

Fall Planning : Preparing Bus Routes for the First Day of School

*15th Annual
Student Transportation Leadership
Conference*

February 2020



Fall Planning

School Bus Routing in North Carolina

- North Carolina is the only state with equivalent School Bus Routing Software in every county and public school district.
- Commonly referred to as TIMS (Transportation Information Management System), this statewide effort to utilize school bus routing software is supported by the North Carolina Department of Public Instruction (NCDPI) as a means of promoting student safety and cost efficiency across all 100 Counties and 115 School Districts.
- Ongoing Software Support and Training Services are provided by TIMS Project Leaders at North Carolina State University and UNC Charlotte.
- TIMS Project Leaders provide Edulog software training and support to local TIMS Coordinators, Bus Routers, Transportation Directors, Technology Staff and any others involved with managing the daily needs of school bus routing.

Fall Planning

TIMS Project Leaders – Support Offices



UNCC: Urban Institute

NCSU: ITRE

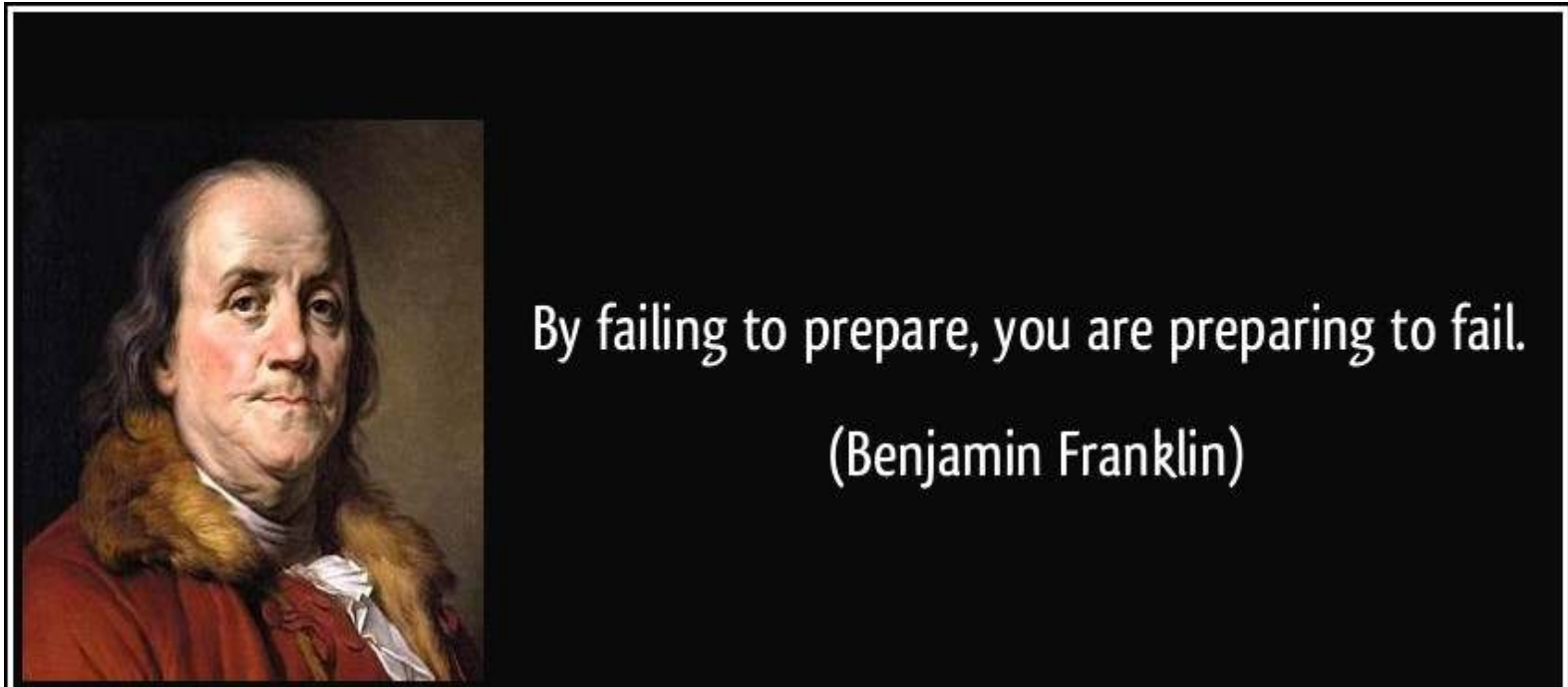


Fall Planning

School Bus Routing in North Carolina

- Because each Public School District in North Carolina implements similar Bus Routing Software; TIMS Project Leaders are able to conduct uniform Training Classes, hold Statewide Information Seminars and perform Online Webinar Trainings in support of many common software features and state reporting deadlines for all 115 school districts.
- As TIMS Project Leaders, we have come to understand that there are 115 School Districts and, unfortunately, 115 methods for managing Bus Route Information and Preparing Bus Routes for the first day of school.
- The following presentation is adapted from a Winter Seminar given the last few years to Transportation Directors and TIMS Operators from across North Carolina.

Fall Planning



How will Bus Routes look
the first week of school?

Fall Planning

Will Bus Routes Look Great?



