

Safe Routes to School™

The Planner and Development Regulations: Part 6

Look at any school early in the morning or mid afternoon and you'll typically see lines of cars and SUVs queued up in front of the building delivering their precious cargo or awaiting the mass exodus at the conclusion of a long day. Many students live only a few blocks from school, but often rely on mom or dad to transport them each day.

Certainly, parental concern for safety is a key factor in the decision to drive children or allow them to walk or bike to and from school. Often, misconceptions about safety result in parents choosing the former option. Safe Routes to School (SR2S) programs often involve extensive educational components to combat these misconceptions. Those programs are often led by the school and parents. However, local communities and planners, in particular, also have an important role to encourage walking and biking to school and in general to create more livable, sustainable, and healthier communities.

HOW PLANNERS CAN ASSIST SR2S EFFORTS

While SR2S programs focus on ways to improve the routes between residents and existing school locations, it is equally important to work to reverse the sprawling development trends and disconnected transportation networks through supportive zoning, subdivision and street design regulations. Planners are key players in this effort, because they are often knowledgeable about the various

facets that contribute to SR2S, such as local land use policies, existing zoning regulations, current engineering practices, and public perceptions. They can also lead efforts to improve off-site infrastructure that support walking and biking. Planners should draw upon their knowledge to:

- Analyze existing conditions.
- Encourage school cooperation.
- Mobilize stakeholders into action.
- Plan for improved walkability.

PLANNING FOR WALKABILITY

Local government plays a large role in shaping the physical conditions of the surrounding area, as residential densities, traffic circulation, and non-motorized systems all contribute to walkability. While "advisory review" of site-specific school plans is an important component of any

SR2S program, desirable improvements are usually not confined to school grounds. In fact, many of the SR2S connectivity and safety considerations relate to improving the routes between homes and school locations and do not affect on-site school design. Transportation networks, pedestrian connections, and residential subdivision design can all be regulated through local development plans and ordinances.

To support them, the community master plan should contain relevant goals and policies regarding sustainability, non-motorized transportation, and improved health of the community. More specifically, the master plan should contain the following:

- Non-motorized transportation. Master plans should encourage the development of sidewalks and pathways with development, especially within ½ mile of school sites.
- Residential density. Residential density can support or hinder SR2S efforts. Areas surrounding school sites, or where walkability is encouraged, should be permitted to develop at densities where sidewalk installation is cost-effective (such as three or more units per acre).
- Traffic circulation. Interconnected streets and sidewalks should be encouraged in favor of cul-de-sacs and long residential blocks. Desired street types and design should be described in the master plan, with a discussion of the benefits both environmentally and fiscally, of alternative street designs. Access Management and other transportation system improvements can also create more walkable environments, by reducing the number of driveways a pedestrian must cross.



Parental concern for safety is a key factor in the decision to drive children to school or allow them to walk, bike, or roll.

Discussion of schools in the master plan provides the opportunity to discuss the overall context of schools in the community rather than discussing their site alone. Local government officials should clearly identify site design elements and improvements desired for new school construction, major school renovations or circulation modifications. In the example below, the master plan discusses street and walkway extensions into adjacent sites, a sentiment that cannot easily be conveyed in a regulatory document.

TRAFFIC CIRCULATION EXAMPLE:

The number, location, size of access and entry points, and internal vehicular and pedestrian circulation routes shall be designed to promote safe and efficient access to and from the site, and circulation within the site for all modes of transportation. Location and design of access points shall consider the safety and flow of pedestrians, bicyclists, busses, and automobiles. To the maximum extent possible, street and road crossing improvements and provisions for street extensions and walkway connections to adjacent existing and future development shall be made. Dedicated easements should be provided where desirable to create safe connections between residential areas and adjacent non-motorized systems, especially school pedestrian networks."

SR2S AND THE ZONING ORDINANCE

School officials may review local zoning ordinances during the school design, so including desired standards for private (required) and public (optional) schools in the zoning ordinance is a way to communicate local expectations even if they cannot be legally enforced. These may include:

- Separate pedestrian traffic from drop-off and bus traffic.
- Improve road crossings at key locations (bump outs and clearly marked crosswalks).
- Drop-off areas should be well marked and organized.

- Complete internal pedestrian and bicycle networks.
- Sufficient and convenient parking for bicycles.

SR2S AND SUBDIVISION REGULATIONS

Proper design of subdivisions, along with vehicular and pedestrian connectivity around the school site is critical to making safe routes to school work. Connecting streets between neighborhoods lessens the needed length of vehicle trips, and can reduce congestion on the major street network by providing alternative routes. The number and length of cul-de-sacs should be regulated to prevent discontinuous streets and sidewalks, and where necessary, ensure a pedestrian connection is still provided. Sidewalks and multi-use pathways, with proper easements to other trails, schools, or neighborhoods, should also be required in subdivision regulations.

SIDEWALK CONNECTIONS EXAMPLE:

"Concrete sidewalks at least five (5) feet wide are required on both sides of the street in all subdivisions, except where a subdivision is adjacent to a collector (major or minor) or minor arterial (major or minor) street, in which case an eight-foot-wide asphalt pathway is required on the north and east sides, as applicable, of the collector or arterial street."

SR2S AND STREET (RIGHT-OF-WAY) DESIGN STANDARDS

While public schools are exempt from zoning, they still may be required to make improvements within the road right-of-way adjacent to the site, similar to those required of other development. Local construction standards that accommodate pedestrians and bicyclists can help create an environment where students bike and walk to school. The standards that should be considered for their impact on biking and walking to school include:

- Bike lanes in street cross-sections (as an option).



Safe Routes to School can provide a variety of important benefits to children and their communities, including increasing physical activity, reducing traffic congestion, improving air quality, and enhancing neighborhood safety.

- Narrower streets.
- Reduced street width at pedestrian crossings.
- Striping patterns (continental or specialized for high pedestrian crossing intersections).
- Sidewalk widths (generally five foot minimum – wider for high volume pathways such as those near schools).
- Pedestrian and bike signals and signage.
- Mid-block crossings in street cross-sections (as an option).
- Bump-outs, tree lawns, and other traffic calming measures.

There are many other solutions that can be used to contribute to a more walkable and safer environment for school children. Most, however, require some "retrofitting" to existing systems. With some forethought and a consensus regarding the public purposes to be served, communities can promote safe routes to school principles as new development occurs. Generally, such improvements provide benefits beyond facilitating non-motorized access to school. They can create better neighborhoods, improve vehicular traffic circulation, reduce congestion, protect the environment, and promote healthier lifestyles.

