WE BECOME LIKE THAT WHICH WE CONSTANTLY ADMIRE:

JUSTIFYING THE USE OF HISTORIC SCHOOL BUILDINGS AS SCHOOLS

by

JENNIFER MARTIN LEWIS

(Under the Direction of Pratt Cassity)

ABSTRACT

The purpose of this thesis is to explore the policies which hinder the use of historic neighborhood schools as schools. The adoption of large acreage requirements, funding formulas which favor new construction over rehabilitation, and modern building codes lead to the abandonment of neighborhood schools and the creation of poorly-designed new schools that instigate urban sprawl. Education specialists agree that smaller schools equal a better education. Historic schools offer this type of learning environment and have proven to be adaptable for other uses, bolstering the argument for their structural flexibility. Research is focused on adverse planning and education policies and the implications for our quality of life and health. Creative policies that deviate from the norm and provide good alternatives to "school sprawl" are presented as a way for communities to adopt policies that encourage the rehabilitation of historic schools for schools and the construction of small neighborhood schools.

INDEX WORDS: Historic preservation, Schools, Smart growth, Urban sprawl, Education, Small schools, Charter schools, Air quality, Obesity, School violence

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B.A., College of Charleston, 1995

A Thesis Submitted to the Graduate Faculty of The University of Georgia in Partial Fulfillment of the Requirements for the Degree

MASTER OF HISTORIC PRESERVATION

ATHENS, GEORGIA

2002

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DEDICATION

This thesis is dedicated to my teachers.

ACKNOWLEDGMENTS

I owe a huge debt of gratitude to so many people for their encouragement and often not-so-gentle prodding in getting this thesis written, especially Adam. Thank you Mama and Daddy – my own personal librarians – who always know where to find it, and Amanda, for all your fun, spontaneous visits! Thank you to everyone who listened patiently as I rambled on and on about old schools, and for so many who had a story to share with me. Thank you to Jeanne Lirola and Anthony Lawrence of The Boudreaux Group for sharing your time, enthusiasm and boxes of photographs! Thank you to the faculty and staff of Logan Elementary and Hand Middle School for touring me around when I arrived unannounced. Thank you to Al Gore for inventing the Internet and to BellSouth for making high-speed DSL access available to my home. Thank you to my reading committee – Dean Crowley, Mark Reinberger, and Cherie Bennett – for agreeing to serve despite the scheduling nightmare. But most of all, I want to thank Pratt Cassity, to whom I owe so much I will never, ever be able to thank him enough.

TABLE OF CONTENTS

Page

ACKNOWLEDGEMENTS v

LIST OF FIGURES viii

INTRODUCTION 1

CHAPTER

1 IMPEDIMENTS TO RETAINING HISTORIC SCHOOLS AS SCHOOLS 5

Acreage, Codes, Maintenance and Money 5

Consolidation, Integration and Modern Teaching Methods 14

Athletic Fields and Vehicle Dependency 16

2 IMPLICATIONS OF POLICIES WHICH FAVOR NEW CONSTRUCTION 18

Urban Sprawl, Loss of History and Higher Taxes 18

Anonymity, Dropouts and Racial Inequality 32

Obesity, Toxic Air and School Shootings 35

3 BENEFITS OF HISTORIC NEIGHBORHOOD SCHOOLS 42

Proven Adaptability, Cost Savings and a Sense of Place 42

Small Schools are Better and Historic Schools are Small 50

Emotional Stability and Walkable Communities 56

4 CREATIVE POLICIES AND SOLUTIONS THAT PROMOTE RETENTION OF HISTORIC SCHOOLS AS SCHOOLS 63

Federal Policies 64

Statewide Policies 67

Funding Opportunities 75

How to Make Historic Schools Work for Education 82

Historic Schools Promote Healthy Lifestyles 103

5 CASE STUDIES FOR HISTORIC SCHOOL RETENTION 109

Hand Middle School, Columbia, SC 109

Logan Elementary School, Columbia, SC 117

Olympia Alternative School, Columbia, SC 127

6 CONCLUSION 140

REFERENCES 142

LIST OF FIGURES

Page

Figure I.1: Historic school; Folkston, Georgia 4

Figure 4.1: Pine Street Elementary School; Spartanburg, South Carolina 73

Figure 4.2: Pine Street Elementary with new addition 73

Figure 5.1: Hand Middle School; Columbia, South Carolina 110

Figure 5.2: Hand Middle School portables 114

Figure 5.3: Hand Middle School entryway 116

Figure 5.4: Hand Middle School classroom 116

Figure 5.5: Logan Elementary School; Columbia, South Carolina 118

Figure 5.6: Elmwood Park homes; Columbia, South Carolina 118

Figure 5.7: Logan Elementary School, multipurpose addition 122

Figure 5.8: Logan Elementary School, interior improvements 122

Figure 5.9: Logan Elementary School, original windows 124

Figure 5.10: Logan Elementary School, new windows 124

Figure 5.11: Logan Elementary School, classroom prior to renovation 125

Figure 5.12: Logan Elementary School, classroom after renovation 125

Figure 5.13: Olympia Mill; Columbia, South Carolina 128

Figure 5.14: Olympia School; Columbia, South Carolina; historic photograph 129

Figure 5.15: Olympia School, historic aerial photograph 129

Figure 5.16: Olympia mill village house 131

Figure 5.17: Olympia School, fire damage 133

Figure 5.18: Olympia School, elementary school wing 134

INTRODUCTION

They stood together in a row by the sidewalk, the only buildings on the edge of a large in-town neighborhood block, a green grass field spreading out behind them. They were three old schools of varying age and size, all reminiscent of an earlier time when every child in the surrounding homes walked together to school each morning, from kindergartners through high school seniors. The school on the far end, a one-story yellow-brick Craftsman style structure built by the Civilian Conservation Corps, was the most modest but also the most inviting. Endless rows of multi-paned windows wrapped around its façade and poured sunlight into its rooms. Above the arched entryway reads the inscription, "We Become Like That Which We Constantly Admire." It undoubtedly was meant to inspire young people to follow in the steps of their mentors, to remind educators that the community's future was sitting in their classrooms, to inspire all who read it to be civic leaders and to set an example of the community's and the nation's values. But the charge seems all too ironic now, as the yellow-brick school and its adjacent brethren are a challenge to admire, sitting vacant for going on several decades. Abandoned, vandalized and deteriorating, these institutions were deserted, just as the small town has been, unsavory to a nation whose appetite favors everything newer and bigger and farther away. While most Americans admire the values of small town life, in reality the majority give their support to big-box stores, live in mini-mansion subdivisions that leapfrog out of town, and send their children even farther away to huge

schools that, constructed on large plots of land and with virtually no windows, are indistinguishable from prisons and factories. Today's students are much more likely to read "No Drugs or Weapons Allowed" than civic prose as they enter school grounds through security guards and metal detectors to sit among other kids whose last names they don't even know. Where community leaders once infused public architecture with a grandeur, distinction and scale that was inspirational to behold and reflective of shared social values, the last forty years of an infusion of strip malls, fast food establishments and cheap architecture appears to be a complete reversal of values. As James Kunstler, outspoken critic of American sprawl predicts, creating places not worth caring about will soon add up to a nation not worth defending.

There was a crisis in America's schools even before the wave of school shootings that has garnered national attention. The echo of the baby-boom generation, assisted by immigration and migration, has resulted in severe overcrowding in the nation's school system. The federal government says that thousands of schools need to be built to relieve overcrowding, and billions of dollars in funding is needed to update existing schools that suffer from inadequate building conditions. Parents and teachers are pushing for smaller class sizes and education specialists routinely tout the benefit of small schools, yet a predilection for newer and bigger has resulted in enormous schools that foster anonymity and hinder learning. Communities nationwide struggle with sprawl development, yet the American dependence on the automobile continues to result in communities that are not navigable for those unable to drive – like children – leading to national obesity levels that health specialists say has epidemic proportions.

Meanwhile, small schools such as the yellow-brick schoolhouse sit empty. Historic neighborhood schools offer the type of learning environment parents and students request without requiring new infrastructure, yet their usefulness is thwarted by policies that counteract achieving a nurturing learning environment. Communities across the nation are experiencing the pain of losing a civic anchor that has nurtured generations of its citizens, yet feel helpless against a school board that is not tempered by local planning efforts. This disturbing trend prompted the National Trust for Historic Preservation to place America's historic schools on its list of Eleven Most Endangered Historic Places.

The purpose of this thesis is to explore the policies which hinder the use of historic neighborhood schools as schools, including the adoption of large acreage requirements, funding formulas which favor new construction over rehabilitation, and modern building codes that render historic schools obsolete. These policies, combined with the mentality that new schools are better, leads to the abandonment of neighborhood icons (and, thus, the neighborhood) and the creation of poorly-designed new schools that instigate urban sprawl. Additionally, in order to successfully debate keeping historic school buildings in use as schools, it is necessary to go beyond traditional arguments for preservation and outline why historic schools can best serve the education and health of children. Studies from leading educational experts and health organizations are included to further justify the continued use of historic school buildings as schools.

Fig. I.1. Historic School; Folkston, Georgia

CHAPTER 1

IMPEDIMENTS TO RETAINING HISTORIC SCHOOL BUILDINGS AS SCHOOLS

National trends and state and local policies converge to keep historic schools from continuing their role in public education, and new schools from being built within urban centers or existing neighborhoods. Some of the policies are rooted in the planning and zoning laws of the last several decades, others in education facility trends and sheer force of habit.

Acreage, Codes, Maintenance and Money

Acreage Standards

By far, one of the most influential factors in school development are the guidelines and facilities standards produced by the Council for Educational Facility Planners, International (CEFPI). A non-profit organization based in Arizona, the Council has a long history as an advocate for school design, classroom configurations and cost estimates as well as a promoter of best practices. According to the National Trust for Historic Preservation and their analysis of public policies that affect historic schools, most states adopt guidelines based on CEFPI's recommendations.[1] The CEFPI facility standards are why so many new schools are so foreboding in appearance: one-story, sprawling campuses on giant plots of land in the middle of nowhere. While not required by law or federal mandate, the CEFPI recommendations most commonly adopted by

states are the minimum acreage standards for school facilities. For elementary schools, ten acres are required plus one additional acre for every one hundred students in the school's maximum projected enrollment. Middle schools have a minimum requirement of twenty acres and Senior High schools require thirty acres, both with the same additional one-acre-per-one-hundred-students requirement.[2] South Carolina bases their standards for K-12 school sites directly on the Council's guidelines, noting these figures to be low for schools that wish to include athletic fields, but the state does not require additional formulas for their inclusion.[3] The minimums do have to be met by useable land, i.e., steep slopes and wetlands are not be included in the acreage tally. However, these requirements are modified by many states as they see fit. In Georgia, the minimum acreage requirements are slightly lower: five, twelve and twenty acres for elementary, middle and high schools, respectively. Georgia, too, adds an additional acre for every one hundred students enrolled full-time. In his study of school site selection and its effects on the South Carolina Lowcountry,[4] Christopher Kouri reported, "CEFPI cannot articulate the goals that underpin these standards, even though these standards helped entrench the modern culture of school site selection."[5] South Carolina's reasons for these

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[1] Constance Beaumont and Elizabeth Pianca, *Historic Schools in the Age of Sprawl: Why Johnny Can't Walk to School* (The National Trust for Historic Preservation, November 2000) 16.

[2] South Carolina Department of Education, *South Carolina School Facilities Planning and Construction Guide: Working Draft* (Columbia, SC: South Carolina Department of Education, April 2001) sec. 203.2.

[3] Ibid.

[4] Christopher Kouri, *Wait for the Bus: How Lowcountry School Site Selection and Design Deter Walking to School and Contribute to Urban Sprawl* (South Carolina Coastal Conservation League, November 1999).

[5] Ibid., ii.

large acreage requirements are not explained in their construction guide, noting only that their standards "are based upon building code and traditional education practice."[6] In many states, waivers are only granted if it can be proven that these minimums cannot be met otherwise. Schools districts in large urban areas can more easily justify an acreage waiver than can districts in rural or suburban areas where open space is plentiful. Districts are still encouraged to attempt to obtain the needed additional acreage, assuming this might mean outright purchase of adjacent lots and necessary demolition costs. Historic schools are often surrounded by historic homes, and this option would not be considered feasible or worthwhile. Unfortunately, historic homes are not necessarily a deterrence. In Newcastle, Pennsylvania, thirteen historic homes have been condemned by the local school board in order to construct a new school with athletic fields and parking lots.[7] Parking lots are a large factor in school acreage requirements, especially for high schools. Many schools calculate that 50 percent of their student body will drive to school. According to the National Trust's study, this calculation yields seven acres of blacktop for a student body of 1000. Historic schools are typically sited on only two to eight acres.[8]

School Planning versus Comprehensive Planning

South Carolina law gives the state the ultimate approval of a school site, but the local school board controls the selection process. The school board does not even have to

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[6] South Carolina Department of Education, *School Facilities Guide*, sec. 203.1.

[7] Beaumont, *Historic Schools,* 17.

[8] Ibid., 14.

consider more than one site.[9] They are also not obligated to work with local planners or within the comprehensive plan, and therefore often do not. In 1994, South Carolina passed the Local Government Comprehensive Planning Enabling Act, requiring local governments to comply by 1999. This act was created as a tool to help local governments deal with and prepare for the inevitable urban sprawl that was rapidly consuming many communities. However well-developed a community's plan for dealing with uncontrolled growth, as Kouri notes, "no government authority can stop the [new school site] project even if the location makes no sense for the community."[10] The 1998 South Carolina Freedom of Information Act, known as the Sunshine Law, does not cover property selection by the local school board. Therefore the process the board undergoes is often private and undisclosed, and the public has limited time to react and influence final site decisions.[11] Meanwhile local planning agencies lament being left out of the school site planning process and school boards bemoan the challenges of finding an appropriate site.[12] It would seem logical that both parties, and the community, would benefit from these two groups working together. School board members are elected not for their planning and design qualifications, but for their commitment to education and public service. A local planning department, committed to combating sprawl in their community and armed with updated zoning maps to direct growth to areas prime to

[9] Kouri, *Wait for the Bus,* 31.

[10] Ibid., 2.

[11] Ibid., 29.

[12] Ibid.

receive it, is rendered ineffectual by a group of citizens not versed in site selection but charged with doing just that. Many other states face this same dilemma.

Predisposition for New Construction

Old school buildings are often plagued by problems: lack of support spaces for large-group instruction; insufficient power; poor communications systems and technology infrastructure; leaky roofs and abysmal air conditioning. Unfortunately, these types of problems are too often associated with old buildings, rather than truthfully attributing them to lack of proper maintenance or regular improvements. This creates a bias towards brand new schools with seemingly no physical problems. School district officials are often swayed by professionals with a financial stake in new school construction – developers, architects, contractors. If powerful school boards are dominated by those who have a vested interest in new construction and have little or no preservation experience, the entire board will defer to new construction options. Todd Zeiger, director of the Historic Landmarks Foundation of Indiana's regional South Bend office, notes that when an architect with no rehabilitation experience says a school building is out of date, then a proper analysis of the structure has not been done.[13] He adds that the comparison of tearing down a historic building in need of new wiring is akin to tearing down your entire house because the bathroom needs remodeling. Zeiger says that in his experience the people who fight for historic buildings are either the newcomers or the people who grew up in town, moved away and have moved back. Sadly, those

[13] Joetta L. Sack, "Razing Objections," *Education Week* (13 February 2002) [journal online]; available from http://www.edweek.org/ew/ew_printstory.cfm?slug =22historic.h21; Internet; accessed 7 February 2002.

who have lived in one place their whole lives are the least concerned about its preservation.[14]

Another factor influencing a school board is the belief that large schools attract industry. While good schools are a proven criterion for industry executives, the research is not based on facts. A survey of the school system is usually conducted by what amounts to a "windshield survey", not in-depth research into the student body's achievements. Industry representatives see a big, new school and assume it is a good school – since it is new – and market the area to industry executives and investors.[15] Therefore school planners want to follow the standard assumption of what a "good school" looks like, leading to homogenous, sprawling campuses on the edge of town.

Modern Building Codes

Because of safety code requirements to have kindergarten and early grade classrooms and rooms they frequent (cafeteria, media center) on ground level for ease of egress, most districts advocate only building one-story buildings. Stairs are labeled dangerous because they are often not structurally enclosed and elevators are considered too expensive. Wood framing often renders buildings unsafe and obsolete in the eyes of building officials since modern building codes require school facilities to be constructed of non-combustible materials.

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[14] Ibid.

[15] Kouri, *Wait for the Bus*, 19.

Poor Maintenance

Nationally, about 40 percent of schools today report unsatisfactory environmental conditions, including instances of mold, mildew, unregulated temperatures and lack of fresh air.[16] The U.S. Department of Education recognizes overcrowding and the delay of regular maintenance activities as taking an incredible toll on the nation's schools.[17] The U.S. General Accounting Office reported in 1996 that $112 billion was need to repair and renovate the existing school buildings in the nation. This figure does not take into account the new schools that are needed for the fifty-three million students that are currently crowded into schools and taking classes in trailers in the meantime. With limited school budgets, leaky roofs are often sidelined while funds are diverted to pay teacher salaries. Educators and administrators are aware of the studies that link academic achievement to the physical condition of the school building. A Washington D.C. study found that students who attended school in buildings listed in poor condition scored 11 percent lower on standardized tests than students located in buildings in good condition.[18] Surroundings that are not well-maintained have an effect on morale, personal safety, and general attitudes. Most districts do not have regulations against deferring maintenance, instead it is inadvertently rewarded. Because school boards have an easier time acquiring funds for new construction, maintenance needs may take a back seat indefinitely and ultimately boost a district's chances for a new school. According to the National

[16] John B. Lyons, "Do School Facilities Really Impact a Child's Education?" *Issuetrak*, The Council of Educational Facility Planners International (November 2001) [article online]; available from http://www.cefpi.org/ pdf/issue14.pdf; Internet; accessed 19 May 2002.

[17] *Schools as Centers of Community: A Citizen's Guide for Planning and Design*, U.S. Department of Education (April 2000), 1.

Clearinghouse for Educational Facilities, 14.1 percent of operating budgets were devoted to building maintenance in 1920, compared with 4 percent today.[19]

Funding Formulas Which Favor New Construction

Local school districts are often prevented from choosing to rehabilitate an existing school instead of constructing a new school by virtue of state funding policies. Many states operate under what is called the 60 percent rule, which says: if a renovation project costs over 60 percent of the cost of new construction, than the school must opt for new construction if they are to receive state funds. The percentage may vary from state to state. In Massachusetts, the figure is 50 percent; in Washington, 80 percent.[20] What these formulas have in common is that they do not factor in the outside costs in new construction, namely acquiring land, running new water and sewer lines, or transportation costs such as busing and road improvements. Districts are also not asked to factor in costs associated with the historic school building they will be abandoning, whether it be mothballing, retrofitting or demolition costs. In Georgia, more than one hundred older schools have been closed under the state's funding formula.[21]

Some states, like South Carolina, have no funding formulas statewide, leaving to the discretion of the district whether to choose rehabilitation over new construction. Often the school project has to be funded locally without state monies. Only Arizona and

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[18] The Council of Educational Facility Planners International, *School Building Day* (2001), 17.

[19] Kerri Rubman, *Community Guide to Saving Older Schools*, National Trust for Historic Preservation, (2000), 2.

[20] Beaumont, *Historic Schools*, 18.

[21] Greg Paxton, "Funding Formulas Encourage School Sprawl, Not Smart Growth," *The Rambler*, Georgia Trust for Historic Preservation (7 February 2000).

Hawaii fund 100 percent of school facility construction projects from the state level, and eleven states provide no funding at all.[22] While many schools boards have to raise money for facility projects themselves, this means that school boards have the discretion to use the funds as they see fit, without any rules coming in to play.[23] School boards fund projects in two main ways. First, most state constitutions allow districts to maintain 8 percent debt service on all assessed property in the county. The other way school boards raise money is through voter-approved bond referendums. This provides the bulk of capital funding for projects.[24]

Other outside factors influencing school site location can come from a few other states and federal agencies, but their influence does not necessarily temper the effects of "school sprawl". In South Carolina, these agencies include the Department of Transportation, the Department of Health and Environmental Control and the Department of Justice.[25] The Department of Transportation has to determine if the site has good access to a major road, analyses needed road improvements and approves traffic flow and orientation on campus. The Department of Health and Environmental Control gives water and sewer approval, conducts wetlands mitigation and checks flood plain requirements. The other outside agency that may have some influence in where a school is located is the Department of Justice. Kouri reports that certain sites in the Lowcountry

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[22] Barbara Kent Lawrence, *Effects of State Policies on Facilities Planning and Construction in Rural Districts*, (Rural School and Community Trust, December 2001) [database online]; available from ERIC, EDO-RC-01-8.

[23] Kouri, *Wait for the Bus,* 27.

[24] Ibid.

[25] Ibid., 29.

of South Carolina are under close scrutiny by the Department of Justice for failure to properly integrate their schools. If the Department of Justice steps in, new schools may be located in sites that are equidistant from racially isolated neighborhoods in order to integrate the school age community and provide racial balance.[26] While this effort may achieve more diversity, it may mean locating new schools in areas that would otherwise not develop, thus promoting sprawl development in areas not suited or prepared for development at all.

In addition to the policies that hinder reusing historic school and building new neighborhood schools, districts have ingrained habits and the passage of time working against them. Because they have built schools a certain way for the past forty years, it is difficult to reverse course and attempt something new. Without proper guidance from the state in rehabilitation practices or compact urban design, local districts would not know where to begin.

Consolidation, Integration and Modern Teaching Methods

County-wide Consolidations

The trend to consolidate several small schools into one large school is an idea that began in the 1960s. Leading educators cite a 1953 book by James Conant, *The American High School Today*[27] as stimulating the push for consolidation with his determination that small high schools were education's biggest problem and that they should be

[26] Ibid.

