



September 13, 2023 (Updated September 14, 2023)

MEMORANDUM

To: Members of the Board of Education

From: Michael J. Martirano, Ed.D.
Superintendent

Subject: Plan to Support On-Time Arrival of School Buses

The purpose of this memorandum is to inform you of the plan that will be implemented to support the on-time arrival of school buses.

At recent Board of Education meetings, I outlined several adjustments we have made to realize improvements in our student transportation services, including:

- Correcting the routes provided to contractors to align with information on the bus locator,
- Improvements to the process of how buses leave the Zum Services bus lot,
- Earlier bus lot departures to ensure the first pickup in the morning was on time,
- Correct routes being input into the tablets on Zum buses and drivers becoming more familiar with the technology,
- Providing placards for buses to display in windows that shows the bus numbers families were provided with,
- Improved communication with families,
- Additional dry runs for bus routes,
- Daily updates provided to me of on-time arrival of buses for their first stop in the morning and at their first pickup school, and
- Simple improvements such as helping out-of-town drivers understand that in Maryland they may turn right on red.

These corrections have resulted in some minor improvements, however, we know that more needs to be done. We have been closely evaluating data and, as a result, considering broader adjustments that I have discussed previously. This review has continued since the first day of school, and we forshadowed during our conversations at last week's meeting that additional adjustments would need to be made.

Currently, the top issue impacting the ability of drivers to deliver students to school in the morning and home in the afternoon on time is insufficient time. This has been very clearly stated by several contractors and bus drivers who drive for various services. There simply isn't enough time, or slack, built into the routing.

Data Analysis

Zum Services provided actual data using each bus's GPS and when we analyze the data between Thursday, Aug. 31 and Monday, Sept. 11, it is clear that although improvements have been made, buses are arriving later and later through each tier. In further review of the data, we have plateaued at the percentage levels since September 5th as the information below shows:

Morning	Tier 1		Tier 2		Tier 3	
	First Stop	School	First Stop	School	First Stop	School
8/31/2023	87%	42%	62%	53%	70%	56%
9/1/2023	93%	63%	80%	67%	81%	66%
9/5/2023	98%	77%	88%	79%	85%	75%
9/6/2023	97%	82%	87%	80%	82%	76%
9/7/2023	97%	81%	86%	79%	81%	76%
9/8/2023	98%	82%	88%	80%	82%	76%
9/11/2023	97%	82%	87%	79%	82%	76%

Note: This table shows the percentages of buses that have an on-time arrival.

The afternoon commute shows the same reality, but with many more buses being late to get students home on time.

Afternoon	Tier 1		Tier 2		Tier 3	
	School	Dropoff	School	Dropoff	School	Dropoff
8/31/2023	88%	58%	62%	47%	20%	12%
9/1/2023	94%	70%	73%	50%	30%	18%
9/5/2023	96%	83%	76%	66%	44%	18%
9/6/2023	96%	83%	68%	58%	27%	23%
9/7/2023	96%	87%	79%	68%	36%	22%
9/8/2023	95%	87%	79%	70%	39%	26%
9/11/2023	95%	87%	78%	70%	39%	25%

Note: This table shows the percentages of buses that have an on-time arrival.

Even on our best days being on time for Tier 1 schools, too many Tier 3 students are not arriving home on time.

This data is clear and supports the reality that our school staff are experiencing—drivers do not have sufficient time to complete the totality of their routes on time. This is supported by feedback received from drivers and multiple transportation contractors whose routes cover all three tiers.

Impacts of Consistently Late Buses

Currently, thousands of students are arriving at school after the first bell—some coming a few minutes late and some missing significant instructional and support time. This consistent tardiness will undoubtedly have a detrimental impact on the instruction and supports students receive while at school and needs to be addressed.

Additionally, asking students and staff to remain at school long after dismissal is untenable as it requires staff to be available to provide oversight while students wait at the school for their bus.