Fall Planning

Or Will Bus Routes Be Overcrowded



Fall Planning

**Will students feel like they are riding the ...
School Bus**

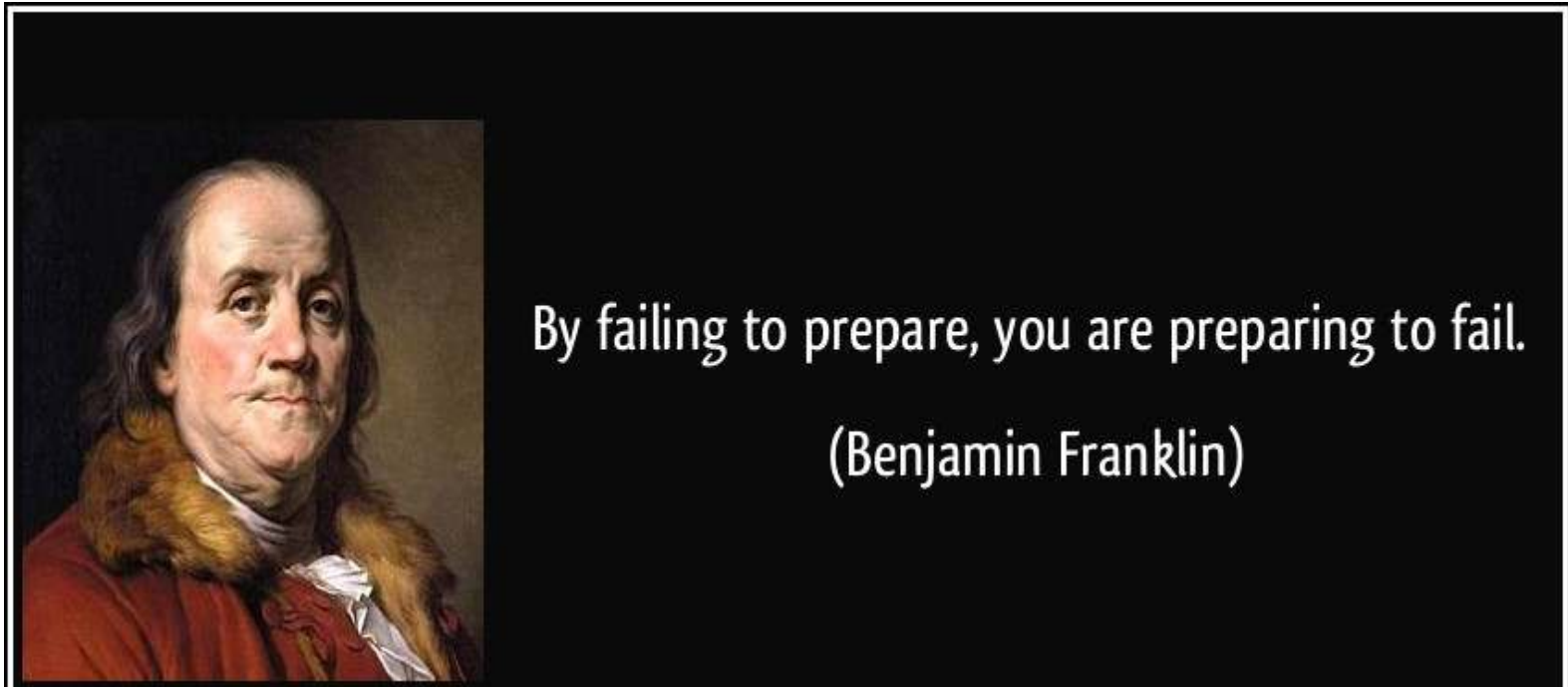


Fall Planning

Or
Will students feel like they are riding the ...
Stool Bus



Fall Planning



How will Bus Routes look
the first week of school?

Fall Planning

Avoid stress
and frustration
in August by
Being
Prepared for
the First Day
of School!



Fall Planning

Preparing Bus Routes for the First Day of School

Session Outline

- Things we cannot control, Things we can control
- Managing Expected Ridership in August
- Springtime Surveys and Transportation Request Forms
- New Students, Promoted Students, Current Students
- Stop Requests, Safety Reviews, Bus Capacity Analysis
- Fall Bell Times and TIMS Transportation Arrival/Departure windows
- Working with PowerSchool Coordinators and School Data Managers

- Info at Open House – Bus Passes, Letters, Assignment Slips, etc.
- PowerSchool Backloads, Here Comes the Bus, Parent Portal Data
- Dry Runs & Practice for Bus Drivers before School Starts

Fall Planning

Fall Planning - Things We Cannot Control

- **New Students Enrolling at the last minute**
- **Students who moved but did not update their address with the School**
- **Students who did not follow local procedures for requesting a bus assignment ... if procedures exist**
 - There will always be students who enroll at the last minute
 - There will always be parents who forget to update their address
 - There will always be parents who do not follow transportation request procedures
 - These issues are much easier to manage when the rest of TIMS is kept up to date and properly maintained.
 - Updated Bus Routes and Street Path of Travel
 - Current Student Assignments
 - Current Bus Loads

Fall Planning

Fall Planning - Things We Can Control

- **Keeping TIMS Updated throughout the School Year.**
- In order to prepare for the first day of school in August, it is important that TIMS has the latest and greatest information by the end of the school year.
- Some Districts work in TIMS everyday, constantly updating stops, runs, routes and student assignments throughout the entire school year.
 - These Districts have great success in managing TIMS and maintaining efficient bus routes.
 - Fall and Summer Planning is much easier when TIMS is caught up.
- Other Districts TIMS Data is not well maintained or Routing is Decentralized
 - TIMS Bus Routes and Student Assignments are not always accurate and cannot always be trusted.
 - Schools and Drivers often manage their own Bus Routes during the year.
 - Due to either not seeking assistance from Transportation
 - Transportation Department has historically struggled with Routing
 - No county oversight or accountability for poor routing decisions.
 - Inefficient, crisscrossed bus routes.
 - The start of school is a nightmare.

Fall Planning

Fall Planning - Things We Can Control

- **Expected Ridership in August**
 - If August Bus Routes are worked on over the Spring/Summer and are thoroughly reviewed and Pre-planned, then you will have a much easier time at the start of school and throughout the year.
 - **How do you know which students want to ride the bus the first day of school?**
 - There are three main types of bus riders to plan for in August...
 - New Students
 - Current Students in same school
 - Current Students in different school
 - Lets look at some Sample Reports from Davidson County and then examine the issues associated with each of these types of students.

Spring Ridership Survey – Davidson County

Spring Ridership Survey – Davidson County

- After having annual troubles with tracking expected ridership in the Fall, Davidson County started conducting a Spring Ridership Survey for All Students.
- The Survey is distributed by Homeroom and every student or parent is required to complete the survey by early May so that TIMS Staff can begin working on August Routes.
- For students who do not turn in a form or new students who enroll over the summer, there is an early August deadline if they want to be guaranteed a seat the first day of school. During the school year there is a Three Day turnover time for all new rider requests. At the start of the year, there may be up to 10 days before new rider requests and changes can be fulfilled.
- It takes time to complete the requests, update the AM/PM Routes, Notify the Schools, Drivers and Parents of the final stop assignment, bus number and expected times.
- Updated Passenger Lists and Driving Directions also need to be distributed to school and drivers

Spring Ridership Survey – Davidson County

Top of Ridership Survey

This is a template created in Microsoft Word.

All of the student specific information is from a spreadsheet created in TIMS.

Microsoft Word allows you to complete a “Mail Merge” and auto-populate the student information from a spreadsheet.

They generate hundreds of these at a time for each school and sort them alphabetically by homeroom for easy distribution.