[27] James Conant, *The American High School Today: A First Report to Interested Citizens (*New York: McGraw Hill, 1959).

eliminated.[28] The desire to begin to build bigger schools in the 1950s can also be attributed to several other things, including school systems which strived to follow current business models of efficiency, the drive to create more scientists to compete with the Soviet Union, and the mandate to desegregate all schools.[29]

This trend to do away with smaller schools in favor of one large school continues today. School consolidations are currently driven by a desire to make construction costs more feasible on a per-student basis, decrease necessary administrative staff, and to offer a wider variety of school programs and activities. Many neighborhoods remain racially segregated, so an integrated school system must have schools that are large enough to be able to draw from multiple neighborhoods to achieve diversity. Schools may also close if the population can no longer support a school with state-required class sizes. This is common in rural areas and small communities with declining populations.

Modern Classroom Instruction Methods

Many school district officials, aiming to create the best educational environment for their community's children, follow the literature on modern classroom instructional methods and deduce that historic school buildings and classrooms are out of date and impair learning. While historic school rooms were designed to be large, isolated teacher-centered lecture halls, current research on learning calls for students to take a more active

[28] Kathleen Cotton, *School Size, School Climate, and Student Performance*, Northwest Regional Educational Laboratory, School Improvement Research Series, Close-Up Number 20 (1996) [journal online]; available from http://www. nwrel.org/ scpd/sirs/10/c020.html; Internet; accessed 7 March 2002.

[29] Ibid.

roll, literally and physically, in their education.[30] This means working together in small groups to problem-solve, and move about the classroom to different learning stations and workgroups. Higher learning standards demand that teachers work closely with individual students, tailoring their teaching methods to make sure each student is succeeding. Older classrooms were designed to be 650-700 square feet. Today, teachers prefer approximately 900-1200 square feet, and this is what most modern codes require.[31] For example, in South Carolina, kindergarten classrooms have a minimum square footage requirement of 1000 square feet, while first grade classrooms must be only 800 square feet. Despite the fact that kindergarten class enrollment is usually smaller than the upper grades, teachers use multiple learning stations, including indoor play equipment that behooves them to have a larger space.[32]

Athletic Fields and Vehicle Dependency

Athletic Fields

Most schools have or desire to have, exclusive athletic fields for their student body. While many types of sports fields can be used interchangeably, the norm is to lay out a separate field for each school-sponsored activity: football, soccer, tennis, baseball, track, etc. Since most rural and suburban counties have large tracts of surrounding farmland and open space, districts will opt for spreading out as much as possible. While it is possible to share and overlay sports fields – track, football and soccer on one field,

[30] U.S. Department of Education, *Schools as Centers of Community: A Citizen's Guide for Planning and Design* (April 2000).

[31] North Carolina Department of Public Instruction, *Making Current Trends in School Design Feasible: Smart Growth, Joint Use, Sustainability and other Design Issues* (November 2000) 30.

tennis and basketball on shared courts – given the need to coordinate schedules and stagger practices, most districts would view this as a hassle.

Driving Habits

Because of the way our towns have developed over the past forty years – with a strong reliance on and preference for driving – Americans have become accustomed to driving themselves everywhere. Walking has become reserved for forced exercise at an air conditioned gym three days a week, at best. Automobile independence has resulted in leaving pedestrians and sidewalks out of the equation when developing new properties. Walking to work or to run errands is such an antiquated idea that developers do not give it a second thought. The availability of parking is the top-most priority, and lot size is calculated by the estimated amount of cars that will converge on site the day after Thanksgiving – the biggest shopping day of the year. Newly built schools are no exception, especially high schools. Construction plans cater to drivers, and it is estimated that over 50 percent of high school students will drive themselves, in addition to faculty. Schools on small sites often lament the lack of parking and request new or bigger sites, rather than promoting transportation alternatives.

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[32] Salmons, Tom. Architect with Richland School District One. Phone Interview by author, 20 May 2002.

CHAPTER 2

IMPLICATIONS OF POLICIES WHICH FAVOR NEW CONSTRUCTION

Urban Sprawl, Loss of History and Higher Taxes

Schools are no longer planned to be easily accessible, integral parts of the community. In Kouri's study of the fast-developing South Carolina Lowcountry, it was found that school sites developed after 1983 are 41 percent larger than those prior to 1983, when South Carolina officially adopted their current site standards, based on CEFPI.[1] Not only are these post-1983 sites larger than ever before, they were found to be 60 percent larger than even the state required. School sites developed before 1983 are 21 percent smaller than the current state standards dictate.[2] While CEFPI gives minimums for acreage, it does not discuss maximums, thus giving the inference that one should err on the side of more rather than less space.[3]

Current planning and development practices adopted by many states nationally have aided in creating "school sprawl" – rapid, unregulated growth that follows the creation of large schools in undeveloped areas. Kouri determined five major factors related to local school board decisions lead to the rampant sprawl that is changing the historically and culturally rich, environmentally sensitive areas of the South Carolina coast. These include: large acreage standards, land donations from developers, new

[1] Kouri, *Wait for the Bus,* i.

[2] Ibid.

infrastructure in outlying areas, the unaccounted for migration of residents to the new school, and annexation of outlying school property.[4] These situations, discussed in depth below, are confirmed by smart growth and preservation advocates nationwide as reasons for increased sprawl development and loss of community.

Acreage Requirements

When design criteria for new schools calls for large acreage requirements, it forces school board officials to look towards the edge of town where large undeveloped tracts exist and land is cheap. When local school boards are searching for these large sites, rural periphery locations are more appealing initially on a cost-per-acre basis, but infill sites which provide long-term cost savings are often overlooked, even though they may satisfy the state's acreage requirements.[5] South Carolina's Department of Education gives no explanation for how acreage relates to school achievement, whether by state requirements or by justifying exceeding state requirements. Acreage requirements are further deemed unnecessary by considering these points: many historic schools on small sites are serving their communities well and many new schools designed for in-town locations prove to be excellent learning facilities. Also, acreage requirements vary widely from state to state, whereas learning requirements do not, therefore isolating their significance from one another.[6] Often school boards are unsure of their duties and regulations, citing necessary compliance with "national education standards" for their

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[3] Ibid., 12.

[4] Ibid., vi.

[5] Ibid., 12.

[6] Ibid., 36.

insistence on large new sites. While the federal government does have educational testing standards for academic achievement, it does not impose facility design standards on the states. And while the Council for Educational Facility Planners is recognized as the national leader in disseminating information on school construction, their recommendations are simply guidelines – they do not have the authority to regulate. Moreover, other sections of the CEFPI guidelines meld with smart-growth planning philosophies, such as the promotion of multi-use facilities that the whole community can use, multi-story buildings that use a minimum amount of land, and lighted athletic surfaces so that the community can make use of the facilities in the evenings. The CEFPI's thoughts on parking actually direct school boards to consider building sites where parking already exists, especially if the need exists for adult education and other evening activities at the site.[7] Taken without the acreage requirements, these suggested CEFPI standards are very compatible with the reuse of historic school buildings. All too often, it is the large acreage requirements that local officials fixate on and which seem to outweigh all other factors. Many state acreage recommendations are technically just suggestions, not strict standards, but local school boards use them as law, either unwittingly or deliberately.[8] While South Carolina does expect its local districts to follow their guidelines, Kouri's study found examples of Lowcountry school boards using state required acreage formulas and then rounding up for no apparent reason.[9]

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[7] Ibid., 35.

[8] Beaumont, *Historic Schools,* 17.

[9] Kouri, *Wait for the Bus,* 18.

This blatant disregard for an efficient use of land and taxpayer dollars flies in the face of reason, but also goes against other principles that South Carolina's state department of education encourages school boards to follow when selecting a site. While CEFPI offers helpful guidelines for communities in choosing large sites for school construction, they also advise school boards to be flexible in their standards and selections. Other considerations to be made are: the availability of water and sewer; ease of access by city services (fire, police); being close to existing community services such as libraries, parks, museums and other schools; and convenience for students.[10] An outgrowth of this "bigger is better" mentality that relates to school sites is the perceived need for enough parking for every individual, based on current commercial zoning practices. This alone inflates the size of a new high school – the only type of public school whereby almost all of the student body is old enough to drive their own car, in addition to the staff and faculty. Filling this need for providing as much parking as possible consumes land, limits site choices, invites and increases traffic congestion including lost time and aggravation, and decreases air and water quality for the entire community. Parents will encourage their children to drive to school, because the new school's location is probably not near their place of business either. If a car is not provided for them, students must provide for themselves, usually taking a job after school that will take time away from studies and extracurricular activities. Kouri aptly notes that providing more parking merely reflects the American value placed on mobility and independence that our cars seem to bring, and the provision of more and more parking is

[10] Ibid., Appendix 5.

thus culturally entrenched.[11] Behavior is learned at a young age. Providing parking spaces for every high school student teaches young adults to grow up and contribute to the traffic congestion of the workforce. However, less parking availability promotes carpooling, respect for the environment, good time management skills, social interaction, and personal and civic responsibility.

Donated Land by Developers

Real estate developers donate land for schools to make development more appealing. Knowing that the perception exists that new schools are better, developers can profit from raising the value of new homes by donating a portion to a local school district, knowing it will boost sales. The farther away the land, the cheaper for the developer, and the larger the developer's profit. Developers are not going to give away the best portion when it could be used for housing. This does not make it the best site for a school, either. Kouri gives a wonderful example of free land not being free. When International Paper Company gave portions of its property for two schools in Charleston County, the incredibly poor quality of the soil for construction resulted in a developed cost-per-acre of $12,500. Market price for the area was only $9,000 – $10,000 per acre.[12]

Introduction of Infrastructure

New school sites introduce infrastructure to otherwise undeveloped areas. Besides having a new school in the vicinity, these previously undeveloped areas now have new infrastructure to draw commercial and residential developers. These areas may

[11] Ibid., 19.

[12] Ibid., 15.

have been undeveloped for various reasons – poor land quality, isolation from the community, designation for other land uses, etc. So this area is neither prepared nor well-positioned for the growth that will occur when new infrastructure is developed. New water and sewer lines are always laid with projected-usage in mind. On-site treatment facilities at a new school site would be sufficient in most cases, but local water and sewer officials are aware of these developmental trends in regards to new schools and are going to plan accordingly. Schools districts have the leverage to get water and sewer lines when a handful of business may not be able to plead their case, therefore inflating the need unnaturally and stimulating growth in a market-driven, naturally low growth area.[13] Water and sewer lines can also recharacterize residential rural areas, prompting denser residential development than is appropriate in rural areas.

Residential Booms

New schools attract residents and result in unexpected booms. School officials often underestimate the population served by a new school, because they do not take into consideration the new growth and development the new school will attract. The situation arises where schools open at or beyond maximum capacity, therefore not eliminating the overcrowding that probably prompted the need for a new school anyway. In a recent article responding to a controversial highway proposal through metro Atlanta's greatest sprawl region, University of Georgia economics professor Jeffery Dorfman predicts that

[13] Ibid., 16.

the Northern Arc highway will cause the greatest damage to the public school systems.[14] His research shows that the accompanying residential development that will follow the Northern Arc never pays enough in taxes to cover the required government services, such as public education. However, the forests and farmland that will be replaced have a track record of providing more revenue than its required services, as do businesses. Schools are hit hardest because new residents do not cover the real costs for educating their children. Dorfman calculated that for a family in a Northern Arc county with two kids in school, they would need to live in a house valued at $645,000 for the district to benefit.

Kouri gives a typical example in Charleston County: while the new West Ashley High School was under construction in 1999 it had to plan to include trailers by its 2000-2001 school opening, because the school board had grossly underestimated growth projections for the area. The brand new school will serve 2500 students.[15] The University of Georgia's School Design and Planning Laboratory, whose mission it is to advance the design and planning of safe, comfortable learning environments, equates planning for trailers to "planning for educational disaster. Trailers represent slum architecture . . . Education in a trailer may prove to be a cultural demise for society as we know it and raise up a new culture having lower standards and values." [16] Trailers are sold to the community as a temporary solution, yet they quickly become a permanent

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[14] Dr. Jeffery Dorfman, "Northern Arc will Take Toll on Schools," *The Atlanta Journal-Constitution* (Atlanta, GA), 25 April 2002 [article online]; available from www.accessatlanta.com/ajc/ opinion/0402/25dorfman.html; Internet; accessed 25 April 2002.

[15] Kouri, 20.

[16] The University of Georgia, School Design and Planning Laboratory, *Planning for Trailers* (August 1999) [article online]; available from http://www.coe.uga.edu/sdpl/ tornadoes/plfortrailers.html; Internet; accessed 18 April 2002.

fixture on most school campuses. This lack of planning and design expertise – resorting to including trailers in new construction – on the part of the school board highlights the instances of phenomenal new growth that is associated with constructing new schools.

Easy Annexation

Towns can often annex schools because they have no "tax value", therefore making it easier for adjacent property owners to bid for annexation, creating a domino effect. County development restrictions become seemingly obtuse when suddenly neighboring property (the new school site) can be developed but neighboring land is not allowed for dense development. This disregard by the school board – albeit within their right legally – renders comprehensive planning efforts obsolete.[17] Since school property contiguous to town boundaries can be annexed, property owners with land adjacent to town boundaries can then petition to be annexed. Boundaries spread exponentially, thus allowing developers to circumvent well-meaning rural development restrictions. This conflict between local planning authorities and the school board creates a problem for many municipalities across the nation.

The Cost of School Sprawl

The resulting sprawl that follows new schools adds up to additional costs for the community, not the developers. These costs are personal as well as public. In Maine, as in most states in the nation, people are spreading out and moving farther away from one another. In their 1997 publication, *The Cost of Sprawl*, the Maine State Planning Office outlines for developers, bankers, environmentalists and all its citizens in simple,

[17] Kouri, 17.

economic terms the reasons for sprawl and what it costs its taxpayers.[18] While its charts and figures apply to the state of Maine, the reasons for sprawl and the economic burden are universal.

Maine's high growth areas over the past thirty years have been suburbs, areas ten to twenty-five miles from a true town center. These areas account for almost all of the state's population growth. Moving to the suburbs has resulted in sprawl development that has cost the state in three distinct ways. First, new infrastructure in remote areas has cost taxpayers $300 million in new rural school capacity alone. Second, communities have had to lengthen service routes for fire, police, emergency services and road maintenance. Last, and certainly not least, historic town centers have suffered from a declining population and underutilized infrastructure.[19]

Citing new school construction as the main harbinger of sprawl, Maine planners pointed to the actions of local school boards as having implications for many other economic, social and environmental drawbacks of irresponsible development. While elementary and secondary public school populations decreased in Maine from 1970 – 1995, $727 million was spent on new school construction, 46 percent of that in fast-growing suburbs. Half of the total new construction funds were totally redundant, as they were not serving new students, but serving existing students who had moved outside of

[18] O'Hara, Frank, *The Cost of Sprawl*. (Maine: State Planning Office, May 1997).

[19] Ibid., 5.

established districts.[20] This means that citizens are paying twice, once to construct the new facility and again to maintain the underused older school.

School busing accounts for other cost-per-pupil increases. In 1970, state and local governments in Maine paid $8.7 million in busing costs. By 1995, with 27,000 less students, busing costs had increased to $54 million. This translates into $254 per student, with state government paying almost 2/3 of this cost and little or no influence on site decisions.[21] Meanwhile, most schools lack state-of-the-art computers and science labs. Instead of going to gasoline and driver salaries, $54 million could go a long way towards upgrading technology needs.[22]

While a move to the country may seem to be an escape from traffic and property taxes, the real expenses are hidden. More money is spent on gas because every errand requires driving, added car maintenance from greater wear and tear, longer commutes to work, less free time and higher home insurance for living far from a fire station.[23] From a study that compared property taxes to actual living expenses in several Maine towns and suburbs, planners found that while a home in a new development on the outskirts of a town had $200 - $700 less in property taxes than comparable houses in town, the actual living expenses (including travel, utilities, insurance) ran $100 - $1400 higher.[24] Meanwhile, property taxes out in the county will eventually rise, as municipalities struggle to keep up with the increase in service area. More city staff, road paving

[20] Ibid., 8.

[21] Ibid.

[22] Ibid.

[23] Ibid., 6.

equipment, and portable trailers will be needed to keep up with the strain on the new school. With an increase in new subdivisions as a result of new schools comes an increase in road and policing costs. While Maine's population increased less than 10 percent in the 1980s, there was a 57 percent increase in miles driven. [25] This translates into higher maintenance and new road costs for local governments, which the planning department estimated to be $200 per household. Other service costs increases are found in the police and fire departments. Even if crime decreases, taxpayer costs increase as new officers and vehicles are added to cover the widespread populations in new, far-flung neighborhoods. Also, with new roads and more motorists comes more traffic accidents, regardless of safer cars and roads. More police officers are needed to cover this increase in accidents.[26] To put it simply, the report warns that "it just costs more, on a per-unit basis, to serve families who are spread out than it does to serve families who live in traditional neighborhoods." [27]

The local government also loses out on revenue when forests and farmland are converted to residential uses. Since 1986, the American Farmland Trust has conducted Cost of Community Service (COCS) studies in over 80 communities nationwide in order to understand the financial impact of various land uses. COCS studies show time and again that for every dollar of residential development revenue, the local government needs $1.15 to provide necessary services. Comparatively, forests and farmland only

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[24] Ibid.

[25] Ibid., 8.

[26] Ibid., 9.

[27] Ibid., 7.

need twenty-seven cents of service; commercial and industrial development requires thirty-four cents.[28] Therefore, swapping revenue-producing farmland in exchange for costly residential development in order to receive donated acreage for a new school is not a sound economic decision for a municipality.

In Traverse City, Michigan, a new high school was built outside city limits in open farmland. Shortly after the school opened, district officials realized they could not afford to pay transportation costs for students to and from the new school. For the next two years, every student had to fend for themselves in finding a way to school.[29] Transportation taken on by parents results in road improvement expenses, less available funds for needed in-town road improvements, increased traffic congestion, and a decline in air and water quality.[30] However, up-front costs in providing sidewalks and bike paths show to ultimately result in taxpayer savings from unnecessary busing. Unfortunately, since the state may cover most busing costs, all other inherent transportation costs (private and public) may be deemed of little relevance to school board officials making school site decisions.

Abandonment of Town Centers

School consolidation is also a common culprit in historic town center abandonment. Often, small towns that once had their own school system now send their

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[28] Source: American Farmland Trust [press release online], available from http://www.farmland.org/news_2001/091901_mi.htm, 18 September 2001.

[29] Joanna Miller, "Hey Kid, Try Walking: Communities Win When Schools Are Close to Home," *Country Lines* (Michigan Electric Cooperative Association, September 2001) [article online]; available from http://www.mlui. org/projects/growthmanagement/sprawl/tywalking.asp; Internet; accessed 2 October 2001.

[30] Kouri, *Wait for the Bus,* 8.

children to large, county-wide schools. According to the Rural School and Community Trust, many states in the Southeast do not provide schools where their students actually live. Half of South Carolina's population is considered rural and over one-third of Georgia's population is rural, but most rural children are bused to large schools in large communities.[31]

When district officials opt for new construction over renovation of a historic school building, it leaves a relatively large building to sit empty or underutilized. Many of these school buildings left behind are significant historic buildings, now referred to as "white elephants" during town hall meetings, as its citizens struggle to find a new use to prevent the school's demolition. Because lack of maintenance has rendered it "useless" in the first place, continued deterioration turns it into an eyesore, affecting the homes and businesses around it. Surrounding commercial areas, already struggling with the flight of anchor businesses to the edge of town, are delivered yet another blow. Large vacant buildings draw crime, spurring those who have the means to leave the area to do so. Crime and neglect will also cause the surrounding historic neighborhoods to suffer and deteriorate, leaving a culturally important area ignored by those who have the means to give it life. Vandalism is then touted as a good reason for demolishing the building, thus erasing an important civic landmark – and costing the district more money. Soon, all the factors that make a community a community are gone. With the average school building as forty-two years old, this national epidemic of school deterioration and abandonment is taking a huge toll on our historic building stock.

[31] Source: www.ruraledu.org.

Even worse than the abandonment of a significant civic building, school consolidation can often be the last straw for small communities trying to hold onto their identity in the midst of mass migration, effectively assuring the abandonment of the community as a whole. May 17, 2002 marked the last day of school, forever, for the elementary school in the small community of St. John in Sumter County, South Carolina. State budget cuts for education are forcing administrators to close many small rural schools and divide a community's students between regional schools. Just during the 2000-2001 school year, the state budget has dropped its support for public schools 6.5 percent to $160 million.[32] In addition to closing St. John school, the Sumter school district will also have to make up budget shortfalls by not filling vacant salary positions, including those for thirty-six teachers. The closing is not coming as a surprise, since the community has slowly declined in population over the past several years. But many community members worry about the fate of their town, not just the school building, as all its teachers and students are transferred out of town. Shirley Palmer, a minister in Sumter County who attended school in St. John, says, "The community needs that school… without it, there's nothing there."[33] With the loss of a rural farming community comes the loss of a way of life.

Meanwhile, physical isolation keeps new schools from being community centers, disconnect schools from the town, hinders them from being used for other community functions and deprive children of needed daily physical activity. Most schools are

[32] Chuck Crumbo, "Community Grieves School's Loss." *The State* (Columbia, SC) 18 May 2002. Available from http://www.thestate.com/mld/thestate/3289477.htm; Internet. Accessed 5/18/02.

[33] Ibid.

designed as stand-alone entities with restricted community access. This mirrors the regulations of a penal facility more than a community center – and the prison analogy is not overlooked by those who are required by law to attend school daily. Municipalities often struggle to raise funds for civic auditoriums or to renovate the old theater, to construct public parks and ballfields – essentially, to create a town center. While an in-town school could have provided these things, these facilities exist out of reach at the new local school. The abandonment of historic school buildings and the isolation of new schools does not benefit [students or] the community at large. Steven Bingler, president of an education planning firm in New Orleans, has witnessed the migration of families away from the city's center.[34] He notes that many parents are drawn to new schools in the suburbs because they do not have the problems that their current, inner city school is experiencing. Bingler suggests that upgrading historic schools and creating new schools in town could keep families in town and encourage more support for the city center.[35]

The perception that "bigger is better" does not correspond with true societal concerns today, such as land conservation, lengthy commute times and gridlock traffic, air and water quality, livable and walkable communities, and the physical and mental health of school-aged children.

