

**Rethinking Community Planning and School Siting
To Address The Obesity Epidemic**

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Since the late 1990s, the planning profession has found itself to be a very important player in efforts to address the issues of health, obesity, and physical activity. Much of this recent attention paid to the effects of community design and transportation choice on physical activity and health has come from the health field rather than from the planning profession or from developers and builders. Noting the tremendous increase in the rate of obesity in the U.S. and the limited effectiveness of encouraging individuals to change their behavior to reverse the trend, public health policymakers and researchers turned their attention in the last several years to factors in the built environment that affect people's ability to be active. This new emphasis has spawned numerous research studies, policy analyses, debates, and, increasingly, direct action to address the problem through local planning more focused on the health and physical activity aspects of development patterns.

Indeed, the growing epidemic of obesity creates an imperative for policy changes in planning and practical, on-the-ground modifications to the built environment to happen sooner rather than later. The percentage of American adults who are obese has doubled since 1980, from 15 percent in 1980 to 31 percent in 2000 (NHANES 1999-2000). The widely disseminated maps depicting obesity trends in the 50 states illustrate the extent of the problem.

The health profession's efforts to highlight the importance of the built environment and its effects on making possible higher levels of physical activity comes at an opportune time for planning, especially for smart growth initiatives. Community efforts in the last decade to revise plans, development regulations, and development patterns to curb sprawl, reduce congestion, and protect the environment—all under the rubric of smart growth—are also creating communities with more opportunities for walking, biking, and routine physical activity.

Also energizing the policy shift to active communities is the burgeoning number of advocacy groups pushing for changes in public investments in transportation spending, land development, street design, and traffic calming in an effort to make their communities safer and more walkable. Such groups have been instrumental, for example, in getting "safe routes to school" legislation introduced, educating the public about existing and potential opportunities for physical activity, implementing traffic calming plans on neighborhood streets, and engendering public support for pedestrian- and bicycle-friendly policies.

The current flurry of policy analyses and interdisciplinary research on the environmental barriers to physical activity and potential solutions to overcoming them are helping to lay a solid foundation for change. But there is much more work needed to determine which specific modifications to the built environment, or combinations thereof, will be most effective in reversing current health and obesity trends.

What are the current conditions in most jurisdictions that run counter to the goal of creating active communities? Here is a sampling that ranges from the very broad to the very specific:

- The perpetuation (through zoning and subdivision regulations) of low-density development—e.g., one dwelling unit per acre or less—which is not conducive to walking or bicycling and thus is not conducive to incorporating activity into daily routines.
- The regulatory and market barriers to mixed-use developments and districts. Regulatory barriers include development standards that prohibit combining various land uses within a single building or in a zoning district and building codes that discourage adaptive reuse of older buildings. Market barriers include bankers' resistance to providing developers financing for any project that constitutes a fundamental departure from conventional subdivision, strip shopping center, or big box retail development. Plus, there are trends in retail, office, and industrial development—such as the proliferation of big box retail stores—that reflect the development industry's need to continually adapt and change to household shopping preferences. In many instances such adaptations do not fit with a community's smart growth objectives and the vision of its citizens.
- The vast majority of streets and street environments in American cities and towns are, by design, unsafe and even hostile toward anything except the automobile. Conventional street design and engineering aims for the safe and efficient movement of vehicles to the exclusion of most other objectives, such as sharing the right-of-way with pedestrians and bicyclists. In private developments, priority is given to the location and size of parking lots, while transit users and pedestrians are left to navigate their way through parking lots and moving vehicles.
- The lack of street connectivity is another problem. Isolated, single-use subdivisions with no direct connections to surrounding shopping areas, schools, or other destinations make it very difficult for people to walk to their destination, even if they choose to do so.
- Not all new subdivisions are required to include sidewalks on both sides or the street or to address safe routes to local schools and shopping areas for people who live in the subdivision. Even where a developer is required to install sidewalks, planners may waive such requirements in exchange for a development "amenity" unrelated to neighborhood walkability. It is also the case that developers argue about the costs sidewalks add to development. Even some neighbors may prefer the rural feel of a neighborhood without sidewalks. But in suburban settings, residential streets without sidewalks send a clear message: no one walks here. Planners need to recognize the health consequences of such tradeoffs or what might seem a fairly inconsequential requirement.

The American Planning Association/Robert Woods Johnson Project: Planning and Designing the Physically Active Community

Planning and Designing the Physically Active Community, sponsored by The Robert Wood Johnson Foundation, is an APA project addressing the land-use planning challenges and opportunities related to the U.S.'s growing problem of obesity and sedentary lifestyles. Specifically, the project is focusing on how planning processes, development regulations, and methods of community participation and collaboration can be modified and used to ensure that physical activity is a significant goal underlying the plans, provisions, and negotiations that lead to the development of a community.

