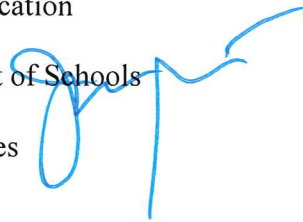


Office of the Superintendent of Schools  
MONTGOMERY COUNTY PUBLIC SCHOOLS  
Rockville, Maryland

October 24, 2018

MEMORANDUM

To: Members of the Board of Education  
From: Jack R. Smith, Superintendent of Schools  
Subject: Student Loads on School Buses



**Question**

Ms. Jill Ortman-Fouse asked how we keep up with our numbers of students on buses and make changes. By the time MCPS has accounted for all students needing seats on buses, students have already found alternate means of transportation.

**Response**

Staff in the Department of Transportation (DOT) uses historical data to predict how many students will ride regular education buses from each stop, each year. Stop-by-stop ridership data from the current school year is used to plan routes for the following school year. Factors such as school boundary changes and new nontransported areas also are considered. Routes are thoroughly reviewed each year so that adjustments can be made where possible to make the most efficient use of every route. This helps us move resources from neighborhoods with declining student populations to those that require additional capacity. Route timing, rather than number of students on the bus, is sometimes the limiting factor in route design.

Several stop-by-stop load counts are taken during the first few weeks of school to provide data needed to make adjustments to routes that are loaded beyond the capacity of the bus. Bus operators are instructed to notify their supervisor immediately if they are overloaded and not wait for the next load count. However, stop-by-stop load counts are needed for buses that are not overloaded so that supervisors may identify stops from which overloaded buses can be shifted. This process generally occurs during the beginning of each school year. Because every effort is made to avoid adding costly routes, buses are planned to be near capacity wherever route timing allows. This effort to maximize the use of each bus means even a small increase in additional student estimates can cause the need for shifting of stops between routes. Montgomery County Public Schools (MCPS) also currently allows students and families to choose which bus stop works best for their families. Most use the stop closest to their home, but other factors such as riding with friends or riding from a before- and/or after-care location may alter stop selection.

The student transportation section of Code of Maryland Regulations addresses bus capacity as follows: “School vehicles shall be routed so that all students are seated and loads do not exceed the manufacturer’s rated capacity. If an emergency situation creates an overload, this condition shall be corrected within a reasonable time.” All school systems in Maryland that strive to maximize the use of their buses make load adjustments in the beginning of each school year.

A crowded school bus is not the same as an overloaded school bus. DOT receives some complaints such as buses that are overloaded or students not being able to find seats, only to find that the load is less than the number of seats on the bus. MCPS regular education buses purchased prior to 2018 have what is referred to as a 3/2 seating design, with a 45-inch seat on the left side of the bus and a 30-inch seat on the right side, for a total capacity of 57. This gives each student, on average, 15 inches of what the industry calls “rump space.” This seating arrangement works well for elementary and many middle school students. Three high school students in a 45-inch seat or 2 in a 30-inch seat can be a tight fit, however.

Starting with buses purchased in 2018, a new 3/3 seating design was implemented. This seating configuration has 39-inch seats on both sides of the bus. The industry considers the 39-inch seat a 3-seater, even though each student has only 13 inches of rump space. It raises the manufacturer’s rated load capacity to 69 per bus, and makes for an even tighter fit for secondary students. DOT plans to load buses to three elementary students per seat and route in such a way that high school buses normally will not be loaded beyond 46, or 2 per seat. Middle school buses will fall between 69 and 46 seats; seats with only 2 secondary students per seat offer 19.5 inches of rump space per student.

In some situations, adjusting the routes to solve an overloaded or crowded bus is complex. Whenever possible, a temporary solution typically involves a spare bus with an extra bus operator following behind the overloaded bus, transporting the extra students as needed until a permanent solution can be created. Every effort is made to strike the right balance between providing the comfort level each student would like and making good use of each bus by transporting a number of students close to the manufacturer’s capacity rating. The new seating configuration, which increases the official capacity and the number of elementary students we can transport on each bus and limits the number of secondary students on each bus, will offer a practical way to continue to improve bus loads.

If you have any questions, please contact Dr. Andrew M. Zuckerman, chief operating officer, at 240-740-3050 or Mr. Todd M. Watkins, director, Department of Transportation, at 301-840-8130.

JRS:AMZ:TMW:sro

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