Education and Smart Growth: Reversing School Sprawl for Better Schools and Communities

This paper was written by Sam Passmore of Charles Stewart Mott Foundation* in collaboration with the Funders’ Network for Smart Growth and Livable Communities. It is the eighth in a series of translation papers published by the Funders’ Network to translate the impact of suburban sprawl and urban disinvestment on issues of importance to America’s communities and to suggest opportunities for progress that would be created by smarter growth policies and practices. Other issues addressed in the series of translation papers include social equity, workforce development, parks and open space, civic engagement, agriculture, transportation, aging, children and families, health, housing and the environment, arts, and community organizing.

Abstract

This paper describes how the trend toward building new schools on large sites far from existing development centers, called "school sprawl" or "school giantism," can have far-reaching impacts on school children, school districts and the larger community.

Educators and parents express concern that large schools reduce educational outcomes, particularly for at-risk youth. Schools that are more distant can diminish student participation in extracurricular activities, parental involvement and taxpayer support. Students are walking and cycling to school less, which contributes to alarming rates of childhood obesity. Many suggest that the growing physical disconnect between schools and community helps create a level of student anonymity and social alienation that sets the stage for tragic events like Columbine.

Smart growth groups, which traditionally have not weighed in on educational matters, are now questioning the same trend. Rather than build shopping mall schools at the edge of town, smart growth advocates encourage the continued use of existing schools and the construction of new schools on infill sites within existing neighborhoods.

Smart growth advocates’ interest in neighborhood schools dovetails with education reformers’ interest in small schools, presenting an important opportunity for collaboration. Scattered efforts are underway across the country addressing the shared interests of educators and smart growth advocates. Much remains to be done, and funders and leaders from all sectors have an important role to play.
When "National Walk Our Children to School Day" rolls around this fall, how many children do you know who can hike the distance? Of those who live close to school, can they safely and easily get there by walking or biking? What was once considered a rite of childhood – the walk or bike ride to school – is fast becoming a distant memory, as more mega-schools are built on the edges of town, far from where we live and work. Is this a problem, or are we merely being nostalgic when we yearn for the days when children took their first big step into the world by independently navigating their way to school?

The planners, architects, developers and builders involved in the smart growth movement say it is much more than sentimentality. They emphasize the role civic buildings, and schools in particular, can play in the life of a neighborhood. Schools can be beautiful buildings that instill pride and set a high architectural standard for the entire community. They can be gathering places for people of all ages, over the course of many generations, providing a community anchor that connects residents to the past and the future. When schools and the associated grounds are embedded in a neighborhood, students can walk or bike to school, giving many children an important taste of independence while freeing up many parents from being their children's chauffeurs. Among smart growth advocates, therefore, there is a great deal of excitement about how neighborhood schools can be a cornerstone around which older neighborhoods are resettled and new, more livable neighborhoods are established.

By the same token, schools can contribute mightily to the problem. Because smart growth advocates want to contain sprawl, they seek to contain the spread of growth-inducing infrastructure – like roads, sewer lines and new schools – beyond the immediate edge of an urban area. The fact that sites for new schools, on average, are getting larger and located further from town is therefore worrisome. One recent study of South Carolina’s coastal counties, for instance, found that school site size has increased in every decade since the 1950s and school sites built in the last 20 years are 41 percent larger than those built previously. Since most new schools are on such large sites, important design opportunities are lost to use the school as a cornerstone for a new neighborhood.

Of equal concern, a new school on a distant site can act as a growth magnet, helping draw people out of older urban neighborhoods and into new subdivisions on the metropolitan fringe. It is well understood that school quality determines where many families will choose to locate within a region. If new schools are being built on the edge of town and they are perceived to be superior, as new schools often are, then families who can afford the move will often relocate. Similarly, under performing schools in older neighborhoods can push families to leave. Even families without school age children are impacted as school quality has a significant influence on residential property values. Thus, school quality can influence population shifts within a region from the urban core to the periphery, precisely the pattern of urban disinvestment.
and suburban expansion that troubles smart growth advocates the most.2