Davidson County Schools 2018-2019 Transportation Ridership Survey Form		332 04 LLOYD
Dear Parent or Guardian of: DAVE SAMPLE		
In order to prepare for the 2018-2019 school year, we require all parents and/or guardians to confirm their transportation plans even if your child currently rides the bus this school year.		
Student's Name:	SAMPLE, DAVE	
Student ID #, last 3-4 digits:	3149	TIMS ID #:
<small>(Office Use Only)</small>		<small>(Office Use Only)</small>
School:	HASTY ELEMENTARY	Current Grade:
		04
Home Address:	22 STONEY POINT CT, THOMASVILLE, NC 27360	
<input type="checkbox"/>	The home address above is incorrect, please use the following:	
	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	
School Attending 2018-2019:	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>	
Please note the following bus stop location information. This is the current information the Transportation Department has on file for your child and it will be used for the upcoming 2018-2019 school year. Please answer the following questions.		
Current AM Bus Stop Location:	22 STONEY POINT CT	
	AM Bus Stop ID #:	332.050
	<small>(Office Use Only)</small>	
1a.	<input type="checkbox"/>	YES, this is the correct AM Bus Stop Location for my child to be used for the 2018-2019 school year.
1b.	<input type="checkbox"/>	No, this is not the correct AM Bus Stop Location for my child. Please use the following address location for the AM Bus Stop: _____
1c.	<input type="checkbox"/>	My child <u>does not</u> need AM (morning) bus transportation for the 2018-2019 school year.

Spring Ridership Survey – Davidson County

Bottom of Ridership Survey

This is a template created in Microsoft Word.

All of the student specific information is from a spreadsheet created in TIMS.

Microsoft Word allows you to complete a “Mail Merge” and auto-populate the student information from a spreadsheet.

They generate hundreds of these at a time for each school and sort them alphabetically by homeroom for easy distribution.

Current <u>PM</u> Bus Stop Location:	<input type="text" value="22 STONEY POINT CT"/>
PM Bus Stop ID #:	332.050 <small>(Office Use Only)</small>
2a.	<input type="checkbox"/> YES, this is the correct PM Bus Stop Location for my child to be used for the 2018-2019 school year.
2b.	<input type="checkbox"/> No, this is not the correct PM Bus Stop Location for my child. Please use the following address location for the PM Bus Stop: _____
2c.	<input type="checkbox"/> My child <u>does not</u> need bus PM (afternoon) bus transportation for the 2018-2019 school year.
<p><u>IMPORTANT:</u> This information <u>MUST</u> be completed and be returned to your child's school by Friday May 4th 2018. Bus stop information will be provided by the school in August, approximately one week before the first day of school. The final day to request or change bus transportation for the 2018-2019 school year is August 3rd 2018. Parents/guardians who fail to request school bus transportation for their children in advance of the August 3rd 2018 deadline may not have bus transportation provided for their children for up to 10 days after the first day of school in August. If parents/guardians request bus transportation after the August 3rd 2018 deadline, they will have to provide transportation for their children to and from school until bus transportation arrangements can be determined — <u>this might not occur until 10 days after school has started.</u></p>	
<p>By signing below I signify that I have read and understand the instructions on this form. I also understand that if this form is not returned to the school by the May 4th 2018 deadline, my child may not be provided bus transportation for up to 10 days after the first day of school in August of 2018.</p>	
Parent/Guardian's Signature	_____
Phone Number	_____ Date _____

Spring Ridership Survey – Davidson County

This Transportation Request Form is included in the Registration Packet for all New Students.

- Incoming Kindergarten Class
- All Other Schools and Grades

During the year, School Data Managers complete this form through a shared Google Document that is electronically sent to TIMS Staff.

This has greatly improved turnover time for fulfilling stop requests and keeping TIMS updated.

After student assignments are completed, TIMS Staff save updated route descriptions and passenger lists in a folder they share with each school.

Davidson County Schools
 2017-2018
 Transportation Request

Dear Parent or Guardian:

Please complete this form if you are requesting School Bus Transportation for your child.

Student's Name: _____ (Last) (First) (MI)

Student # _____ (To be supplied by the school)

Current Grade: _____ School Attending 2017-2018: _____

Home Address: _____ (Number) (Street Name) (City) (St)

YES, my child needs bus transportation for the 2017-2018 school year.

AM PM Both (Same as "Home" address)

AM Bus Stop Location: _____
if different from "Home" address

PM Bus Stop Location: _____
if different from "Home" address

NO, my child does not need bus transportation the 2017-2018 school year.

The final day to request or change bus transportation for the 2017-2018 school year is August 4th 2017.

If parents/guardians request bus transportation after the August 4th 2017 deadline, they will have to provide transportation for their children to and from school until bus transportation arrangements can be determined — this might not occur until 10 days after school has started.

Additionally, there is a three (3) day minimum turn-around period for Bus Transportation Requests made during the regular school year.

Parents/guardians requesting bus transportation should expect a three (3) day minimum turn-around to allow the Transportation Department to receive and process the request.

Parents/guardians will have to provide transportation for their children to and from school until bus transportation arrangements can be determined.

By signing below I signify that I have read and understand the instructions on this form:

Parent/Guardian's Signature _____

Phone Number _____ Date _____

North Carolina Student Information System

North Carolina uses PowerSchool as the statewide Student Information System (SIS)

- PowerSchool contains all student information imported into the Routing Software; including basic demographic information, school and grade of assignment, home address, parental and emergency contact information and, if utilized by local school districts, AM and PM Ridership Status as well as any Special Transportation Needs.
- PowerSchool goes offline each year during the first week of July for a process called Year End Transition (YET) in which all students are promoted to their Next School and Next Grade. PowerSchool Data Managers must have YET Information entered prior to the end of June. This includes data entry of all Pre-Registered Kindergarten Students as well.
- If possible, the majority of YET data can be entered prior to the June Deadline so that TIMS Operators can begin using this information much sooner to being Planning Bus Routes for August. Some of the larger districts in North Carolina seek to have most of this information entered by April or May.

Fall Planning

Fall Planning - Things We Can Control

- **Expected Ridership in August – New Students**
- Incoming Kindergarten Students
 - When is Kindergarten Registration for each school?
 - Is there a Transportation Request Form in the Registration Packet?
 - What info is collected on this form?
 - AM and PM Ridership Requests?
 - Will they be riding To/From their Home or To/From somewhere else (Daycare, Grandparents, Boys & Girls Club, etc.)
 - When will TIMS Staff begin receiving Transportation Request Forms?
 - When will School Data Managers enter the new students in PowerSchool?
 - When can TIMS Staff begin Fall Planning?

Fall Planning

Fall Planning - Things We Can Control

- **Expected Ridership in August – New Students**
- Incoming Students: Non-Kindergarten
 - What is the registration and enrollment process in your district?
 - Are new students asked to complete a Transportation Request Form?
 - What info is collected on this form?
 - AM and PM Ridership Requests?
 - Will they be riding To/From their Home or To/From somewhere else (Daycare, Grandparents, Boys & Girls Club, etc.)
 - When will TIMS Staff begin receiving these Transportation Request Forms?
 - When will School Data Managers enter the new students in PowerSchool?
 - When can TIMS Staff begin Fall Planning?

