

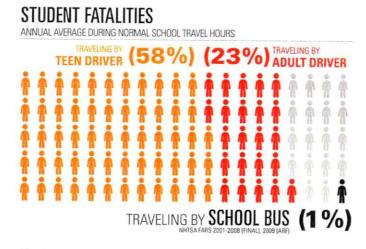
# Safety Guidelines for Creating, Moving, or Eliminating School Bus Stops

#### Purpose

At times parents request that the Department of Transportation (DOT) either move an existing bus stop or add an additional stop to better serve their students. At other times, the DOT may decide as a result of periodic internal bus stop audits, to add, eliminate, or move stops that contain too many students, are placed too close together, placed in inappropriate or unsafe locations, or are not in accordance with school system policy or regulations. The purpose of this document is to clearly communicate to school staff and parents the reasoning behind bus stop, location decisions made by the DOT. In addition, the guide is designed to serve as a resource for DOT staff to ensure consistency when creating, moving, or eliminating school bus stops.

## The Greatest School Bus Stop Danger:

School buses have been documented as the safest form of transportation in the United States. When students board the school bus, they are statistically the safest passengers on the road. Note in the graphic below the comparative fatality data compiled by the National Highway Transportation Safety Administration of students transported to and from school on the school bus as opposed to other methods of transportation.



But national data compiled annually for the last 40 years by the Kansas State Department of Education for the National Association of Pupil Transportation and the National Association of State Directors of Pupil Transportation Services also shows that of the very small number of student fatalities associated with school bus accidents in the United States, three quarters occur to students as pedestrians and two thirds of those occur because of contact with the student's own school bus.

This fact leads to a sobering paradox: the school bus is the safest form of transportation in the country, yet the most dangerous vehicle on the road for student pedestrians is their very own school bus. The reason is simple. Each school day in America over 25 million student pedestrians come within very close proximity to their school bus when both the students and the bus are approaching, standing at, or departing from the bus stop. In establishing safe school bus stop locations and procedures, the number one goal should be to protect student pedestrians from their own school bus. This is done in large part by tightly controlling the location and nature of contact between student pedestrians and their school bus at the bus stop. Most of the location decisions and bus stop rules that are discussed in this document are developed primarily to minimize this number one risk.

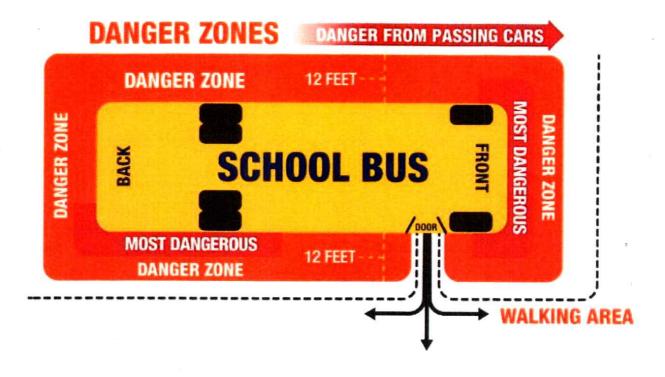
# Establishing Safe School Bus Stop Locations

There are inherent dangers whenever young pedestrians approach a large motor vehicle like a school bus at the bus stop. These dangers may arise from the sightlines around the stop, the volume and speed of vehicle traffic passing the stop, and the direction to and from which students approach and leave the stop. A crucial factor is the degree to which the bus driver can see all pedestrians, both students and parents, as the bus approaches, loads or unloads, and leaves the stop. The degree to which a stop location either promotes or impedes safe pedestrian flow to and from the stop must be considered.

The combination, nature, and magnitude of the factors listed above are different for virtually every existing or potential bus stop. Each school bus stop has its own unique set of relative risks. Because of this, there are no cookie cutter protocols for evaluating the safety of bus stop locations. The relative safety of each stop must be evaluated individually by experienced transportation professionals knowledgeable of the nature and relative risk of the unique characteristics that exist at the given stop location.

## Danger Zones

Except for the area at the school bus service door, where the driver can closely monitor the activity of student pedestrians, the bus is surrounded by danger zones that should be avoided not only by student pedestrians but by parents as well.



## The Safest School Bus Stop Configuration

Given these danger zones, the safest conceivable school bus stop configuration would be where the bus approaches from one direction and all students approach and depart the stop in a direction perpendicular to the right, or door side of the bus (see Satellite Image 1 below) and wait in a clearly delineated, safe, and visible standing zone. This minimizes the need or propensity for students or parents to enter the danger zones around the bus. Although not always achievable, the goal is to establish locations that get as close as possible to this ideal configuration given the roads, sidewalks, and paths in the area served by the stop.