Regrettably, even in an era of planning marked by greater awareness and commitment to “smart growth”—plans and regulations discouraging development patterns that destroy community character, harm the environment, promote social inequities, and lead to an even greater reliance on automobiles—there are very few comprehensive and functional (e.g., transportation, land use, trails) plans even mentioning health or physical activity as a basis for smart growth. By overlooking health and activity as a key impetus for good planning or smart growth, planners are clearly missing an opportunity to coordinate their efforts with health practitioners to educate the public and to actively accomplish other progressive planning goals, like reducing traffic congestion and minimizing sprawl.

Despite the fact that there has been seemingly inattention to the various relationships between land-use planning, health, and physical activity in plans, a survey APA conducted as part of its project indicates growing public and planning profession awareness of the need to reconnect the disciplines.

This survey, conducted by APA in 2003 of 1,000 city planners, explored the extent to which planners and the local officials in their jurisdictions recognize the impacts of plans and land-use controls on physical activity.

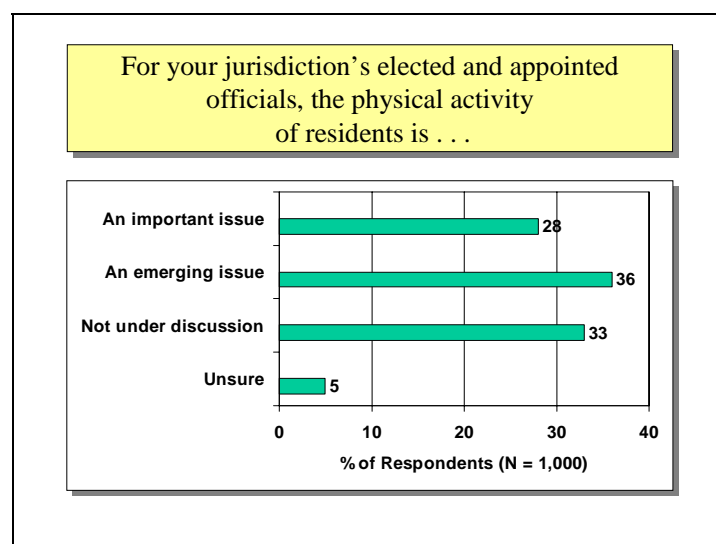


Figure 1

Inasmuch as new public policy at the local level derives from how the mayor, the city council, or other officials react to specific events, trends, or new information, it is clear local officials see they have a policy making role in this area (Figure 1). Twenty-eight percent of respondents said local appointed and elected leaders in their jurisdiction regard the physical activity of residents as an important public policy issue. An additional 36 percent said officials regard it as an emerging issue.

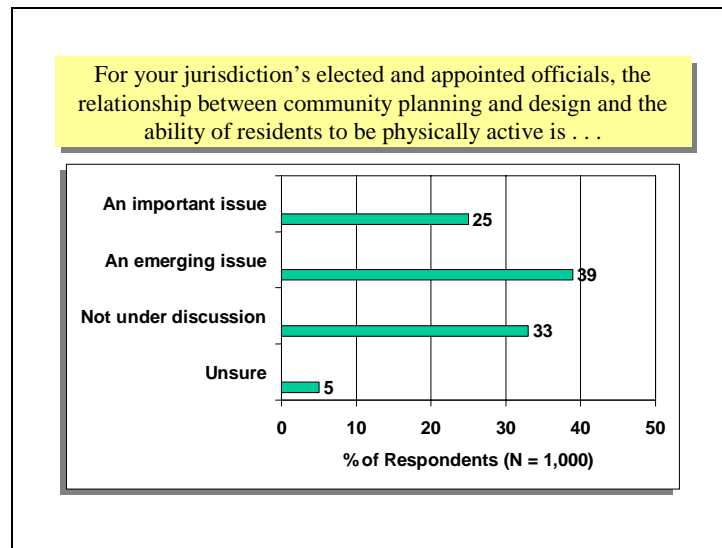


Figure 2

To improve the built environment to encourage physical activity, local officials must recognize that community planning and design—including land use, development patterns, transportation choice, and neighborhood design—are all part of the solution. According to the survey, 25 percent of respondents reported that local officials did recognize the relationship between planning and public health, and another 39 percent said local officials' awareness of the relationship was emerging.