Start Time Adjustments

The Board Policy 2000 charges the Superintendent with the responsibility for the administration and management of the school system. The daily operation of the schools is part of that administration and management. The Implementation Procedures connected to Board Policy 5200 provides the Superintendent with the flexibility to adjust school start times by 10 minutes. The Board last updated the policy and reviewed the implementation procedures on May 26, 2022. Additionally, the Office of General Counsel has reviewed the "history" of the start time decision and the determination of bell times within a tier is reserved to the Superintendent. The Office of General Counsel also confirmed its understanding with Board Counsel on September 13, 2023, that the authority to change the school start times rests solely with the Superintendent.

To build the needed time into the master student transportation schedule, this plan utilizes the flexibility granted in policy but does not adjust any times beyond 10 minutes. Staff designed this plan based on ongoing analysis and review over the first two weeks of school, including modeling using routing software and conducting some dry-runs over this past weekend.

This plan will adjust school start times as follows:

- **Tier 1 schools will shift earlier by 10 minutes from 8:00 a.m. to 7:50 a.m.**
- **Tier 2 schools will be split to two new start times**
 - **Tier 2 middle schools will start at 8:30 a.m., which is 10 minutes earlier than the 8:40 a.m. current start time.**
 - **Tier 2 elementary schools will begin at 8:45 a.m., which is 5 minutes later than the 8:40 a.m. current start time.**
 - **All Tier 2 schools will end at 3:15 p.m.**
- **Tier 3 schools will begin 10 minutes later, adjusting from 9:15 to 9:25 a.m. All Tier 3 schools will end at 3:55 p.m.**

These start time adjustments result in the following changes to afternoon dismissal times:

- Tier 1 schools will now dismiss at 2:35 p.m., accounting for the 10-minute adjustment to the start time.
- The staggered start of Tier 2 schools will now allow all schools in that tier to dismiss at 3:15 p.m., correcting the staggered dismissal that was occurring. This is projected to result in better route timing.
- The adjustment to start Tier 3 schools ten minutes later results in a ten minute later dismissal from 3:45 to 3:55 p.m.

	Current	New (Effective 9/20/23)
Tier 1 (all high schools, some middle schools, Cedar Lane & Homewood)	8:00 a.m. – 2:45 p.m.	7:50 a.m. – 2:35 p.m.
Tier 2 (some middle schools)	8:40 a.m. – 3:25 p.m.	8:30 a.m. – 3:15 p.m.
Tier 2 (some elementary schools)	8:40 a.m. – 3:10 p.m.	8:45 a.m. – 3:15 p.m.
Tier 3 (some elementary schools)	9:15 a.m. – 3:45 p.m.	9:25 a.m. – 3:55 p.m.

Note: This table displays the times described above.

The new start times detailed in this plan will be implemented beginning Wednesday, Sept. 20. While it was considered to implement this solution at the beginning of a week, it is unfair to our students, staff and families to delay these improvements any longer than is absolutely necessary. Additionally, any route modifications will have to be held until the implementation of this plan while the routing system is updated to the new times. Delayed implementation would negatively impact new students enrolling in the system, including prekindergarten students and further delay our efforts to improve specialized routing. Implementing this prior to a three-day weekend will also allow staff to mitigate any issues that are experienced during the first three days of implementation.

All school system divisions have been involved in this review process and feedback from several school administrators has been incorporated to help ensure the implementation is comprehensive and mitigates as many concerns as possible.

Adjusting Tier 1 Pickup Times

While it is projected that the additional 20 minutes of total time added to the schedule will result in significant improvements, it does not fix the challenge occurring in Tier 1 of buses getting slowed significantly by the confluence of car riders and student drivers. This reality is the primary reason for the Tier 1 on-time status from the time a bus picks up their first stop to the time they drop off at the school.

To build additional time to the Tier 1 drop-off schedule and provide additional separation between buses and car riders, an additional 10 minutes will be built into the bus pickup times for Tier 1 schools.

This results in improved traffic patterns as it separates buses from most car riders and student drivers and allows buses to begin their Tier 2 routes on time.

Anticipated Improvements

Based on the analysis generated by transportation staff using routing software and currently available data, we project that significant improvements will be realized.

As displayed in the chart below, the morning models demonstrate that 96% of buses in all three tiers will arrive at school on time. Additionally, only 4% of buses will be late by 10 minutes or less and no buses are expected to be later than 10 minutes—a significant improvement to the current reality. Additionally, we are confident that the remaining 4% of delayed morning routes can be improved with adjustments to routes and pickup times.

