TIMS Webinar:
Fall Planning & Summer School

April 2021

*Preparing for
Expanded Summer School Programs
and
Reopening Schools in August 2021*

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**Institute for Transportation
Research and Education**

TIMS: Fall Planning & Summer School

Before discussing preparation for Fall and Summer School, recognition and special thanks are to due to all of the following…

- **TIMS Operators**

- **Transportation Directors**

- **PowerSchool Coordinators**

- **School Data Managers**

- **Bus Drivers and Monitors**

- **Various School Staff**

- **Cafeteria Workers**

- **And Many More…**

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Think about all that has been accomplished since March 2020 when Schools shut down.

- **Food Distribution Routes (Summer and Fall)**

- **Reopening Schools under Plan B**
  - **Socially Distanced Busing**
  - **ABC Cohort Groups**
  - **Staggered Returns from August to April**
  - **Changing Plan B Operations Multiple Times**

- **Returning to Plan A (for most LEAs)**
  - **Some still operating under Plan B**

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Preparing
for
Expanded Summer School Programs

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As part of Plan B Operations and Preparing for Socially Distanced Bus Routes, TIMS Support Staff stressed the importance of proper data collection for bus route planning.

Many LEAs were introduced to the concept of Importing ABC Cohort Codes and Yes\No Ridership information into TIMS from a simple student spreadsheet or through Custom Screens in PowerSchool.

Using ABC Cohort Codes and Yes\No Ridership Data, LEAs were able to create and manage irregular bus routes more effectively through better data management practices.

Many LEAs improved their operations over the last year and are in much better shape for the upcoming year.

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Preparing for 2021 Summer School Programs

Most LEAs are anticipating the largest summer school offering in school history, with large increases in both student participation and summer programs lasting several weeks longer than normal.

Transportation Departments may need to prepare for more Summer School Drivers than a regular year.

In order to determine the summer drivers needed, Transportation Directors and TIMS Operators need **RIDERSHIP LISTS** and key pieces of information related to the expanded summer programs.

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Preparing for Summer School

- Summer Students vs. Summer Riders
  - Collecting the information for Summer Riders
    - To\From Home for AM\PM or Alternate Stop Locations?
  - Some students will have a different summer transportation needs

Focus on BUS RIDERS, not Summer School Enrollment

- Planning Routes for all 1,200 Students enrolled in Summer School is much more difficult than planning for the 580 that will actually ride the bus.
  - At an average of 50 students per bus, this is a difference of planning 24 Routes vs 14 Routes
  - It is a double waste of time for TIMS Staff to scramble and prepare for 24 Routes, only to go back and rework them to 14 Routes once true ridership is established.

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Transportation Staff need to understand the logistics of summer school operations and should be working with the LEA Summer Coordinator.

Not every school building will have a summer program and many students will need to attend summer classes at another school location. In addition to collecting ridership information, TIMS Staff will need to know the following about each summer program.

- Summer School Location(s) and Student Assignments
    - *Which building(s) will Summer School be held?*
    - *Students from which school(s) will attend this program?*
    - *How many different programs or locations?*
    - *What time of day do they begin and end?*
    - *What time do they need students there in the AM?*
    - *What dates do the programs begin and end?*
    - *How many days a week will the program occur?*

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As part of Plan B Bus Routing, many LEAs collected ridership data for each ABC Cohort and used this information for better planning of limited bus routes. Smaller LEAs used a shared spreadsheet to communicate ridership info, while larger LEAs worked with PowerSchool and developed a Custom Student Screen to collect Plan B Ridership info.

Summer School data collection and communication can and should be approached the same way.

1. Custom Student Screen in PowerSchool for Summer Students
2. Shared Spreadsheets containing Summer Student Information
    - *Spreadsheet must contain Student PowerSchool ID*

With proper school building assignments and ridership information in an electronic format, TIMS Staff can more effectively manage the quick turnover time often required for summer school routing.