Discussions about the connection between schools and community design are not new within smart growth circles, but they certainly have become more focused recently, with the publication of a National Trust for Historic Preservation report, "Historic Neighborhood Schools in the Age of Sprawl: Why Johnny Can’t Walk to School." The report serves as a clarion call to smart growth advocates across the country, stating: "Despite the clamor for smaller, community-centered schools, ‘mega-school sprawl’ – giant schools on the outskirts of town with tenuous physical connections to the communities they serve – continues to spread across the country." 3

The Smart Growth Response

Until this recent focus on school sprawl, smart growth policies have not made much of a distinction between schools and other public infrastructure. Still, some growth management programs have had considerable influence over school facility planning. Such measures generally strengthen the connection between community planning activities and capital investment decisions, including new school construction. As early as 1971, for instance, Maryland established a state-level committee, involving the Secretary of Planning and the State Superintendent of Schools, to approve all school sites. Other states with robust growth management programs, like Florida and Oregon, also exert considerable influence over the location and size of school sites, stirring some controversy. Last year in Oregon, for instance, a bill was introduced to permit urban schools on prime farmland immediately outside the state’s urban growth boundaries. 1000 Friends of Oregon and other smart growth advocates helped defeat the bill.4

In addition to fighting such rear-guard actions, smart growth groups now have gone on the offensive against school sprawl. Such efforts coalesce around three related, but separate issues: minimum site size requirements; funding formulas favoring new construction over rehabilitation; and walkable schools. Each is discussed below.

Site Size

All states have regulations pertaining to the siting, design and construction of new schools, as well as the rehabilitation of existing schools. Most state regulations include minimum site size requirements, patterned after guidance established in the 1970s by the Arizona-based Council of Educational Facility Planners International (CEFPI). Under the model rules, an elementary school for 500 students would require at least 15 acres and a high school for 2,000 would require at least 50 acres. Citing such huge acreage standards at the top of the list of "public policy culprits," the National Trust explains in Why Johnny Can’t Walk: "Older schools typically occupy only two to eight acres. To satisfy the standards, school districts must often destroy nearby homes, parks and neighborhoods, or they must move to...
... most school facility decisions get made at the district level, suggesting that community-based education and discussion among educators, parents and other concerned citizens -- is as necessary as regulatory changes at the state level.

‘sprawl locations’ in outlying areas.” CEFPI is currently reevaluating the idea of the site size requirement, due largely to the recent pressure, and some states have different site standards without the help of national guidance. Florida’s requirements are smaller than the national average. Maryland has no such requirement, and Maine has turned CEFPI’s minimum requirements into maximums – undergirding that state’s effort to return to small, neighborhood schools that do not inadvertently induce sprawl.

Unless a state is willing to follow Maine’s lead, simply moderating the minimum site size requirement will not be enough to reverse the trend toward larger, more distant school sites. South Carolina, for instance, uses the CEFPI standards, yet schools constructed since 1971 in that state’s coastal counties are 47 percent larger than the requirement. This is a clear reminder that most school facility decisions get made at the district level, suggesting that community-based education and discussion – among educators, parents and other concerned citizens – is as necessary as regulatory changes at the state level. Making Current Trends in School Design Feasible, a recent North Carolina Department of Public Instruction publication, is a good example of what states can do to encourage such local dialogue. Without taking a position on the matter, the report advises local school officials on how to best integrate smart growth and related concerns into their school facility planning. Even Maine’s State Office of Planning, despite the benefit of a site size maximum, has prepared and widely distributed an informative brochure on the basic subject, aptly entitled The ABC’s of School Site Selection.

**Funding Formulas**

The mix of state and local funding for school construction varies considerably across the county, as do the rules that govern school district’s use of state dollars. The so-called “60 percent rule” is of special concern to smart growth advocates, particularly where state monies represent a large piece of the overall funding pie. Though the actual percentages vary from state to state, the basic rule dictates that the local district cannot receive state funding to fix up a school if the rehabilitation cost exceeds 60 percent of the school replacement cost. This type of formula inevitably leads to the abandonment of older neighborhood schools, when a more complete cost accounting might favor rehabilitation over new construction. Finding a neighborhood site for the replacement school, largely because of the minimum site size requirement, can be extremely difficult. As a result, houses and other buildings in the neighborhood must be raised to make room for the new school – or, more often, the new school gets built on a vacant site at the edge of town.