Anonymity, Dropouts and Racial Inequality

While school consolidation and large sprawling campuses seem to have their advantages, the drawbacks of this design are taking their toll on education. Schools are

[34] Beaumont, *Historic Schools*, 13.

[35] Ibid.

getting bigger and bigger. A recent study on school size showed that from 1940 – 1990 the number of K-12 schools in the United States has fallen 69 percent, while the national population has risen 70 percent.[36] Consolidation has led to fewer, but larger, school districts. The average school enrollment has increased five times during this period, and it is not uncommon to find high schools with populations of 2000 – 3000 students in suburban districts, with large cities having up to 5000.[37] While early education specialists like James Conton, cited previously, believed larger schools were needed, his 1950s vision of a large high school was defined as one with one hundred students in each graduating class. Four hundred students is right on par with what educators today consider a proper small school. James Conton's theories did not intend to advocate high schools of 3000 students.[38]

Large schools and large class sizes create an impersonal environment where teachers do not know their students, and students do not know one another. As Johanna Miller of the Michigan Land Use Institute writes in her article analyzing the benefits of having schools close to home, "Schools are the anchors of family and community life, just like major department stores are the anchors for shopping districts. Just as downtown shopping districts fold when their anchors move to the mall, so do the neighborhoods and businesses that the school bonded together before it moved out of town. Spreading our schools, businesses, post offices and homes further across the land,

[36] Cotton, *School Size*.

[37] Ibid.

[38] Ibid.

often accessible only by car, encourages a society where people don't know one another and eventually do not take care of one another."[39]

The Bill and Melinda Gates Foundation, known for advancing technology in rural areas and advocating for smaller schools, cites numerous problems with large schools, including: a 25 percent drop-out rate, growing racial and economic gaps, two and five seniors that have not mastered fractions, percentages and averages; and half of high school graduates that need remedial courses once they get to college.[40] The reasons given for these conditions include anonymity, isolation, bloated administrations that are slow to respond to change and restrictive district policies.[41]

When the large school dilemma combines with the lack of interested or qualified teachers, the resulting quandary has a negative effect on education. A high student-to-teacher ratio hampers an instructor's ability to give needed individual attention to their pupils. With teachers, parents and the public ranking lower class sizes on their list of needed education reforms, the trend towards larger and larger schools is highly counterproductive. In February of 2002, the Center for Education Reform reported on a Georgia policy standard that sets the bar so low that schools in which only three out of ten students pass standardized tests are considered acceptable.[42] Since federal funding is

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[39] Miller, "Hey Kid, Try Walking".

[40] The Bill and Melinda Gates Foundation, *Facts on Small Schools* [article online]; available from http://www.gatesfoundation.org/education/smallschools/relatedinfo/makingcaseforsmallschools.htm; Internet; accessed Mar 21, 2002.

[41] Ibid.

[42] Source: Center for Education Reform, *CER Newswire*, 4 no. 8 (26 February 2002) [digest online]; available from www.edreform.com; Internet; accessed 26 February 2002.

tied to achievement, perhaps it is time for districts to rethink current educational practices.

Obesity, Toxic Air and School Shootings

By constructing new schools far away from towns and neighborhoods and requiring everyone to come to school in a vehicle, students suffer physically and socially as well as academically.

Obesity and Lack of Exercise

The Centers for Disease Control (CDC) have reported that the amount of children that are currently overweight has doubled since the 1970s. Thirteen percent of children ages six to eleven are overweight, and fourteen percent of children ages twelve to nineteen are overweight.[43] One in five children and one in three teenagers are at risk for being overweight. Being overweight has serious health implications, ranging from depression, eating disorders and low self esteem to high blood pressure, diabetes, heart disease and colon cancer.[44] The CDC emphasizes that halting this epidemic will require the collaboration of public and private officials as well as strong commitment from individuals and communities.

The American Cancer Society (ACS) reports that obesity brought on by poor diet, lack of exercise and reliance on the automobile accounts for one-third of the 500,000 cancer-related deaths annually.[45] Their March 2002 annual report is the first they have

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[43] The Centers for Disease Control, *Obesity and Overweight: A Public Health Epidemic* (12 September 2001) [article online]; available from http://www.cdc.gov/ nccdphp/dnpa/obesity/epidemic.htm; Internet; accessed 26 April 2002.

[44] Ibid.

[45] Ibid.

issued that includes recommendations for children – prescribing an hour of exercise at least five days a week for children – but also notes that it will take more than personal willpower to reverse the escalating trend of obesity. The report calls on all levels of government and the private sector to aid in helping to fight cancer by making it easier for people to get exercise, including providing public sidewalks and good food and exercise programs at schools.[46]

While the Centers for Disease Control and the American Cancer Society cite declining physical exercise and obesity among children as a top heath concern, new schools are not promoting – by design – the ability of children to walk to school and receive passive exercise, among other benefits. In fact, it is increasingly dangerous for kids to do so. In 1999, the informative study done for the South Carolina Coastal Conservation League on how the current selection of school sites deters walkability and promotes sprawl found that children were four times more likely to walk to school if their building was built before 1983, after which the state officially adopted CEFPI-inspired acreage standards.[47] Students that cannot walk to school, by virtue of a distance greater than a 1.5-mile radius between their home and the school, are provided transportation by school bus. Students who live within a 1.5-mile radius of their school are not provided bus transportation – unless there is a situation which would endanger the student upon his or her attempting to walk to school, such as lack of sidewalks or having to cross a

[46] Ibid.

[47] Kouri, *Wait for the Bus*, 6.

heavily-traveled highway.[48] Having to provide bus service in these close-proximity situations is referred to in this study as "hazard bus transportation", meaning if they are close enough to walk, it is not safe. Three coastal South Carolina counties have kept data documenting the amount of hazard transportation they have had to provide over several decades. With schools built before 1971, after which most South Carolina counties began unofficially implementing large school sites, only 6.3 percent of students needed hazard transportation. However, over 20 percent require hazard transportation to schools built after 1971.[49]

Declining Air and Water Quality

Individual choices by citizens to move out to the county results in an increase in individual expenses, but there are larger costs for the entire population as more and more families move away to chase new schools. Maine reports that since 1970, car usage has doubled in their state.[50] Since half of the destructive ozone compounds come from vehicle emissions, everyone's air quality is compromised. In addition to air pollution from increased auto usage, there are other social and health issues related to school sprawl. A decline in the health and quality of lakes and rivers from development runoff, the isolation of those without transportation, such as the poor, the elderly and the young, and the loss of farmland and traditional farming practices.[51]

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[48] Ibid.

[49] Ibid.

[50] O'Hara, *The Cost of Sprawl*, 11.

[51] Ibid., 5.

A study by the Surface Transportation Policy Project (STPP) analyzing sprawl and driving shows that Americans are spending more time than ever behind the wheel, and that mothers are spending the most time of all.[52] Mothers are increasingly the family member called to transport children and elderly parents who cannot get from place to place on their own and forced to run errands to stores that are not located close to where they live. The report cites a consistent lack of safe routes for kids to walk or bike to, such as school and after-school activities, forcing moms to chauffeur their kids everywhere.[53] All this driving does not count as quality time spent with family and is leaving women more frazzled than ever. The report urges communities to pursue transportation alternatives, beginning with providing safe, well-lit sidewalks and bike lanes so that children get move around independently, noting that this teaches kids responsibility and respect for others.[54] In addition to constructing these paths, STPP promotes locating civic, cultural and commercial destinations closer to where people live, so that those without a car are not a burden, while also highlighting sidewalks as a traffic calming device and safety measure.[55]

Increased busing alone contributes significantly to poor air quality, especially for those children who ride the bus. In a report on the affect of diesel schoolbuses in California, the National Resources Defense Council and the Coalition for Clean Air

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[52] Surface Transportation Policy Project, *High Mileage Moms* (Washington, D.C.: Surface Transportation Policy Project, 6 May 1999) [publication online]; available from http://www.transact.org/Reports/ highmilemoms/splash.htm; Internet; accessed 11 February 2002.

[53] Ibid.

[54] Ibid.

[55] Ibid.

found exhaust levels inside the buses to be eight times higher than what was found outside the bus.[56] Diesel exhaust contains fine particles that settles in the lungs and worsens asthma. Diesel exhaust has also been linked to decreased lung function growth in children, resulting in faster breathing, immature lungs and intolerant immune systems. Having to rely on busing to transport most school children to far-away schools not only deprives them of needed exercise but endangers the very air they breathe.

Less Involvement in Extracurricular Activities

When students must rely on parents, friends or the bus for transportation home after school, it limits their ability to participate in after-school extra-curricular activities. Students that are forced into purchasing a car to get them from place to place may also have to find a job after school, thus cutting into afternoon and evening time that could be reserved for athletics, music classes and studying.

Violence and Social Problems

Lack of time for or access to participation in extra-curricular activities can have devastating results. Nearly half of all juvenile crimes are committed after school between the hours of 2:00 – 8:00 p.m.[57] The number of single parent families and two-income families have increased, leaving more kids than ever home alone after school. By the time their children are adolescents, parents are only spending about two hours per day on

[56] Gina M. Solomon and Todd R. Campbell and others, *No Breathing in the Aisles: Diesel Exhaust Inside School Buses* (Natural Resources Defense Council and Coalition for Clean Air, January 2001) [publication online]; available from http://www. nrdc.org/air/transportation/schoolbus/schoolbus.pdf; Internet; accessed 20 February 2001.

[57] Molly Masland, *After the Bell: Three Months with American Kids After School* (MSNBC.com Special Report) [article online]; available from www.msnbc.com/news/452149.asp; Internet; accessed 22 March 2002.

average with their kids.[58] These hours after school are crucial in a child's development, and lack of supervision and stimulation can cement behavior patterns for the rest of their lives. Students that do not participate in after-school activities are more likely to have dropped out by their senior year, to have smoked cigarettes and tried drugs, to have become teen parents, and to have been arrested.[59] By locating schools and neighborhoods away from other positive resources, such as the YMCA, and by making it impossible for kids to walk or bike on their own to these resources, including their school and its extra-curricular activities, kids are left with little to do after-school other than watch television. By designing neighborhoods that children cannot navigate by themselves, they are deprived of the independence needed to mature and foster healthy self-esteem and self-worth.

School violence has seemed to increase dramatically over the past several years, as evidenced by terrible school shooting rampages at Columbine High School in Colorado and others in Arkansas, Georgia and Oregon. After the horrific events of April 20, 1999, at Columbine High School – in which two seniors carried out a deadly revenge campaign against teachers and students at their school before committing suicide – the Governor of Colorado ordered a commission to study events and determine ways to respond to and prevent such disturbing school violence. In their report, the commission emphasized that as schools become larger and larger, their sheer size and numbers seriously inhibits a community's ability to cope with the rise in school violence and

[58] Ibid.

[59] Ibid.

prevents a school administration from create a nurturing environment for students. The commission admitted that while districts prefer large schools over small for the construction and land cost savings, the community ultimately "pays a price for larger schools: students… feel marginalized and less a part of a school community in comparison to their counterparts at smaller facilities."[60]

As we continue to witness, these feelings of isolation and anonymity can have horrific results. Lakis Polycarpou, a 1990 graduate of Columbine High School, recently reflected on his time in Littleton:

> When I was a senior, a fellow student died in a drunk driving accident. We all attended a tearful school assembly in which a friend who had survived the accident joined the administrators in admonishing us not to drink and drive. In the class immediately after, we spent a somber hour discussing the incident. A classmate posed a question: "What are we supposed to do? There's no place for us to go out at night. We aren't allowed into bars. You have to drive to get anywhere." Even in the wake of a friend's death, she was utterly unable to conceive of the possibility of abstinence, or to think of any other fun activity in which she could participate that did not involve drinking and driving. It took me a few years to realize it, but that day I was staring in the face of suburban alienation.[61]

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[60] *Report of the Governor's Columbine Review Commission,* by the Honorable William H. Erikson, chairman (Colorado, May 2001) 101 [publication online]; available from http://www.state.co.us/columbine/Columbine_20Report_WEB.pdf; Internet; accessed 26 April 2002.

[61] Lakis Polycarpou, "The Littleton I Know Isn't Anytown. It's Notown," (*The Washington Post,* 2 May 1999) [article online]; available from http://www.innercity.org/columbiaheights/newspaper/littleton.html; Internet; accessed 4 March 2002.

CHAPTER 3

BENEFITS OF HISTORIC NEIGHBORHOOD SCHOOLS

Proven Adaptibility, Cost Savings and a Sense of Place

The American Society of Civil Engineers reports that 45 million students are in the nation's 86,000 schools.[1] According to a recent study by the U.S. Department of Education (DOE), one-quarter of the nation's public schools, serving eleven million students, suffers from inadequate building conditions.[2] The DOE estimates that $127 billion is needed to bring the nation's public schools up to good condition, or about $2.2 million per school. The DOE concurs with preservationists' arguments, stating that the actual age of school buildings is less important than the building's maintenance and renovation record and practices. The average age of America's public schools is forty years old, and if they had any renovations, it was an average of eleven years ago.[3] DOE prefers to classify buildings by their "functional age", which is the last year in which the building underwent any construction project. This average is approximately sixteen years. The baby boom echo, immigration and migration are credited with overcrowding our nation's schools, and the schools which are most overcrowded are large schools with

[1] Source: American Society of Civil Engineers, available from http://www.asce.org/reportcard/index.cfm?reaction=factsheet&page=5.

[2] National Center for Education Statistics, Statistical Analysis Report, *Condition of America's Public School Facilities: 1999* (National Center for Education Statistics, June 2000) [publication online]; available from http://nces.ed.gov/ pubsearch/pubsinfo.asp?pubid=2000032; Internet; accessed 24 April 2002, 55.

[3] Ibid., vi.

high minority enrollments. The DOE considers a school to be overcrowded if it exceeds five percent of the building's capacity.[4] Overcrowded large schools were found to have more instances of poor building conditions than small schools.[5] Underused historic schools can serve to relieve overcrowding.

Proven Adaptability for Other Uses

Old school buildings are highly regarded by preservation-savvy developers for their architectural merit and commanding presence; high ceilings, large windows and light-filled spaces; hardwood floors and solid construction. They are often located near existing retail and residential areas, and their size and room arrangement makes them well-suited for a variety of new uses. In Georgia alone, historic school buildings across the state have been rehabilitated and taken on new lives as artists lofts and teaching studios, gallery exhibition space, offices, museums, cultural centers, condominiums and elderly housing, libraries, police departments, and child care development centers. By virtue of already owning the building, school districts themselves often find a use for schools as administrative offices or adult and continuing education classes. If historic schools can serve well for uses and groups for which they were never intended, they can continue to educate children amidst shifts in educational practice and advances in technology.

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[4] Ibid., 45.

[5] Ibid., vi.

Cost Savings and Benefits to Community

In a recent article for *Education Week*, CEFPI spokesman Barbara Worth acknowledged that a historic school building can portray a culture and a community in ways that new buildings can not.[6] She also admitted that restoration is often more feasible, since school districts often fail to factor in the hidden costs of new construction like land acquisition, demolition, infrastructure, etc., when opting to abandon an old school for a new one. Renovation has the advantage of not needing to factor in all the high costs associated with new construction that are outside of the building expenses. Infrastructure such as roads, water and sewer lines, even sidewalks and bus routes are already in place. The land and the building are paid for. Craftsmanship, high quality materials and design do not have to be sacrificed because they are inherent in the building. A previously underused auditorium can double as a much-desired civic theater after renovation. Retaining forests and farmland in turn generates revenue for the city.

Historic school buildings have the advantage of being located close to where people live, usually surrounded by a historic neighborhood complete with sidewalks and street trees. This makes it easy for kids who attend the nearby school to safely walk there every morning and afternoon without relying on the bus or their parents. This saves parents unnecessary trips, money for gas and reduces wear and tear on their car. High school students can save time and money if they are not forced into getting a job to pay for their own car insurance and gas. Millions of dollars that states normally have to

[6] Sack, *Razing Objections.*

allocate for busing costs can be funneled into so many other necessary and worthwhile areas, such as teacher salaries, technology upgrades and building maintenance.

As economic development consultant Don Rypkema says, historic preservation is about jobs. New construction is about half labor and half materials. Renovation projects are 60 - 70 percent labor – labor that is done by locals who, in turn, spend their paychecks locally.[7] Research by Preservation North Carolina determined that for every one million dollars a community spends on rehabilitation rather than new construction, $120,000 more stays in the community and five to nine more construction jobs are needed. Sales at retail establishments will increase $34,000, and realtors, banks and restaurants all gain more from rehabilitation projects.[8]

Improvement and beautification projects are contagious, and the whole community can benefit. Communities that have put the time, effort and money into renovating a historic school building report a significant increase in upgrades to surrounding homes and businesses. Eighty-five percent of all new jobs in America are within small businesses and revitalized historic commercial areas help create new jobs by providing the optimum size and affordable rent that small businesses need.[9] Therefore the rehabilitation of in-town schools helps stimulate the economy of historic retail districts and helps new small businesses. Historic preservation efforts and local historic district designations are known to stabilize, and then gradually increase property values.

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[7] Rypkema, Don, "Historic Preservation is Smart Growth," *The Rambler*, Georgia Trust for Historic Preservation, 25 no. 5, October 1999.

[8] Fulkerson, Jay, "Historic Preservation: The Ultimate Recycling," *Preservation North Carolina*, Summer 1995.

[9] Rypkema, "Historic Preservation is Smart Growth".

In Georgia, several studies have been done that showcase the economic impact of historic preservation. In the university town of Athens, property values in seven neighborhoods with national and local historic district designation grew by an average 48 percent from 1976 to 1996, compared with a 34 percent growth rate in similar, non-designated neighborhoods.[10] In Savannah, three historic neighborhoods were studied from 1974 to 1997. In a town that benefits from history and tourism more than most, the two neighborhoods with National Register designation increased their property values by an average of 441 percent. The third, non-designated neighborhood, only appreciated at a rate of 15 percent.[11]

The Georgia Department of Community Affairs wanted to see if their Main Street and smaller Better Hometown communities benefited economically from their structured downtown revitalization programs. Specifically, have there been positive effects on the tax base? The city of Greensboro, Georgia, population 5,000, has had their Better Hometown downtown revitalization program in place since April 1997. Since that time, the town has had many victories to celebrate as a result of their concerted efforts to improve their downtown: an award-winning new addition to their historic courthouse; new businesses; a successful façade grant program; many renovated historic buildings; new sidewalks, street trees and lighting as part of a streetscape effort; and an enormous increase in volunteers for and participation in downtown festivals and activities. Upon visiting, one can easily see that the efforts have paid off in the beauty and attitude of the

[10] Joni Leithe and Patricia Tigue. *Profiting From the Past: The Economic Impact of Historic Preservation in Georgia*. (Athens-Clarke County [GA] and the Georgia Department of Natural Resources, Historic Preservation Division, 1999) 8.

town. But these results show up in the town's tax base as well. Before 1997, there was little investment in downtown, but in 1997 – when the downtown revitalization program was put into place – the tax base jumped the equivalent of gains that normally took the town three or more years to achieve.[12]

The benefit of preservation and revitalization efforts such as these to the school system is that the local school board typically has the highest millage rate among the three taxing agencies (school board, county and city). So while the city and county benefit from these programs, the school district benefits the most. Therefore it is in school districts' best interests to enhance preservation efforts by reusing historic schools as schools and stimulating neighborhood and commercial revitalization.

Natural Community Centers

Kouri's study compared goals of the South Carolina criteria for school site selection with recognized aims of land use conservation planning, based on the South Carolina Coastal Conservation League's (SCCCL) goals. Contrary to what would seem to be the case, based on recent school site selection, the goals of the South Carolina Department of Education and conservation-based planners are the same. The South Carolina criteria urges local school boards to consider energy conservation, proximity to existing community services, and the availability of existing utilities when selecting new school sites.[13] These and all other goals are compatible with conservation-based planning

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[11] Ibid. Both figures arrived at after factoring inflation between the study years of 1974 and 1997.

[12] Source: Alan Dickerson, Better Hometown Coordinator, Georgia Department of Community Affairs.

[13] Kouri, *Wait For the Bus,* Appendix 5.

principles. The SCCCL and other conservation-based planning groups advocate minimizing traffic congestion, minimizing infrastructure costs, and mitigating adverse environmental impacts of development.[14] While Kouri promotes the solution of building schools in-town to fill empty urban or residential spaces within existing development to fulfill both group's criteria, preservation-based planning takes the solution further when existing historic schools are renovated for modern school use, all the while promoting civic pride and protecting an important piece of architecture, the beauty of which could not be duplicated in a new building for the cost of rehabilitation. Historic schools were built on a human scale, which makes them approachable and welcoming. Large windows, high, arched ceilings, grand staircases and rich wood detailing are all common in historic schools. Public schools used to be built to inspire people to learn.

The U.S. Department of Education published a citizen's guide in 2000 entitled *Schools as Centers of Community.*[15] The Guide appeals to local district officials, educators and public leaders to have schools serve as the center of community, or locate schools within established centers, adjacent to other viable resources such as museums, colleges, zoos, etc. It states that students learn better in an environment where the school is central to the community and is a place of learning for everyone to use.[16] School is then held at a higher value by students, not thought of as just someplace far away that they have to go. Historically, schools were always designed as prominent buildings within town, and the Department of Education implores that schools once again need to

[14] Ibid., Appendix 6.