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Custom Student Screen for Summer School
Example from Beaufort County Schools

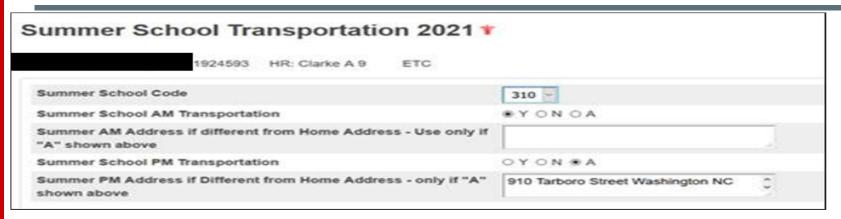Summer School Transportation 2021

1924593   HR: Clarke A 9   ETC

Summer School Code   310

Summer School AM Transportation   ● Y ○ N ○ A

Summer AM Address if different from Home Address - Use only if "A" shown above

Summer School PM Transportation   ○ Y ○ N ● A

Summer PM Address if Different from Home Address - only if "A" shown above   910 Tarboro Street Washington NC

Similar to Custom Student Screens for Plan B Cohorts, this example provides the necessary info about Summer School Assignments to TIMS Staff.

- *School Building Code, AM\PM Transportation Needs (Yes, No, Alternate)*

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Summer School Transportation 2021 ▼

1924593   HR: Clarke A 9   ETC

Summer School Code	310 ⌄
Summer School AM Transportation	● Y ○ N ○ A
Summer AM Address if different from Home Address - Use only if "A" shown above	
Summer School PM Transportation	○ Y ○ N ● A
Summer PM Address if Different from Home Address - only if "A" shown above	910 Tarboro Street Washington NC

With this information in PowerSchool, TIMS Staff can download a simple spreadsheet and easily import this data into TIMS for managing summer school bus routes.

Student_number	Summer_School_Code	Summer_AM_Transportation	Summer_AM_Address	Summer_PM_Transportation	Summer_PM_Address
1924593	310	Y		A	910 Tarboro Street Washington NC
1947953	310	A	1234 Hwy 17 Washington NC	Y	
12090344	310	N		Y	
12245976	310	N		N	
12284792	310	N		Y	
12321809	310	N		N	

If an LEA wants to use a spreadsheet instead of a Custom Screen, make sure the spreadsheet requires the Student PowerSchool ID.

Avoid Pencil and Paper Forms and Manual Data Entry if possible.

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12

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Most LEAs want cheap, efficient Bus Routes over the summer… which means the least amount of buses possible while not creating unreasonably long ride times or extremely early AM pickup times. Summer Routes will typically have to be experimented with and redesigned a few times before settling on the final routes for each program.

> *Things to consider…*
> - *What time does the program start? … 8am, 9am?*
> - *How early is too early for AM pickup? … 6am, 7am, 5:30am?*

TIMS Staff are often asked to "try it with 6 buses" and when the times are too early, "try it with 7 buses" … and then … "how about 8 buses?"

It can be a lot of work to design and redesign bus routes under these constraints. It is important that TIMS Staff have several weeks to appropriately plan for efficient Summer School Routes.

With proper ridership information, TIMS will help you determine how many buses will be needed for Summer School.

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When does Summer School Begin?

If school ends on Thursday June 3rd , it is unrealistic for Summer to begin that following Monday June 7th... unless the summer school rider info has been available to TIMS Staff for several weeks before school ended.

Please speak to your Summer Coordinator about the number of summer programs this year and the start date for each program. Explain to them the importance of having accurate transportation requests for summer students up to several weeks in advance so TIMS Staff have time to plan routes accordingly.

Once Routes are created in TIMS, students and parents will also need to be notified about their expected stop time and bus number for summer school.

Many LEAs also prefer routes completed a few days before to give drivers time to review (and maybe practice) the routes prior to the first day of summer school.

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⬡ **Summer School Begins**

▭ **Driver Routes & Parents Notified**

★ **Summer Rider Info Received**

Think backwards from Day 1 of the Summer School.

When will drivers receive routes and parents be notified?

How long before that will TIMS Staff need to develop routes?