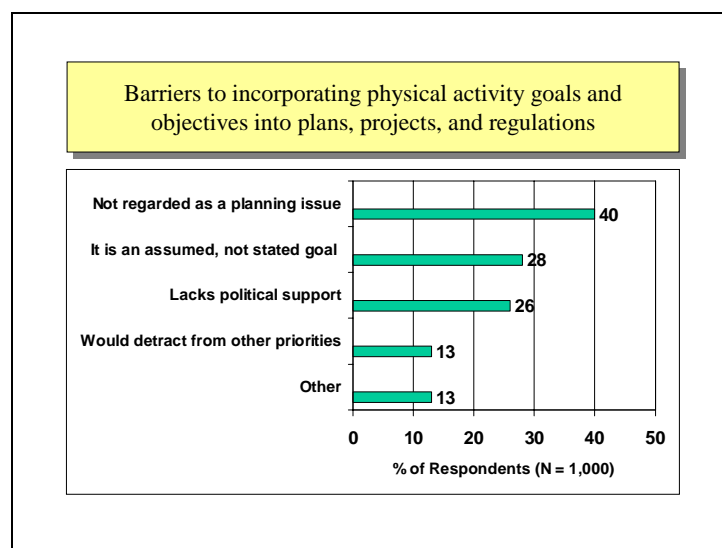


Figure 3

By their nature, comprehensive plans and land development regulations address a broad scope of community issues, including land use, housing, transportation, the environment, urban design, and economic development, among other elements. Despite the fact that approximately two-thirds (64 percent) of these plans recognize the importance of community planning and design as a key part of the solution, barriers remain to full incorporation of the explicit goal of promoting or allowing for physical activity in plans, projects, and regulations (Figure 3). The largest barrier, according to 40 percent of the respondents, is that physical activity is not yet regarded as a planning issue. The second greatest barrier (reported by 28 percent of respondents) was that physical activity is an assumed, not a stated, goal. Like most local government agencies, planning departments are perpetually faced with limited resources to tackle complex work programs and responsibilities. In that vein, 13 percent of respondents said the barrier to incorporating physical activity was that it would detract from other departmental priorities.

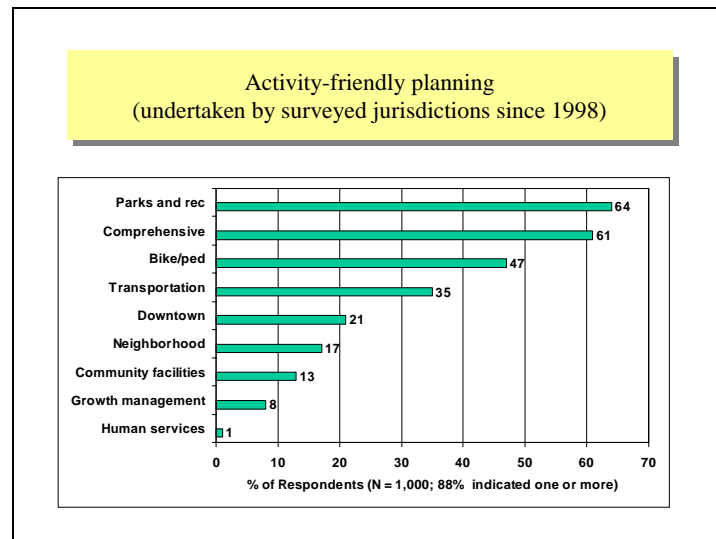


Figure 4

Next APA asked planners which of the common types of plans in their jurisdiction contain *explicit* policies, goals, or objectives related to increasing physical activity opportunities for residents (Figure 4).

Based on the findings of other research APA has done on such plans, very few jurisdictions have such explicit policies. In this survey, however, many more respondents than expected said that several of their jurisdiction's plans contain such explicit policies. As shown in Figure 4, 64 percent indicated that the parks and recreation plan contains such explicit policies, 61 percent indicated that the comprehensive plan contains them, and 47 percent said the bicycle and pedestrian plan contains them.

A closer examination of the actual plan documents in question revealed that most plans did not contain specific policies. Respondents were most likely characterizing any policies, goals, and objectives related to walkability, alternate transportation modes, and quality of life enhancement—all of which are commonly found in the plans listed in the

survey—as explicitly directed at increasing the physical activity levels of residents. While it is significant that planners *perceive* that physical activity and health of residents is being addressed in these plans, expressly stating such goals would be a stronger commitment to health on the part of the local jurisdiction and would result in programming and resources being directed at creating active communities. And, of course, broadening plans and the plan-making process to include health issues could help leverage substantial and previously untapped support for smart growth reforms jurisdictions have undertaken or will be undertaking.