Progress is being made to modify funding formulas so that they no longer favor new construction. Historic preservationists in Pennsylvania recently won an important victory by eliminating that state’s 60 percent rule. Under Governor Glendening, nationally recognized as a smart growth leader, Maryland now explicitly favors the construction of new in-town schools, or the renovation of existing ones, over building new schools on remote sites. This fiscal year, eighty
percent of Maryland's school dollars will go toward renovation, compared to about 25% in the mid-1990s.⁸

**Walkable Schools**

Across the nation, medical experts warn that decreased physical exercise among school-age children is leading to unprecedented levels of obesity. More than a third of young people in grades 9-12 are not active enough, and one-fourth of those aged 6-17 are overweight.⁹ Based on the South Carolina study cited earlier, students are four times more likely to walk to schools that were built before 1983 than those built after 1983, since the newer schools are built far from community centers with busing or driving conceived as the sole means of transportation.¹⁰ Thus, school sprawl deprives children of an important and traditional outlet for daily physical activity, particularly when the intervening roadways are unsafe for cyclists and pedestrians.⁹ Such safety concerns can affect urban and suburban school children and parents alike.

Such concern has prompted the Centers for Disease Control and other public health organizations to sponsor a National Walk Our Children to School Day every fall. First organized by the Partnership for a Walkable America in 1997, the walk has grown to involve hundreds of thousands of school children and addresses a wide array of community concerns including the need to build new neighborhoods that are pedestrian friendly and retrofit suburban neighborhoods so that children can walk to school safely. Taking this interest one step further, the CDC now actively promotes "Active Community Environments," which are no different than the mixed-use, pedestrian-scale neighborhoods that many smart growth advocates praise.¹¹

The Surface Transportation Policy Project (STPP), a national group, has also taken a direct interest in pedestrian safety around schools, successfully leading an effort to pass the California Safe Routes To School Act. Under this new law, one-third of the federal transportation funds that are reserved for safety improvements must be spent in and around schools on bike paths, sidewalks and the like. In California, this translates to $20 million per year. Similar legislation is now under development in other states. STPP and other smart growth advocates are enthusiastic about Safe Routes To School legislation, first, because it leads to tangible improvements in the transportation system. Second, by highlighting how most new communities are auto-dependent, it presents an opportunity to make common cause with new allies and uncommon partners.¹²
Small school advocates cite many reasons why the trend toward large schools is a profound mistake that should be corrected.

**Student Performance**

According to conventional wisdom, larger schools yield better educational outcomes because a more comprehensive curriculum can be offered as budgets and enrollment rise. To the contrary, growing evidence concludes that small is better when it comes to student performance. Students attending smaller schools, on average, have lower dropout rates and score better on standardized tests, and children in poverty appear to benefit the most. A recent four-state study found that smaller schools reduce poverty’s affect on test scores by 20 to 70 percent. Researchers conclude that the intimate environment of small schools encourages learning because teachers know their students well and can hold them accountable to higher standards. Concerns about the cost-effectiveness of smaller schools, because they do not have a large school’s economies of scale, are quieted by small schools’ high graduation rates. A New York University study, for instance, found that smaller schools in New York City spent slightly less per graduate than their large school counterparts.

**Extracurricular Activities**

Just as they can offer a wide array of courses, large schools can support...
many extracurricular choices. Studies indicate, however, that the percentage of students participating in after-school activities actually drops as school size rises. The reasons are not hard to discern. Take sports for example. Students with limited natural ability are less likely to make the team in a large school when they would be welcome on a small school team for which fielding a full complement of players can be a genuine challenge. In larger schools, then, fewer young people have the chance to learn valuable lessons in leadership and other life skills outside the classroom. Volunteer opportunities outside school are further reduced when the school is located on a large distant site, simply because the physical separation makes it difficult to connect the life of the school to the civic life of the larger community.

