

Safe Routes to School Guide

Student Drop-off and Pick-up



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Contents

Student Drop-off and Pick-up

- Overview 7-1**
- What’s Wrong With This Picture? 7-2**
- Student Drop-off and Pick-up Tools..... 7-4**
 - Encouraging Walking, Bicycling and Carpooling.....7-5
 - Curb Striping and Other Pavement Markings.....7-7
 - Signs.....7-8
 - Separating Motor Vehicles From Pedestrians and Bicyclists.....7-8
 - Drop-off and Pick-up Lane.....7-10
 - Assistants to Help Students In and Out of Vehicles7-11
 - Off-site Queuing Lane7-11
 - Temporary Street Closures and One-way Streets7-12
 - Temporary Use of School Grounds as a Drop-off and Pick-up Zone7-13
 - Education7-13
 - Monitoring and Enforcement of Drop-off and Pick-up Policies7-14

Overview

The purpose of a Safe Routes to School (SRTS) program is to encourage and enable more children to walk and bicycle to school safely. Communities tailor a combination of engineering, enforcement, education and encouragement strategies to address the specific needs of their schools. This includes the walk or bicycle journey to and from school as well as the drop-off and pick-up process of children at school who are transported by motor vehicle. The drop-off and pick-up process must be safe and efficient for students and parents arriving by bus or private motor vehicle, as well as those who arrive on foot and bicycle.

Some parents are reluctant to allow their children to walk or bicycle to school due to the traffic congestion and perceived traffic danger during student arrival and dismissal. This often results in more parents driving their children to school which adds to the extra congestion and safety problems at the school, creating an increasing cycle of more traffic problems and less walking. By improving the drop-off and pick-up process, traffic conditions become safer for all, including pedestrians and bicyclists. Better organized and safer traffic conditions will ease the concerns of parents, and make them more willing to allow their children to walk or bicycle.

This chapter will help readers identify problems associated with the drop off and pick up of students at school, and identify engineering, enforcement, education

and encouragement solutions to these problems. The purpose of improving the drop-off and pick-up process is to increase the safety and attractiveness of traveling to and from school on foot or by bicycle. The drop-off and pick-up process, as with all components of a SRTS program, requires coordination with local government officials, law enforcement, school officials, parents and the general public.

Improving the drop-off and pick-up process will:

- Increase safety for everyone in route to and from school, as well as on school grounds.
- Employ engineering, enforcement, education and encouragement strategies.
- Require a site-specific application of strategies; each school will have its own set of limitations and opportunities.



Casselberry, Florida.



Mike Cynecki

Orangewood Elementary School, Phoenix, Arizona.



David Parisi

Rogers Elementary School, California.

What's Wrong With This Picture?

There are many ways that a drop-off and pick-up zone can become dangerous for children. The next several images illustrate a variety of situations that are chaotic and potentially unsafe.

what's wrong with these pictures?



David Parisi



David Parisi

This drop-off and pick-up site employs some useful strategies including striping, signs and enforcement, but it is not working. The pictures show the chaos along the curb and in the street. Note the double parking, erratic behavior and dangerous mix of pedestrians and motor vehicles.

what's wrong with this picture?



David Parisi

Motor vehicles are parked in the school crosswalk.

what's wrong with this picture?



David Parisi

Motor vehicles are driving in the wrong direction. Children are exiting motor vehicles in the middle of the street.

• what's wrong with this picture? •



David Parisi

This small child is running across a busy parking lot unaccompanied.

• what's wrong with this picture? •



David Parisi

The driver of this motor vehicle is making a U-turn in the school drop-off and pick-up zone.

• what's wrong with this picture? •



David Parisi

Motor vehicles are parked along the NO STOPPING zone when they should not be.

• what's wrong with this picture? •



David Parisi

The school utilizes orange cones to mark the drop-off and pick-up lanes and a driver still performs an illegal U-turn.

Student Drop-off and Pick-up Tools

When assessing the drop-off and pick-up process, activity on school grounds (on-site), as well as activity in the area surrounding the school (off-site), must be considered. These images depict an on-site drop-off and pick-up process that is orderly; motor vehicles are approaching single file and releasing students directly to the sidewalk in the designated drop-off zone.