JUNE 2021

SUN	MON	TUE	WED	THU	FRI	SAT
		1	2	3 ★	4	5
6	7	8	9	10	11	12
13	14	15	16	17 ▭	18	19
20	21 ⬡	22	23	24	25	26
27	28	29	30			

JULY 2021

SUN	MON	TUE	WED	THU	FRI	SAT
				1 ★	2 ▭	3
4	5 🚫	6 ⬡	7	8	9	10
11	12	13	14	15 ▭	16	17
18	19 ⬡	20	21	22	23	24
25	26	27	28	29	30	31

Depending on the Size and Complexity of Summer School Programs, some LEAs may need several weeks to develop Summer School Bus Routes.

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15

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<u>Preparing for Summer School</u>

Start asking about Summer School programs now...

- What can Transportation do to help gather Summer Ridership Info?
- What can Schools do to help gather Summer Ridership Info?
- What can PowerSchool or IT Department do to gather Ridership Info?

- Many LEAs conducted Student\Parent Surveys to determine ridership.
- Talk to School Administration and Explain Your Needs

- When will Transportation have the final list of riders?

- It takes time to complete all of these steps.

START RIGHT AWAY!

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RECAP - Preparing for Summer School

- Importance of Collecting Summer Ridership Info
  - Routes not based on Summer School Enrollment
  - Ask students Yes\No for AM and PM

- Allows proper Run\Route Planning based on good information
  - Takes the guesswork out of Hiring Drivers
  - Let TIMS help determine Fleet Requirements

- Consulting with LEA Summer Coordinators, PowerSchool & IT Staff
  - Shared Spreadsheet vs. Custom Student Screen in PowerSchool
  - Must have PowerSchool ID
  - Summer School Building Assignments
  - Yes\No\Alternate Stop Data Collection

- Establishing a Realistic Deadline for Ridership Requests
  - 2 weeks or more before start of summer programs

Preparing
for
Reopening Schools in August 2021

Student Assignments, Route Planning and Bus Driver Estimates

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After nearly a year of Plan B Operations and most LEAs now back to Plan A Operations, there is an increased need to collect updated ridership requests for all students returning to school in August.

Although current Plan A Routes are closer to normal school bus operations, many students have remained virtual learners or have received transportation via their parents. Most LEAs have seen large decreases in school bus ridership under Plan A compared to normal.

As schools prepare to fully reopen in August, LEAs should expect many of the virtual students and end of the year car riders to request school transportation for the upcoming school year.

How many UNKNOWN BUS RIDERS do you have?

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Importance of Collecting Fall Ridership Info

Traditional Methods

Historically, most LEAs carry assignments over from year to year, making sure end of the year bus riders are assigned in Fall Planning Data.

This method tends to work sufficiently under normal circumstances, with Transportation Departments typically able to make last minute adjustments and assign the missing bus riders.

Many of the LEAs operating this way focus on asking promoted students (new 6th and 9th grade) and incoming kindergarten students about transportation to\from their new school of assignment.

THIS IS NOT A NORMAL YEAR

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Importance of Collecting Fall Ridership Info

Current End of Year Bus Riders

LEAs should expect many of the current virtual students and end of the year car riders to require school bus transportation for August.

Depending on the size of the LEA, there could be dozens, hundreds or even thousands of unknown bus riders for the upcoming year.

Bus Routes need to be based on students who have requested transportation, and LEAs can use TIMS to determine how many Bus Runs and Routes are needed to service the student requests.

The next slide contains real data from 3 LEAs and illustrates the size and scope of unknown bus riders for August.

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Here is current data from 3 LEAs compared to 2019 Headcounts

2019 vs Plan A	LEA #1	LEA #2	LEA #3
Buses	100	180	300
2019 Headcounts	5,000	9,000	19,000
2019 Riders per Bus	50	50	63
Current Plan A Riders	4,000	6,000	13,000
Current Riders per Bus	40	33	43
Rider Diff (from 2019)	1,000	3,000	6,000
Riders % Diff	20%	33%	32%
Riders per Bus Diff	10	17	20

Last Official Headcount (Normal Operations)

Current TIMS Assignments

Potential Unknown Bus Riders

Will the 20% to 33% Decrease in Riders be the same in August?
How many Virtual Students and Car Riders will need a last minute Bus Stop?