Fall Planning

Fall Planning - Things We Can Control

- **Expected Ridership in August – Current Students**

Current Students: Same School, Same Address

- If a student rode the bus last year, has not changed addresses and will stay in the same school for the upcoming year... some districts just “assume” they will ride again and keep the student assigned to a bus stop in TIMS.
 - This is somewhat acceptable as I can understand the assumption of ridership.
 - This is much more acceptable when you know TIMS assignments are accurate.
 - Assuming Ridership will be the same next year can create problems as you may be sending buses in certain areas assuming there will be students there waiting for pickup.
- Some LEAs make all students complete Ridership Surveys and New Transportation Request Forms for August and then evaluate/redesign their Bus Routes based on a more complete and accurate list of expected riders for Fall.

Fall Planning

Fall Planning - Things We Can Control

- **Expected Ridership in August – Current Students**

Current Students: Same School, Different Address

- Anytime a student moves and the parent updates their address with the school, either over the summer and especially during the school year, the student must have their Transportation Needs reassessed from their new house.
- Are these students with an address change given Transportation Request Forms?
 - Do they need transportation To/From the new house?
 - Will they ride the bus AM and PM?
 - Will they be going To/From their House or somewhere else? (Daycare, Grandparents, Boys & Girls Club, etc.)
 - Who decides which Bus they will ride?
 - Who decides where their new bus stop will be?
 - What is the turnover time for a new stop assignment?

Fall Planning

Fall Planning - Things We Can Control

- **Expected Ridership in August – Current Students**

Current Students: Different School and/or Address

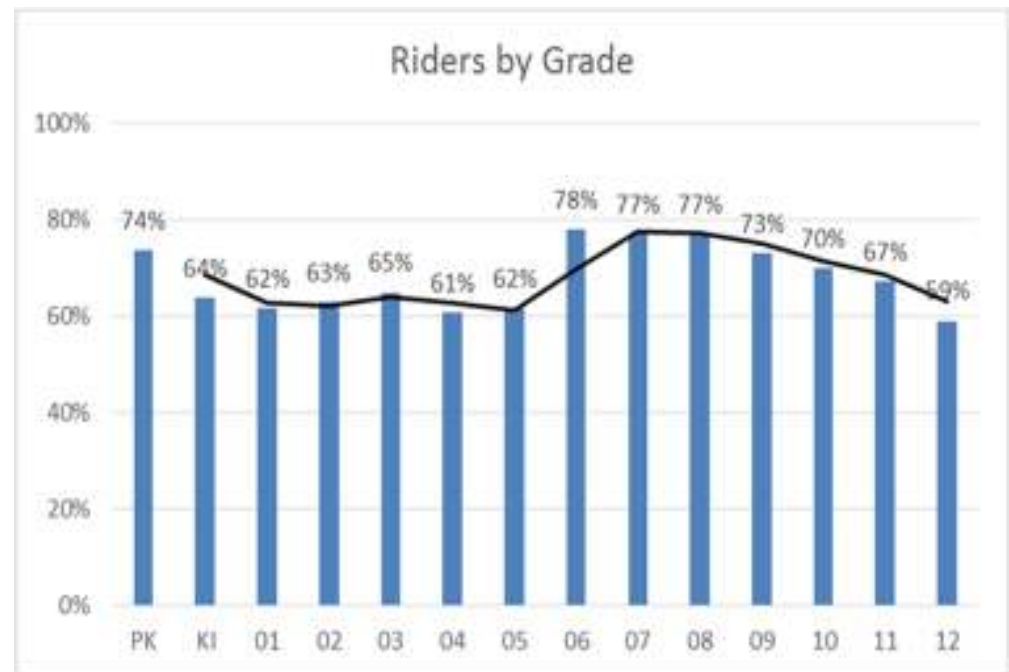
- The largest problem districts make in “Failing to Prepare” for August is neglecting to ask about the ridership of students being promoted to a new school over the summer.
 - **Elementary to Middle (5th to 6th)**
 - **Middle to High (8th to 9th)**
- Just because a student rode the bus last year, to/from their former school building, does not mean they will ride the bus to/from their new school building. Current Non-Riders may now need transportation to their New School in August, while current Riders could now ride with a parent instead of taking the school bus.
- Assessing the Transportation Needs of these Transitioning Students is very important in preparing for the first day of school.
- Double the information to ask if a student changed schools and addresses.

Fall Planning

Fall Planning - Things We Can Control

Trends in Student Ridership – by Grade Level

- Most districts show this pattern of Ridership by Grade Level
- Consistent across Elementary Grades
- Ridership Percentage spikes for Middle School Students and then slowly drops as they progress through High School.
- As you can see, capturing the ridership status of students moving from Elementary to Middle School may be the most important group to focus on.
- Failing to Prepare is Preparing to Fail.



Fall Planning

Fall Planning - Things We Can Control

- **Stop Requests, Safety Reviews, Bus Capacity Analysis**
 - Once TIMS Staff have a good list of expected riders for August, they can start the process of reviewing stop requests, creating new stops if needed, assigning students, reviewing assignments for safety concerns and then analyze anticipated bus capacities.
 - There are ways to code or flag students so they can be easily displayed for assignment purposes alongside the current Stops, Runs and Routes in TIMS.
 - TIMS Staff can then determine if there is a safe stop already in place for each student or if a new stop needs to be created and added to an existing bus run.
 - After expected riders are assigned, or as staff are working on Fall Routes, TIMS will allow you to examine the assigned loads and provide the opportunity to redesign bus routes that may be overcrowded or identify which buses are under capacity.
 - It takes time to design, analyze and perfect Bus Routes. Do not wait until the last minute to begin preparing for Day 1 Bus Routes.

Fall Planning

Fall Planning - Things We Can Control

- **Bell Times and Transportation Arrival/Departure Windows in TIMS**
 - Every year, at least one district calls and asks why all of their buses are late to a certain school.
 - Typically, it turns out that the School changed Bell Times and never notified the Transportation Department.
 - These districts like to blame the schools.
 - In reality, the problem is that the Transportation Department never bothered to ask/verify/confirm any of the Bell Times for Fall.
 - The blame actually falls on the Transportation Department for not asking.
 - In TIMS, the settings for the Bell Time Arrival and Departure Windows are very important to ensure buses arrive on time.
 - Early enough in the AM for breakfast, bathroom, etc.
 - Need to coordinate School supervision for double loads in AM/PM

Fall Planning

School Bell Times

- Have you verified the Fall Bell Times for each of your Schools?
 - Setting the Bell Times in TIMS
- TIMS Transportation Windows
 - Setting the Bus Early and Bus Late Windows in TIMS

When setting the Bell Times for each School in TIMS, you are asked to enter 6 pieces of information:

- **AM Bell Time**
 - **AM Bus Early**
 - **AM Bus Late**
- **PM Bell Time**
 - **PM Bus Early**
 - **PM Bus Late**

Grade	Bell Times	Bus	
		Early	Late
01	07:50 AM	07:25 AM	07:40 AM
	02:30 PM	02:35 PM	02:45 PM

Lets look at each of these variables in more detail to better understand how they are used in TIMS.