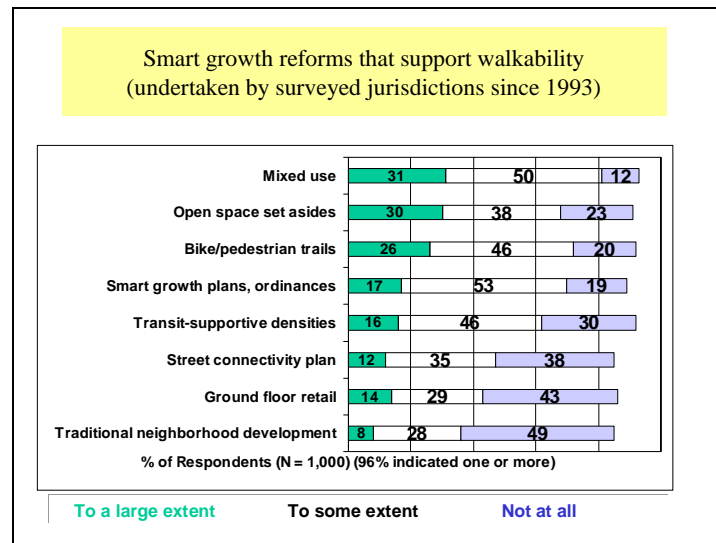


Figure 5

Focusing on elements found in walkable communities, respondents were asked to indicate the specific measures their jurisdiction had implemented to support walking and physical activity. Since many codes are revised and reformed incrementally, respondents were asked whether the actions had been implemented to a large extent, to some extent, or not at all (Figure 5). Mixed-use development was the most commonly implemented measure, with 31 percent indicating their jurisdiction permits it and an additional 50 percent having included such provisions to some extent (presumably they allowed it in some but not all districts). Also scoring high were bicycle and pedestrian trails, with 26 percent indicating they had required or encouraged the incorporation of such facilities into subdivisions since 1993, with an additional 46 percent having done so to some extent. Increasing development density near transit also scored high—16 percent indicated it had been implemented to a great extent, and 46 percent said it had been done to some extent. Perhaps the most broadly encouraging finding was the results for smart growth plans and policies. Seventeen percent indicated the jurisdiction had incorporated smart growth policies into plans, ordinances, and development review processes, and more than half (53 percent) said they had done so to some extent.

A New Planning Paradigm for Active Communities: Points of Strategic Intervention in the Planning Process

What role do planners have in modifying the built environment to encourage physical activity? APA's work with the Robert Wood Johnson Foundation has centered "five strategic points of intervention" where planners can affect change.

1. Visioning and goal setting
2. Plans and planning
3. Implementation tools
4. Site design and development
5. Public facility siting

Point 1. Visioning and goal setting. When citizens, planners, and stakeholder groups come together to prepare a new plan, the conversation typically begins with a discussion of shared values. Such groups brainstorm about how they would like their neighborhood, city, parks, or transportation system to look in the future and how it will function.

Protecting and improving one's family's health and one's own health is a universally shared value. But in the thousands of jurisdictions, agencies, and other entities that prepare land-use plans, it is the exception for health and physical activity advocates or public health professionals to be present as stakeholders at visioning session. Their absence results in several missed opportunities. First, planners and public health practitioners could use such sessions to educate the public about how communities develop and the effect development patterns have on their ability to be physically active when following their daily routines.

Point 2. Plans and planning. As described above, smart growth planning—a major focus of which is the creation of walkable, compact, mixed-use neighborhoods and a multimodal transportation network—are inherently supportive of increasing the physical activity of residents. In other words, smart growth has laid solid groundwork for planning to address health.

But it is important for health to be elevated to the level of other land-use and comprehensive plan goals (e.g., creating affordable housing, supporting economic development, and protecting open space) if jurisdictions are to be successful in creating active, healthy communities. Without direct involvement by health experts in the planning process, health has not been, nor is it likely to be, addressed in plans to any substantive degree. Creating opportunities for citizens to be physically active needs to be an explicit, not simply implied, goal in comprehensive plans, as well as many of the functional plans and plan elements that most jurisdictions prepare, including the transportation and circulation plan, bike and trails plan, housing plan, and parks and recreation plan, among others. It is not enough for planners and local officials to assume that, when implemented, a new bicycle and pedestrian plan will result in people becoming more active and healthier. Such plans need to document baseline health conditions and describe how such conditions will be addressed as the plan is

implemented. They also need to prescribe how and when the effects of such change will be measured, monitored, and reported.

Smart growth plans have also been touted as a potential solution to other health problems. For example, promoting compact, walkable developments and increasing transportation choices beyond the automobile can reduce car dependence for some families and thus improve air quality. A balanced plan for transportation would likely advocate or require narrower-than-typical streets as well as traffic calming in residential areas, which can reduce the incidence of motor vehicle/pedestrian accidents. Such accidents are the leading causes of death among persons 1 to 34 years old. Each year, motor vehicle crashes are to blame for 42,000 deaths, 3 million nonfatal injuries, and \$230 billion in costs (CDC 2003; NHTSA 2002).

On the environmental front, urban service limits or growth boundaries, which delineate the outermost points of an urbanized area to be served by sewer and water utilities, can help stem groundwater contamination by cutting down on the number of septic systems and redirecting future growth to areas already served by municipal utilities.

Point 3. Implementation tools. There are numerous modifications that can be made to zoning and subdivision regulations to produce neighborhoods where residents have more opportunities to be active. First, jurisdictions can revise ordinances to permit mixed-use development where housing, shopping, and offices can coexist in the same building or in the same zoning districts. Going a step farther, zoning ordinances should be revised to include New Urbanist or traditional neighborhood development (TND) provisions, either as an overlay district, as a requirement in certain districts, or communitywide. Such provisions, like other smart growth provisions, promote compact communities with services and principal locations within walking or biking distance.

Other tools include:

- increasing required development densities which set forth a minimum number of dwelling units per acre;
- requiring sidewalks and/or trails in new developments and retrofitting already developed areas with sidewalks, trails, and bike paths: instituting traffic calming measures;

- requiring new developments to include usable parks or open spaces that ideally connect to similar spaces in adjacent neighborhoods; and
- requiring street connectivity, where a grid or modified grid street network allows persons on foot, bike, or behind the wheel to travel from one neighborhood to another and one destination to another without having to depend on a crowded arterial street.