[15] U.S. Department of Education, *Schools as Centers of Community.*

have an integrated physical and emotional presence. By using historic school buildings as modern-day schools, this national goal can be achieved. Since good schools are key to families' choices about where to live, the Department recognizes that by, ". . . building smaller schools close to where people live, communities can encourage the development of smart growth policies that lead to better neighborhoods and more livable communities."[17]

The Department goes on to say, "we cannot afford to think of high school graduation as a finish line, and this means one of the most important end products of schools needs to be citizens who have learned how to continue to learn."[18] No one stops learning at age eighteen. Schools should be inviting, not foreboding. Treasured places glorify learning and invite all to participate, not just those who are required to attend. Schools should be open later and on weekends to facilitate community and student interaction and project education as a community value. Historic schools can provide all these things with the added benefit of being beautiful, interesting spaces. Children can walk to school under tree-lined streets in cared-for neighborhoods, smile and wave at neighbors they pass daily, and visit local businesses after school, all the while cultivating a self-affirming independence that will carry them through into adulthood.[19]

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[16] Ibid., 1.

[17] Ibid.

[18] Ibid., 6.

[19] Miller, "Hey Kid, Try Walking."

Small Schools are Better and Historic Schools are Small

With decades-long thinking that consolidation was the key to better education, and with the design of bigger and bigger campuses, the social and academic disadvantages of large schools have emerged. The education community has responded in many ways, not just calling for smaller class sizes and better pay for attracting more teachers, but for bigger reforms of the public education system. The leading movements that have been gaining followers are for small schools, charter schools and schools-within-a-school. The overall focus of each of these ideas is to shrink the primary and secondary school to a manageable size and create a low teacher-student ratio. The benefits of a teacher's ability to have more personal interaction with their students are enormous, and smaller schools offer this and much more. Historic schools are small schools, and historic school buildings can offer the organization and format of a small school education in an often architecturally inspiring setting.

There is an overwhelming amount of literature on the educational and social benefits of smaller schools. In fact, it is rare to find educational research that supports or justifies large schools. Kathleen Cotton, an educational research specialist at the Northwest Regional Educational Laboratory in Portland, Oregon, reviewed 130 of the leading studies which related school size to any aspect of education and compiled her findings in a 1996 report entitled "School Size, School Climate and Student Performance." [20] Educators and researchers vary on how they define large and small

[20] Cotton, Kathleen, *School Size, School Climate, and Student Performance*, Northwest Regional Educational Laboratory, School Improvement Research Series, Close-Up Number 20 (1996) [journal online]; available from http://www. nwrel.org/ scpd/sirs/10/c020.html; Internet; accessed 7 March 2002.

schools in terms of student population, but based on her research, Cotton concludes that effective [small] schools hold 300 - 400 at the elementary level and 400 - 800 at the middle and high school levels.[21] Throughout her research, she found that small schools proved over and over to be superior to large schools on most counts, and equal to them on the rest. This held true for both elementary and secondary schools regardless of setting.[22] These educational benefits should be touted by advocates for keeping historic school buildings as schools.

Of the 130 documents she studied, the implications of school size were researched for their effect on a wide variety of issues, including achievement, schooling costs, student attitudes, behavior problems, alienation, attendance, extracurricular participation, college preparation, student/staff relations and teacher attitudes. Citing an early study on school size,[23] Cotton's report states that while large schools could provide a larger variety of extracurricular activities, students in small schools had a better opportunity to hold leadership positions in their activities. In a small school, everyone is needed to serve on all the various clubs and teams, therefore students who may not normally consider themselves deserving of inclusion are strongly encouraged to participate by peers and teachers. Students perceive the biggest benefit of a small school setting to be the attention, support and help they receive from teachers. There is a strong correlation between self-esteem and extra-curricular participation. Distance learning and technology

[21] Ibid.

[22] Ibid.

[23] Barker, R. and P. Gump, *Big School, Small School: High School Size and Student Behavior* (Stanford, CA: Stanford University Press, 1964).

are available for smaller schools to enhance their curriculum further. Meanwhile, only 5 – 12 percent of students in large schools participate in the extra courses that are offered.[24] Large school benefits tended to be illusory, thus leading these researchers to decide that small schools had the overall advantage for students. Thirty years later, today's educators are still insisting that small schools are better.

More Cost Effective

One of the most common arguments against small schools is the presumption that they are not as cost-effective as large schools. Surprisingly, the available research does not support an across-the-board policy that small schools are more expensive per student. Studies show that many small schools have proven to operate efficiently while many large schools have bloated per-pupil costs.[25] The larger school populations get, the needed increase in staff to manage and control students has costs rising exponentially. The Rural School and Community Trust reminds proponents of larger schools that when cost-effectiveness is approached from a cost-per-graduating-student basis, the numbers are reversed. Small schools have a higher percentage of students who go on to post-secondary education.[26]

Improved Academic Achievement

With a smaller student-teacher ratio comes greater academic achievement. Academic achievement is classified, per Cotton's studies, as a combination of grades, test

[24] Cotton, *School Size.*

[25] Ibid.

[26] Source: The Rural School and Community Trust, available from http://www.ruraledu.org/keep_learning.cfm?record_no=559.

scores, honor rolls, and higher thinking skills. Her compiled research revealed about half of experts feel results are indistinguishable between large and small schools, the other half concluding that small schools give students an advantage. None of her research concluded that students at large schools outperform students at small schools. This was true regardless of whether the schools were located in an urban or rural setting.

Racial Educational Equality

While small schools have proven to positively affect grades, test scores, attendance, extra-curricular participation and graduation rates equally or better than large schools, the greatest results throughout were in the achievements of minority and low-income students.[27] Unfortunately, studies also show that these students are most adversely affected by attending large schools and are concentrated in those states with the largest schools and the highest drop-out rates, the highest incidents of violence and the lowest academic achievements.[28] Since the majority of schools needing repairs are in poor, rural communities, and minority and low-income students perform significantly better in smaller schools, the conclusion could be drawn that sending these students away to big consolidated schools is missing the point – wasting money and wasting time.

Civic Pride in Architecture, Local History

After the Chicago fire of 1871, the city seized the opportunity to rebuild from scratch, attracting architects from all over to do their best work and make a name for themselves. As they rebuilt, these architects purposefully designed schools and churches

[27] Cotton, *School Size.*

[28] Sack, *Razing Objections.*

as the tallest buildings around, emphasizing to new immigrants the importance America places on education and religion.[29] Today, the U.S. Department of Education in their Citizens Guide, compels school design and planning committees to realize that "school buildings, whether new or renovated, should model the highest standards of aesthetic quality for public projects. They should respect the landscape while reflecting the unique identity of the particular community they serve. They should capture the noble character of public architecture while being visible symbols of individual self-esteem and shared values. They should serve as a source of community pride."[30] Historic school buildings satisfy this mandate because they were built at a time when this exact philosophy was ingrained in the community. Today Chicago is following in the steps of their forefathers through massive school restoration efforts, reinvesting $2.5 billion to renovate its school buildings for their 431,000 students. The district has spent approximately an average of $130 per square foot to renovate its schools, compared with $155 per square feet to build sterile new construction on the existing sites.[31] Not only has it cost the district less to renovate, the historic schools offer an emotional advantage that new schools cannot. Attending school in a historic building teaches history simply by conducting classes there. It provides a connection to the past that is imperative for students if they are to realize the greater role they can have in society. When children attend school in rooms that so many generations before them gathered in, the school and their education becomes a source of great pride.

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[29] Sack, *Razing Objections.*

[30] U.S. Department of Education, *Schools as Centers of Community.*

In an attempt to mimic the benefits of small schools, many mega-schools are creating schools-within-a-school, where the student body is broken down into smaller segments, each with its own school name and mascot and its own set of teachers. While the evidence on this trend is much less conclusive than that of small schools, this approach can achieve some of the social aspects of independent small schools. Researchers and participants say the major dilemma with schools-within-a-school attempts is achieving an acceptable level of separateness and autonomy. They do not recommend that schools-within-a-school programs be considered the ultimate solution to large school problems.[32] Therefore a better solution would be to construct smaller schools and renovate historic school buildings for educational purposes.

With all these academic and social benefits of small schools, why are historic schools being abandoned and replaced with sprawling campuses with thousands of students? One researcher[33] put the dilemma facing educators – who hold the preponderance of evidence for small schools but face a lack of change and execution – to the fact that school size is seldom based on educational research but on political, economic and demographic factors. This has proven to be true time and time again as school districts focus on new construction and large sites. In her analysis of school size and climate, Cotton concluded that those who know the facts on the benefits of small schools have to become strong advocates for a sweeping change in policy. For preservationists, this means uniting with parents, teachers, students, planners and

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[31] Sack, *Razing Objections.*

[32] Ibid.

environmentalists to speak with one voice for keeping historic schools in use as schools for better education.

Emotional Stability and Walkable Communities

The physical and emotional health of students and faculty stands to be improved by the smaller educational environment, building design and location that historic schools have to offer.

Violence Prevention

Social behavior is dramatically more positive at small schools than large. Student attitudes are better at small schools, as is their sense of belonging and self-worth. Cases of truancy, disrupting class, theft, drug and alcohol abuse, vandalism and gang activity all decreased in small school settings.[34] Large schools are more likely to use security guards and metal detectors, arbitrary searches and mass expulsions to control an anonymous student body, thereby reinforcing the acceptance that violence will happen.[35] A 1999 report by the National Center for Education Statistics reports that large schools with a population over 1,000 are eight times more likely to have a serious incidence of violence than small schools with a population below 300.[36] In their report analyzing the Columbine High School massacre, the Colorado Governor's Commission noted in their preventative recommendations that devices such as metal detectors and security cameras

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[33] Cotton, *School Size.*

[34] Ibid.

[35] Michael Klonsky, "How Smaller Schools Prevent School Violence," *Educational Leadership*, February 2002 [article online]; available from www.smallschools.com/ed022002mKlonsky.html; Internet; accessed 19 February 2002.

[36] Ibid.

have not proven to deter major school violence. Instead, they recommended that all districts should work towards constructing smaller schools or developing schools-with-a-school among other strategies to enhance communication and relationships.[37] While major violence like school shootings grab headlines, parents are generally more concerned with instances of bullying, racial conflict and suicide, which outnumbers school shooters by the thousands.[38] James Garbarino, director of the Family Life Development Center and a professor at Cornell University, speaks for many child psychologists who are working towards preventing juvenile violence, saying, "If I could do one single thing, it would be to ensure that teenagers are not in a high school bigger than 400 to 500 students."[39]

Better Relationships

Large schools searching for an end to violence cite the inability of teachers to get to know all of their students and prevent a problem from escalating. With smaller schools comes smaller class sizes, and teachers have the capability to intervene early in a potentially dangerous situation. They can also better offer the academic and emotional support that each of their students need. Smaller student populations foster positive social interaction and facilitate supervision.[40] A safe environment is created naturally when teachers have a close relationship with their students, and students with each other, thereby developing mutual respect and friendships.

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[37] *Governor's Columbine Review Commission.*

[38] Klonsky, "How Smaller Schools Prevent School Violence".

[39] Ibid.

[40] U.S. Department of Education, *Schools as Centers of Community.*

Large schools also tend to produce low teacher morale and a general staff distrust of the administration. Teachers in smaller schools are more likely to form teaching teams and integrate their studies with other classes and grades, as well as relate studies to the outside world more than in large schools.[41] In small schools, learning is individualized, flexible and more focused on a student's needs. Many researchers have observed that small schools form stronger relationships between teachers, students, each other, parents and the community at large. This is often attributed to a small school's location, which is often physically, and therefore emotionally, closer to where students live.[42] Cotton found that smaller schools work because they are easier to manage and implement change. She credits this to everyone's knowing each other and actively participating in the school's life, especially small schools' higher rates of parental involvement. By involving all community stakeholders in creating a school-based community center, a diverse group of individuals of all ages and backgrounds contribute ideas and needs to the project, resulting in creative collaboration, a highly useable project and wide-ranging community support in terms of volunteers and financial backing.[43] The federal Department of Education also states that along with good lighting, safe passageways, attractive and architecturally inspirational spaces can reduce violent behavior. "A growing body of evidence suggests that student behavior and attitudes can be significantly affected by the quality of the learning environment… communicate respect for the people and the

[41] Cotton, *School Size.*

[42] Ibid.

[43] U.S. Department of Education, *Schools as Centers of Community.*

activities housed within. As such, they contribute to positive school climate, good discipline and positive learning."[44]

Social Diversity

Children who attend school in a historic school building are also more likely to have a diverse group of classmates and a social awareness of other cultures. Historic schools are located in historic neighborhoods, which offer a wide range of housing styles, sizes and qualities. This means that a wide variety of people can afford to live there, as opposed to new subdivisions which offer a single – and often unattainable – type of housing. Therefore the families that school children pass every morning and the population that the neighborhood school draws from is likely to be a rich mixture of citizens of all races and socio-economic levels.

Walkable Communities

Historic neighborhoods with sidewalks that link students to their school means they are engaged in exercise at least twice a day when they walk or bike to and from school. Being able to walk and bike is a benefit to their health, but it also means they have the independence to participate in extra-curricular activities at school and nearby centers without relying on parents or the bus. Attending a historic neighborhood school can promote high self-esteem by virtue of its location and interconnection with the community, rather than isolating students physically and emotionally from others. A school's location within a neighborhood also means it has a built-in security system, as neighbors keep an eye on the school and can easily report suspicious activity.

[44] Ibid.

Benefits of Natural Light

One common design feature of historic school buildings is the prevalence of large windows. Fenestration is one of the strongest differences between new school buildings and old schools buildings. Bands of large windows contribute not only to the beauty of the façade, but to the nature of the interior classrooms and hallways as well. However, multiple stories of multiple wooden windows that have been neglected for years often pose a great expense to a district that is considering renovation. In weighing their importance, the districts should also consider the contribution that windows and natural light have on students and teachers.

A recent study of schools in California, Washington state and Colorado revealed that natural light does in fact have a positive affect on human behavior.[45] Paralleled with a study on the effect of skylights on retail sales, researchers chose to compare the effects of natural light on the academic performance of second through fifth grade students – due to the fact that students had standardized testing results available in those grades and that they remained with one teacher in one classroom throughout the year.[46] The researchers used statistical analysis techniques to remove other influences of windows and skylights and isolate the effects of natural light in the classroom on academic performance. While each of the three districts varied in terms of population and climate, the results were all positive. In California, students in classrooms with the most daylight progressed 20 percent faster in math tests and 26 percent faster in reading tests than those in rooms with

[45] Pacific Gas and Electric Company. *Daylighting in Schools: An Investigation into the Relationship Between Daylighting and Human Performance* (California: Pacific Gas and Electric Company, 20 August 1999).

the least daylight. Students in classrooms with the most windows progressed 15 percent faster in math tests and 20 percent faster in reading tests than students whose rooms had the least windows, and in most cases, even being able to open the windows resulted in a 7 percent - 8 percent further increase over those classrooms with non-operable windows.[47]

While the year-end testing results in Washington and Colorado could only be compared to the beginning of the year, as opposed to throughout the year as in California, the results were still positive: classrooms with the most daylighting resulted in 7 percent - 18 percent higher test scores than those rooms with the least windows. In fact, researchers felt that the results were actually stronger, given that children in climates such as the western mountains and the Northwest were affected more dramatically by sunlight than children from Southern California, who spent most of their time in the sunny outdoors.

The researchers draw the conclusion that several factors associated with natural light produce these positive results, ranging from improved visibility due to light quality and illumination to improved health, mood and behavior. Teachers reported using daylighting as their only light source when needing children to be calm and attentive, and found being able to take in the view helped reduce stress in themselves.[48] These suppositions coincide with several studies that have been conducted on the positive affect

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[46] Ibid., 3.

[47] Ibid., 4.

[48] Ibid., 29.

of windows in a hospital room on a patient's recovery time.[49] The California researchers also paralleled their findings to a Swedish study of eight-year-old students over the course of the school year, which found meaningful connections between daylight and student performance and behavior, and therefore determined that windowless classrooms should be avoided.[50] These findings prove that the decision whether or not to include or renovate windows in a school building should not be made at the whim of engineers who are striving solely for heating and cooling efficiency. Clear, operable windows that allow light to penetrate a room improves students' and teachers' attitudes and performance. Historic school buildings with their large expanses of windows can provide this type of enhanced learning environment.

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[49] Ibid., 30. Cites Wilson, L.M., "Intensive Care Delirium. The effect of outside deprivation in a windowless unit" (Archives of Internal Medicine, 1972) 130, 225-226, and Ulrich, R., "View Through Window May Influence Recovery from Surgery", *Science* 224, 420-421 (1983) and Keep, P., J. James, and M. Inman, "Windows in the Intensive Therapy Unit", *Anathesia* 35, 257-262 (1980).

[50] R. Kuller and C. Lindsten, "Health and Behavior of Children in Classrooms with and without Windows", *Journal of Environmental Psychology* (1992) 12, 305-317.

CHAPTER 4

CREATIVE POLICIES AND SOLUTIONS THAT PROMOTE RETENTION OF HISTORIC SCHOOLS AS SCHOOLS

In response to the many communities who have expressed dismay at not being able to keep their historic schools from being abandoned, not to mention demolished, the National Trust for Historic Preservation launched a campaign for historic schools, beginning with including them on their annual list of most endangered places in 2000. In the years following, the Trust has produced two initial reports on the climate of neighborhood schools and the obstacles to their continued use. *Why Johnny Can't Walk To School* and *A Community Guide to Saving Older Schools* both dispute myths about historic schools versus new schools and give case studies as examples and inspiration. Many educational resources mention both publications when disseminating information on small, community-centered schools. Citizens groups are networking to share success stories and these are slowly becoming evident.

Other nationwide efforts to curb sprawl and promote historic town centers give precedence to preservationists' efforts to locate public schools within historic school buildings. Federal policies, changes in statewide planning laws and education standards, and funding opportunities are emerging to respond to the loss of our nation's historic fabric. Innovative grass-roots efforts serve as inspirational lessons.

Federal Policies

Presidential Executive Orders

Two high-profile examples of federal support for preservation efforts are the Presidential Executive Orders signed by Presidents Jimmy Carter in 1978 and Bill Clinton in 1996. Carter's 1978 Presidential Executive Order directs all federal facilities to locate federal buildings and spaces in urban areas rather than the periphery of towns, to utilize historic buildings, to collaborate with local officials in site selection, and to economize the use of space for federal facilities.[1] In 1996, President Clinton reaffirmed Carter's Executive Order by stating furthermore that federal offices should locate in, utilize and maintain historic properties in central business areas wherever possible. A federal office's first consideration should be to a historic property within a historic district, secondly to other properties within a historic district, and thirdly to historic properties that were outside a historic district.[2] This order gave further support to the National Historic Preservation Act and stressed the importance of local historic resources and the communities that federal agencies serve. Likewise, local officials, such as school boards, should realize the role a healthy historic school has to play in the fabric of the community.

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[1] U.S. President, Executive Order 12072, "Federal Space Management," Federal Register 43, no. 36869 (16 August 1978), available from http://envirotext.eh.doe.gov/ data/eos/carter/19780816.html; Internet; accessed 9 June 2002.

[2] U.S. President, Executive Order 13006, "Locating Federal Facilities on Historic Properties in Our Nation's Central Cities," Federal Register 32, no. 21 (27 May 1996), available from http://frwebgate6.access.gpo.gov/cgi-bin/waisgate.cgi?WAISdocID=661972253370+0+2+0&WAIS action=retrieve; Internet; accessed 9 June 2002.

U.S. Department of Education

The U.S. Department of Education has given its support for reversing school sprawl and creating schools that can once again serve as centers of community life, literally and figuratively. In the aforementioned *Citizens Guide for School Planning and Design*, communities are encouraged to have schools that are available to its citizens before and after school hours, therefore creating schools as community centers.[3] By creating "parent centers" schools can invite parents to come during the day to see what their child is learning, thus encouraging them to be more involved. This way, learning is carried over to home life and students feel less isolated when family members take interest. The guide cites creating relationships with local businesses to support the local economy and relate learning to life after school. Community business leaders are encouraged to provide apprenticeships and service learning opportunities to enhance education.

CEFPI and NCPTT

Good news for preservationists everywhere was the announcement in December 2001 of a collaboration between two organizations considered experts in their fields. The National Center for Preservation Technology and Training (NCPTT) and the Council for Educational Facility Planners, International (CEFPI) are working together to ensure that historic school buildings are given equal consideration as new schools are when districts are looking to expand their facilities. Regie Teague, president of CEFPI says, "Innovation and renovation can go hand-in-hand when modern practices in construction

[3] U.S. Department of Education, *Schools as Centers of Community, 6.*

and technology are used in these rehabilitation projects."[4] The collaboration will result in a revised version of CEFPI's *Appraisal Guide*, which many communities use when deciding whether to renovate or build new. NCPTT expertise will contribute to the equation by providing information on assessing the structure, efficiency and accessibility issues and creative ways for historic buildings to meet modern building codes. Case studies of successful renovation projects will also be provided. Considering the extent to which local school boards trust CEFPI's recommendations, this collaboration could be one of the greatest boosts for retaining historic schools as schools.

Historic Schools Preservation Act

On March 20, 2002, the Historic Schools Preservation Act (H.R. 4045) was introduced to Congress, which would authorize the Secretary of Education to launch a pilot program for historic school rehabilitation offering grants to ten states to conduct cost analysis studies of school renovation projects. The program will be used to determine if, in fact, rehabilitation and renovation stand as viable alternatives to new construction in an effort to curb school sprawl and preserve historic school buildings. While in its infancy, the bill is a welcome opportunity to increase awareness of the potential that historic school buildings can offer to communities.[5]

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[4] Source: Council of Educational Facility Planners International, [press release online]; available from http://www.cefpi.org/historic.html; Internet; accessed 11 February 2002.

[5] The National Conference of State Historic Preservation Officers. *Weekly Legislative Update for SHPOs*, 5 no. 18, 10 May 2002.