David Parisi



David Parisi

But off-site, on a street near the same school, the process is chaotic. Notice the backed-up street, delaying commercial vehicles, school buses and parents wishing to drop off children. Such situations are often accompanied by unsafe driving behavior as everyone rushes to beat the morning bell or get to work on time. Developing safe routes to schools requires an orderly process for dropping off and picking up children, both on and off the school campus.



David Parisi



David Parisi

Numerous tools can be used to improve the safety and efficiency of the drop-off and pick-up process at schools including:

- Encouraging walking, bicycling and carpooling.
- Curb striping and other pavement markings.
- Signage.
- Separating motor vehicles from pedestrians and bicyclists.
- Adding a drop-off and pick-up lane.
- Assistants to help students exit and enter motor vehicles.
- Adding an off-site queuing lane.
- Temporary street closures and one-way streets.
- Temporary use of school grounds as a drop-off and pick-up zone.
- Education, including maps and frequent reminders using school announcements and newsletters.
- Monitoring and enforcement of drop-off and pick-up policies.

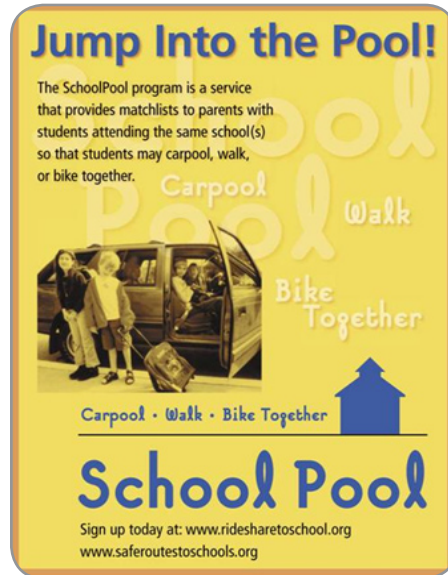
Encouraging Walking, Bicycling and Carpooling

Naturally, a Safe Routes to School (SRTS) Program encourages students to bicycle and walk to school. But, some students simply live too far from their school to walk or bicycle, and are not provided with bus service. For those parents who must drive their children to school, several strategies can reduce traffic congestion at the school and in the adjacent streets, including park and walk and carpool programs. A park and walk program makes use of an off-site location (such as a nearby church or park) as a parking area for parents who then walk their child to school or join a regularly scheduled walking school bus to complete their journey. The Encouragement chapter of this guide describes park and walk and walking school bus programs in detail.

Families that have no alternative to driving their children to school can also carpool to reduce traffic congestion at the school.

Communities such as Charlottesville, Virginia (www.rideshareinfo.org/schoolPool.asp), Fort Collins, Colorado (www.fcgoc.com/transportation/schoolpool.php), and Santa Cruz, California (www.commutesolutions.org/schoolpool.html), have developed “school pool” programs in which a voluntary group of parents share the responsibility of getting children to and from school safely. This can include walking, bicycling, carpooling or taking the bus, and whether done on a daily basis, occasionally or in case of an emergency, school pools help communities address child safety and reduce traffic congestion.

Many larger metropolitan areas around the nation have free programs that assist people with forming carpools. These programs are now extending their reach to include school related trips. The school pool program, for example, is a service that provides “matchlists” to parents with students attending the same school so that students may carpool, walk or bicycle together. In some cases, participating schools provide student rosters containing names, addresses and phone numbers to the agency, which then provides the computer matching. In other cases, parents sign up individually and are matched with parents at the same school. After parents receive a matchlist of other parents it is up to them to make the arrangements they prefer.



This flier from the Marin County, California, Safe Routes to School program advertises their School Pool program that promotes walking, bicycling and carpooling.

.....
Families that have no alternative to driving their children to school can also carpool.
.....



David Parisi

Carpoolers have preferred drop-off and pick-up lanes at St. Marks School in San Rafael, California.

The Mid-America Regional Council runs the RIDESHARE program for the greater Kansas City Region. School Pool is a service of RIDESHARE a free commuter matching services. Visit www.marc.org/rideshare/schoolpool.htm to learn more about how this program works. RIDES for the San Francisco Bay Area operate a similar program. Bay Area Commuters, Inc. is a nonprofit organization promoting commute alternatives to driving alone to school or work.