School Security
The tragic shootings at Columbine focused considerable attention on the connection between school safety and school size. A panel of school security experts subsequently convened by former Secretary of Education Dick Riley recommended, first and foremost, that the nation reduce the size of its schools. A large school, particularly when it is located outside the range of a neighborhood’s watchful eyes, can breed feelings of anonymity and alienation that can lead to violence. The available data bears out the point. According to a recent U.S. Department of Education report, schools with 1,000 or more students have 825 percent more violent crime and 270 percent more vandalism than schools with fewer than 300 students.

Teacher Satisfaction
The sense of community and strong personal relationships that can develop in small schools benefits teachers as much as students. A recent study of small schools in Chicago found: "Teachers in small schools are more likely to report a strong professional community and greater job satisfaction....Teachers in small schools also are more likely to report that they feel creative, reinvigorated and recommitted to teaching..." The fact that teachers do well in a small school surely translates into their students doing well.

Parental and Community Involvement
Schools that are large and physically distant are as uninviting to parents as to their children. In contrast, studies have shown that parents are more involved in small schools, and that parent-teacher relationships are stronger. This lack of involvement in large schools is even more pronounced among adults, like empty-nesters and senior citizens, who do not have school-age children. Out of sight, and therefore very much out of mind, such schools draw from a shrinking pool of adult role models and volunteers. Important opportunities to open the school to multiple community uses, like shared playing fields and libraries, can also be lost. Of course, connecting the life of the school to the life of the community, so easily accomplished in a small neighborhood school, comes back to benefit the school system itself. Voters who know the schools will be more likely to support the schools on election day – an increasing concern as larger percentages of the voting population move out of their child-rearing years.
Models of Reform

Though far from declaring victory, the small schools movement has enjoyed considerable success. For example, 150 small elementary and high schools were created in Chicago during the 1990s, primarily in low-income, minority neighborhoods. Given the opportunity, voters in rural states will vote against consolidation of small schools and small districts, as recently demonstrated in Maine and Colorado. The U.S. Department of Education has established a grant program to support the creation of small schools, and the State of Florida recently passed a law that bans large schools as of 2003. The mainstream press has taken up the cause. Writing for Newsweek, for instance, Anna Quindlen has linked school violence and school giantism. For the most part, these measures and others like them have been adopted strictly for their perceived educational benefits. The fact that the push for smaller schools helps smart growth is largely an unintended benefit. To date, efforts that deliberately link the small schools and smart growth agendas are scattered, but they are growing in number, geographic scope and promise.

One concept emerging out of the education field, "schools as centers of community," provides a framework for collaboration. Former Secretary of Education Richard Riley recognized as much in an October 1999 address to the American Institute of Architects, a key constituency within the smart growth movement. Riley endorsed the idea of small neighborhood schools stating: "Let's build new schools so that they serve the entire community by encouraging multipurpose use. Rather than isolate the school from the community – which often has been our habit in the past – let's build schools as the anchor and center of our communities. Public schools are just that – public." Riley went on to recognize that the schools as centers of community concept has room for the smart growth agenda: "By building smaller schools close to where people live, we can encourage the development of smart growth policies that lead to better neighborhoods and more livable communities." This direction is very compatible with the aims of the C.S. Mott Foundation, which has been active in the area of community schools for many years.

Steven Bingler, a New Orleans architect at the forefront of the discussion, emphasizes the importance of citizen engagement. If all segments of the community are involved in the development of a new school facility, he argues, it becomes easier to engage the community in the life of the school once it is built. This public design process, outlined in a U.S. Department of Education document, "Schools as Centers of Community," has been applied in communities as different as Los Angeles and Littleton, New Hampshire. Support from the New Hampshire Charitable Foundation helped make the work in Littleton possible.