In larger metropolitan areas, the provision of public transit and transit-oriented development around stations can add to residents' transportation choices.

Point 4. Site design and development. There are factors of building design, site design, and the relationship of a building to its surroundings that determine whether an area allows or promotes physical activity. These factors include the orientation of a building to the street, architectural details, building materials, windows, and sidewalks. For the most part, these elements are chosen or decided upon by the developer in concert with the planning agency, and, depending on their design, can either promote or prohibit pedestrian activity.

Many jurisdictions have also invested in new sidewalks, crosswalks, street lighting, public art, transit shelters, and street furniture to create pedestrian-oriented settings and public gathering places. Further, zoning and planned unit development regulations commonly contain provisions for developers to provide other amenities, such as landscaping, on-site pedestrian paths, awnings, and variety in building design. Such regulations often require that buildings be built right to the sidewalk rather than setback beyond surface parking and also require retail on the ground floor of multifamily residential and office buildings, multiple entrances for pedestrian convenience, and transparent windows on the first floor, all to create a lively street scene conducive to walking.

Ordinances can prohibit long expansive blank walls that deter people from walking by requiring large buildings to vary the blank wall by creating more inviting facades with windows, awnings, architectural features, and entrances. And finally, ordinances governing development in pedestrian-friendly areas now commonly allow developers to build less parking and to locate all or some of it on the side or rear of commercial buildings. The object is to minimize the amount of surface parking overall and to shape the public realm in a way

Schools as Centers of the Community

A 2003 report by the National Clearinghouse for Educational Facilities and other allied organizations addressed the critical backlog of school investment needs in the U.S. The report acknowledged that the pressing need to renovate, replace, and create many new schools presents a compelling opportunity to evaluate existing research about what constitutes an optimum learning environment. What they found was that all creative solutions, such as reducing school size, reconfiguring classrooms, and emphasizing lifelong and experiential learning, have one common theme: schools should be the centers of community. At their best, community-centered schools should:

- help meet a community's leisure, recreational, and wellness needs;
- be accessible to people of all ages;
- encourage more parental involvement in school activities; and
- contain shared public spaces that are accessible year round.

Community-centered schools are supportive of activity-friendly objectives. They would generally be smaller and located within neighborhoods, they could increase opportunities for kids to walk to school, and they would provide opportunities for all members of the community to use and enjoy recreational facilities and public spaces.

Source: National Clearinghouse for Educational Facilities (2003)

that puts the people's safety and comfort ahead of the movement and accommodation of cars.

Point 5. Public facility siting. The location of public facilities and the design of the environments around them are keys to creating active communities. Unlike the other strategic points of intervention, planners tend to have much less influence over public facility siting and design. , Instead, those decisions are made by other local or federal government agencies with preemptive powers that override local plans and zoning rules.

Post offices, schools, city hall, courthouses, and libraries serve as frequent destinations, popular community gathering places, and as visual, architectural focal points of a community. Post offices on Main Street provide a destination for residents interested in “purposeful” walking; that is, getting some exercise while accomplishing a few errands at the same time. But in the last several decades, many such post offices in many small towns and suburbs have relocated to new, single-story processing facilities outside the city. Schools, in particular, as the sidebar above noted, can serve as community centers. There are many reasons that schools are no longer focal points. The section that follows focuses on this particularly important aspect of public facility siting in the goal to allow and promote more physical activity and better health—especially the health of children.

School Siting and Walkability

With respect to schools, the trend in the last several decades has been for school districts to build fewer and larger schools on sites disconnected from the places students live. At the same time, many smaller, older neighborhood-based schools are more likely to be accessible to kids on foot or by bike are shutting their doors. Community planning and design and decisions by school boards regarding new school siting and rehabilitation and reuse of older schools, and the impact of this problem on how children get to school are the focal point of the rest of this paper.

According to the CDC, in 2000 just 13 percent of school children walked to school, as compared to 1969, when 66 percent of kids walked to school (CDC 2000). According to parents, the two primary reasons why kids are driven rather than walk to school are that, first, schools are too far for kids to walk, and two, the route they would have to walk is too dangerous (e.g., inadequate sidewalks, no crosswalks). At the high school level, the increasing rate of car ownership per household in recent decades means that kids are driving themselves to school in ever-growing numbers.

For younger children, the shift from a walk to a ride to school is, in part, prompted by changes in American family life. Households with two parents working full-time often lack the time to walk their children to school. Single working parents also opt to drive their kids to school rather than let them walk there unsupervised. Even kids that live within close proximity to their school are not walking or bicycling. The CDC has also found that 31 percent of kids that live within one mile of school walk or bike to school; in 1969, 90 percent did so (MMWR 2002).

For mothers, the effect of serving as the family taxi driver is troubling. *High Mileage Moms*, a 1999 report by the Surface Transportation Policy Project, found that, on average, a typical mother travels 29 miles a day, taking 5 or more trips, spending more than an hour behind the wheel each day. That is 20 percent more driving than the amount of driving done by either single women or men, and constitutes time that mothers could be spending with their family or getting exercise.