Walking school buses and bicycle trains can be loosely structured or highly organized. For example, walking buses or bicycle trains can be as simple as neighborhood families deciding to walk or bicycle together. More formal, organized walking school buses and bicycle have a coordinator who recruits volunteers and participants, creates a schedule and designs a walking route. While requiring more effort, more structured walking school buses and bicycle trains offer the opportunity to involve more children.

Tool: Encouraging Walking, Bicycling and Carpooling

What is it and how does it work?

Urge students and parents to walk and bicycle to school, and when not possible, to ride the bus or carpool.

Benefits strategy provides

- Decrease traffic at school.
- Reduce vehicle emissions.
- Increase physical activity levels.

Key factors to consider

- Develop encouragement activities to reflect specific situation at each school and within each community.

Putting It Into Practice: "25 or Less" Campaign

Morton Way Public School, Brampton, Ontario, Canada

Morton Way Public School in Brampton, Ontario, Canada, has 877 students in junior kindergarten through grade five. Approximately 50 students travel to school by school bus, and the rest of the students live within walking distance of the school. During the past four years Morton Way has sustained a successful walk to school program with between 83 and 92 percent of students walking or bicycling to school on specific days.

Despite the success of the program, the Morton Way community still felt there were too many private vehicles dropping off students. They recently implemented a new initiative to reduce the amount of motor vehicles at the school through a "25 [Cars] or Less" campaign. A "thermometer" is displayed to alert drivers how many vehicles dropped off students the day before and school PA announcements update the students of progress. There are also signs displayed around the school promoting the 25 or Less campaign.

See the Encouragement chapter for a description of other Morton Way Safe Routes to School activities.

Curb Striping and Other Pavement Markings

Curb striping or painting is used in drop-off and pick-up zones to clarify parking and other curb use rules. The color painted on curbs means:

White (or no color)

Parking allowed, unless restricted or limited by signs.

Blue

Parking for the disabled only. Drivers must have a disabled person parking placard (typically hanging on the rear view mirror) or disabled person or disabled veteran license plate.

Green

Parking allowed for a short time. The time is usually shown on a sign next to the green zone, or it may be painted on the curb. Green curb can also be used for student loading zones if accompanied by the appropriate signs.

Yellow

Stop only long enough to load or unload passengers. Drivers are usually required to stay with their vehicle.

Red

No parking. Red curb may also be used in NO STOPPING or NO STANDING zones in conjunction with the appropriate signs. A bus may stop at a red zone marked for buses. Red is also used to designate fire lanes at schools.

In some cases it may be helpful to stripe out the loading area, both for the driver and for the waiting students. Some schools stripe the path the drivers are supposed to use for drop off and pick up, and some schools use pavement arrows and pavement stencils to designate circulation patterns and where loading is to occur.



Mike Cynecki

Pavement stencil at Monroe Elementary School in Utah.



Mike Cynecki

The blue line used by the Deer Valley School District in the Phoenix, Arizona, metropolitan area designates parent drop-off circulation for school parking lots. This sign corresponds to the blue pavement markings used by the Deer Valley School District in Phoenix, Arizona.



David Parisi

The combined use of signs and striping on a residential street adjacent to school property clarifies the intended curb use. The white curb marking indicates an area in which drop-off and pick-up of passengers is permissible. Santee, California.



Mike Cynecki

This is part of an on-site drop-off and pick-up zone with highly visible red striping. The loading and unloading occurs in a specially marked area beyond the red curb. Orangewood Elementary School, Phoenix, Arizona.

Tool: Curb Striping

What is it and how does it work?

Delineate zones and intended use with paint.

Benefits strategy provides

- Low cost.
- Provides continuous explanation of zone.

Key factors to consider

- Maintain paint.
- Use standard colors.
- Educate parents and students on proper use.
- Use in conjunction with signing to clarify purpose.



David Parisi

Nonstandard signs are not always understood by drivers. This sign is often hit by motor vehicles and leads some drivers to believe the entire street, and not just the crosswalk, is off-limits to parking.

Signs

Signs help define areas in drop-off and pick-up zones and explain their proper use. Signs should be standard, highly visible, properly installed and well-maintained.