Statewide Policies

Comprehensive and Educational Planning Laws

In the meantime, eliminating the problems associated with larger schools and being able to provide the education and environment that small schools can offer will require wholesale changes at the state levels. Many states have realized the damaging sprawl that current methods of new school construction can create, and they are modifying their regulations for local school boards to follow. Florida is one of the first states to pass laws requiring smaller facilities for new school construction. By the beginning of the 2003 school year, newly built high schools are not to exceed 900 students. Florida's Statewide Comprehensive Planning law takes a proactive stance regarding school site selection. The law requires future land use plans to designate land for educational use. Failure to comply results in the local government's inability to amend or modify its comprehensive plan, eliminating their ability to receive state grants and other funding. The law also encourages the location of schools in urban residential areas and to consider colocating schools with libraries, museums, parks and community centers. Florida's School Planning Laws mirror the Comprehensive Planning laws and instruct school boards to work closely with local planning agencies. Regarding site selection, minimum site sizes are relatively small and are flexible enough for local boards to defend if they require an even smaller site than the state recommends. Also notable is the school board's authority to make a request of the local government to construct and maintain sidewalks and bike trails within a two-mile radius of the school site. There are time limits imposed on local governments for correcting pedestrian and bike hazards

within this radius. Thus, the state's comprehensive planning laws and school planning laws ensure that each group's efforts coordinate.[6]

Maryland now requires school boards to comply with local comprehensive plans, building on the statewide "smart growth" policies curbing sprawl. Early in the 1970s, Maryland's larger cities like Baltimore were running out of space to build new schools based on the state's acreage standards.[7] The state guidelines no longer have minimum acreage requirements and stipulate renovation of existing buildings wherever possible, shifting the importance of new construction to a secondary role.[8] The state's criteria specifically states that projects should not encourage sprawl and should not be located in agricultural preservation areas.

Vermont's Land Use and Development Law also requires school districts to comply with the local comprehensive plan and further states that any school district with plans for a school site over ten acres must submit plans to the Environmental Commission – a governor-appointed body whose goal is to curb the waste of public resources and funds. [9]

Maine's Department of Education collaborated with the State Planning Office to produce a brochure for citizens and local school board officials entitled *The ABCs of School Site Selection*.[10] This brochure guides local officials to make good decisions

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[6] Kouri, *Wait For the Bus*, Appendix 7.

[7] Beaumont, *Historic Schools*, 17.

[8] Kouri, *Wait For the Bus*, iii.

[9] Ibid., Appendix 7.

[10] Maine Department of Education, State Planning Office, *The ABCs of School Site Selection* (Augusta: Maine Department of Education, 2000).

regarding site selection for new schools, noting first to consider renovation and expansion of existing sites. It also instructs school boards to follow the comprehensive plan, avoid farmland and open space where possible, make sure students can walk or bike to school, utilize existing facilities and infrastructure to limit costs, and encourage broad public participation in the process. Each guideline is explained and related to potential cost-savings for the district. This smart growth, community-based thinking counteracts typical school board policies and promotes the renovation of historic school buildings.

Slowly and reluctantly, cities who are simply running out of space are realizing that the current trends in school design will not work forever. The counties surrounding metro Atlanta – Gwinnett, Barrow and Forsyth – have long felt the effects of urban sprawl. They have conceded that land prices combined with rising construction costs dictate the need to build up, rather than out.[11] Gwinnett now has twenty-three K-12 schools that are multi-story, and Forsyth County recently approved a three-story elementary school slated to open in 2003. The American School Board Journal recently cited a growing trend towards building two-story elementary schools.[12] The report noted that utilizing less acreage, a smaller roof and foundation area affectively reduced plumbing, cooling and electrical system runs which all contribute to a less expensive design. Jerry Rochelle, director of facilities services for Georgia's Department of Education is not convinced that multilevel schools are cheaper to build, but admits that

[11] Chris Reinolds, "New School, New Stories: Multilevel Design Popular, Practical for Campus Plans," *The Atlanta-Journal Constitution* (Atlanta, GA) Metro section, 3 December 2001.

[12] Ibid.

rising land prices often tip the scales in favor of multiple stories.[13] Forsyth's three-story design may become a prototype for all Georgia elementary schools. The design takes advantage of a sloping landscape, nestling the building into the natural topography so that all levels are accessible from the ground. While this design would obviously not work for areas of the state without the rolling terrain of north Georgia, it does show that the state is aware of its limited resources and is willing to promote more compact designs. Hopefully, this trend will facilitate compact, neighborhood designs even in areas that have an abundance of open space, and highlight the benefit of reusing schools that were designed this way historically.

The Rehabilitation Subcode and Compatible Additions

Many school districts cite the inability of a historic school building to meet current building codes as a reason for abandonment. However, building codes are updated regularly, and to follow this logic, even recently built buildings are not "up to code". This does not make them unsafe. Fire warning and suppression devices, such as sprinkler systems, help historic buildings to maintain high safety standards, and well-designed elevators help provide access for all persons. These creative additions are common retrofitting solutions and can be configured easily by an architect familiar with rehabilitation practices. Many states are recognizing the need for building codes that do not discriminate against historic buildings and renovation projects. The best example is New Jersey's innovative historic rehabilitation subcode.[14] Created specifically to address

[13] Ibid.

[14] Available from the New Jersey Department of Community Affairs, http://www.state.nj.us/dca/codes/ rehab/.

historic building upgrades and renovations, the subcode covers all areas of construction, giving ways to meet safety requirements without compromising significant historic features and materials.

Until 1998, Pennsylvania's Department of Education prevented schools two or more stories tall with wood-frame construction from receiving funds for renovation, citing fire safety regulations. This rule was abolished after city and statewide preservation groups sponsored a study of recorded fire incidents.[15] The study found no correlation between school construction and injuries, and in fact, schools with wood frame construction were found to be more fire-resistive than most.

Throughout the National Trust for Historic Preservation's study of successful historic school retentions,[16] the consistent element (besides the dedicated community members who initiated and led the efforts) was the invaluable input from an architect experienced in rehabilitation projects. According to the National Trust, architects who have worked on both old and new construction agree that historically, buildings were built more solidly and with greater craftsmanship and attention to detail than buildings are today.[17] This solid foundation gives creative architects something to work with when updates need to be made to an old building. High ceilings provide plenty of room to run new HVAC services, stairwells can become elevators in order to meet handicap-accessible guidelines, sprinkler systems can mediate wood frame construction and technology upgrades really consist of just running new wires.

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[15] Beaumont, *Historic Schools*, 45.

[16] See http://www.nthp.org/issues/schools/studies.html.

Pine Street Elementary School in Spartanburg, South Carolina, is the oldest continually operating school in Spartanburg County. The Beaux-Arts style school was built in 1929 on 8 acres in a residential neighborhood.[18] (Fig. 4.1) When the school opened it had only six classrooms and remained in its original configuration until was upgraded in 1954 and 1983 resulting in the removal of the original windows and maple floors. In 1999, a much more sensitive renovation took place based on input from the historic neighborhood and community as well as school administrators. A two-story, 60,000 square foot addition was part of the new project, adding eighteen classrooms, a new cafeteria, media center, gym and arts complex. Besides a thirty-station computer lab, each classroom has six computer outlets resulting in over 150 computers in the school which is fully networked with the district.[19] The new addition extends from the back of the original building and respects it in style, scale and materials. The new yellow brick, tinted mortar and pre-cast stone reflects the original façade and its pale terracotta details. (Fig. 4.2) The architects at McMillian, Smith & Partners were able to give the school the space and amenities it needed without sacrificing the original structure or depleting the historic neighborhood of one of its most valuable assets. The project won a preservation award in 2001 from the South Carolina State Historic Preservation Office.

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[17] Beaumont, *Historic Schools*, 46.

[18] Source: South Carolina Department of Archives and History, available from http://www.state.sc.us/ scdah/hpawards2001.htm; Internet, accessed 15 May 2002.

[19] Source: Pine Street Elementary School, available from http://www.spart7.k12.sc.us/pinestreet/history_awards.htm; Internet, accessed 25 May 2002.

Fig. 4.1. Pine Street Elementary School, Spartanburg, SC, original façade.

Fig. 4.2. Pine Street Elementary with new addition.[20]

[20] Images from South Carolina Department of Archives and History; http://www.state.sc.us/scdah/hpawards2001.htm.

National Register Listing and Local Designation

While preservationists and architectural historians can recognize a significant historic structure from a mile off, it often takes its listing in the National Register of Historic Places to prove a building's worth to its community. Local historic district designation extends this recognition and offers the building protection from insensitive changes. So when the Pittsburgh Landmarks Commission learned several years ago of the school district's plan to begin closing and tearing down old schools, they quickly sought to get each of the nine immediately threatened schools on the National Register, and then began the process of local historic designation for all historic school buildings.[21] When the school district learned of the Landmarks Commission's intention to nominate thirty-eight of the city's ninety schools for local protection, they were not pleased. However, after the Commission explained the significance of having such a number of public gems and credited the school board for its good maintenance of the buildings, school officials graciously relented. After consideration, the school district still requested that only twelve be protected, but the city's Historic Review Commission approved fourteen. The Landmarks Commission countered with a proposal to designate twenty and let them receive right of first refusal on four others. One can imagine the surprise for all involved when city council insisted that all thirty-eight nominations be voted on! Some council members were insulted when schools in their district were not to be considered for designation. Twenty-two schools were named City Historic Structures at

[21] Rubman, *Community Guide*, 16.

council's first meeting, and the rest will presumably go through at the next meeting.[22] Preservationists can use the lessons learned in Pittsburgh and be proactive. Schools that are listed and promoted for their architectural and historical significance before demolition or closure is called into question stand a better chance of soliciting community support.

Funding Opportunities

National Register listing also allows properties to benefit from historic preservation grants. In Georgia, Florida and Colorado, among others, historic schools listed on the National Register can benefit from preservation grants and special help.[23] Encouraged by local preservationists, some state education departments are altering their funding biases against historic schools.

Positive Funding Formulas

In line with their smart growth planning efforts, Maryland has changed its funding formula so that it favors renovation over new construction. Now 84 percent of their funding goes towards existing schools.[24] Oregon and Pennsylvania have eliminated their funding biases towards new construction as well. Vermont's Department of Education passed a new policy in 1997 that brought school policies in line with their progressive planning efforts. Beginning with a statement that recognizes the historic importance that schools bring and reinvestment opportunities for their reuse, the policy goes on to announce that funding requests for renovating an existing school structure would receive

[22] Ibid.

[23] Ibid., 3.

precedence over those for new construction. Also notable is the Department of Education's mandate to local boards to make every effort to protect, preserve, reuse and place easements on historic schools if they are determined unusable as public schools.[25] Additionally, the Vermont School Construction Planning Guide emphasizes community-centered locations for schools that have alternative transportation options.[26] While Georgia preservationists are still trying to influence new funding reimbursement standards that do not discriminate against historic buildings in favor of new construction, they were successfully able to persuade their Department of Education to eliminate the provision that allows schools to receive funding for rehabilitation only once.

Special Purpose Local Option Sales Tax

Georgia has, in the past, raised school construction and renovation funds through property taxes. The local board of education would either ask voters to approve the sale of bonds, which would be paid off through property taxes, or ad valorem tax revenue would be used. Either way, funding was contingent on local property.[27] In 1997 a constitutional amendment[28] was passed to give local governments the option of putting to vote a Special Purpose Local Option Sales Tax, known as SPLOST. If passed by a majority of the voters, local boards of education can levy the 1 percent sales tax for up to five years to create funds for specific capital improvement projects, be it new

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[24] Beaumont, *Historic Schools*, 43.

[25] Kouri, *Wait For the Bus*, Appendix 7.

[26] Ibid.

[27] Source: Georgia Department of Education, Facilities Services; available from http://www.doe.k12.ga.us/facilities/splost.html.

construction or renovation, or they can use the funds to pay off bond debt. The Dekalb County School System praises the penny sales tax, as it spreads the tax base out beyond just the property owners, and the county can take advantage of shoppers from out of town who put demands on the county's infrastructure – they account for 40 percent of the tax burden.[29] The metro Atlanta school system has had staggering growth – 2,000 new children are introduced to the school system each year. The 1997-2000 SPLOST resulted in the construction of ten new schools, classroom additions on twenty-one schools, seventy-nine schools got new multi-purpose buildings, and roughly 130 schools got technology and security upgrades. In addition, the school board was able to pay off all bonded indebtedness and reduce the millage, effectively lowering property taxes.[30] SPLOSTs are popular in most Georgia counties, as the funds can be used for multiple community improvement projects, such as historic renovations on public buildings, streetscape improvements and park and ballfield construction. SPLOST funds can be an excellent source of revenue for school renovation projects if a community has an influx of shoppers from outside the county, and they provide for community review and input.

Qualified Zone Academy Bonds

Qualified Zone Academy Bonds (QZABs) are new federally-assisted bonds that school districts in low-income areas can use to implement needed renovations and repairs on existing public school buildings. To raise funds for renovation projects, school

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[28] Georgia Constitution Article VIII, Section VI, Paragraph IV; O.C.G.A. § 48-8-110 through § 48-8-121; O.C.G.A. § 48-8-140 through § 48-8-142.

[29] Source: Dekalb County School District, available from http://www.dekalb.k12.ga.us/progress/documents/splost_3_11_02.pdf.

[30] Ibid.

districts often issue bonds to raise the necessary funds. The IRS exempts bondholders from paying taxes on the interest, which is more appealing than purchasing standard corporate bonds. Instead, the district pays the principal and interest of the bonds, but at a reduced rate. With QZABs, the federal government offers bondholders a tax credit and the school district only has to pay the amount borrowed. Because interest payments can add up to 50 percent of the cost of the bond, it is a substantial cash savings to the district when the federal government is paying the interest costs. According to their web site, Congress has allocated $1.6 billion in funds since 1998.[31] To qualify, schools must be located in an Empowerment Zone or Entitlement Community, and 35 percent of students must be eligible for the federal free or reduced-price lunch program. Also, funds can not be used for new construction. Recognizing that some school districts cannot finance needed repairs through bonds, the Administration is proposing $1.3 billion in interest-free loans and grants. Estimations reveal that this program could leverage $33.5 billion over the next five years, enough to help 25,000 schools with urgent renovation projects.[32] (QZAB) An announcement is to be made in the summer of 2002 regarding new allocations of funds; insiders expect $11 million will go towards QZABs.

The Economic Policy Institute (EPI) highlighted the poor conditions of America's schools in 2001.[33] The Institute noted that with a national recession looming, schools would only defer needed maintenance even more, aggravating the situation. In response,

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[31] http://www.ed.gov/pubs/fixschools/facts.html.

[32] Ibid.

[33] Max B. Sawicky and Doug Harris, "Putting School Renovation on a Fast Track," *EPI Issue Brief #167*, (Economic Policy Institute, 2 November 2001).

the EPI called for an expansion in funding for QZABs as an example of a solid program that could be used to stimulate the economy while at the same time making a long-term investment in education.[34] The other school renovation program EPI endorsed was a funding increase for in an effort to stimulate growth was the $1.2 billion in emergency repair funds within the Individuals with Disabilities Education Act (IDEA). Unfortunately, newly elected U.S. President George W. Bush cut this funding early in 2001.

Funding Partnerships

In spite of these recent efforts and innovative programs, federal and state funds are scarce, especially for education and historic preservation, prompting advocates to forge creative partnerships to achieve funding goals. One such creative funding venture was undertaken by the parent committee at the James F. Oyster Bilingual Elementary School. Located in Washington, D.C., Oyster School has one of the oldest bilingual programs in the nation, featuring two teachers in each classroom, one fluent in Spanish and one in English. Conceived in 1971, the school has consistently ranked high in student achievements and standards, distinguishing itself nationally, but especially from the other, poor-performing schools in its district. With its award-winning language immersion program, the school attracts high-ranking diplomats' children from the upper-middle class neighborhoods near Dupont Circle as well as Latino families from the lower-income Adams Morgan neighborhood.[35] In the early 1990s, the condition of the

[34] Ibid., 3.

[35] Veronica Fern, "Oyster School Stands Test of Time," *The Bilingual Research Journal* 19, nos. 3 and 4 (Summer/Fall 1995), 500.

building was not reflective of the high quality education it housed. The 1926 façade of the traditional brick schoolhouse was in relatively good condition, but the classrooms suffered from overcrowding, water damage and years of neglect. The library was insufficient and the temporary portables that had been used for twenty years were crumbling.[36] Parents pleaded with the school board to construct a new school, but the neither district nor the city had the money for school construction. After some debate, parents were granted permission to look for alternative funding sources.[37]

What Oyster had in its favor was its location – it sat on a prime piece of real estate in D.C., close to the National Zoo and trendy neighborhood restaurants. Realizing the value of their land, parents began to formulate a plan to lease a portion of the school's 1.67 acres to a developer who could in turn finance the school's construction.[38] The Oyster community created the 21st Century School Fund, backed by $200,000 from the Ford Foundation for initial planning. LCOR, Inc. was the developer who ultimately took on the project, agreeing to build and furnish a new Oyster School in exchange for getting to build a 211-unit apartment building on the other half of the land and paying debt service on the $11 million, thirty-five-year tax-exempt school construction bond. In lieu of property taxes, LCOR is retiring the bond with funds, in part, from the exclusive apartment revenue. Due to new size constraints and the poor condition of the building,

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[36] Alan Richard, "Developer, D.C. District Team Up to Build New Elementary School," *Education Week* 21, no. 1 (5 September 2001) 6. Available from http://www.edweek.org/ew/newstory.cfm?slug=01 oyster.h21; Internet. Accessed 22 May 2002.

[37] The Local Government Commission, *New Schools for Older Neighborhoods: Strategies for Building Our Communities Greatest Asset* (Sacramento, CA: The Local Government Commission, January 2002) 6 [publication online]; available from http://www.realtor.org/SmartGrowth2.nsf/files/SchoolRpt.pdf/$FILE/SchoolRpt.pdf; Internet; accessed 1 March 2002.

organizers opted for new construction which resulted in a three-story brick schoolhouse custom-designed for Oyster's unique programmatic needs.[39]

The community-driven process took nine years and was a major operational hurdle for the school district. Besides the unconventional, untested partnership, the city had not built a new school in twenty years.[40] The triumph of the venture holds much promise for Washington and other cities faced with overcrowded schools, major renovation needs and little to no money to address the demand. While the success of the Oyster School hinged on its valuable real estate – in addition to its dedicated organization of parents – this project's formula could be a model for other schools in desperate need of funds. LCOR's John Stainback, who called the project the smallest yet most important he's ever worked on, feels that "school districts and other local governments could raise money and provide better public buildings by making better use of public land" through similar partnerships.[41] Communities looking to revitalize historic urban areas could entice developers downtown by capitalizing on existing infrastructure and available property in exchange for restoring an existing school.

The Appomattox Regional Governor's School in Petersburg, Virginia, was able to undertake much-needed restoration, renovation and technology upgrades with the creation of a similar public-private partnership. Due to the significance of the circa 1910 neoclassical building and the quality of its construction, the partnership was also able to

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[38] Ibid.

[39] Ibid., 7.

[40] Richard, "Developer, D.C. District", 7.

[41] Ibid., 6.

take advantage of federal and state historic rehabilitation tax credits.[42] The Appomattox Educational Foundation organized a building campaign fund drive and raised $7.5 million for the project, setting aside $1 million for an operating endowment. In addition, the project received over $450,000 from the city, funds from the Commonwealth of Virginia and the Virginia General Assembly, and collects some local funding from each student who attends the school. The total renovation cost was $12 million, or $113.75 per square foot, compared to $118.12 for new construction. Not only does the school anchor the Folly Point historic district, its technological advances and scientific equipment rival the surrounding colleges.[43] The pride and energy generated by the renovation project has stimulated public and private redevelopment efforts throughout the region, which was recently marred by widespread disinvestment. The National Trust for Historic Preservation has praised the community for its efforts and presents the creative public-private partnership as a model for other preservation groups stymied by lack of funds.

How to Make Historic Schools Work for Education

The North Carolina Experience

Knowing the educational and social benefits of small schools, many communities are asking, "Why aren't more being developed?". The majority of the reasons come down to economics. With limited capital improvement funds and existing grade organization, school districts feel locked into current practices. In most cases school

[42] Source: National Trust for Historic Preservation; available from http://www.nthp.org/issues/schools/ success/Appattomox_VA.pdf.

[43] Ibid.

construction costs and staffing on a per-student basis are more expensive for small schools. A district with several smaller schools needs a media center complete with books, computers and staff, physical education space, guidance counselors, and lunchrooms to serve *each* school, no matter the size. Historic school buildings are often considered too small by many states that derive their facility standards from current CEFPI guidelines, yet these buildings can easily accommodate the educational trend of smaller schools and smaller class sizes. Recent battles in North Carolina have led state officials to amend their public school facility standards to accommodate new small schools as well as historic schools.

North Carolina communities, among many others, were struggling with convincing local officials that historic schools were worth saving and retrofitting. In 1989, a North Carolina Department of Public Instruction (DPI) report concluded that the George Watts Elementary School in Durham should be closed for failure to meet many of DPI's facility standards.[44] The reasons included issues such as enrollment, which came under the 450 student minimum required for elementary schools to be efficient (360 were enrolled), and having a building area that was half as big as suggested by DPI's per-student area calculations. Other issues included problems with spatial arrangement and access. DPI notes that children in lower grades should be located in classrooms on the lowest floors of a building for ease of egress in a dangerous situation, such as a fire. This rule applies to other rooms these students frequent such as a media center. At Watts, the

[44] Jeff Caiola. "Renovating a Historic School for Continued School Use in North Carolina: A Community Challenge." *North Carolina Preservation* (Summer 1998) [newsletter online]; available from http://www.presnc.org/learnmore/ newsletters/summer1998.html; Internet; accessed 10 April 2002.

media center and the computer room were on the second level of the building. Also of issue was the fact that within Watts School's four floors, there was no elevator and no handicapped access ramps, as preferred by DPI for schools over two stories. Classrooms were too small, coming in under the 1,000 – 1,200 square feet specified, and lacked up-to-date features such as a "wet instructional area" for lower grades. Modern building codes also conspired to render the building obsolete: most windows, doors, stairwells, ceilings and walls were not up to current requirements. The site of Watts School raised more red flags. The existing site was 3.99 acres, while DPI's calculations expressed a need for 14.5 acres to meet its current enrollment. Besides being too small, the site lacked a separate, fenced in area for the kindergarten students and did not have what DPI required as an adequate number of parking spaces.[45]

These standards were typical of what historic and urban school communities are up against – no older school within existing neighborhoods could meet these standards. The Watts School neighborhood community felt helpless against this condemnation of their historic school and the school board claimed to have their hands tied. The community had seen too often how the Durham school board had closed schools and then left them to sit empty and unattended. The turning point for parents and preservationists came when they learned that while the facility standards were often blindly followed by the school boards in North Carolina, the final decision truly rested with the local officials, not the state. Knowing that the school board had the power to keep the building but would probably not find a new use if the school was closed, gave encouragement to the

[45] Ibid.

community who quickly began an organized campaign to save their school. In 1991, a school bond referendum was passed that directed $2.9 million for renovation. After this positive response, the school board began a feasibility study for Watts while the community task force looked to local architects and engineers familiar with renovation projects for help in developing their own study. Both studies were completed at nearly the same time in 1992, but with different results: the task force backed by parents, teachers and preservationists came up with a cost per square foot of $65 – less than the school board's estimate of $99 and it included an expansion plan to accommodate 400 students, while the school board estimated having to reduce the current population to 300 students.[46]

A local architect was awarded the project for $4 million. The difference in cost from the bond referendum was made up with excess funds from two other school renovation projects in Durham involving the same architect.[47] These creative swaps made the project feasible. Other creative solutions came from the architect's reworking of the building. It was determined that the site did indeed allow for an addition, which made it possible to increase enrollment to 450 students in a new total gross square footage that exceeded DPI's minimum standards. The first floor of the building was actually a half story, so creative exits allowed for "first-floor egress" from what was technically the second story. An elevator in the new addition links all floors. By shrinking the wide hallways somewhat, classroom were enlarged and in some instances

[46] Ibid.