School Siting and Land-Use Planning

Until a few years ago, smart growth advocates and planners overlooked the issue of school size and siting as a generator of sprawl. But considering the factors in the built environment that may contribute to sedentary lifestyles and obesity has focused the discussion on how large, sprawling schools have precluded the option of walking or biking to school for students.

A lot of attention is being paid to widely disseminated guidelines for school facility and site size produced by the Council for Educational Facilities Planning International (CEFPI). States are not required to use the standards, although more than half do use a formula based on them. As more and more attention is paid to the impact of these standards, several states have opted to stop using them or to set them as maximum size standards. Further, CEFPI is in the process (as of spring 2004) of revising the guidelines to reflect new objectives in school planning, including the effects on sprawl and transportation mobility, and to create the highest quality environment for learning in the context of myriad changes in school financing formulas, federal mandates (e.g., No Child Left Behind Act), and a growing demand for smaller, neighborhood-based schools. While change is underway in many states, most school districts follow these guidelines:

- Elementary schools = 10 acres, plus 1 acre for every 100 students;
- Junior high/middle schools = 20 acres, plus 1 acre for every 100 student;
- Senior high schools = 30 acres, plus 1 acre for every 100 students (CEFPI 2003).

As mentioned, there is also a significant parallel movement throughout the U.S. to revitalize and reuse small, neighborhood schools. The intent is to improve the environment for learning and to reverse the trend of disinvestment in older school buildings. Proponents of these initiatives point to the importance of keeping schools open in neighborhoods within walking distance of students, capitalizing on existing public infrastructure, restoring and modernizing historic school properties, and allowing schools to serve as centers of community life.

There are, however, many examples of how—in pursuit of their respective mandates—the local government planning function and the school district planning function work at cross purposes with one another.

School districts are mandated to use tax dollars in the most efficient manner possible while providing the best learning environment possible. Land-use planners are charged with guiding development in a fiscally and environmentally responsible manner, limiting

unnecessary sprawl and using public infrastructure efficiently. From a planning standpoint then, rehabilitating a school or siting in an already urbanized area is an obvious goal of meeting planning and smart growth policies. But even in those states where local governments do have a say about the siting of schools, urban land costs and the size standards cited above require massive land purchases, which means the only possible sites are “greenfield” sites on the urban edge where land is available and cheaper.

In states where local governments have no control over school siting, the lack of coordination creates significant problems, not just as regards siting and its effect on community character, design, and opportunities for physical activity, but also tremendous economic inefficiency. In Michigan, for example, state law exempts schools from local planning and zoning. The Michigan Land Use Institute found that even though the school-age population in Southeast Michigan is projected to decline by 1.5 percent in the next 30 years, \$6.2 Billion has been spent in that region on new schools since 1996.

New school sprawl creates a ripple effect whereby new subdivision and commercial development is drawn outward toward the school. The result is excess land consumption, added pressure on exiting roads, sewers, and water utilities. The converse effect then occurs for older, in-town schools, which suffer from declining enrollment, weakened tax base, and an skewed funding formulas and size standards that make modernization and rehabilitation of old buildings a near impossibility.

The Michigan study also found that some sprawling schools engage in aggressive marketing programs to lure new students away from older schools to help justify the investment (Michigan Land Use Institute 2003). The resultant decline of urban school systems couple with declining tax base as result of families leaving, create even greater hardships in an already cash-poor school system, which leads to even more families leaving for the suburbs as school facilities and programs degenerate.

Another factor that raises questions about the wisdom of locating new schools on the suburban fringe is the changing demographics of suburbia. A report by the Brookings Institution found that new immigrants to the U.S. are bypassing central cities and settling directly in the suburbs (Singer 2004). Furthermore, evidence suggests that poverty is spreading beyond the urban core as the low-wage service economy moves to the suburbs attracting low-wage workers there as well. This likely outcome will be that low-income families and immigrant families who rely most on public transportation, carpooling, or walking are settling or resettling in areas designed to accommodate driving only. Jurisdictions will be pressed to address the safety and transportation needs of both adults getting to work and children getting to school safely.

Some local governments have the authority to impose adequate public facilities requirements for schools, which means new school facilities must be available to serve new students that move into new subdivisions. But, in Maryland communities, which have aggressively implemented APFO under the statewide smart growth program, the attempts to fully connect adequate facilities requirements to future school enrollment

projections, capital budgets, and mitigation measures (which allow developers to build schools themselves when public capital will not be available to build schools when new demand comes on line) have created a “regulatory quagmire” (Donnelly 2003).

Exacerbating the complexities of coordination is the push in many places towards school choice, charter schools, and private schools. Such new school paradigms will render traditional school enrollment and capital spending forecasting methods obsolete when school districts and planners will no longer be able to assume that the children who live in new residential developments will be attending the schools being built to accommodate that new residential development.