Some signs can be confusing if improperly placed or poorly worded. Signs with fewer words are easier to read and understand. Standard signs should be used on school property and in the surrounding area for regulating and guiding traffic. A local traffic engineer can recommend appropriate signs and their placement. See the Engineering chapter for more information on signing.

Separating Motor Vehicles From Pedestrians and Bicyclists

Separating or eliminating conflicts between students arriving on foot or bicycle from those arriving by buses and motor vehicles is highly recommended. Adequate physical space should be provided for each mode by which students arrive at school. Also, the route provided for each mode should be separate from other modes. Provision of sidewalks and bikeways that are separate from lanes dedicated to buses and lanes dedicated to motor vehicles will reduce a student's exposure to traffic. Students walking or riding to school should not have to cross busy driveways or roadways to access the campus. If they do, an adult school crossing guard or older student should be placed at the crossing to assist students safely across.



Mike Cynecki

When worded properly and when parents are educated properly, some nonstandard signs can be quite helpful in regulating drop-off zones. Orangewood Elementary School (left) and Roadrunner Elementary School (right), Phoenix, Arizona.

Tool: Signing

What is it and how does it work?

Clearly indicates intended use of zone.

Benefits strategy provides

- Low cost.
- Provides continuous explanation of zone.

Key factors to consider

- Use standard signs.
- Install signs properly.
- Maintain signs.

It may be appropriate to provide a separate travel lane for buses, a separate lane for private motor vehicles and specific routes for pedestrians and bicyclists. Separate bus zones can be established either on the school site, or on the adjacent street, wherever sufficient room exists. Preferably, the bus zone is not immediately adjacent to the private motor vehicle area to ensure that there is no spillover from the motor vehicles into the bus area.

A separation of arrival and departure times may also be useful. Staggered bell times for groups of students help to disperse the traffic peak at schools during the relatively short drop-off and pick-up periods. Staggered release or bell times for walkers and bicyclists, and bus riders and carpoolers can help reduce pedestrian or bicyclist exposure to, and minimize conflicts with, motor vehicles. Conflicts often occur when private motor vehicles and buses arrive at the same time and in the same location. For example, buses may use a drop-off and pick-up lane at a certain time, followed by private motor vehicle use at a later time. Staggered bell times are most applicable for schools with a large student population or when two or more schools are in close proximity to one another.

To further reduce conflicts, school facilities can be arranged to eliminate or reduce the number of children walking through parking lots. Children should walk around parking lots on dedicated walkways or sidewalks. If this is not possible, clearly marked walkways through parking lots with adult or older student monitors should

be used, and speed calming treatments, such as humps or bumps, should be employed in the parking lots.

School bus loading areas should be separated from parent drop-off and pick-up areas if at all possible. Signs, pavement markings, gates or orange cones may be used to provide this separation, but some education and enforcement will also be needed.



Mike Cynecki

Phoenix, Arizona.



Mike Cynecki

Traffic cones can be used to keep parents from entering the bus loading area at Monroe Elementary School in Utah.

Tool: Separating Vehicles From Pedestrians and Bicyclists

What is it and how does it work?

Provide different school access points in space or time for various student travel modes.

Benefits strategy provides

- Provide efficient and safe flow of all modes with minimal mixing.

Key factors to consider

- Can be costly if construction is needed.
- New schools and rebuilt or modernized schools should be carefully reviewed to ensure that separation is present.



David Parisi

Mill Valley, California.

Drop-off and Pick-up Lane

A drop-off and pick-up lane is an area on a street adjacent to school grounds or directly on the school grounds that is dedicated to the loading and unloading of students by private motor vehicles.

This school created a drop-off and pick-up lane on the street adjacent to school grounds. The picture to the left shows a corral where children wait to be picked up. Motor vehicles with identification tags that correspond to an individual student line up in the yellow-lined area. When the motor vehicle progresses to the white-striped loading area, the appropriate child exits or enters the vehicle. Signs, such as the one in the picture to the right, can remind drivers to follow the established process.



David Parisi

Marin Horizon School, Mill Valey, California.