[47] Ibid.

combined to meet modern needs. Sinks, bathroom and teacher workspaces were all able to be added, thanks to the additional space, and new ceilings, windows and doors brought the building up to code. The site even allowed for additional parking and a fenced kindergarten playground.[48] Only by arming themselves with the facts behind school renovation costs and state education policies were parents, teachers and preservationists able to save a school building that they loved. A local school board will almost always prefer cost savings, and if they are only getting facts from the state department of education and a universal set of obsolete guidelines, the feasibility studies will be one-sided.

North Carolina education officials have begun to understand that the design of school buildings impacts the way students learn, therefore design and planning are intertwined with education to create a healthy community. While the "Finance Act of 1987" established public school facility standards (those which set out to abandon Watts School), the North Carolina General Assembly changed the standards to guidelines in 1996.[49] In 1993, the General Assembly of North Carolina passed House Bill 1001, entitled, "An Act to Encourage Local Boards of Education to Renovate Old School Buildings Instead of Replacing Them." It states that if a local board is considering building a new school to replace an older one, it must first complete a cost and feasibility analysis submitted to the state Superintendent of Education and the North Carolina

[48] Ibid.

[49] *North Carolina Public School Facilities Guidelines*, Public Schools of North Carolina and the State Board of Education, Department of Public Instruction (March 2000), i. [publication online]; available from http://www.p2pays.org/ref/10/09937.pdf; Internet; accessed 6 February 2002.

Historical Commission.[50] This analysis must compare renovation versus replacement costs and clearly justify – determined by a creative scoring system that must result in a cost per square foot advantage of 15 percent or more – why new construction is more desirable and feasible.[51]

Most recently, the North Carolina State Board of Education and the Department of Public Instruction expressed this turn-around in thinking in a November 2000 joint publication by noting, "the design of educational facilities has a profound impact upon how students learn and how well they [the buildings] serve the communities in which they are located."[52] North Carolina now appeals to local school board officials to consider current trends in education and community planning when choosing a school site or deciding to close a historic school. DPI notes that ideas such as "small schools" and "new urbanism" are joining forces to question the way schools are designed and planned for, and that local officials should be aware of the implications of existing practices. Their publication touts the benefits of smaller schools and walkable communities and gives ways in which school districts can make small schools work economically. Many of their ideas can also be applied to helping historic schools function as modern educational settings. Creative policies such as joint-use arrangements and multi-purpose classrooms can continue to enhance historic schools and overcome the

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[50] Ibid., 64.

[51] North Carolina State Department of Public Education, *North Carolina Public Schools Feasibility and Cost Analysis Forms* (Raleigh, NC: North Carolina State Department of Public Education, 8 April 1998), 7 [publication online]; available from http://www.schoolclearinghouse.org/pubs/costfeas.pdf; Internet; accessed 10 April 2002.

[52] North Carolina Department of Public Instruction, *Making Current Trends in School Design Feasible: Smart Growth, Joint Use, Sustainability and other Design Issue* (November 2000) iii.

economic obstacles to building small schools. Sharing transportation, parking, auditoriums, kitchens, libraries and after-school care all benefit the school and the community through cost savings, varied grant money sources and a renewed sense of place.

The North Carolina publication notes that "for a small elementary school, [support] spaces are over 50 percent of the total building area.[53] Gyms, cafeterias and media centers are all large volume spaces – the most expensive to construct, equip and staff. One large school, rather than two small schools, gives a more incremental increase in cost. Their comparison of two 300 student elementary schools versus one 600 student elementary school shows that initial facility costs are 22 percent higher for two small school, and the life cycle costs per student for the two school option is 19 percent greater than costs for one large school.[54] These percentages are very important to school boards looking to create new schools in order to alleviate overcrowding and not contend with raising taxes as a result of limited funds. But Kathleen Cotton's research on school size as it relates to performance does not support an across-the-board policy that small schools are more expensive per student. Her studies showed that many small schools have proven to operate efficiently while larger schools have bloated per-pupil costs.[55] She notes that as school populations get larger, a needed increase in staff – to manage and control students – rises exponentially.

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[53] Ibid., 10.

[54] Ibid., 14.

[55] Cotton, *School Size*, 5.

Nonetheless, local school board officials are sure to become fixated on initial start-up costs of building smaller school buildings. North Carolina suggests several good solutions for making schools more economically feasible and more academically beneficial. These joint-use arrangements, including partnering with other groups and maximizing small spaces apply well to reusing historic school buildings.

Partnering with Other Groups and Agencies

Sharing in the cost of renovation and maintenance or construction through the joint use of facilities means joint funding opportunities and the ability to market the school as a community center. Local after-school programs for neighborhood children can receive monies from certain funding sources that school boards can not. Sharing facilities means that the school can benefit from housing a non-profit or governmental program through increased funds for the school facility. Making schools the center of community activities has many benefits. A town avoids the costly duplication of services and fully utilizes the school building outside traditional school hours and during scheduled student breaks. Sharing space provides better equipment and facilities by pooling resources. Plus, increased use by the community gives citizens a personal stake in the success of their school, thereby bestowing their financial support.[56]

The most popular sharing arrangements are for athletic fields, gyms and auditoria – expensive to construct but flexible in their uses.[57] School boards should look to partner with agencies such as the city or county parks and recreation departments and the YMCA

[56] North Carolina Department of Public Instruction, *Current Trends,* 17.

[57] Ibid., 24.

to share ballfields, youth athletic programs, summer camps, arts programs and vocational rooms. The YMCA and local daycare providers may be interested in collaborating on an after- and before-school program. A local arts council may be looking to partner to provide performance space in exchange for studio equipment and guest artists as teachers. The school could combine forces with the library to provide state-of-the-art media center facilities, computer labs and reference collections. A local community college might collaborate on adult education, GED courses, vocational, technology and computer classes. Meals on Wheels and similar nutrition programs may be interested in contributing to a renovation project in exchange for use of the school kitchen.

While having enough parking is always a concern in this day and age where everyone is used to driving themselves everywhere, convenient parking does not have to translate as one contiguous lot on the property. Large asphalt lots greatly diminish the beauty of a place. Splitting up parking spaces into smaller, landscaped, shaded lots or delineating the outside rim of the property for single parking spaces is a more attractive and equally convenient solution. These designs are better for drivers as well, as more parking spaces can benefit from shade. Creative solutions abound for accommodating cars – it just takes thinking that breaks from familiar practice. North Carolina now promotes reducing school acreage by considering off-site staff parking and shared parking with existing businesses and churches, locating loading and drop-off areas on nearby low-volume streets, sharing play areas with nearby parks, and working with

municipal bus services to coordinate with small school children who live on their regular bus routes.[58]

Maximizing the Use of Space

Finding innovative ways to maximize how the building is used means that a new school can afford to be built smaller, or a historic school can survive. North Carolina's suggestions begin with scheduling a class in every room during every period. This means having subject-based classrooms rather than teacher-based classrooms. Consider creating one room as a teacher commons, supplied with one or two computers and shared office equipment. Teachers will not hold up an empty classroom during their planning period if they all share a communal office space. Designing flexible multi-purpose classrooms that can be used for a variety of subjects alleviates the need for a distinct room for each subject area. For example, art and science classes could share the same room at different times, because they both require the use of sinks whereas other classes do not.[59] Multi-purpose classrooms are especially good for grouping all programs that are not used every day, such as art and music. North Carolina officials recommend creating 1000 sq. ft. multi-purpose rooms in elementary schools. They should have cleanable flooring and several storage closets, one for each separate program that uses the room. An even larger room (3600 – 4000 sq. ft) could also house physical education (PE) classes. PE classes could also share space with a lunchroom, provided roll-away tables and chairs and

[58] Ibid.

[59] Ibid., 17.

adequate storage units for play equipment were incorporated.[60] In reality, all classroom spaces at the elementary school level should be flexible, so that rooms can accommodate larger groups as they advance in grade.[61] Multi-purpose rooms are also beneficial at the middle and high school levels. Secondary level classes such as science and vocational classes could easily adapt to the same type of room, with work tables as opposed to individual desks. Performance and practice space needs are filled for orchestra and drama classes by designing a room to accommodate both and then staggering schedules.

A separate Career and Enrichment Center facility could serve all high schools in the district or region with special elective courses that typically have low enrollment, such as Latin, cosmetology or auto repair.[62] Citing the success of schools in its districts, North Carolina officials relate how students are transported by shuttle bus for a few hours of classes in the afternoon to this central location. Again, cooperation with a local technical school or community college lowers expenses and adds to the enrichment of the academic program of a small school, without the individual expense. All of these joint use arrangements can help keep schools in small, historic buildings while at the same time enhance what the school can provide to its students and to the community at large.

Year-round schools are another way to maximize use of the building. Having students attend school in groups scattered throughout the calendar year can increase the efficiency of a facility by reducing the down-time a school building generally has over the summer months. North Carolina officials describe a year-round schedule that

[60] Ibid., 34.

[61] Ibid., 35.

increases the usage of the building by 25 percent. The 45/15 system refers to students attending school for forty-five days, then taking off fifteen days. If the student body is broken down into four groups and this 45/15 schedule is staggered so that no more than three of the groups are using the building at a time, a much smaller building can effectively serve a larger student population.[63] The downside to this efficiency is the lack of open summer months for major construction projects, an increase of wear and tear on the building, and staff serving a large total student body.

Another high efficiency model for small school buildings is to have two shifts during the day. One group of students attends school from 8:00 a.m. – 2:00 p.m. The second group of students attends the same school from 10:00 a.m. – 4:00 p.m. The core classrooms are used by the first team before lunch and then they switch and attend elective classes after lunch. The second team has the opposite schedule, giving each classroom maximum usage at a lower density.[64] While these changes seem somewhat unconventional, they accomplish both goals of reducing class sizes and accommodating a large student body within a smaller historic school building.

Involving students and parents

Involving students, as well as parents and teachers, broadens the base of advocates for keeping a historic school functioning. Students can have a strong affection for their historic school, knowing that their grandparents went there, or that a famous

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[62] Ibid., 37.

[63] Ibid., 34.

[64] Ibid., 40.

person once roamed the same halls as they do. Their creativity and spontaneity can be a strong asset to preservationists.

In their fight to save several historic schools from demolition, preservationists in Denver, Colorado, paired with concerned parents, neighborhood organizations, city planners and students to convince the school board that the neighborhood schools were worth keeping.[65] Denver's local historic preservation ordinance provided for a one-year moratorium on the demolition of locally designated buildings, so the new task force decided to first work towards getting the schools listed. The task force planned to focus on eight buildings that included elementary, middle and high schools. Creatively, the task force thought to involve the students of these eight schools to use the National Register listing as an educational tool and solicit their help with the nominations. Students began by researching their school building's architectural style, but the momentum grew as the project was integrated with lessons in math, science, history, writing and interviewing. Over 500 students participated in the project and all grades made presentations to the school board, the landmarks commission and to city council to nominate their school and ensure that it was designated. All eight schools received unanimous approval, and the task force went on to nominate twenty-four more schools with the help of each student body. Sarah McCarthy, director of "All Schools Colorado" credits the complete involvement and dedication of the students for saving these schools

[65] Rubman, *Community Guide*, 13-14.

and enlightening the school board about their significance, all the while teaching a new generation to appreciate community history.[66]

The desire for more parental involvement is felt at every school. Students do better in school when their family is a part of their education, whether it is through parents reading to their children and helping out with homework or attending music performances and volunteering their time. Harvard's Family Research Project credits involved parents with being the necessary ingredient for school reform and academic achievement, even more than small class sizes and excellent teachers.[67] "We're now discovering that even small class sizes with the best teachers and best materials may not be enough to fix a school," says Heather Weiss, director of Harvard's Family Research Project. "If you get parents on board then you've got a better shot."[68] To lure them back, schools are doing everything from sending teachers on house calls to giving parents a larger role in school reform.[69] In the case of keeping a historic school open, the support of parents is essential to preservationists.

In a place blessed by the economic success of decades-long preservation efforts, Savannah, Georgia, too, has had major struggles to retain their historic schools as schools. The Charles Ellis School was built in 1929 in the historic district of Ardsley

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[66] Ibid., 14.

[67] Source: "When Parents Drop Out," Time.com Special Report [article online]; available from http://www.time.com/time/covers/1101010521/parents.html.

[68] Ibid.

[69] Ibid.

Park and is the oldest continuously operating school in Chatham County.[70] After desegregation, the school reinvented itself with a Montessori curriculum and remains the only public Montessori school in Georgia. It is the most successful magnet school in the county and boasts an even racial mix and good test scores.

However, following a plan derived from a 1960s overhaul aimed at standardizing curriculum and replacing all public schools with new buildings, school district officials decided in 1997 that it was time to close Charles Ellis School and relocate it to a new, larger building under current state acreage standards – within the historic district, no less! Despite its favorable curriculum, school officials decided 350 students was too small and the school needed to be brought up to 750. Parents were stymied that the school district would want to close down a perfectly successful school that they and their children loved. According to state standards, 250 students was appropriate given that the school site is only 2 acres. After a few frustrating meetings where it became obvious that the board had made up their minds and would not entertain outside ideas, the angry parents mobilized and took a proactive stance, recruiting more parents with different skill levels and political connections, and began crafting a vision. They advocated for the unique curriculum, the architectural character of the building, the pride felt by the community and the pride in the school's educational quality. They created Parent Advocates for Charles Ellis (PACE) and they attended local Board of Education meetings *en masse*, drawing needed media attention. Every time PACE met, they sent copies of their minutes to the school board so that they would not appear subversive. Members

[70] Source: Dr. Robin B. Williams, Georgia State Historic Preservation Conference, 28 February

who were attorneys analyzed an early school bond referendum that the school board claimed sanctioned their plan. They studied current literature on the benefits of small schools and met with new, oncoming board members about their fight. PACE looked for the twenty acres the school board required in the historic district and determined it would mean tearing down approximately one hundred historic African-American homes – not a good move for the school board politically.

The school board eventually conceded and began to draw up plans for renovations and additions to the school. But their new plans consisted of a 300-student enrollment increase and two new wings that would drastically reduce the play yard.[71] With the help of a Savannah College of Art and Design (SCAD) architecture professor and Charles Ellis parent Robin Williams, PACE countered with a plan that included keeping the Montessori curriculum and becoming a true magnet – or charter – school, removing a non-compatible, non-workable 1950s addition and adding only one large wing which could raise enrollment to 500 students. They were also able to creatively rework parent and bus loading zones to retain an adequate play yard. The Board accepted their plan, and just over a year from the initial announcement to close Charles Ellis the school board appointed an architecture firm to finalize designs for the estimated $4.3 million renovation and construction project. The price tag for the board's initial new school came in at around $11 million. The following summer, after the final plans were announced keeping the new school, parents from beyond the school's home district

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2002, author's notes.

[71] Jennifer Rose Marino, "Board Appoints Architect for Ellis School Expansion" *Savannah (GA) Morning News* (22 April 1999) sec.1C and 4C.

enrollment area were camping out at midnight the night before to be ready at 8:00 a.m. to enroll their children into the Charles Ellis School. Dr. Williams, the SCAD professor and PACE member, says that unless parents are committed to keeping a historic school open, preservationists need not bother. He recommends advocating for the old building by highlighting its architectural significance and using regional examples of adaptively reused schools as illustrations.[72] Also, he says to remind the school board that they can only count on gaining financial support from generations of alumni if the old school is still standing. For old school advocates, he says to never let up until all options have been explored.

Incorporating Preservation in Education

While most renovation projects are scheduled for the summer when schools are empty, sometimes major projects can take longer, forcing project managers to schedule work during the school year. At Edison Elementary School in Grandview Heights, Ohio, teachers and administrators decided to put a positive spin on the inconveniences of ongoing construction. By using a "Build It Up" theme, projects and assignments revolved around the renovation of their school.[73] Students learned about careers in design and construction, architects and contractors visited classes, students were given construction tours with stations where children could learn about interior design and watch a backhoe in action. A bulletin board with photos kept students and staff updated on the school's progress. Teacher Richard Boettner said, "The kids loved the whole program . . .

[72] Georgia State Historic Preservation Conference, 28 February 2002, author's notes.

[73] Vonda M. Alberson and Sandra M. Kate, "Modernizing an Old School," *Principal Magazine* 79, no. 2 (November 1999).

Renovations take patience, but they gave us a chance to learn new things and now we have a beautiful building."[74]

A similar creative venture was highlighted in CEFPI's newsletter in 1993.[75] While a particular K-8 school was undergoing renovation during the school year, teachers and administrators took advantage of the obvious disruption by incorporating the renovation project into the students' learning experience.[76] Students and teachers were kept abreast of the stages of renovation by the architect and contractor, naming a "student foreman of the week" and giving tours of the work in progress. Students participated by creating a mural, having a pizza lunch with the workers and even learning to lay brick. What could have been a year-long noisy, dusty nightmare became a fun learning experience. Finding new ways to involve students in a renovation project or campaign enlivens their studies and improves preservation efforts.

Charter Schools

Charter schools are coming closest to giving the kind of intimate educational experience that kids need and that parents want, and they are having much success on a national level. Rigorous studies and Saturday classes, paired with enthusiastic teachers and creative programs, are drawing parents and their children in droves, causing lines to form outside of districts in order to enroll on a first-come, first-serve basis. In most states, charter schools operate from the public school system, as a public school open to

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[74] Ibid.

[75] David Edwards, "Turning a Disadvantage into an Advantage," *Planner* (CEFPI) 31 no. 1 (January-February 1993).

[76] Rubman, *Community Guide*, 6.

all school-age children in its district, but with much greater flexibility in its operation. Charter schools are a way for educators, parents and community leaders to work together in providing education the way they see fit without the red tape that inhibits most teachers, prompting innovative learning environments, creative methods and personalized attention. States with charter school legislation see this arrangement as beneficial for the school system at large, as educators can learn from various methods that charter school teachers have at their disposal. Charter schools are typically small schools with a distinct focus, be it educating children with learning disabilities or having an arts or science-based approach to all subjects. Parents are often intimately involved as administrators or volunteer teachers. Because of their manageable size and flexibility, charter schools can easily bring their classrooms into the real world through field trips and extra-curricular studies. Attention and education are more specialized. All of these factors contribute to academic and social success.

Glenforest Charter School in Cayce, South Carolina has been operating for twenty years, drawing its 120 K-12 students from all over the Carolinas and Georgia. Most of their students have above-average intelligence, but have suffered in traditional public schools when teachers could not relate to their attention deficit disorder or dyslexia.[77] Through its proven formula of small classes and personal attention, Glenforest School can boast that 86 percent of its graduates go on to college.

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[77] Jennifer Holland, "Students Shine at Unique School," *The State*, (Columbia, SC), 1 April 2002. Available from http://www.thestate.com/mld/thestate/news/local/ 2975859.htm; Internet; accessed 1 April 2002.

Charter schools and downtown revitalization are brought together in a unique effort documented in the "New Schools, Older Neighborhoods" publication by the Local Government Commission, a non-profit organization working to build livable communities.[78] The publication highlights two new charter schools in Chattanooga, Tennessee, among its collection of innovative practices. In the 1960s, downtown Chattanooga was suffering from the fate of most historic commercial districts – suburban flight of retail stores and residents, deterioration of historic buildings, declining schools – with the added dilemma of being one of the most polluted cities in the United States. Chattanooga has since cleaned up its act, bolstered by the development of a world-class aquarium and IMAX theater on the riverfront that has drawn restaurants, hotels and boutiques back into the downtown. While some residents began moving into downtown and surrounding neighborhoods, more families were dissuaded by the limited number and condition of the inner-city schools.[79] As with most urban revitalization efforts, it was the top reason keeping more families from flocking downtown.

In order to address the school situation and bolster revitalization efforts, a downtown community development organization called the River City Company got together with the local school board and the local government, the University of Tennessee at Chattanooga (UTC) and the Lyndhurst Foundation to talk about possible opportunities and solutions. Through this collaboration, it was discovered that enough

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[78] The Local Government Commission, *New Schools for Older Neighborhoods: Strategies for Building Our Communities Greatest Asset* (Sacramento, CA: The Local Government Commission, January 2002) 6 [publication online]; available from http://www.realtor.org/SmartGrowth2.nsf/files/SchoolRpt.pdf/$FILE/SchoolRpt.pdf; Internet; accessed 1 March 2002.