Fall Planning

School Bell Times

Setting AM Bell Times in TIMS

Grade	Bell Times	Bus	
		Early	Late
01	07:50 AM	07:25 AM	07:40 AM

AM Bell: The time classes begin.

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 before the morning bell? When is the earliest a Car Rider could be dropped off by a parent?

AM Bus Late: this is the preferred arrival\drop-off time 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.

Fall Planning

School Bell Times

Setting PM Bell Times in TIMS

PM Bell: The time classes end.

Grade	Bell Times	Bus	
		Early	Late
01			
	02:30 PM	02:35 PM	02:45 PM

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

Most LEAs set the PM Bus Early time for 5 to 10 minutes after the PM Bell. This gives students 5 to 10min to exit school and board the correct bus before departure. When you process Run Directions in TIMS, the system uses PM Bus Early as the expected departure time of all the PM Bus Runs for this school, 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 (with staff supervision) while waiting for a bus to arrive and pick them up. For Routes with double-loads from the same school or those paired with a Route from another school, you will need to set PM Bus Late based on the time the last bus leaves the school with a load of students.

Example: 3:10pm if some students wait 40min after school for a bus to arrive.

Fall Planning

On the TIMS Website, under Documents, there is a Bell Times Worksheet to help map out the Arrival/Departure Windows for each School.

Call around and ask about Fall Bell Times right now, so you can plan for any changes caused by a new bell schedule.

**In some LEAs, the Transportation Department helps set the Bell Times at each school to ensure they can maintain their current level of transportation efficiency.*



EXAMPLE					
School Bell Times & Transportation Windows			Earliest AM Drop Off : refers to the earliest time a student can be dropped off		
AM BELL	Earliest AM Drop Off	Latest AM Drop Off	Latest AM Drop Off: refers to the latest time a student can be dropped off		
8:00 AM	7:20 AM	7:50 AM	PM First Load: refers to the usual time the first bus load departs		
PM BELL	PM First Load Departs	PM Last Load Departs	PM Last Load: refers to the latest possible time a bus load can depart		
3:00 PM	3:05 PM	3:45 PM			
School ###: School Name			School ###: School Name		
AM BELL	Earliest AM Drop Off	Latest AM Drop Off	AM BELL	Earliest AM Drop Off	Latest AM Drop Off
PM BELL	PM First Load Departs	PM Last Load Departs	PM BELL	PM First Load Departs	PM Last Load Departs
School ###: School Name			School ###: School Name		
AM BELL	Earliest AM Drop Off	Latest AM Drop Off	AM BELL	Earliest AM Drop Off	Latest AM Drop Off
PM BELL	PM First Load Departs	PM Last Load Departs	PM BELL	PM First Load Departs	PM Last Load Departs

Fall Planning

2020

January							February							March							April						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
			1	2	3	4						1	1	2	3	4	5	6	7				1	2	3	4	
5	6	7	8	9	10	11	2	3	4	5	6	7	8	8	9	10	11	12	13	14	5	6	7	8	9	10	11
12	13	14	15	16	17	18	9	10	11	12	13	14	15	15	16	17	18	19	20	21	12	13	14	15	16	17	18
19	20	21	22	23	24	25	16	17	18	19	20	21	22	22	23	24	25	26	27	28	19	20	21	22	23	24	25
26	27	28	29	30	31	23	24	25	26	27	28	29	29	30	31	26	27	28	29	30							

May							June							July							August						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
					1	2	1	2	3	4	5	6			1	2	3	4							1		
3	4	5	6	7	8	9	7	8	9	10	11	12	13	5	6	7	8	9	10	11	2	3	4	5	6	7	8
10	11	12	13	14	15	16	14	15	16	17	18	19	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15
17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22
24	25	26	27	28	29	30	28	29	30	26	27	28	29	30	31	23	24	25	26	27	28	29					
31																	30	31									

For most school systems in NC, the first day of traditional calendar schools will be August 24, 2020. This is not the deadline for Bus Routes to be finalized. Many school systems hold annual Open House Events a week or two prior to the first day, and having Day 1 Bus Route Assignments available for students at Open House is very important.

Many NC Counties also hold a Back to School Bus Driver Meeting in early August. If at all possible, Day 1 Bus Routes should be nearly completed and ready for distribution around the time of the driver meeting, shown above as scheduled for Friday August 7th.

Fall Planning

May							June							July							August						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
					1	2	1	2	3	4	5	6	1	2	3	4							1				
3	4	5	6	7	8	9	7	8	9	10	11	12	13	5	6	7	8	9	10	11	2	3	4	5	6	7	8
10	11	12	13	14	15	16	14	15	16	17	18	19	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15
17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22
24	25	26	27	28	29	30	28	29	30	26	27	28	29	30	31	23	24	25	26	27	28	29					
31																30	31										

Many school districts do not properly plan ahead and think through all of the various timelines, deadlines and other needs as they prepare Bus Routes for the first day of school.

The majority of May and June will likely be spent preparing for and implementing Summer School Routes. Depending on the size and complexity of Summer Programs, Bus Routers may have less time available over the summer to properly prepare for August.

North Carolina holds their Annual Pupil Transportation Conference in June, so staff in attendance will not be able to work on routing for a week. Coupled with possible staff vacation, the Memorial Day break in May and the 4th of July Holiday, and there are at least 12 working days lost over the summer months due to these events. Most LEAs also go to a 4-Day workweek in June and July, so this removes another 4 to 8 days.

At best, if Bus Routers begin planning on May 1st; there are only 85 working days until school on August 24th, which means only 75 days until the driver meeting on August 7th, or less than 65 Days if Summer Conference is attended and personal Vacation is taken, and around 60 days after the 4-Day calendar. Meeting deadlines can be difficult if proper planning does not take place.

Fall Planning

Preparing for Open House and the Start of School

Finalizing Student Assignments and Stop Creation (Cut Off Dates Needed)

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

- Possibly Allow Dry Runs and Practice Time for Drivers
- Stop Lists, Passenger Lists, Turn by Turn Directions, etc.

School Bus Information Available at Open House

- Bus Assignment Slips
- Master Spreadsheets
- PowerSchool Data
- GPS Tracking, HCTB, Parent Portal, etc.

Fall Planning

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

At this point of the summer, you should have most of your TIMS Data caught up and your Bus Routes are close to final, based upon your expected ridership the first day of school.

TIMS Staff should display the AM and PM Runs for a school and look for any overlap or crisscrossing that could be avoided.

Expected Ridership and Bus Capacity should be examined and plans made for the larger buses to run the routes with the heaviest loads. You may discover some buses that are overcapacity while others are partially full. You will want to look into fixing these issues prior to the first day of school.