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If LEAs do expect a heavy loss of ridership, then efforts should be made to cut buses and combine routes for August. This would help with driver shortages reported across the state as well as general transportation efficiency measures.

However, if LEAs assume Plan A ridership carriers over to August but it is actually closer to 2019 Headcounts, LEAs will not be able to hire dozens of drivers at the last minute and complete bus assignments to accommodate all of the unknown requests.

Without a complete list of expected bus riders, Transportation Departments cannot properly plan bus routes and so the number of bus drivers needed for August is also unknown.

What will you do if you need to hire 5 Drivers at the last minute?
What about 10 Drivers? 20 Drivers? Or even 50 Drivers?

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RECAP – Student Assignments & Driver Estimates

- Importance of Collecting Fall Ridership Info

  - End of year assignments much lower than normal
    - Virtual Students and Parent Transportation

  - Historical Methods of Student Assignments may be insufficient
    - How many Virtual Students will need a Bus Stop?
    - How many current car riders will need a Bus Stop?
    - Potential for 33% Increase in Ridership

  - If ridership will remain lower than normal
    - LEAs should explore combining runs and cutting buses
    - Will help manage driver shortage

  - If ridership returns to normal
    - How many drivers can be hired at the last minute?

*Confirming School Bell Times
and
Establishing Arrival and Departure
Windows at Each School*

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Collecting ridership requests is very important as Bus Routes will be designed based on the cargo needing transported AM and PM.

Just as important as knowing the bus riders, it is necessary to know the Bell Times and Early\Late Windows for School Bus Arrival and Departure at each school building.

The concept of Bell Times and School Transportation Windows are key for route planning and preparation in TIMS. Bus Routers must know the window of time in which buses can come and go from the school while loading and unloading students.

Before extensive route planning, LEAs should verify the Fall Bell Times at each school and establish the school transportation windows with each administrator.

Lets explore this concept and how it assists in Route Planning.

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Within TIMS, each School has a default AM Bell Time and PM Bell Time for each school. The Bell Times have no effect on Bus Routes in TIMS.

The Early and Late Times, referred to as the Transportation Windows, are what determines the Arrival and Departure Times for Bus Runs and Routes at each school.

It is important that Transportation Departments work with schools on establishing these windows AM and PM as Bus Routes will be based on this information.

Lets look at the AM and PM Windows to better understand how they are used in TIMS.

EXAMPLE		
School Bell Times & Transportation Windows		
AM BELL	Earliest AM Drop Off	Latest AM Drop Off
8:00 AM	7:20 AM	7:50 AM
PM BELL	PM First Load Departs	PM Last Load Departs
3:00 PM	3:05 PM	3:45 PM

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Setting AM Bell Times in TIMS

AM Bell: The time classes begin.

School Bell Times & Transportation Windows		
AM BELL	**Earliest AM Drop Off**	**Latest AM Drop Off**
8:00 AM	7:20 AM	7:50 AM

AM Bus Early: is the earliest time buses could begin unloading students in the morning.
- When will the doors to the school be open and staff present to supervise students?
- When is the earliest a Car Rider could be dropped off by a parent?

AM Bus Late: this is the preferred arrival for buses at this school and should typically be long enough before the AM Bell to allow time for students to eat breakfast, stop by their locker, visit the restroom, etc... before they report to class.

When you process Run Directions in TIMS, the time listed in AM Bus Late is the drop-off time all of your Bus Runs for that school will try to meet.

AM Bus Late is the Key Variable in TIMS for Morning Bus Runs.

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Setting PM Bell Times in TIMS

PM Bell: The time classes end.

School Bell Times & Transportation Windows		
PM BELL	**PM First Load Departs**	**PM Last Load Departs**
3:00 PM	3:05 PM	3:45 PM

PM Bus Early: is the earliest time in which buses begin leaving campus with students onboard.

Most LEAs set the PM Bus Early time for 5 to 10 minutes after the PM Bell. This gives students time to exit school and board the correct bus before departure. TIMS uses PM Bus Early as the expected departure time for PM Bus Runs, so make sure this time is accurate.

PM Bus Early is the Key Variable in TIMS for your Afternoon Bus Routes.