[79] Ibid., 12.

students to fill a new school were being bused away from the city. Despite the local district's plans to build a new school downtown, it was determined that two downtown schools would be needed to really bolster redevelopment efforts. Assuming their efforts would draw new students into the population area, organizers were still worried that schools would not be full enough, and that only the children of downtown pioneers – a distinct racial and socio-economic group – would not give the diversity that good schools need. Their solution was twofold: first, ensure that these schools will offer innovative and unique learning environments not found elsewhere in the district. By partnering closely with the University system and sharing resources, its excellent reputation was transferred by association. Second, the school enrollment area was opened up not just to residents in the surrounding neighborhoods, but to the children of downtown employees as well. This assured a greater mix of families than the residential areas did alone.

While the school board was prepared to open one school, they did not have the funds to construct a second school. Under the leadership of the Lyndhurst Foundation, it and other philanthropic organizations raised the necessary funds in record time. The greatest difficulty in getting these schools built, say organizers, was in convincing the school board to let go of traditional, entrenched ideas about what a school had to be and for them to become comfortable working with such an innovative partnership.[80] Both of the elementary level schools are slated to open in August of 2002, with approximately 450 students each. The H. H. Battle School will focus on specialized, individual learning based on the way each student best expresses themselves, be it through verbal, spatial,

[80] Ibid., 13.

musical or other means.[81] The Brown Academy for Classical Studies will use classical literature, art, language and history to supplement and steer the traditional education curriculum.[82] Both schools will share UTC education faculty and graduate students as well as all of the university's campus facilities. As with most charter schools, seats are filled by a lottery process far in advance of the upcoming school year.

Many downtowns larger and smaller than Chattanooga find that having high quality schools nearby is key to keeping families living, working, shopping and re-energizing their downtown centers. Due to their national success, charter schools could be the education movement that eliminates mega-schools and returns schools to a more intimate size and environment. Since they are left to their own devices, charter school administrators have to be creative in their search for available buildings. Known to occupy renovated warehouses and other commercial facilities, their achievements prove that quality education can happen anywhere. Marry this success with empty, small, beautiful historic school buildings and charter schools – and communities –could thrive.

Historic Schools Promote Healthy Lifestyles

Given their location within existing in-town neighborhoods, historic schools are naturally walkable, diverse and community-centered. Nationwide efforts to promote healthy lifestyles support the notion of keeping historic schools as schools.

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[81] See Battle Academy for Teaching and Learning at www.hcde.org/magnet/batl.htm.

[82] See Brown Academy for Classical Studies at www.hcde.org/magnets/bacs.htm.

Walkability

The past thirty years have seen the number of overweight kids ages six to eleven double. Most kids don't have a physical education period every day, and many elementary schools are even removing recess altogether.[83] Citing the statistics that half of all young Americans twelve to twenty-one years old are not active on a regular basis, and that 14 percent get no regular exercise, the Centers for Disease Control (CDC) has launched a community-based program called "Kidswalk-to-School" designed to encourage walking to school. By focusing on walking to school, the CDC hopes that having parents accompany their children to school in organized walking groups, even for one Walk to School Day, will inspire children and parents to walk together everyday.[84] Creating safe opportunities for kids to walk to their daily activities will in turn encourage them to do so, resulting in regular physical activity and healthy, walkable communities for all ages. While the CDC acknowledges an increase in television programs and video games marketed towards children, it directs the blame for lack of exercise towards the design of our communities as well: "Being active and exploring their surroundings comes naturally to children. Unfortunately, young people today are not as free to walk and play outdoors because our neighborhoods are no longer kid-friendly".[85] Constructing schools away from where people live and that are not conducive to walking deprives neighborhoods as well.

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[83] The Centers for Disease Control and Prevention, Department of Health and Human Services. *Kidswalk-to-School: A Guide to Promote Walking to School* (2001) [publication online]; available from www.cdc.gov/nccdchp/dupa/kidswalk; Internet; accessed 1 October 2001.

[84] Ibid.

[85] Ibid., 1.

Teaching kids (and their parents) the benefit and enjoyment of walking to school will create healthier lifestyles, especially as these children grow into adults. The CDC reminds parents that regular physical exercise in children is necessary for healthy, strong bodies, weight control, improved self-esteem and emotional well-being, and better academic achievement from being more alert throughout their day.[86]

Additionally, the CDC anticipates benefits of the program to be improved walking and biking habits for kids *and* adults so that adults choose to take the car less for short trips. This will mean less automobile congestion around schools in the mornings and afternoons, improved safety in the neighborhood due to fewer cars on the roads and friendlier neighborhoods from an increase in social interaction. As the CDC notes, neighborhoods are not the same without the benefit of active, laughing children.[87]

A short walk to school and back can give parents the 30 minutes of daily exercise recommended by the Surgeon General.[88] Parents who walk to school with their kids also get an opportunity to interact with their neighbors. They will notice and act on needed improvements in the neighborhood, like sidewalk repairs and needed street lighting. Making neighborhoods more walkable for children also improves conditions for the elderly and the handicapped to get around independently of others and of cars. It also encourages walkers, joggers and cyclists to use the neighborhood daily, therefore improving the neighborhood's safety and visibility – more "eyes on the street" means a decrease in crime. A local Walk-to-School organizer in North Dakota reported that

[86] Ibid.

[87] Ibid.

launching their program has put into motion community-wide partnerships and changes to make the entire community more pedestrian-friendly.[89]

The CDC's program for walking to school also includes variations on the theme, including Skate- or Bike-to-School, Park-and-Walk and carpooling. All of these programs can also be solutions for advocating that a historic school building remain a viable school. Being able to walk to school is not just a nostalgic idea, but a necessary part of a kid's life. It is a huge benefit of attending school in a nearby historic school building. Touting the ability of walking to school and subsequent health and lifestyle benefits also may encourage the revitalization of other in-town neighborhoods and commercial areas.

Shared Public Playgrounds

Chicago Public Schools began a major capital improvements program in 1996 to relieve overcrowding and renovate school buildings.[90] Since that time, nearly every school has received improvements, in addition to the seventeen new schools that were built. Citing the importance of physical fitness and organized sports, the school district set about converting the asphalt covered land around their schools to campus parks, open to the community. The spaces range from planting gardens and playground facilities to baseball and soccer fields and walking paths.[91] The parks are being completed through a

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[88] Ibid., 3.

[89] Ibid., 8.

[90] Chicago Public Schools and Chicago Board of Education, *Chicago Public Schools: State of the Buildings, The Capital Improvement Program* (Chicago: Chicago Public Schools and Chicago Board of Education, April 2002) 1.

[91] Ibid., 14.

partnership of the schools, community members, the city public buildings commission and the parks department. Since 1995, over eighty parks have risen from neglected school property, and fourteen more are planned for 2002. Because the parks and sports fields were designed so that the whole community benefits, the school district did not have to provide play space for students on their own.

Chicago also made window repair and replacement a priority in order to bring the benefits of the outdoors inside. Recognizing that "being able to see outside and enjoy sunlight promotes creativity and stimulates the visual senses and the learning process", 343 schools have received new windows.[92] While preservationists should make it their duty to inform the local board on the advantages of repairing rather than replacing windows, it is comforting to know that districts are moving away from boarding up windows in favor of minor energy savings.

Social Diversity

When asked if South Carolina was moving towards a trend of smaller, more walkable schools, Department of Education architect Tom Salmons said, emphatically, "No." [93] He identifies the biggest roadblock to building neighborhood schools as the fact that a school in which all its children could walk would be a segregated school. "You can't have neighborhood schools without integrated neighborhoods." For many cities, it may not be possible to have a 100 percent walkable school, but aiming for the ability for a even a majority of students to walk is progress. Furthermore, by locating new schools

[92] Ibid., 16.

[93] Tom Salmons, Architect with Richland School District One, phone interview by author, 20 May 2002.

within range of a historic district, while using existing infrastructure and revitalizing urban areas, schools are more likely to naturally draw a diverse student population that can walk as an added bonus. All members of the surrounding community will benefit from the neighborhood reinvestment that a new or rehabilitated school will bring, especially those neighborhoods that have suffered from disinvestment because of racially-biased lending practices and development trends. In working towards schools that are both walkable and socially diverse, North Carolina officials suggest that a careful analysis of households may show neighborhoods of adjacent diversity where small schools can be located.[94] Chattanooga's solution of opening enrollment for a new downtown school to the children of downtown workers is a creative option for achieving student diversity in an area of racially-segregated residential neighborhoods.

[94] North Carolina Department of Public Instruction, *Current Trends,* 19.

CHAPTER 5

CASE STUDIES FOR HISTORIC SCHOOL RETENTION

Three schools in South Carolina's state capital of Columbia exemplify high quality education in historic school buildings. While the state board of education does not promote historic school retention or small school development through their facility standards, these schools have prevailed. All three are part of Richland County School District One, the third largest school district in the state. Each provides education at different grade levels, in buildings of varying ages, and are nestled within three distinct historic neighborhoods. The strong involvement, support and tight weave of these neighborhoods is a common thread in each of their successes.

Hand Middle School, Columbia, SC

Built in 1930, Hand Middle School has been in continuous operation as a middle school, and currently serves 950 Students in grades six through eight. Hand is located in the heart of Shandon, an early-twentieth century neighborhood distinguished by its oak-lined streets, endless sidewalks and inviting porches. It is a large neighborhood with a wide variety of historic house styles, sizes and conditions, which in turn provides for an equally eclectic mix of residents. The neighborhood thrives off of the school, which rises three stories tall and is comfortably located near the edge of the sidewalk as the houses are. (Fig. 5.1) The school property comprises an area of two residential blocks, with the seventy-year-old red brick building at one end and a grass playfield and track at the other.

Fig. 5.1. Hand Middle School, Columbia, SC.

Hand is not only physically in the center of this community, it serves as its emotional heart as well. Neighborhood parents who once opted to send their children to a private school rather than within their own neighborhood are returning to draw from Hand's success. Even real estate agents use the school as a selling point for Shandon.

The school's motto is "Excellence at Hand" and its mission is "to build a common culture based on an appreciation of excellence in all forms and the establishment of shared goals". This is exemplified in the visual and physical praise and recognition that each student receives, be it from teachers who make a point to greet every student by name, or the photography exhibits, drawings, sculptures and writing projects that plaster every inch of hallway in the building. Classical music accompanies you throughout the school, and everywhere you look there is evidence that art and creativity enriches every academic subject taught. Students are encouraged to participate in some aspect of the schools many academic and extra-curricular opportunities during the extended eight-period day, be it the daily offering of drama and dance classes, sports and academic teams or homework assistance and computer learning programs.

Hand was not always the model school it is today. Former principal Jeanne Stiglbauer is credited for transforming Hand into a proud, community-centered institution. As an inner-city neighborhood, Hand's student pool draws not only from the surrounding neighborhood, but from several low-income neighborhoods with the host of urban problems that accompany poverty. Half of the students qualify for the federal free lunch program. On Stiglbauer's first day of school in 1995, the police were called before

the morning bell rang to break up nine fights that had erupted.[1] With a new program of strict discipline, clear school-wide goals, high praise for hard work and deep involvement from staff, parents, and neighborhood churches, Hand began a rise to distinction. Professors and education students from the nearby University of South Carolina serve as guest lecturers and tutors. Wealthier parents pool money so that the entire basketball team can have new shoes for the season.[2] Hand volunteer and parent of an eighth-grade student, Kathy Wade is part of a core group of parents that are at the school daily. She has a list of 300 volunteer parents she can call on, none of whom have ever said no.[3] Student suspensions have fallen 66 percent and attendance is up 97 percent.[4] In 1994-95, Hand students' test scores ranked in the 50th percentile in the state. By 1998-99, the school improved by such leaps and bounds that it ranked in the 90th percentile and drew the largest amount of incentive funds in the state for its measurable gains.[5] Hand was one of the earliest schools in South Carolina to receive a Communities in Schools designation, extending their efforts to draw its surrounding citizenry into volunteer efforts that amend traditional learning. One of their most exciting accomplishments was their receipt of a U.S. Department of Education grant establishing a Fast Forward Community Technology Center at the school, open early and late, year-round, for all residents in the

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[1] Jodie Morse, "Let Them Lift Us Up," *Time*, 21 December 2001.

[2] Ibid.

[3] Karen E. York, "Hand Middle Earns Blue Ribbon Award," *The State* (Columbia, SC), 20 May 2000, sec. B1.

[4] Ibid.

[5] *Hand Middle School: Blue Ribbon School nomination*, (U.S. Department of Education, Office of Educational Research and Improvement, 2000) [publication online]; available from http://www.ed.gov/offices/OERI/BlueRibbonSchools/ 17SCM01F.html, Internet; accessed 18 May 2002.

Hand's attendance zone to use. The Shandon Cluster of Churches helps to staff the center and provide childcare, tutors and mentors for the center.

The success and dedication of its students and staff has garnered the school numerous awards. Hand has been twice-nominated for a statewide Palmetto's Finest award, capturing the award for Best Middle School in 2000. The same year, Hand was honored with the coveted Blue Ribbon School award from the U. S. Department of Education, which identifies schools that are models of academic excellence, and received special honors in the Family Involvement category. At the school assembly and popsicle celebration following the announcement of their win, eleven-year-old Erica Solomon rejoiced, saying, "Five years ago, they said this school was nothing and the test scores were bad. But now look what we have gone on to be."[6] The awards kept coming in 2001. Because of the school's successful effort to partner with local churches and businesses and become a true community center, the resulting high test scores and influx of families, Time magazine named Hand the Middle School of the Year.

The popularity of the school has resulted in some drawbacks. Eight portable classrooms are set up behind the school, and most students have at least one class in them. (Fig. 5.2) The library and cafeteria are small for the student population, requiring six staggered lunch rotations. The school can not hold an assembly for all its students because they do not all fit in the gym at the same time. For a school with such an impressive performing arts program, not having an auditorium is a source of much

[6] York, "Blue Ribbon Award".

Fig. 5.2. Eight portable classrooms sit behind the original building. Notice the amount of space available for a multi-story addition.

frustration for students and teachers. Past renovations resulted in two-thirds of the paired, double-hung windows to be bricked up, but teachers still remark upon the good light that their classrooms get. (Fig. 5.3, 5.4) Built-in shelves and cabinets provide coveted storage space, but every teacher wished they had more. In 2002, Richland School District One began conducting a series of meetings on school construction projects. Architects, administrators and parents met recently to discuss the future of the Hand building and its needs. Two options were on the table: the first involved renovation and new additions. The early schematics illustrated that there is enough room to add classrooms, an auditiorium and media center to the H-shaped school, leaving a double courtyard in the center and two tennis/basketball courts where the portables now sit.[7] The second option was to construct a new building. According to South Carolina's school facilities construction guidelines, the current population of Hand would require a twenty-nine acre site.[8] The current site is eight acres. Participants voted for the $16 million renovation option and the 50,000 – 60,000 square feet that could be added to the building on its current site. The next step is getting the bond referendum passed by the voters.

Upon visiting the school after the Blue Ribbon win, Governor Jim Hodges remarked, "if all schools in South Carolina were like Hand, we would not have a crisis in education."[9] Is Hand's achievement directly related to the age and character of the

[7] Source: Unpublished plans courtesy Richland School District One.

[8] South Carolina Department of Education, *School Facilities Guide.*

[9] *Hand Middle School: Blue Ribbon School nomination.*

Fig. 5.3. Large entryway doors are a signifcant feature of the school.

Fig. 5.4. While the pairs of windows on either side of these have been covered over, teachers still appreciate the light that their classroooms receive.

building? Maybe not, but the fact is the age and size of the building has not kept it from being one of the top schools in the nation, boasting academic and technological advances and a diverse student body. The support of the community – credited as the lifeline to its success – would not be as strong were the school not mere blocks away from so many homes, businesses and churches. Hand Middle School is living proof that an old building does not render a school obsolete.

Logan Elementary School, Columbia, SC

The Elmwood Park neighborhood was the first suburb of Columbia, South Carolina, with residents living there as early as 1839.[10] In 1911, Elmwood Park residents petitioned the City of Columbia to build a school in the neighborhood for its children. With a donation of land and money from a local citizen, a beautiful Italian Renaissance-style school was built in 1913. (Fig. 5.5, 5.6) Faced with red brick, colored tile and large windows, the school sat on prominent Elmwood Avenue, across from large Victorian homes and a median of Elm trees. Children from the neighborhood walked to school with their books tied with a belt, played marbles on the playground and vied for the honor of decorating the inner courtyard windows at Christmastime.[11]

The 1960s brought changes to the Elmwood Park neighborhood. Bigger suburbs and newer homes drew residents away, and the two-story Queen Anne and Foursquare

[10] Jeanne Lirola, "Buildings of Columbia: Logan School," *The State* (Columbia, SC) B2, 17 May 2001.

[11] Bill Robinson, "Logan School Lives On In Memory of Students From an Earlier Era: Elmwood Park Building Reopens Today As It Once Was – an Elementary School," *The State* (Columbia, SC) 3 January 2000.

Fig. 5.5. Logan Elementary School, Columbia, SC.

Fig. 5.6. Logan is part of the Elmwood Park Historic District.

style houses fell into disrepair as in many historic neighborhoods. The migration of families away from the school meant Logan was no longer needed as an elementary school.[12] After serving for sixty-two years, the district used it for alternative schools and adult education, but by 1980 the school was only used for random meetings. During the 1980s, a preservation movement began stirring in Columbia, and new residents with young families began moving back to Elmwood Park, taking advantage of the low prices on the large homes in need of serious elbow grease. At this time the school district, Richland One, began talking about moving students out of nearby McCants Elementary, located in the low-income neighborhood of Earlewood by Elmwood Park, and into a new school. The small 1930s McCants school – with only ten classrooms – had been outgrown by its student body and was in poor condition. Residents of the Earlewood and Elmwood neighborhoods began a petition to ask the school district to consider renovating Logan for an elementary school once again. The school district had $184 million in funding for renovation from a 1996 bond referendum. After receiving estimates for the renovation of Logan for approximately $8 million, compared with a new school costing between $12 and $16 million, the choice was easy for district officials. Having an elementary school closer to the historic district of Elmwood Park would mean its predominately middle-income families would be more likely to send their kids there, and would increase the diversity of McCants' 96 percent minority and low-income student population.[13]

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[12] Ibid.

[13] Leslie Patterson, "New McCants to Be Full of History," *The State* (Columbia, SC) 10 October 1996.

Of concern to school officials was the size of site and the school's proximity to Elmwood Avenue, now a six-lane major thoroughfare lined with fast food restaurants and convenience stores. Logan sits on only four acres, while South Carolina standards require seven acre sites for elementary schools. The school also needed a gymnasium. Richland One began exploring the idea of demolishing three homes behind the school to increase the site to seven acres. Residents were furious and objected vehemently. Since Logan is not only on the National Register but is a City of Columbia local landmark, the school district had to seek permission from the Columbia Landmarks Commission. The school district admitted that the land was "not crucial to the project" but would help them meet state guidelines.[14] The district later decided it would simply move the houses rather than demolish them, but their lack of a plan for relocation led to a denial by the Landmarks Commission. South Carolina Education Facility Guidelines give local districts permission to apply for a variance in case of limited site size, and such a waiver was granted for the Logan renovation. The project continued to move forward and local architects, The Boudreaux Group, were hired.

Having experience in historic renovation work, the architects were able to accommodate everyone's needs. The designers began by ensuring collaboration with the school district, the neighborhood associations, the Landmarks Commission and the state historic preservation office. To solve safety concerns, the entire school site was ringed with a congruous brick pier and metal fence to define its boundaries and keep kids out of traffic. Original 1912 plans revealed that the inner courtyard of the three-story school

[14] Dawn Hinshaw, "School Expansion Plan Rouses Neighbors," *The State* (Columbia, SC) 1 July

was intended to have an assembly space constructed in it, giving precedence for its availability for a gym building.[15] Preservationists were concerned that a new addition would detract from the original building, but architects designed the new multi-purpose building so that it was invisible from the outside of the school. With restrooms that connected the new courtyard addition to the original building on two sides, the other two walls were faced in glass block to take advantage of all available light and be distinctive from the historic structure. (Fig 5.7) The side carriage entrances, which historically led teachers' carriages into the courtyard where their horses grazed during the day were redesigned for modern carriages – becoming the main entrances from the teacher parking lot and bus and parent loading zones on either side of the school. The original wooden carriageway doors were retained and mounted on the inside of the openings. Four obsolete chimneys in the courtyard were removed and the brick recycled to use where necessary.

Each of the four stairwells has a large Italianate window, each restored by hand. Four stairwells gave the architects the flexibility to turn one into an elevator shaft, all the while preserving the view of and from the distinctive window. While the other original windows and classroom doors were removed for energy-efficiency and fire code reasons, the architects worked with the state historic preservation office to ensure that the new windows and doors duplicated the original designs in modern materials. (Fig. 5.8) This

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1997.

[15] Jeanne Lirola, *Logan Elementary School*, (Columbia SC: The Boudreaux Group, Inc.) 2001.

Fig. 5.7. Logan's new multipurpose room in the inner courtyard.

Fig. 5.8. New doors, a dropped ceiling and thicker walls were chosen to make the school more energy-efficient.

included using a plywood template to record the nuances of each classroom door opening to ensure a good fit.[16] The difference between old and new is negligible. (Fig. 5.9, 5.10) On the first floor, the original concrete floors were covered with a new commercial grade vinyl composition tile in a diamond pattern reflective of the decorative tile on the facade. The second and third level floors are heart pine and were refinished – only one bundle of new flooring was needed for patching.[17] The plaster walls were determined to be in poor shape and the builders wanted better insulation, so three inches of blown-in insulation was covered with sheetrock, projecting the walls slightly. All the original chair and picture moulding was removed first, and 45 percent of it reused. A skilled trim craftsman added the rest, sanding each piece by hand to give it the subtle variations of the old trim.[18] Only one classroom had significantly high levels of lead paint and asbestos, so the plaster walls and ceiling were completely removed and replaced. Dropped ceilings were added to hide all new mechanical retrofittings, lowering the ceiling enough to come below the arched openings of the windows. The designers boxed out the ceilings away from the windows so as not to totally obscure the top of the openings. (Fig. 5.11, 5.12)

The school reopened in January of 2000 with a redesigned media center updated with the latest technology, a separate computer lab, and a television in every classroom, meeting all the district's programmatic needs. With a total renovation cost of $7.9

[16] Anthony Lawrence, architect with The Boudreaux Group, interview by author, 17 May 2002, The Boudreaux Group, Columbia, SC.