Once your bus routes and student assignments in TIMS are as good as they can be, you should print updated Route Descriptions, Stop Lists and Driving Directions for each Bus Driver.

Good 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 can provide feedback about the accuracy of expected pickup times and other routing improvements.

Fall Planning

Transportation Data Available at Open House

Schools, Parents, Students and Drivers should have the latest and greatest Transportation Data available to them a week or so before school during Open House.

Some LEAs have great methods and information available...

- Bus Slips and Stop Assignments are included with class schedules for the semester.
- Master Spreadsheets posted on the wall where students and parents can check assignments.
- Transportation Staff attend Open House and help check/verify stop assignments in TIMS.
- Homeroom Teachers or Assistant Principals distribute Bus Assignments.

Some LEAs have not so great methods...

- A Driver Table at open house where students say they need a ride and then the drivers create routes in their head and decide who gets to pick up the student.
- Have drivers do the same routes they did last year and just pick up all the students waiting by the road... and figure out the students they missed later.
- Yes, this actually happens in some LEAs.

Fall Planning

Transportation Data Available at Open House

TIMS Bus Pass and Transportation Assignments

TIMS: Sample Bus Pass	
To the Parents of:	
JOHN DOE AABEN 1420 SMITH FARM RD	
Student Name: JOHN DOE AABEN	Student ID: 001234567890
2018-2019 School:	ALEXANDER CENTRAL HIGH SCHOOL
Bus Number:	188
AM Stop:	1420 SMITH FARM RD
Approximate Time:	07:07 AM
Bus Number:	188
PM Stop:	1420 SMITH FARM RD
Approximate Time:	04:23 PM

Fall Planning

Transportation Data Available at Open House

Student Letters from TIMS or a Mail Merge on Official School Letterhead

YOUR SCHOOL DISTRICT
123 ANYWHERE ST.
BOB, CA 12345

To the Parents of:
JOHN DOE AABEN
1420 SMITH FARM RD

02/20/2018

Dear parent/guardian of JOHN DOE AABEN,

Please note the following stop location and stop time information for your child. This information is what the transportation department has on record for your student. Please note that the stop time is an estimate and subject to change.

If you feel there is an error in the provided information, please contact us immediately at 404-555-1212. If the information is accurate please sign and date the bottom portion of this letter. Tear at the dotted line and have your child present it to the bus driver when boarding the bus. Please have your student to the bus stop 10 minutes prior to the bus arriving.

Sincerely,

Bob Smith
Transportation Director
Any Public Schools

PLEASE BE AT BUS STOP 10 MINUTES PRIOR TO ARRIVAL TIME

Student Name: JOHN DOE AABEN
School: ALEXANDER CENTRAL HIGH SCHOOL
Grade: 09

AM Stop: 1420 SMITH FARM RD
07:07 AM

PM Stop: 1420 SMITH FARM RD
04:23 PM

Parent Signature: _____ Date: _____

Fall Planning

Transportation Data Available at Open House

Master Spreadsheets for Each School

Last	First	GR	Address	AM Bus	AM Stop	AM Time	PM Bus	PM Stop	PM Time
ABBOTT	MAT	PK							
ADAMS	CAR	03	55 COUNTRY HOLLOW DR	158	RINK DAM RD & COUNTRY HOLLOW DR	06:30 AM	158	RINK DAM RD & COUNTRY HOLLOW DR	03:55 PM
ADKINS	PAR	01	177 CALLAWAY DR						
ALBA	ASH	PK	52 HELENS WAY						
AMBROC	ADR	PK	165 LAKE VISTA LN						
AMBROC	JAS	04	1036 LAKE VISTA LN	158	1030 LAKE VISTA LN	06:25 AM	158	1030 LAKE VISTA LN	04:05 PM
ANDERS	BAY	PK							
ANDRAS	MAC	05	1731 MAIN ST NW						
ANDRAS	TOR	02	570 FOX CT						
ARGUEL	BRE	04	1087 NC HWY 90 W						
ARGUEL	KEI	PK	106 MILSTEAD MHP LN						
ARIAS	GAL	KI	119 COUNTY HOME RD	175	119 COUNTY HOME RD	07:19 AM	175	119 COUNTY HOME RD	04:26 PM
ARIAS	MIL	01	60 JAS RANCH DR						
ARIAS	NEH	04	40 EMERSON CT						
BARLOW	ALL	KI	160 WHITTINGTON RIDGE DR				181	915 ALSPAUGH DAM RD	04:10 PM
BARLOW	EMI	02	100 MEADOWRIDGE DR						
BARLOW	MAD	02	1130 WITTENBURG RD						
BEAL	CAR	KI	486 CROUCH RD						
BEAL	KAT	05	87 SAVANNAH LN	181	CHURCH RD & SAVANNAH LN	07:25 AM	181	CHURCH RD & SAVANNAH LN	04:19 PM
BENFIE	AND	01	7630 CHURCH RD				158	7630 CHURCH RD	03:16 PM

Fall Planning

Transportation Data Available for Drivers

Driver Directions with Stops and Passengers

Run ID:	302.001	Route ID:	152	Run Frequency:	MTWUF	
Run Description:	152 AM					
Stop Time	Description	Service ID	Assign Stop Load	Assign Run Load	Miles	Acc Miles
06:36 AM	ALEXANDER CENTRAL HIGH SCHOOL	@CP.003031	0	0	0.0000	0.0000
	Proceed On SCHOOL DR Right Turn Onto LILEDOWN RD Left Turn Onto US 64 90 Right Turn Onto BOSTON RD Right Turn Onto LEE MATHESON RD					
06:44 AM	463 LEE MATHESON RD	302.025002	1	1	4.9157	4.9157
	Last Name, First Name	District ID	School	Grade		
	[REDACTED]		302	10		
	Proceed On LEE MATHESON RD Left Turn Onto TAYLORSVILLE MFG RD					
06:45 AM	930 TAYLORSVILLE MFG RD	302.149002	1	2	0.7538	5.6695
	Last Name, First Name	District ID	School	Grade		
	[REDACTED]		302	10		

Fall Planning

Transportation Data Available for Drivers Passenger Lists, sorted ...

Alphabetically

Run ID: 308.001	Description: BUS 163		
Last name, First name	District ID	School	Grade
/			
/			
/			
ALEJO-GAR		308	04
ALEJO-GAR		308	02
ALEJO-GAR		308	01
BELL, JAC		308	04
BLACKMAN,		308	KI
BLACKMON,		308	03
CATALAN,		308	03
CLARK, AD		308	02
DAVIS, KE		308	05
DAVIS, PA		308	04
DINGMAN,		308	01
DINGMAN,		308	04

or By Stop Order

Run ID: 308.001	Description: BUS 163		
Last name, First name	Time at Stop	School	Grade
/	7:23 AM		
JACKSON	7:27 AM	308	03
CLARK,	7:28 AM	308	02
WELLS,	7:29 AM	308	05
WELLS,	7:29 AM	308	01
SHOMAKE	7:29 AM	308	03
BLACKMA	7:29 AM	308	KI
BLACKMO	7:29 AM	308	03
POTTS,	7:29 AM	308	03
JAMES,	7:33 AM	308	05
CATALAN	7:35 AM	308	03
RUSS, K	7:35 AM	308	02
MARTINE	7:35 AM	308	03
JONES,	7:36 AM	308	01

Fall Planning

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.