Satellite Image 1

The least desirable bus stop configurations would be either where students approach the bus from all directions, as in a cul-de-sac or apartment parking lot (see Satellite Image 2 below), on narrow streets with parked motor vehicles, or where the bus is forced to turn around or back up at or near the stop. These configurations greatly increase the likelihood of students entering the danger zones around the bus as they approach or depart from the bus stop. These configurations should be avoided when possible.



Satellite Image 2

# The Five-Minute Safety Rule

A good safety rule is to ask all students to be at the bus stop five minutes prior to the established pick up time. Although this rule does promote more reliable and efficient route timing, the primary reason for the rule is the safety of the students at the stop. As stated above, one of the crucial factors affecting the safety of students as pedestrians is the bus driver's ability to see and monitor the location of all students as the bus approaches the stop in the morning, loads or unloads students, or leaves the stop in the afternoon. If all students are standing at the stop prior to the pickup, the driver can more safely and effectively monitor the students' movements and activities throughout the pickup procedure. If multiple students are moving toward the stop from different directions as the driver approaches the stop, it greatly decreases the driver's ability to account for the location of all students, increasing the potential for students to enter the danger zones of the bus undetected.

## Types of Bus Stops

Most jurisdictions have established several different types of stops based on the level of service dictated by their operational guidelines. The following discussion of the various types of stops is for the purpose of providing guidance and justification for staff in stop location decisions and clearly communicating the reasoning to schools and parents for the placement of stops based on safety.

#### Neighborhood stops.

As the name implies, these stops are designed to serve students within neighborhoods. The bast practice for placing these stops is to determine and maintain the safest permanent locations that best serve all potential students within the neighborhoods and not moving stops from place to place based on the convenience of individual students. Moving stops frequently to accommodate the convenience of individual students leads to a greater degree of uncertainty for both pedestrians and the motoring public and eventually compromises the safety of the stops.

In the state of Maryland, jurisdictions should also strive to honor, when possible, the **Code of Maryland Regulations (COMAR) 13A.06.07.13 Routing and Operating Procedures** which states that "Stops should be approximately ¼ mile apart". Placing stops at least a quarter of a mile apart reduces to some degree the tendency for the motoring public to become impatient with following the school bus and passing the bus at stops in an unsafe and illegal manner.

At times there are also students who live along the route of the bus within a community that request a stop in front of or at the closest intersection to their home with the rationale that the bus is going right past the spot. Honoring these requests would not be in keeping with the safety goals and parameters discussed above. Once established, the DOT should only move neighborhood stops requested by parents based on documented safety factors including vehicle and pedestrian sightlines, traffic volume and speed, safe walk route issues, or other pertinent safety factors.

Bus stop changes based on internal stop audits by the DOT may occasionally be considered for efficiency reasons but should not be implemented unless the change is first determined by the DOT to be either safety neutral or safety enhanced. Although efficiency should be a primary goal for establishing or changing the path of routes or trips, or the order of stops, the location of well thought out bus stops should not be changed for the sake of efficiency.

The local DOT should periodically audit bus stop locations for compliance with any state or local guidelines like the COMAR regulatory guideline stated above. If stops are determined to be closer than the stipulated distance for other than safety or student load issues, stops may be relocated or eliminated. If it is determined that there is eminent danger associated with the location of a stop, a more suitable location should be established as quickly as possible. Sufficient notice should also be given to students and parents in these cases.

A common misconception with neighborhood stops is that a stop closer to a student's residence is safer than a stop further away. As explained earlier, the safest bus stop configuration is where the bus approaches from one direction and students come out to the bus stop from a controlled and predictable direction, minimizing the potential contact

between the students as pedestrians and the danger zones of the bus (refer to Satellite Image 1).

Bringing buses further back into communities typically results in students approaching the bus from many different directions. This configuration creates a far greater exposure of students as pedestrians to the danger zones of the bus and significantly decreases the safety of the stop (refer to Satellite Image 2).

The number of students who are driven to neighborhood bus stops instead of walking has significantly increased over the years. This practice keeps students out of the weather on cold or wet days and gives parents those precious added minutes to spend with their students at the beginning of the day. Notwithstanding, this practice does create congestion in the areas around school bus stops, especially at stops within communities (as depicted in Satellite Image 2 above) and is a factor to be considered by the DOT when considering bus stop placement.

For these reasons, the DOT would be wise to avoid putting buses any deeper into communities than necessary. At times the argument is presented by parents that "the garbage truck comes back into the community, why can't the school bus?". This is a valid observation, but the difference is that young pedestrians generally avoid the garbage truck but flock to the school bus from all directions, exponentially increasing the risk of injury in the danger zones. Remember the number one danger discussed above and the strategy for mitigating that danger: tightly controlling the location and nature of contact between student pedestrians and their school bus at and around the bus stop.

The National School Transportation Specifications & Procedures last adopted by the Sixteenth National Congress of School Transportation in 2015 cites "narrow streets with parked motor vehicles" and "children darting between vehicles" as contributing to a "potentially hazardous location" for bus stops. Although the DOT may recognize and appreciate that students and parents generally desire stops to be as close as possible to their homes, the goal is to establish the safest locations for bus stops, not necessarily the closest or most convenient. The definition of safety and convenience should never be allowed to be confused or conflated.