PM Bus Late: this is the latest time students can remain on campus while waiting for a bus to arrive and pick them up. For Routes with double-loads or those paired with another school, PM Bus Late settings are based on the time the last bus leaves could the school with a load of students.

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Based on this example Bell Time, the following would and could occur within TIMS.

AM – Bus Routes will plan to arrive at this school by 7:50am, 10min before the AM Bell

If needed, a Bus could drop off a first load of students at 7:20am (when doors open) and then complete a second load near the school and be back within 30min by the 7:50am time.

PM – Bus Routes will plan to depart this school at 3:05pm, 5min after the PM Bell

If needed, a Bus could leave at 3:05pm to drop off a first load near the school and return by 3:45pm to pick up the second load of students.

EXAMPLE		
School Bell Times & Transportation Windows		
AM BELL	Earliest AM Drop Off	Latest AM Drop Off
8:00 AM	7:20 AM	7:50 AM
PM BELL	PM First Load Departs	PM Last Load Departs
3:00 PM	3:05 PM	3:45 PM

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Establishing realistic Bell Time Windows and working with School Administration to coordinate student supervision before and after the AM\PM Bell can be a challenge.

If permitted to complete a quick double-load near the school, this will allow one or two buses to do the work of 3 or 4 buses.

If the school system is operating on a tiered bell schedule, then the establishment of Early\Late Windows will be key to helping manage the pairing of AM and PM Runs into an efficient transportation operation.

If schools want all the buses to arrive and depart at the same time and are not willing to supervise children before or after the Bell, then the efficiency of your transportation operation will be limited.

EXAMPLE		
School Bell Times & Transportation Windows		
AM BELL	Earliest AM Drop Off	Latest AM Drop Off
8:00 AM	7:20 AM	7:50 AM
PM BELL	PM First Load Departs	PM Last Load Departs
3:00 PM	3:05 PM	3:45 PM

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<u>RECAP – School Bell Times and TIMS Transportation Windows</u>

- The Bell Times in TIMS do not impact Bus Routing

- The times listed in the Early\Late Transportation Windows are what impacts Bus Routing in TIMS

- Transportation Departments need to establish, verify and confirm the Fall Bell Times and Early\Late Transportation Windows for each school.

- Realistic Transportation Windows (30-45min) before and after the AM and PM Bell can promote route efficiency and help with driver shortages by establishing double loads and multi-tier routes.

- Schools will need to be cooperative and supervise children before and after the bell to accommodate bus routing requirements.

Finalizing Bus Routes
And
Preparing for Open House

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Preparing for Open House and the Start of School

Finalizing Student Assignments and Stop Creation (Cut Off Dates)
- July 1st or August 1st?

Streamlining AM and PM Runs for Efficiency
- Crisscrossed Bus Routes
- Overcrowded Loads, Half-Empty Buses
- Improve Multi-Tier Bus Route Pairings (for larger LEAs)

Have finalized Routes ready for Back to School Driver Meetings
- Dry Runs and Practice Time for Drivers
- Stop Lists, Passenger Lists, Turn by Turn Directions

School Bus Information Available at Open House
- Bus Assignment Slips
- Master Spreadsheets
- PowerSchool Data, Parent Apps & Other Technology

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The last few weeks before school – Polish the Brass on your Stops, Runs and Routes

At this point of the summer, TIMS Data should be caught up and Bus Routes close to finalized, based upon expected ridership the first day of school.

Expected Ridership and Bus Capacities should be analyzed and plans made for the larger buses to run the routes with the heaviest loads. Once bus routes and student assignments in TIMS are as good as they can be, LEAs typically print updated Route Descriptions, Stop Lists and Driving Directions for each Bus Driver.

The better LEAs provide the drivers with their routes a few days or even weeks in advance so they have time to review and practice the new routes prior to the first day of school.

If drivers review and practice the new routes, they may be able to provide feedback about the accuracy of expected pickup times and other improvements before school.

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Transportation Data Available at Open House

Schools, Parents, Students and Drivers should have the latest and greatest Transportation Data available during Open House and Back to School Sessions.