Some LEAs have WebQuery, a website that identifies the closest stop to an address.

Edulog offers a Parent Portal App that allows parents to view TIMS Stop Assignments.

TIMS Bus Stop Data can be also imported back into PowerSchool and Blackboard Systems, where 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.

If you stand by your TIMS Data, then there is no reason why you should not be taking advantage of these additional features.

Fall Planning

The clock is ticking...and we have a whole lot to do.

With around 3 months of school left this year, you need to focus on a few things...

- Winter/Spring Route Updates in TIMS
- Collecting the Ridership Status for students in August
 - Once they leave in June, it will be impossible to collect this info from everyone
- Bus requests for Incoming Kindergarten and other Grades
 - Now through June and procedures over the summer
- Students being promoted to a New School
- Students staying in same school
- Fall Bell Times and School Supervision before/after the bell
- Do you have a cutoff date for Day 1 Stop Requests?

And don't forget... Summer School typically starts a few weeks after school ends in June, so you will need to spend time working on those Bus Routes as well.

We will talk about setting up for summer school next...

Fall Planning

Most LEAs will begin on August 24th this year while Early College Students and some entire counties may begin much earlier in August.

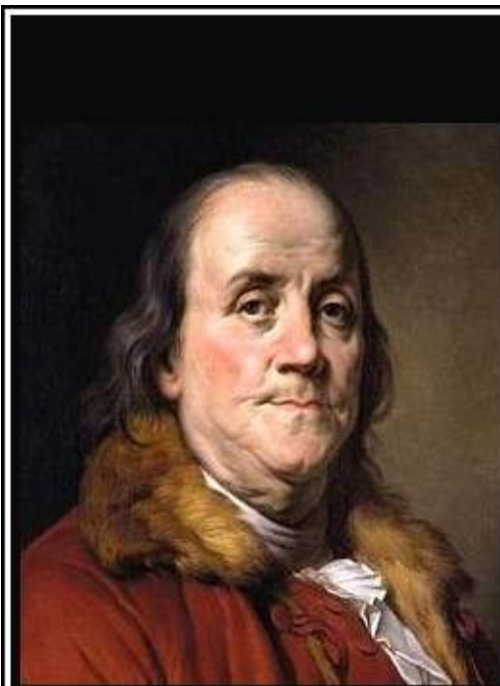
Even if August 24th is the first day of school, this is not the actual deadline for Bus Routes to be completed. Use the Fall Driver Meeting or Open House as Target Dates for having TIMS Routes ready.

In addition to traditional calendar schools and regular education bus riders, properly planning for Students with Special Transportation Needs and irregular school assignments (modified day) can be an even greater challenge. TIMS Staff must work and coordinate transportation with Special Needs Staff as well as student attending Alternative Schools.

Some school districts offer both traditional calendar schools as well as year-round schools, so managing bus routes and student transportation requests can become even more difficult when juggling multiple calendars, shared buses, as well as competing program times and requirements.

In the end, we are only as good as our “sloppy data”. TIMS is an amazing tool that works to produce accurate Bus Routes when proper information is present within the system and managed correctly by staff. It is all about proper planning and preparation.

Preparing for Summer School Bus Routes



By failing to prepare, you are preparing to fail.
(Benjamin Franklin)

How will your Bus Routes look
the first week of summer school?

Summer School Planning

Summer School Bus Routing in North Carolina

- Not every school district in North Carolina offers Summer School Programs each year and this varies based on applicable funding and the needs of the district.
- When Summer Programs are in session, they are not typically offered at each school within the district. Additionally, there may be multiple summer programs occurring at the same time, with students from multiple schools attending classes at different locations.
- In PowerSchool, the North Carolina SIS, there is not any easy way to establish temporary Summer Programs and enroll the applicable students into this program for a limited time frame.
- As a result of the summer school limitations in PowerSchool, TIMS Operators have had to traditionally rely upon lists of summer students, both paper lists and spreadsheets, in order to begin preparing Bus Routes.

Summer School Planning

Summer School Bus Routing in North Carolina

- Within the routing software, Students are assigned a school code, which is typically their home school of attendance. However, given that summer programs are not held at each building, this has caused problems within the routing software as student must be reassigned to summer school locations as well as have new stops, runs and routes created to service summer riders.
- Historically, some districts would create empty stops for the summer school code and include the student name only in the stop description. This workaround, however, proved problematic when more than 2 or 3 children were assigned to a stop and severely limited software capability as the system was no longer able to calculate actual Run Loads or produce proper passenger lists.
- Additionally, this type of Summer School design (empty stops with names in the description) does not permit HCTB, Parent Portal and other Student Specific Apps to properly track student assignments.

Summer School Planning

Summer School Bus Routing in North Carolina

- In order for GPS Student Apps to function properly, the routing system requires that the student record be fully assigned to the Route Level of the system.
- For larger districts in NC, this resulted in days and weeks of additional work to manually reassign students to the summer school code before stops could be made, students assigned and runs/routes created and paired.
- As a result of the improved capabilities of GPS Student Apps and the inability for PowerSchool to accommodate a summer school specific NewStu file, TIMS Project Leaders at NC State University developed an Access Database that would update the NewStu File to reflect the Summer School Code of the student.
- The Summer School Code Replacement Database has been available in North Carolina for the past two years.

Summer School Planning

Summer School Replacement Database

The TIMS Extract from PowerSchool (NewStu.txt) regularly contains the Student ID, the regular School Code for the Student and, if being used, the Y's and N's for AM and PM Ridership as entered on the Student Transportation Page of PowerSchool.

newstu.txt	Student ID	School Code	AM Ridership	PM Ridership
08236674525	910308000	Y	Y	
01985188	910360000	N	N	
01985190	910380000	Y	Y	
012544209	910314000	Y	Y	
012462465	910360000	Y	Y	
012446524	910314000	Y	Y	
012460444	910360000	Y	Y	

With an accompanying spreadsheet of Summer Student IDs, the Summer School Code and, preferably, the AM and PM Ridership Info; the School Replacement Database will read the information for each student in the Summer School Spreadsheet and update\replace their regular School Code and AM\PM Ridership Codes within the TIMS Extract and produce an updated newstu.txt file.