In the afternoon, across all tiers we anticipate 67% of buses leaving the school on time to transport students home. This is an average and we know that Tier 1 will have a greater on-time rate than Tier 3. Data will be tracked each day and reported out following the implementation. Staff believe that additional improvements may be made with smaller route adjustments through troubleshooting individual routes once this system-wide solution is implemented.

	Morning	Afternoon
On Time	96%	67%
< 10 Minutes Late	4%	28%
10-20 Minutes Late	0%	5%
> 20 Minutes Late	0%	0%

***Note:** These percentages of on-time buses are based on modeling but do not take into account all the traffic concerns which are also being addressed in this plan.*

While our goal is to function in a 100% on-time reality, we believe this solution gets us much closer to that target than the current model ever could. Additionally, it allows us to eliminate the majority of current challenges so staff focus can turn to the remaining routes that are continuing to operate behind schedule.

On-time operations for our buses will also support transportation for field trips and afterschool activities, including athletics.

Shifting All Schools

Not all schools are currently experiencing challenges with transportation. Many students—particularly in the western part of the county—currently arrive at school on time. This is primarily a result of transportation contractors who serve that part of the county and only serve schools on two tiers rather than all three.

However, having schools on different schedules would have an impact on staff who are split between multiple schools and would be detrimental to the staffing at each school. Additionally, building more “slack” into the system will benefit all schools because it allows for unforeseen delays caused by driver shortages and weather delays.

Specialized Student Transportation

The plan described above will be implemented for general bussing, which makes up the majority of all student transportation. However, we know that improvements must be made to our specialized transportation service, including buses that serve students with IEPs or are in pre-kindergarten, and buses that serve Cedar Lane School and Homewood Center.

Once this plan is implemented and general education routes begin arriving consistently on time, staff in the Office of Student Transportation will have greater bandwidth to evaluate and improve specialized routes on a route-by-route basis. Changes to specialized routes will be communicated directly with impacted families.

Additionally, we want to implement this new plan as early as possible because while route times are currently being updated, no new special education or pre-kindergarten students can be added into the system. A delay in implementation would result in a delay in transportation services for these students.

Continuous Improvement

It is important to note that this adjustment will not solve all problems. We are still experiencing a driver shortage that is being remedied through a promising driver pipeline. This week was the first time we experienced no bus cancellations in the morning or afternoon due to the availability of sufficient drivers to fill in for callouts.

As noted above, our work to improve routes and timing will continue as we fine tune each route that continues to experience delays.

Adjustments to School Staff Duty Hours

We understand that this implementation will create a shift in school-based staff schedules. While the change in start times will be no more than ten minutes, I don't want to ignore or minimize the fact that this will necessitate a shift for all school-based staff. I have heard from many staff members, and school administrators are amplifying their voices loud and clear. More than anything, they want a solution to the ongoing transportation delays they are experiencing because they are having a detrimental impact on instruction. School administrators will work with their staff as appropriate during the initial few days of this change as staff members adjust to the new schedule.

Next Steps

Following the transmittal of this Board memo, we will communicate this decision with school administrators, HCPSS staff, and bargaining unit representatives before a full community message is sent.

An extensive communications plan that includes internal and external messaging strategies, including translations, from now through the date of implementation has been developed and will guide our engagement. It is important that all families are informed of these changes in a short amount of time so our messaging will be comprehensive, constant, and leverage as many platforms and solutions as possible to be sure all families

are informed. The Board will receive communication briefing documents and other messaging to remain informed and to help communicate with your many constituents.

I also want to be very clear that this is essentially a reset of the transportation system for the school year. As is the case every new school year, the beginning of the school year results in a week or so of adjustments to be made after implementation. This implementation will be no different. We anticipate the first day will not be perfect as bus drivers, students, staff and families adjust to the new times and account for traffic patterns and other factors. Based on the data and the additional slack in the schedule, we expect to see improvements in the on-time arrival compared to the current schedules.

Please contact Jahantab Siddiqui, Chief Administrative Officer, with any questions.

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