[17] Ibid.

[18] Ibid.

Fig. 5.9. Original upper-story windows before renovation.[19]

Fig. 5.10. New lower-story aluminum window closely follows the profile of the originals.

[19] Photo courtesy The Boudreaux Group, Columbia, SC.

Fig. 5.11. Logan classroom before renovation.[20]

Fig. 5.12. Logan classroom after renovation. Dropped ceiling is stepped away from the windows so as not to totally obscure the openings.[21]

[20] Photo courtesy The Boudreaux Group, Columbia, SC.

[21] Photo credit: Rion Rizzo, Creative Sources Photography, Inc.; Atlanta, GA

million, the district got a state-of-the-art elementary school, the neighborhoods got a crucial landmark building preserved, and 206 children get to go to school in one of the city's most beautiful buildings – and 75 percent of them walk there. The school has received numerous awards, including preservation/restoration awards from the Historic Columbia Foundation, the South Carolina Department of Archives & History (SHPO), from the South Carolina and Columbia chapters of the American Institute of Architects, and Logan was recently chosen by the National Trust for Historic Preservation to serve as a case study exemplifying the reuse of historic schools.

Janice Cowen, who lives in Elmwood Park, is excited about her young daughter being able to walk to school when she starts kindergarten, and is sure other residents will begin sending their children there as well.[22] The neighborhood is thrilled with the project and has already noted an increase in home improvements. While renovations were taking place at Logan, the equally grand historic Wardlaw Junior High right next door was being renovated, after fourteen years in limbo, by a private developer for assisted-living apartments. Logan has become a showpiece for the school district, the neighborhoods, and the entire city. The success of the venture can be credited to a dedicated and persistent neighborhood organization and an architectural firm familiar with historic renovations. Being able to show that upgrades and an addition really would cost less than new construction, and could be done on a smaller than required site, will hopefully ensure that the school district considers renovation options from now on.

[22] Patterson, "New McCants to Be Full of History."

Olympia Alternative School, Columbia, SC

The Olympia Mill was part of a group of textile mills built in Columbia by W. B. Smith Whaley, of Charleston, at the end of the nineteenth century. (Fig. 5.13) These mills included Olympia, Granby, Richland and Capital City.[23] A school was organized for Olympia mill village children in 1901 in one of the mill village houses and later moved to a new brick school in 1910.[24] After a 1913 child labor law was passed, the Olympia School surged to 400 students, making it the largest school in Richland County at the time. In 1926, a new high school building was added to the school, followed by a vocational wing and gymnasium in 1939.[25] This last building phase completed a U-shaped complex of one-story brick Colonial Revival school buildings at the end of a long drive. (Fig. 5.14, 5.15) The Olympia School served all grades through high school before dropping the senior high grades in 1970, and then closing its doors in 1999 because of indoor air problems.[26] Mill villages are historically distinct, tightly woven communities. All over the South, tenant farmers and their families were recruited to work for the mills, who provided housing, churches, a company store and a school. Villages were virtual towns within themselves. Pay was minimal and workers could not afford housing or goods outside the mill village, furthering their need for community camaraderie, as families supported each other out of necessity.

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[23] Diana Greer Miles, "Revitalization and Preservation in Two Textile Mill Villages in South Carolina" (MHP thesis, University of Georgia, 1996.)

[24] Gina Smith and Kimanthi Lewis, "Ex-students Recollect a Rich, Unique History," *The State* (Columbia, SC) 7 November 2001, sec. A13.

[25] Ibid.

[26] Ibid.

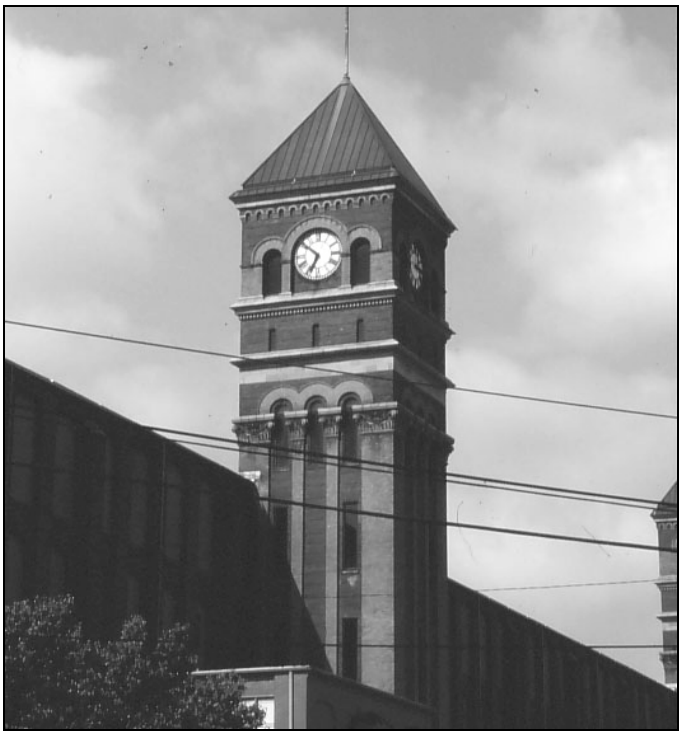

Fig. 5.13. Olympia Mill.

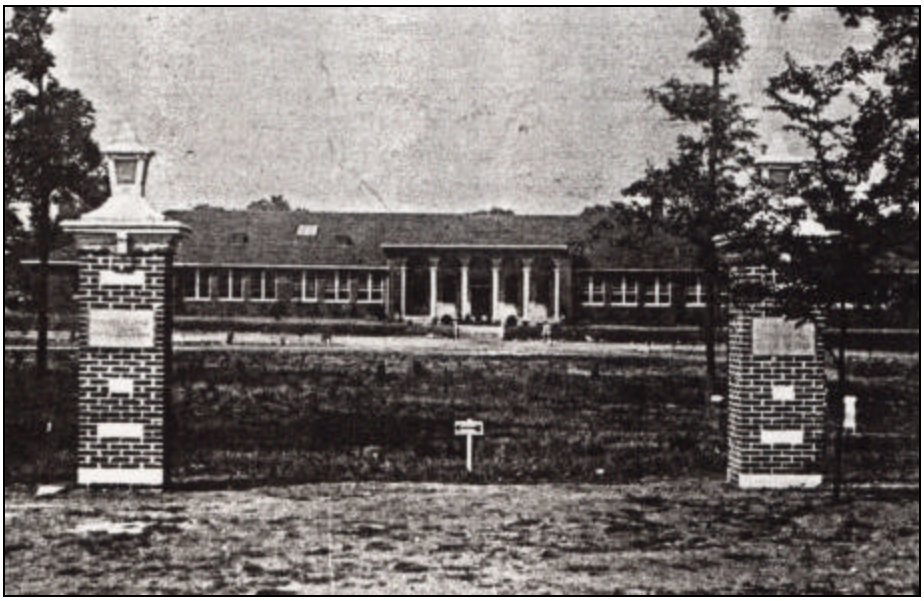

Fig. 5.14. The entrance into Olympia Schools as seen shortly after construction.[27]

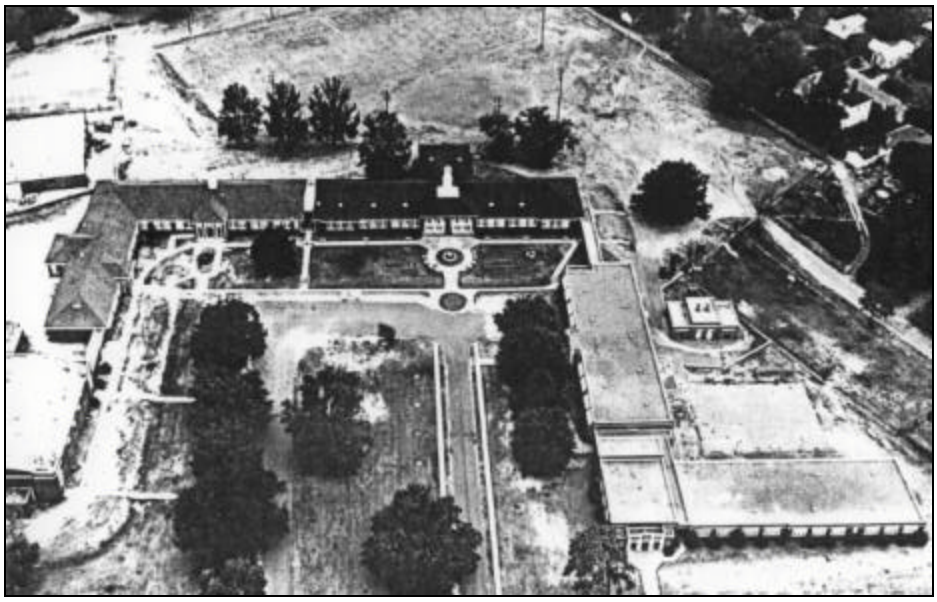

Fig. 5.15. Early aerial view of the Olympia School complex.[28]

[27] Photo credit: Alvin W. Byars, from *Olympia Pacific: The Way It Was, 1895-1970.* West Columbia, S.C.: Professional Printers, 1981.

[28] Photo credit: Alvin W. Byars, from *Olympia Pacific*.

Olympia and its immediately adjacent neighbor, Granby, are the only two mills left standing today. Though both are sitting empty, their proximity to the University of South Carolina campus has developers eyeing the property for its redevelopment potential as apartments or condominiums. The two mill villages, virtually indistinguishable from each other, are enjoying a slow resurgence as young families pioneer into the neighborhood and mingle with long-time residents who proudly call themselves "lintheads". With intermixed house styles and sizes, including two-story gable front single houses, two-story saltbox duplexes, and gable-ell cottages all with varying remodeling needs, many different families of varying sizes and income levels can live there. (Fig. 5.16) The mill village is still a tight-knit group, holding school reunions for alumni every three years.[29] Currently the neighborhood is in intense discussions with the city and a nearby quarry to renegotiate gravel truck traffic through the neighborhood that residents say is ruining their quality of life and potential mill developers claim is keeping reinvestment opportunities at bay. In 2001, when Richland School District One began considering a consolidation of its alternative-education programs in a new location at Olympia School, the neighborhood association enthusiastically jumped behind the idea. Richland One began a $15 million dollar restoration of the school to house an alternative middle school, an alternative high school and an adult education program serving over 600 students.[30] Students who are struggling because of discipline or learning problems would come to Olympia to receive personalized attention and get back on track,

[29] Ibid.

[30] Karen York, "Plan Would Make Olympia Alternative School." *The State* (Columbia, SC) 7 May 2001, sec. B1.

Fig. 5.16. The mill village is beginning to see improvements to its historic houses.

focusing on reading, math and career development classes.[31] The school district planned to keep the façade as it was and undertake major renovations inside to eliminate mold and mildew problems and install new technology. Jim Jaco, president of the "We Are Olympia" neighborhood association and Olympia School graduate spoke for the entire village, saying "It means a lot to the community. . . it is the focal point of the community, and it's a beautiful structure. An empty building will go bad quick."[32]

The district was $1.3 million into its remodeling project, having just put a new roof on the gym, when a fire began the night of November 5, 2001, and in ninety minutes burned most of the school to the ground. The gym and the elementary school wing were saved, but the most prominent middle section was destroyed. (Fig. 5.17, 5.18) The fire was eventually ruled an accident, but the mill village community was devastated, and alumni from all over the country came to grieve together and share memories. Articles, old photographs and remembrances made the front page of the statewide newspaper for weeks. Not only had they lost the place that held so many memories of the past, but a large part of the village's future went up in flames as well. Immediately after the fire, the neighborhood began pleading with the school board to rebuild their school and continue on with their plans. The majority of the neighborhood concurred that the school should be rebuilt as it was, or as close as possible.

Even though Richland One still had most of their construction budget and would receive insurance money from the fire, the district needed to reevaluate costs and options

[31] Ibid.

[32] Ibid.

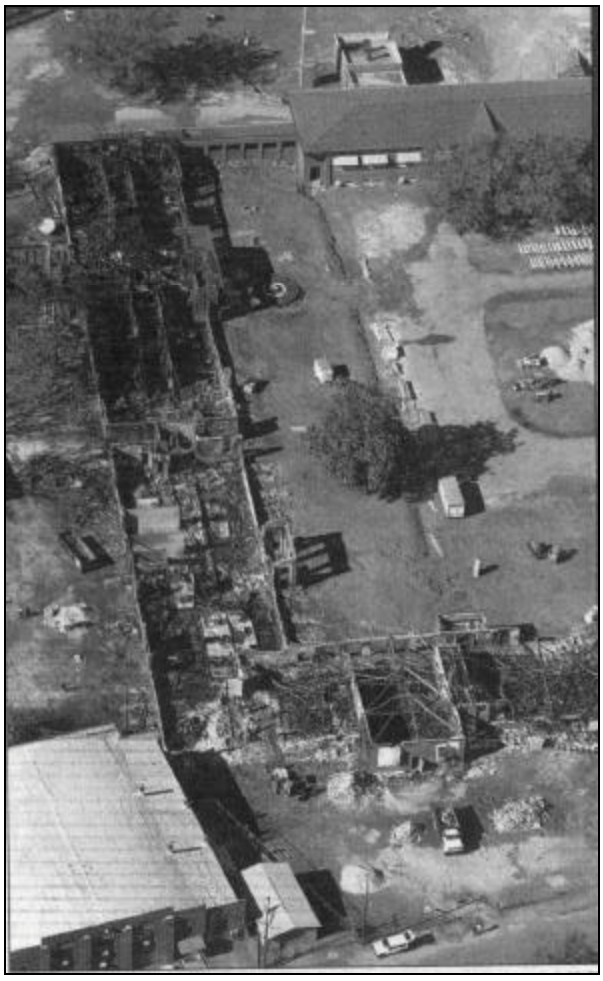

Fig. 5.17. A fire in November 2000 completely burned Olympia's prominent middle section.[33]

[33] Photo credit: Jason Clark, *The State* (Columbia, SC) 7 November 2001, A1.

Fig. 5.18. Olympia's elementary school wing was not damaged by the fire and will be renovated as part of the new alternative school.

in light of the new circumstances. District official Bob Chestnutt was one who agreed with rebuilding the school on its former site, pointing to the district's current ownership of the site, community support and the expenses of starting over elsewhere.[34] Approximately two months after the fire, district officials met and voted unanimously to rebuild the school, and were met with cheers and applause from the room full of Olympia residents.[35] Don Kirkland, who graduated from Olympia School with his wife and never left the village, said the excitement of the community was hard to explain, adding, "People don't realize what the school means to us until they've lived here."[36] Current schematic drawings for the new school show a façade identical to the original, and the rest of the building in a scale that is complementary. The Olympia Alternative School is scheduled to open in May 2003. Richland One Facilities Construction Director Raymond Perkins credits the neighborhood's total involvement, historic photo documentation and completed design plans with being able to continue with the Olympia School project as a reconstruction of the original.[37] While the school will still serve to educate students in the sixth through twelfth grade levels, its educational structure as an alternative school surely gives it the flexibility to vary from the district's usual standards. For all these reasons, the unique fact remains: a new public school is to be built on a former school site in the middle of a historic neighborhood. It will serve not only to educate, but as a center

[34] Gina Smith, "Olympia's fate mulled tonight," *The State*, (Columbia, SC), 8 January 2002, sec. B1.

[35] Gina Smith, "Richland One to Rebuild Olympia School," *The State*, (Columbia, SC), 3 January 2002, sec. B3.

[36] Ibid.

[37] Raymond Perkins, Richland School District One Facilities Construction Director, phone interview by the author, 7 May 2002.

for community learning and gathering, and will undoubtedly be a source of pride, just as its predecessor was.

Despite different situations, circumstances and approaches, these three schools prove that high quality education can happen in historic school buildings. In each situation, it took dedicated preservationists and neighborhood residents concerned with protecting their quality of life and armed with the numbers that proved it could work, to convince the third largest school district in the state to renovate their historic neighborhood school rather than build a new school following their minimum acreage standards. But the community still has a long way to go.

As parents and administrators met recently to discuss the future of Hand Middle School, they also were in discussions over the fate of Dreher High School, which Hand students feed into. The 1930s school is experiencing common problems associated with high growth and low maintenance: a cafeteria that seats only one-third of the student body, water damage, two unairconditioned gyms, limited student parking and playing fields and no room to add more. Despite a strong nostalgia for the school – Columbia's mayor of many years, supreme court justices and many of Columbia's citizens graduated from Dreher – the eighty participants in the meeting all spoke in favor closing Dreher and building a new school on a fifty to sixty acre site.[38] The current site is thirteen acres. Nostalgia for Dreher will probably keep the school from ultimately being torn down, but its size is not being considered a benefit to the education of its students. It is unknown

[38] Gina Smith, "New Dreher High School, Hand Upgrade Get Backing." *The State* (Columbia, SC) 21 May 2002.

whether the district has or will consider renovation or new construction on the current site as an option.

Jeanne Stiglbauer, former principal of Hand who is credited for its rebirth, is now the principal at Dreher. In defense of a new school, she said, "I have a girls' soccer team that just won a national championship without a field."[39] Is it possible that their winning the national championship means they can do so without a field on site? Marilyn Helms, mother of two Dreher students said, "This school produces some of the best students in this state… I think they need a top rate facility."[40] Could it be that the size and location of the school is not limiting students' education? Two unairconditioned gyms and lack of parking and athletic fields are cited as the main reasons for the school's future abandonment. Has the district considered demolishing one of the gyms and constructing a student parking garage in its place? Perhaps a portion of the fifty to sixty acres the district would use for a new school could be better served by a county park for all residents, complete with athletic fields for the school. This option could let the existing school continue to serve the neighborhood and prevent sprawl development from cropping up around a new school and causing further disinvestment in the city that officials are working so hard to revitalize. Despite award-winning historic schools, preservationists and advocates of small, neighborhood schools still have a long way to go in convincing the Richland One school board and parents of what makes a good school.

[39] Ibid.

[40] Ibid.

In 2000, South Carolina Governor Jim Hodges created a Historic Preservation Task Force, charged with making South Carolina the leading state in heritage-based tourism and historic preservation efforts. Based on state-wide public forums, the task force created a list of recommendations to serve as a blueprint for achieving the Governor's goals. In addition to supporting private stewardship and developing heritage tourism, the forums revealed a need to educate South Carolinians about the value of their heritage and integrating historic preservation into public policy and planning. The task force specifically mentions the need to "increase general public awareness of our historic resources; enhance the teaching of South Carolina history in our public schools; promote awareness of our African-American heritage; provide historic preservation training for local government officials; and provide technical training for architects, contractors, craftsmen, and building code officials."[41] Recognizing the impact that state and local governments can have on the preservation of the state historic resources, the task force directly mentions the need to encourage these entities to make historic preservation a factor in their planning actions.

Keeping schools in historic school buildings achieves all of these goals. What better way to educate the public on the value and significance of their history than through school children and their parents and teachers? Local history is learned in a building that was present to see history made. Historic preservation training is accomplished by recruiting skilled and able local craftspeople, contractors and architects

[41] *Investing in South Carolina's Future by Preserving Our Past: Report of the Governor's Task Force on Historic Preservation and Heritage Tourism*, by Robert T. Lyles, chairman (Columbia, South Carolina: November 2000).

to restore historically significant school buildings and be able to transfer this learned knowledge to other historic structures. When preservation is practiced by local school boards and the state Department of Education as historic schools are held up as architectural and educational jewels, other governmental agencies are encouraged to pick up the mantle of preservation. By not discriminating against historic school buildings, local school boards can lead the effort towards achieving Governor Hodges's tourism goals, and should have a state department of education that encourages historic preservation.

CHAPTER 6

CONCLUSION

Population increases, years of deferred maintenance, and new technology all lead to an opportunity to reuse historic schools for public education and to build new schools that respond to the call for smaller facilities, healthier children, walkable communities and urban revitalization. Building new schools in established areas makes sense: it preserves vanishing open space and farmland, encourages and accommodates growth that is smart, and centers schools within the community. Renovating historic schools for schools further capitalizes on existing infrastructure, reinvests in established neighborhoods, and provides a good match for parents and teachers seeking smaller schools and better learning environments – in buildings whose beauty and craftsmanship cannot be easily duplicated. Historic school buildings can go a long way to relieve overcrowding in the nation's schools. Changes in state policy can pave the way for smaller new schools to be built in existing neighborhoods.

At the culmination of their planning report, *The Cost of Sprawl,* Maine asks its citizens to play an individual role in curtailing the effects of sprawl. "The solution will come from new homebuyers who decide they're simply not going to drive that far anymore. It will come from business owners who decide to fix up historic stores on Main Street. It will come from the Planning Board members who have the courage to design ordinances which reward in-town living. It will come from the [town councils] who

invest in maintaining and upgrading their older roads, schools, and buildings."[42] In other words, change has to happen locally.

A concurrent theme in all available examples of historic school buildings which were saved and retained is the role that the local preservation organization played. With a mission to preserve historic structures and educate community leaders, historic homeowners and other citizens on the benefit of our collective past, battle-strong preservationists understand the significance that historic school buildings hold. A vital subsection of this group is the neighborhood organization within the homes that surround historic schools. They have an interest in the revitalization of their neighborhood, the stabilization of their property values. Community reinvestment, the preservation of farmland, advances in educational achievement and a healthier citizenry can all be realized. Proponents of these measures have already received national support on several levels. Many states are making changes in planning laws and school facility standards, but the power to further planning, education and health goals rests in the hands of local citizens. Preservationists, parents, educators and health experts will have to band together and speak with one voice to create community change and lead reforms in educational facilities.

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[42] O'Hara, *The Cost of Sprawl*, 15.

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