Staff then use this updated NewStu File for a Summer School UPSTU into TIMS.

Summer School Planning

Summer School Replacement Database

Student Summer School Spreadsheet

Columns A (PSID) and B (SCH) are required for the Database to function properly.

Columns C (AM) and D (PM) are optional, relate to Ridership Status for Summer School and can also be imported into TIMS for each student.

If AM and PM Ridership Codes are collected, then TIMS Staff can quickly identify and easily display the students who have requested a bus ride to or from Summer School.

This will help produce a much quicker turnover time when developing Summer School Routes.

TIMS Staff work with Summer School Coordinators to collect both Summer Enrollment and Summer Ridership Information.

	A	B	C	D
1	PSID	SCH	AM	PM
2	1941227	800 Y		N
3	1959789	800 N		Y
4	1961196	800 N		N
5	1967974	800 Y		Y
6	1967976	800 Y		N
7	1968367	800 Y		N
8	1968659	700 N		Y
9	1977178	700 N		Y
10	1977188	700 N		Y

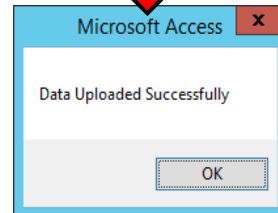
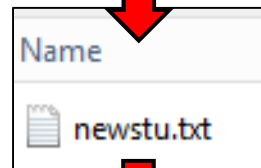
Summer School Planning



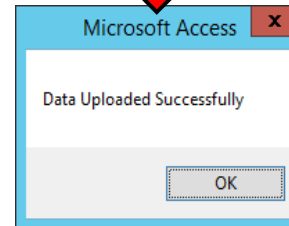
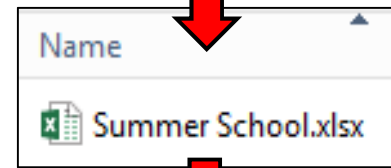
Click the Step 1 Button to Clear Previous Data



Click the Step 2 Button. Then browse to and select the most recent TIMS Extract

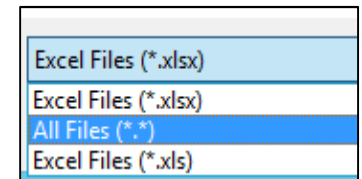


Click the Step 3 Button. Then browse to and select the Excel Spreadsheet



After Importing the NewStu.txt and Excel Spreadsheet;

Click the Step 4 Button to visit the Export Options Page



You may need to view All Files to see Different versions of Excel Spreadsheets.

Summer School Planning

There are two options for Exporting the Updated Student Information into an UpStu File that is compatible with TIMS.

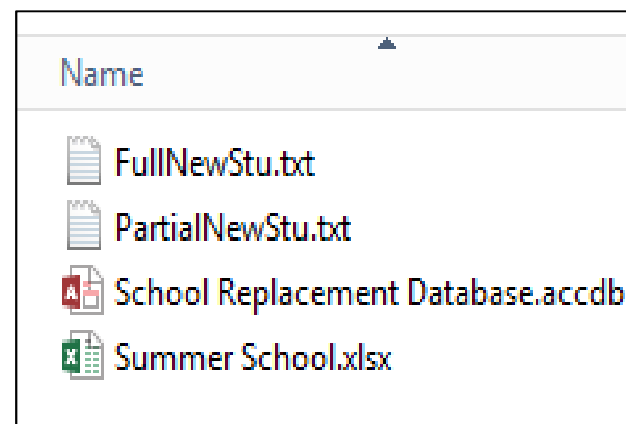
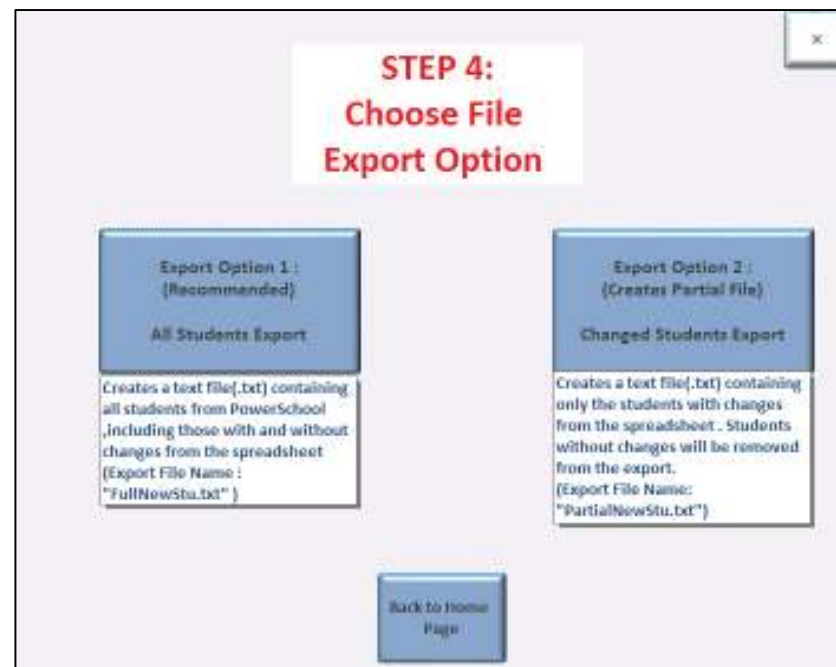
Option 1: All Students Export (Recommended)

This option produces a complete TIMS Extract containing all students with and without changes to their School Code and Ridership Codes.

Option 2: Changed Students Export Only

This option produces a TIMS Extract containing only the students that were listed in the Excel Spreadsheet. All other students (non-summer) would not be included in the TIMS Extract.

The All Students Export is recommended as operators may need all students within the TIMS Summer School Dataset in case assignments change and more students are added to the Summer Program at the last minute.



Other Applications of SS Database

Since the development and distribution of the Summer School Replacement Database, a number of school districts have begun using this school search and replace option on a daily basis to manage other irregular student assignments that cannot be correctly programmed and captured in PowerSchool.

Alternative School Placement is often short term, from 3 Day to 3 Weeks and students are not officially enrolled or reassigned to this school code, if the school code is even “official” and exists within the school system.

Special Needs Assignments can also vary by county such that a student may be enrolled in what would be their home school, but all classes occur at another school building. Sometime the student may not be assigned to the school they actually attend.

With a spreadsheet list of these irregular school assignments, TIMS Staff are now able to better manage data within TIMS and maintain assignments to irregular school codes during UPSTU and not experience lost assignments.

New Hanover County performs several iterations of this each day, with their new and improved data management procedures highlighted at a future session this week.

Questions or Comments?

Questions or Comments?

Fall Planning : Preparing Bus Routes for the First Day of School

Questions or Comments?

Questions or Comments?

*15th Annual
Student Transportation Leadership
Conference*

February 2020