Improving Coordination between School Siting and Land-Use Planning: Examples from Several States

Most state laws provide statutory authority for planning agencies to use zoning to review and approve new schools sites. But clearly a lot of local governments have abdicated the zoning authority that would influence school siting. School sprawl continues to occur despite local planning objectives calling for smart growth and compact, walkable communities. Further, a number of states, such as Michigan, preempt local governments from applying zoning requirements to the school siting process.

In states and localities actively working to connect planning with school facilities siting, the key theme is the need to improve communication between planning officials and school districts. Better communication will lead to better sharing of data; coordination of land-use planning and school siting plans; and agreements on school design and use.

Some of the techniques that authorities are using to foster coordination include school siting ordinances; interlocal agreements; joint-use agreements; joint school board and regional/county/local work sessions; and consideration of school siting in the land-use and public facilities elements in the comprehensive plan (LeBeau 2004).

Florida

The state of Florida has considerably experience in trying to coordinate land-use planning and school siting. Florida requires local governments to prepare comprehensive plans and land development regulations (i.e., zoning and subdivision ordinances) consistent with statewide goals for planning, land development, environmental conservation, natural hazard mitigation, transportation, and interagency and interjurisdictional cooperation. The state recognized more than 20 years ago that addressing school siting in local plans was important because schools are a “vital organizing element in building communities.” Regrettably, what the state came to recognize in its early efforts, which included two state enabling laws—one for planning agencies and the other for school boards, was a failure to communicate that led to misinterpretation and a lack of coordination (Hubbard 2004).

In 2002, the state stepped in and mandated interlocal agreements between school districts and localities and provided small grants to facilitate agreements and provide technical assistance. According to the law, there must be a school board representative (in a

nonvoting capacity) on the local and regional planning commission. The agreements must lead to sharing of:

- student enrollment and population projections (the mismatch between the different projections of planners and school board authorities was noted as a particular problem);
- data about planned residential growth and public facilities;
- information about school site selection decisions;
- school facility infrastructure siting; and
- statistics about the capacity for growth in the jurisdiction.

Furthermore, the agreements mandate that there be local government input in the school facility work plan.

The penalty for not achieving an interlocal agreement is a state financial sanction. And the process seems to be working. These mandated interlocal agreements are in place in all but two Florida counties (they were required to be in place by 2004). Some of the immediate changes have resulted in jurisdictions banking land for future school sites and increased adherence to the provisions of the existing state enabling legislation requiring local input on school decisions, which to this time had been applied inconsistently and inappropriately.

Maine

Since the late 1990s, the State of Maine has been a leader in tracking the cross-cutting effects of school siting, sprawl, and state and local growth management laws. Between 1970 and 1995, Maine's public school enrollment declined by 27,000 pupils. From 1975 to 1995, Maine state government spent \$727 million on new school construction and additions (Del Valle 2003). Prior to 1998, Maine's school financing system was unaccountable to other state or local agencies affected by its decisions. School districts were not required to plan for or invest in the maintenance of existing facilities; in fact, state funds were available only for new school construction, not renovations.

In 2000, the legislature requested that the State Planning Office and the State Board of Education submit a joint report with recommendations regarding land-use ordinances and zoning ordinances near new schools (State of Maine 2001). That report, *Making Schools Important to Neighborhoods Again*, contains very detailed recommendations for local governments. First are recommendations on which zoning districts schools should be permitted as of right and where they should be allowed as a conditional use. The report also contains guidance on appropriate land-use and zoning classifications for the environment near schools, including the type and intensity of development in adjacent neighborhoods. For example the report recommends relatively high residential densities within one-half mile of the school, which ideally would put many kids within walking distance.

The Maine report also recommends pedestrian-oriented development in neighborhoods around schools and suggests that such neighborhoods be developed with narrow lots and

narrow streets to make the area walkable. Finally, the report contains recommendations on street connectivity, pedestrian and bicycle connections, and open space and parks for areas near schools, with the aim of centering the school in a safe, walkable location.

At the committee's recommendation, the Department of Education passed a school siting approval rule, which applies to all Maine schools receiving state funding. The state also did away with the CEFPI minimum school-size requirements and instituted a maximum size provision. Among other recommendations, the rule requires school boards to consider of the impact of siting on student transportation, vehicular traffic, and student safety. Perhaps most importantly, the report requires school boards to consider locating a proposed new school in a locally designated growth area identified in the municipality's comprehensive plan. In the absence of a plan, a school board must consider locating the school in an area served by a public sewer system or in a compact neighborhood. If a school board fails to locate a school as such, it must provide a written explanation of why it did so (Maine Revised Statutes, 05-071 Department of Education, Chapter 50 New School Siting Approval.).

New Jersey

The 2001 revision of the New Jersey State Development and Redevelopment Plan incorporated new policies to coordinate school facility planning, management, and financing that are coordinated with the plan's overall goal of stopping sprawl, preserving land, and allocating state resources in a fiscally responsible manner. The objective is to direct school construction and financing into existing urban areas and to foster a more integral role for schools in the context of the entire community. Local units of governments that prepare plans pursuant to the statewide plan will coordinate local land-use decisions with local school funding and siting decisions.