At times, individual bus drivers will take it upon themselves to add unauthorized and unpublished neighborhood stops along a route as a courtesy to individual students. Although these stops are usually added by the driver with the best of intentions, their safety cannot be insured, exposing students to danger and the driver and school system to unnecessary liability and risk. In addition, substitute drivers inevitably miss unpublished courtesy stops, disrupting route reliability and causing students to miss the bus. Courtesy stops also result in multiple stops within a short distance, many time defying state or local guidelines and unnecessarily aggravating the motoring public. Courtesy stops at some

point become anything but courteous. When an unauthorized and unpublished courtesy stop is identified, the DOT should notify the parents and the stop should be eliminated.

#### FROM - TO Stops.

These stops are designed to pick up students outside of neighborhoods on rural routes or arterial roads that are not considered safe for pedestrians to walk along. One example would be:

NEW HAMPSHIRE AVE **FROM** OLNEY SANDY SPRING RD **TO** EDNOR RD - RSO".

This example signifies that the bus will pick up all students on New Hampshire Ave from Olney Sandy Spring Road to Ednor Road at their individual driveways. The individual addresses may or may not be listed based on the capabilities of the local routing software and the ability of the DOT to maintain current data. RSO indicates RIGHT SIDE ONLY and instructs that the driver will only pick up students who reside on the right, or service door side of the bus. FROM – TO stops also infer that there may be multiple stops along each road segment depending on the number of students residing on that segment. These situations would be appropriate exceptions to the COMAR directive cited above that "Stops should be approximately ¼ mile apart". Students at these stops should be instructed to stand at a safe distance from the road, but where the driver can see them as the bus approaches the driveway.

#### Centralized or Collector Bus Stops.

Centralized or collector stops are defined as transportation from a central location such as a neighborhood elementary school or library and are generally used to transport to and from regional magnet programs. These stops are in many cases outside of the walking distance from students' homes and require them to be driven to and from the stops. When designing these stops, there should be adequate parking for parents at the stop allowing the bus a clear path and acceptable sightlines to and from the stop location. In addition, the DOT should be mindful that in the afternoon, many students may not get picked up for an extended period of time due to parent schedules. Locating these stops at public libraries or other accessible public buildings allows students to wait and/or study safely and out of the weather until their ride arrives in the evening. School systems customarily notify parents or guardians in writing prior to acceptance into these magnet programs of their responsibility to transport to and from the centralized bus stops, regardless of the existence of an appropriate walk route."

#### Special Stops.

This designation signifies stops determined generally by an IEP, 504 Plan, McKinney–Vento, or Forster Care directive. When determining the need for these stops, the DOT should always start with the assumption that unless otherwise noted in the IEP or other governing document, the student will utilize the existing Neighborhood, FROM – TO, or Collector Stops designed for their residence or day care. Any stop location accommodations that would necessitate the use of a special stop would be based solely on the needs of the individual student as stated in the IEP, 504, McKinney-Vento, Foster Care, or local school system senior administration documentation.

In most jurisdictions, these stops are generally routed on buses which exclusively contain special needs stops. In compliance with the federal Family Educational Rights and Privacy Act (FERPA), these routes are not shared with the general public.

### Bus Stop Safety is a Team Commitment

This document focuses on the responsibility of the DOT to ensure the safest locations, approaches to, and departures from bus stops for both the bus and the students. But no stop is safe without a team commitment by all involved. It is the bus driver's responsibility to consistently exercise safe practices for picking up and dropping off students and maintaining a constant vigilance for the movement of student pedestrians around the bus at all times. Students and accompanying adults at the stop must practice safe behavior when approaching, standing at, or departing from the stop. As stated above when discussing the five-minute rule, arriving at the stop prior to the arrival of the bus is a fundamental safety practice. It allows the driver to more effectively monitor the location of all student pedestrians as the bus approaches the stop.

In addition, it is importation for students to stay calm at the stop. Horse play or other sports type activities are not conducive to a safe bus stop. Students should depart the stop in the afternoon without delay. Pedestrians should never walk behind a school bus at the stop and should maintain a 10-foot distance from the bus when crossing in front. Students should NEVER, NEVER, NEVER try to retrieve personal items from the danger zones or under the bus, but immediately notify the driver. When walking to or from the bus stop it is also not wise to be a "cell phone zombie". Just like distracted driving, distracted walking is dangerous and could have dire consequences. Just like defensive driving, pedestrians should practice defensive walking or standing. Be vigilant of fast developing traffic dangers around you and be prepared to take evasive action — it may save your life. Students and parents should stay alert for safety's sake.

It is the hope of the author that this document will help provide students a safer trip to and from school. Best wishes in attaining this goal.