The Los Angeles program, "New Schools/Better Neighborhoods," is operated by the Metropolitan Forum Project and sponsored by The James Irvine Foundation. In this case, the school district anticipates building 51 new schools to accommodate nearly 80,000 new students by 2008. Since much of this student growth is expect-
ed in existing urban areas, the suburban model of large schools on large sites will not work, according to New Schools/Better Neighborhoods. Instead, "smart schools" are the right solution – small schools that serve as anchors to vibrant urban neighborhoods by providing a full range of social services like day care, health care, recreation and libraries during all times of day and every day of the week. Beginning with the term, "smart schools," New Schools/Better Neighborhoods emphasizes how small neighborhood schools and smart growth policies can reinforce one another, advancing this view through publications, symposia and community planning exercises.

A similar effort is currently underway in Chattanooga, partially funded by that city’s Lyndhurst Foundation. Unlike Los Angeles, however, the Chattanooga school district is not anticipating significant increases in student population, particularly in the urban core. Rather, the construction of two new downtown elementary schools is part of a larger strategy to resettle the city’s older urban neighborhoods and put the brakes on suburban development outside town. To improve the chances that this experiment will work, the two schools are small academic magnets with permissive enrollment policies, allowing suburban children to attend as long as their parents work downtown. As the downtown population rises, induced partly by the high-performance elementary schools, district officials and civic leaders expect to gradually limit enrollment to families who live in the neighborhood.27 In this way, those working to revitalize downtown Chattanooga have taken a page out of the suburban developer’s playbook – siting a school in the neighborhood to entice families to relocate.

The push to save a historic school from demolition plans, and therefore stabilize an entire urban neighborhood, often brings together the same coalition of parents, educators and smart growth advocates, but in a more spontaneous way. In Why Johnny Can’t Walk, the National Trust presents many case studies that prove this point, including the story of the McMillan School, Detroit’s oldest, which Principal Wes Ganson describes as a "lighthouse" for this blighted community.28 On a similar track, rural communities for years have been fighting to save their small community schools from consolidation, a cause taken up the Rural School and Community Trust.

The private sector can also play a reform role. In St. Louis, for example, developer Richard Baron has deliberately linked his efforts to revitalize a 40-block downtown area with the reopening and restoration of a neighborhood school.29 Out in the suburbs, developers who have embraced smart growth design principles also are working to integrate neighborhood schools into new development projects. They are having some trouble with local school officials, however. For quite legitimate reasons, school leaders resist the idea of building a new public school to serve students primarily from a single, and often exclusive, private development project. While this issue can be addressed through the drawing of attendance zones, it is more difficult to resolve disputes about site size. In keeping with the standard suburban model and often to conform with various state mandates, school officials may insist upon a site that the developer considers exceedingly large. The land cost can be significant, but the developer is usually more con-

**Administrator Concerns**

Administrators and other officials, even those who value small schools, typically face some very real constraints, including: the cost of renovating old schools, though sometimes inflated, can still be high; most administrators are persuaded that the per-pupil cost of operating a large school is lower due to so-called "economies of scale," though small school advocates will dispute the point; many parents, elected officials and design professionals possess unexamined biases that favor new and big over old and small; and new schools, even small ones, need to be bigger than their historical counterparts because of contemporary requirements like expanded technology, science and athletic facilities. Many of these obstacles can be overcome with additional or redirected funds, suggesting that advocates for small neighborhood schools need to be as versed in school finance as in urban design or classroom instruction.

In conclusion, it is important to note that education reformers generally are more familiar with such issues. Smart growth advocates should look to their colleagues in the education field for leadership on these and similar matters.
cerned about the design problem of connecting the school to the rest of the neighborhood if it is sitting on a large, imposing site. As a consequence, many such developers abandon the neighborhood school idea, or seek out a private school or charter school willing to locate on a small parcel.\textsuperscript{30}

### Opportunities for Funders

In June 2000, the National Center for Education Statistics estimated that the nation needs to spend $127 billion to repair, renovate and modernize its public schools – and this number does not include the need to accommodate growing enrollments. Fifty-three million children went to elementary and secondary schools in the U.S. in 2001, an eight million increase over the preceding 15 years. Enrollments are expected to rise throughout the rest of the Century, as the grandchildren of the Baby Boomers and the children of recent immigrants to the U.S. reach school age. In recent years, this has been as much an urban phenomenon as it has been a suburban one, a pattern that is expected to continue.\textsuperscript{31} Accounting for future enrollment growth, the National Education Association estimated the nation’s overall school construction and rehabilitation needs at a sobering $322 billion.\textsuperscript{32}