Some LEAs have great methods and information available…
- Bus Slips and Stop Assignments are included with student class schedules
- Master Bus Assignment Spreadsheets can be made available to School Staff
- Homeroom Teachers or Assistant Principals can distribute Bus Assignments
- TIMS Data available in PowerSchool, Parent Apps and other Technology

Some LEAs have not so great methods…
- A Driver Table at open house where students request transportation and drivers create routes in their head and decide who gets to pick up the student
- Drivers are told to do the routes they did last year and just pick up all the students waiting by the road.
- Yes, both of these actually happen in some LEAs

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Transportation Data Available at Open House

Other Technology Options

Some LEAs use "Here Comes The Bus" that notifies Parents when the bus is approaching their child's assigned stop in TIMS. Synovia tends to pull TIMS Data Daily, so Parents can view planned assignments in the App before school begins.

Edulog offers their own Parent Portal App that allows parents to view TIMS Stop Assignments. Some LEAs also have WebQuery or Web School Assistant, a website search from Edulog that identifies school of assignment and the closest stop to an address.

TIMS Bus Stop Data can be also imported back into PowerSchool and Blackboard Systems, where Parents, School Staff and Administration can view planned bus assignments.

TIMS Data, if regularly updated and imported in PowerSchool or Blackboard, can then be used to populate School Messenger Systems and other types of Automated Calling Services to notify parents about bus assignments, delays, accidents or breakdowns.

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RECAP – Finalizing Routes and Preparing for Open House

Deadline for Final Day 1 Bus Requests
- Bus Routers need time to work a final solution for all expected riders for Day 1 Bus Routes.
    - *Bell Time Windows, Combining Loads and Multi-Run Pairing*
- Routers cannot receive hundreds or thousands of new requests a few days before school.
    - *LEAs will struggle to develop new routes and hire extra drivers at last minute.*
    - *Drivers will likely need review and practice time to learn new bus routes.*

Information Available at Open House
- Student Bus Slips and Master Spreadsheets for Schools
- TIMS Data within PowerSchool or Blackboard Systems
- Parent Apps by Edulog, Synovia and other GPS Vendors

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The clock is ticking...and there is a lot to do.

With around 1 month of school left this year, LEAs need to focus on a few things...

- Collecting Ridership Information for All Students
    - Summer School Students
    - Back to School Riders in August
        - Once they leave in June, it will be impossible to collect this info
    - Work with PowerSchool and Local IT Staff to Survey Student Transportation Needs
        - Establish a Deadline for Day 1 Bus Requests

- Work with Schools to establish proper bell time windows
    - Summer School Bell Times and Early\Late Windows
    - Back to School Bell Times and Early\Late Windows

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For most LEAs, Early College and some High School students will return to classes the first week in August and need to first prepare for those Contingency Routes.

Other schools will tend to open around or after August 16th. Please check local listing for Back to School Dates in your LEA.

Open House tends to occur the week before school and this should be the target date for Fall Bus Routes to be Completed.

Some LEAs hold Back to School Meetings for Bus Drivers in early August and try to have Routes finalized by this date.

August 2021

SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

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Final Thoughts and Words of Wisdom

Despite the challenging year managing Plan B Cohort Bus Routes and returning to Plan A in the Spring Semester, most LEAs were successful in completing the irregularities brought about by COVID.
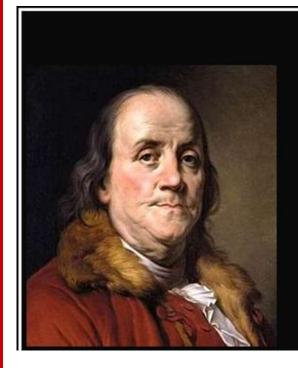
Implementing the largest Summer School programs in history will certainly be a challenge, as will collecting updated ridership info for Back to School in August.

The next four to five months will be tough on everyone, but consider these challenges the final steps to getting things back to normal within the school district.

Once Summer School is completed and Fall Bus Routes have stabilized after a few weeks of school, we can all take a deep breath and focus on managing a single set of TIMS Data in LIVE.

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By failing to prepare, you are preparing to fail.

(Benjamin Franklin)