An on-site drop-off and pick-up lane can employ the same general technique as in the on-street drop-off and pick-up lane. The system illustrated in the pictures to the right uses two lanes rather than one, and the lanes are actually on school grounds. Several motor vehicles in one lane progress to the unloading zone, release the children simultaneously and move out when all the children have cleared the street. The next group of motor vehicles moves into the loading zone from the other line of queued vehicles and repeats the process. Curb striping delineates the areas, signs further explain their proper use, orange cones mark the lanes and school personnel orchestrate the entire process.

Tool: On-street and On-site Drop-off and Pick-up Lane

What is it and how does it work?

- A lane designated for drop off and pick up of students from private motor vehicles only.
- May be on school grounds or on street adjacent to school.

Benefits strategy provides

- Speeds up and provides order to the drop-off and pick-up process.

Key factors to consider

- Clearly delineate zone and define process.
- The student loading area should be at the far end of the lane to maximize vehicle storage. In some cases two storage lanes may be used.
- Unload or load three or four motor vehicles at a time.
- Do not create a process that negatively impacts students arriving on foot or bicycle, and do not encourage more parents to drive students to school.



David Parisi

Monta Vista School, Santa Barbara, California.

Assistants to Help Students In and Out of Vehicles

Providing curb-side assistants in drop-off and pick-up zones to help students exit and enter motor vehicles can provide order to the process and decrease its time.

Parents, school personnel, safety patrol or older students can serve as valets and open curb-side doors for students to enter and exit motor vehicles and remove bags or other items. This speeds up the drop-off and pick-up process by eliminating the need for the parents to get out of the vehicle and ensures students are directly accessing designated locations. These assistants should wear safety vests or belts, and the loading area should be designated by signs or paint and be located at the far end of the lane. It is best to have enough assistants to help load three or four vehicles at a time to speed up the process in a safe manner.



Richman Elementary School, Fullerton School District

Tool: Assistants to Help Students In and Out of Vehicles

What is it and how does it work?

Person opens and closes curb-side motor vehicle door for students entering and exiting vehicles. Parents stay in vehicle and leave immediately after the child exits.

Benefits strategy provides

- Speeds up drop-off and pick-up process.
- Channels students directly from motor vehicle to pedestrian zone or from pedestrian zone to motor vehicle.

Key factors to consider

- Parents, school personnel and safety patrol can all participate.
- Need to educate parents and children on the process.
- Assistants should wear safety belts or bright vests.

Off-site Queuing Lane

Another strategy to improve the safety and efficiency of the drop-off and pick-up process is the use of off-site queuing lanes.

The street in this photograph is a major collector. During arrival and departure of students, the right lane is marked no parking and the motor vehicles line up for drop off and pick up. As students are loaded or unloaded from the motor vehicles at the drop-off and pick-up zone the vehicles in the queue advance. Off-site queuing lanes, in conjunction with drop-off and pick-up lanes and assistants to help students enter and exit motor vehicles, can speed up and improve the safety of the loading and unloading process.

In some instances, striping a center turn lane on a collector street can provide a queuing area for left-turning drivers waiting to enter the school drop-off and pick-up area, without blocking other traffic using the street.



Tool: Off-site Queuing Lane

What is it and how does it work?

Orderly line of vehicles on street adjacent to school waiting to pull into the drop-off and pick-up zone.

Benefits strategy provides

- Reduces conflict with non-school traffic.
- Speeds up and provides order to the drop-off and pick-up process.

Key factors to consider

- Clearly delineate queue.
- Do not block non-school traffic with queue.
- Does the public right-of-way provide sufficient space for the vehicles, or does the needed width infringe on private property?
- Do not extend the motor vehicle queue through a student crosswalk.

Temporary Street Closures and One-way Streets

Temporary street closures during student arrival and departure times can improve the efficiency and safety of the drop off and pick up of students at school. Temporary street closures eliminate motor vehicles in areas congested with pedestrians, bicyclists and perhaps buses. Another similar technique is to designate a street as one-way during drop-off and pick-up times. Signs are essential for this method.

Both temporary street closures and temporary use of one-way streets can work well in densely developed neighborhood schools. Any proposed street closures must be approved by the appropriate local transportation agency and must be coordinated closely with neighbors. It is also important to ensure that employing either of these techniques does not create traffic problems on other streets. Remember that all of these techniques should improve the safety of the overall process, and not simply relocate the chaos.