With these kinds of current and future needs, states and school districts in virtually every corner of the nation will be building new schools and rebuilding old ones for decades to come. Channeling that school construction activity in ways that support and celebrate the small, neighborhood school will be a great challenge. The prospects are better if small school reformers and smart growth advocates work together, and funders can facilitate such linkages through a number of means.

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**Coalition Building**

Leaders of the smart growth movement and the small schools movement have much in common and much to learn from one another. From these conversations could come shared state and local strategies to promote small neighborhood schools.

**Research and Communications**

There is a continuing need to refine our understanding of how school size, school quality, neighborhood vitality and regional growth patterns interrelate. Since local decision makers tend to distrust information gathered in distant places, it is also necessary to replicate informative research approaches in different geographic and political settings. As important, what is learned from new research, as well as what is already known, must be communicated successfully to school officials, planning officials and others at the local level.

**Model Projects**

Specific, place-based experiments – as in Chattanooga – provide important working examples of small neighborhood schools. Documenting the benefits these schools provide, as well as the barriers overcome to put them in place, will ease the way for more small neighborhood schools in the future.
What Works

When considering the transition to small neighborhood schools, local officials need to be reassured that they are not reinventing the wheel. Thus, a compendium of success stories that addresses all of the possible questions and pitfalls would be very helpful. Such a data base should also include examples of policy and statutory changes that have proven helpful in developing small neighborhood schools.

Change the Rules

Finally, federal, state and local laws that favor school sprawl over small neighborhood schools need to be reworked. For instance, the site size requirement is an obvious target around which a sustained discussion about small neighborhood schools can be initiated.

The Foundation Center reports that the education sector receives the largest share of all philanthropy dollars – nearly $2 billion in 1997 out of a total of about $8 billion spent by foundations and other private grant makers. Of that, an undetermined, though surely modest, fraction went to the cause of small schools. Smart growth, though a hot topic nationally, also receives support from a very limited pool of funders. Just as the advocates for school reform and smart growth would benefit from collaboration, funders in the two areas may be able to extend their dollars further by identifying joint projects and areas of common interest.

Conclusion

In March 2001, Business Week’s cover story described a seven-part agenda to “fix American’s schools”: pay teachers for performance; hold educators accountable; offer more variety; provide adequate funding; increase time in school; use technology effectively; and make schools smaller. While it may be possible to argue with aspects of this particular set of proposed items, the small neighborhood school jumps out as the main point of intersection between education reformers and smart growth advocates. The fact that a shared interest exists doesn’t automatically mean that it will exploited. To make the most of this important opportunity for collaboration, the key stakeholders will need to work over time to develop a common agenda that benefits school children, their parents, educators and the community at large.

Resources

Coalition of Essential Schools
www.essentialschools.org

National Clearinghouse for Educational Facilities
www.edfacilities.org

National Trust for Historic Preservation
www.nationaltrust.org

New Schools/Better Neighborhoods
www.nsbn.org

The Rural School and Community Trust
www.ruraledu.org

21st Century School Fund
www.21csf.org
Endnotes

10. Kouri, op. cit., p. i.
11. CDC, op. cit.
12. See www.transact.org/.
16. See for example www.smallschoolsworkshop.org/.
22. For more information on the federal program, go to www.ed.gov/offices/OESE/SLCP/overview.html; for more information on the Florida statute, go to www.leg.state.fl.us and search for Title XVI, Chapter 235, Section 2157.
26. Ibid., p. 5.
33. William C. Symonds, et. al., How to Fix America’s Schools, BusinessWeek online, March 19, 2001, p. 6 @www.businessweekmagazine/contents/01_12/b3724001.htm/.
34. See, for instance, Patricia A. Walsey, et. al., op. cit.