The state plan envisions local schools in New Jersey communities as providing various services, such as libraries, health clinics, arts centers, and housing. This new state planning for schools policy coincided with Educational Facilities Construction and Financing Act, which authorized the sale of \$8.6 billion in bonds to pay for construction and reconstruction of schools throughout New Jersey.

North Carolina

In 2003 the Center for Urban and Regional Studies at the University of North Carolina at Chapel Hill undertook a study of trends in school construction in North Carolina. The report, *Good Schools—Good Neighborhoods*, identified the key factors affecting school location and design and provided recommendations to local governments, school boards, and to the North Carolina Department of Public Instruction on how to overcome obstacles to building and maintaining, walkable neighborhood level schools (Salvesen and Hervey 2003).

Similar to other studies, the key findings on the factors that influence school siting and design in North Carolina are: suburbanization, economics, land-use regulation, and state

size and siting guidelines that have resulted in large, consolidated schools and the closure of older smaller schools in established neighborhoods.

The report concludes with recommendations directed at school boards, local governments (i.e., planning departments), and the State Department of Public Instruction. The theme that runs through each set is the need for all three entities to consult with one another early in the school siting process. The recommendations in the report were as follows.

School Boards

- Consult with municipal and county governments early in the planning process.
- Emphasize saving older school buildings rather than building new schools.
- Build small schools on compact sites.
- Seek creative solutions for achieving compact school sites for the main school building.
- Provide safe and adequate bicycle and pedestrian connections.
- Factor in walk-zone compatibility in selecting school sites.
- Work with the community to identify solutions to improving connections to schools.

Local Governments

- Adopt local development standards that allow developments to be built that maximize the potential for walkable neighborhood schools.
- Work with the local school board to identify school sites in advance.
- Facilitate connections to schools.
- Explore joint use of school and public recreational facilities.

North Carolina Department of Public Instruction

- Recommend small school prototypes and examples of renovations rather than sprawling school designs using the Prototype School Design Clearinghouse
- De-emphasize the CEFPI minimum acreage guidelines in facility planning guides.
- Provide staff expertise at the state level to help communities with land use and urban design planning decisions as they are related to promoting walkable schools.

Washington

The state of Washington enacted the Growth Management Act in 1990, which instituted mandatory land-use planning for all cities and counties larger than 25,000 people. Local land-use plan policies are now required to be consistent with statewide planning goals, and cities and counties are required to draw urban growth boundaries around urbanized areas to contain sprawl, use public infrastructure efficiently, and keep development out of sensitive environmental lands. The law was prompted by rapid population growth, haphazard sprawl, an overtaxed transportation system, and loss of open space in the Puget Sound region.

As originally drafted, the law would have made special purpose districts, including school districts, accountable to state growth policies and to local plans. However, then Governor Booth Gardner vetoed that provision because it contained an exemption to the law for port facilities, something he did not want to bargain away. As an alternative, the state directed county-level growth management councils (made up of representatives of each local unit of government whose chief purpose is to coordinate the urban growth boundary delineation process) to provide guidance on how school districts and local planning functions should be coordinated.

After the growth management law had been in place for several years, residents in the rural areas of King County raised concerns that school district and utility services were extending into rural areas, thus undermining the growth management act. In response the King County Growth Management Planning Council approved a policy to request schools districts to take into consideration the proximity of the proposed school to the urban growth boundary.

The Puget Sound Regional Council has prepared a list of other potential strategies also to coordinate growth management and land use decisions. These include:

- requiring local governments should help identify vacant and buildable sites within already developed areas to keep schools from leap-frogging to rural sites that will invite sprawl;
- expanding King County's Green Schools program to other school districts. The program allows schools to select from a list of environmental protection actions to pursue, including several that relate to improving pedestrian and bicycle access to schools and reducing the number of driving trips to schools and CO₂ emissions near schools; integrating schools and land-use planning policy; namely, requiring or strongly encouraging consideration of infill sites for school construction and promoting multistory school buildings to maximize the use of land;
- eliminating minimum size requirements;
- revising policy to favor school renovation over new construction; and
- expanding the use of school buildings to make them centers of community (Raker 2004).

Conclusions

Fostering integration of school-siting policies and local land-use planning policies is imperative if walking and bicycling to school are to serve as part of the solution to getting kids moving and physically active again. So too must comprehensive plans, zoning, and building site designs be created and designed in a way that supports the goal of improving health and creating active communities.

There is much work to be done to determine exactly which modifications in the built environment will be the most effective in this area. The lack of action on these issues to date is due in part to the lack of understanding by planners and others about the health consequences of how we shape the built environment (Srinivasan 2003). That said, given the mutually supportive nature of smart growth policy and active living policy, local

jurisdictions should not wait to see what ongoing and future research says about relative benefits of the recommended strategies for creating active communities. Planners and public health professionals too have a responsibility to formalize their collaboration on health and activity issues. Such collaboration could include educational sessions for the respective sectors on their responsibilities to the community, their processes for engaging the public in decision making, and opportunities to leverage the knowledge and resources of each profession to ultimately create healthy, active communities.

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