Tool: Temporary Street Closures and One-way Streets

What is it and how does it work?

Officially close street to traffic, or create a one-way street only during drop-off and pick-up times.

Benefits strategy provides

- Decreases traffic and chaos at drop-off and pick-up times with minimal cost.

Key factors to consider

- Coordination with local government and adjacent property owners is necessary.
- School officials may have to place and remove barricades and maintain them during the street closure.
- Do not relocate traffic problems to adjacent neighborhood streets by employing this strategy.



David Parisi

These images illustrate the temporary closures of neighborhood streets adjacent to schools in Seven Trees, California, (right) and Monroe Middle School, California (left). The closures are marked by the use of movable barricades.

Temporary Use of School Grounds as a Drop-off and Pick-up Zone

A section of the school grounds, such as a play area or parking lot, can be used as a dedicated drop-off and pick-up zone only when children are arriving at, or leaving, school. Temporary drop-off and pick-up zones can be useful in older, urban schools that were built without student loading areas when most children walked to school rather than being driven to school.

Some schools have received permission from their fire department or fire marshal to use a gated fire lane that encircles the school building as a parent pick-up and drop-off zone. This use requires parents to always stay in their vehicle, and to use a circulation pattern so that students load on the building side of the vehicle. At other times this area is closed to motor vehicle traffic.

Tool: Temporary Use of School Grounds as a Drop-off and Pick-up Zone

What is it and how does it work?

Use school play area, parking lot or other area as a drop-off and pick-up zone.

Benefits strategy provides

- Provides a separate space for drop-off and pick-up by motor vehicle.

Key factors to consider

- Useful in schools in densely developed areas with space constraints.
- Education of parents and students is important.
- Need good sign and paint plan; cones may be helpful.
- To use a fire lane as a drop-off or pick-up zone, schools need to obtain approval from the fire department beforehand.

Education

Educating parents and students on proper drop-off and pick-up procedure is essential in developing a safe and efficient system.

Regular reminders of drop-off and pick-up procedure from school officials to students and parents is one way to keep parents informed. Information provided to parents should be clearly stated, provide consistent messages and be delivered regularly throughout the school year. Maps of the drop-off and pick-up area with traffic flow patterns are very helpful. It is often good to begin a new drop-off plan at the start of a new school year or after a break, and after sufficient notice has been given to parents and students about the new plan.

Some schools hold traffic safety days to provide students and parents with useful information. Drivers are reminded of traffic safety principles and school drop-off and pick-up policies and processes. At this time children can be recognized and rewarded for walking or bicycling to school. Drivers who are not following proper process can receive warnings from school personnel, parents or law enforcement officers. Giving small rewards, such as stickers or pencils, to students whose parents follow proper process may be more beneficial in correcting bad habits than punishing poorly behaved parents.

Communities with a large non-English speaking population may benefit from multi-lingual educational literature, parking lot monitors and events.



David Parisi



David Parisi

Monitoring and Enforcement of Drop-off and Pick-up Policies

Enforcement of drop-off and pick-up rules is essential in creating a safe drop-off and pick-up environment. Enforcement as it applies to the entire Safe Routes to School program is discussed in detail in the Enforcement chapter, so it will be mentioned just briefly here.

Enforcement of drop-off and pick-up policies and process can be performed by a variety of people. Schools around the country have had success utilizing law enforcement officers, school personnel or parent volunteers. When new drop-off and pick-up plans are implemented assistance may be requested from law enforcement officers to make sure traffic flows smoothly during the first few days. Implementing a new plan may also require more volunteers or monitors to regulate parent activity in the first few days.



This notice is placed on a vehicle windshield to inform the driver that they have illegally parked in a drop-off and pick-up zone for buses.

Tool: Monitoring and Enforcement of Drop-off and Pick-up

What is it and how does it work?

Inform and remind the school community of drop-off and pick-up policies and process.

Benefits strategy provides

- May be the only additional activity necessary to keep drop-off and pick-up safe and efficient.

Key factors to consider

- Regular reminders and consistent application of rules are necessary.
- Reward students if their parents follow the process.
- Police assistance may be requested when implementing a new plan.

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