

New TDTIMS Diagnostic for the 2022-2023 School Year

Diagnostic: Student Stop Distance > Half Mile

Purpose of the Student Stop Distance Diagnostic, How to Sort the File, Review Data and Make Corrections to Student Assignments.

Background & Purpose

As part of the new Annual Pupil Service Indicators Report (available online in 2023) we will be analyzing and reporting TIMS information at a much deeper level than ever before.

Some of the new measures being developed are related to the distribution of Student Stop Distances, which will report the walk distance from the student's home or alternate address to their assigned bus stop. We are calculating how many students have door/driveway stops, maximum walk distance, average walk distance; as well as distances at the 25th, 50th, 75th and 95th percentiles for assigned riders.

In looking at previous TDTIMS information, nearly every LEA has at least one student with a stop distance several miles away from their home address. Some districts have had dozens or hundreds of such assignments while others may only have a handful of students with extreme stop distances.

Some children may live on a long, no-travel road and can only be assigned to a corner stop where it intersects with the main road. Depending on how long their no-travel road is, they could show a valid and correct Stop Distance of 1+ miles. These students would not have to be fixed in TIMS as their walk distance shows correct information.

The errors seems to be primarily related to mismanagement of Student Alternate Address Locations for AM and PM. For example: if a student is assigned to a bus stop at a daycare or afterschool program, but the address for this location is not managed on the student screen in TIMS the system will calculate their walk distance to their home address and may show 10+ miles.

(See Example Screenshots on Next Slides)

Transportation Information

Location: 158 HERITAGE VIEW RD School: 304 - BETHLEHEM ELEMENTARY SCHOOL

Walk Dist. to School: 2.27 mi. Eligibility: 0 - Eligible Grade: 04

Drive Dist. to School: 2.27 mi. User Eligibility: 99 - Default value - no Elg. code yet Program:

Geo Dist. to School: 2.27 mi.

Home Stop Right Side Pickup Available Special Ed / IEP Max. Ride Ti

Additional Transportation

AM Location: AM Shuttle: [None]

AM School Walk Dist.: AM School Drive Dist.: AM School Geo Dist.:

AM Eligibility:

PM Location: PM Shuttle: [None]

PM School Walk Dist.: PM School Drive Dist.: PM School Geo Dist.:

PM Eligibility:

Student Trips

Active Stops Only

Type	P/U Location	D/O Location	Bell Time	Stop ID	Time at Stop	Stop Description	Stop Dist.	Route Code
To School	158 HERITAGE VIEW RD	249 BETHLEHEM ELEMENTARY S...	8:00 AM	304.020	7:02 AM	CREEKSIDE LN & HERITAGE VIEW RD	0.02 mi.	195
From School	249 BETHLEHEM ELEMENTARY S...	158 HERITAGE VIEW RD	3:10 PM	304.062	3:20 PM	MT. BETHEL CHURCH - AFTERSCHOOL PROG	2.17 mi.	171

School: 304 Sch Dist (Walk): 2.27 mi Location: 158 HERITAGE VIEW RD

Grade: 04 Sch Dist (Drive): 2.27 mi SIS Addr: 158 HERITAGE VIEW RD

Program: Sch Dist (Geo): 2.27 mi Eligibility: 0 School Path: Walk Path: Apt:

Modified: 02/04/2020 01 Created: 07/23/2012 User ID: STUDST User Elg: 99 SpEd / IEP Home Stop

Student Contact Information

City: HICKORY State / Prov: NC Zip / Postal: 28601 Publish in Directory

Primary Phone: 828-495-4163 Secondary Phone: Email:

AM Transportation

Location: Eligibility: 99 Sch Dist (Walk): Shuttle: Sch Dist (Drive): Sch Dist (Geo):

PM Transportation

Location: Eligibility: 99 Sch Dist (Walk): Shuttle: Sch Dist (Drive): Sch Dist (Geo):

AM Trn D: AM Trn T: AM Bus D: OD-Bndy: Local1: Local3:

PM Trn D: PM Trn T: PM Bus D: OD-Cnty: Local2: Local4:

Trip Table Contacts Student Needs Extra Info

Add	Edit	Delete	Quick Assign	Refresh	Active	Schedule	Deassign	New Stop	Columns
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inactive Flag	P/U Location	Stop Description	Run C...	Time@Stop	Stop Dist				
1	158 HERITAGE VIEW RD	CREEKSIDE LN & HERITAGE VIEW RD	MTWUF--	7:02 AM	0.0193				
2	249 BETHLEHEM ELEMENTA	FMT. BETHEL CHURCH - AFTERSCHOOL PROG	MTWUF--	3:20 PM	2.1739				

This child lives at 158 Heritage View Rd (highlighted in blue) and is assigned to a corner stop near their home address at Creekside Ln & Heritage View Rd in the AM and to a stop at an afterschool church program in the PM (highlighted in red).

Please note how their AM Stop Distance is 0.02 Miles to the corner, but their PM Stop Distance suggests they are walking home 2.17 miles from the stop at Mt. Bethel Church.

To fix the PM Stop Distance for this child TIMS Operators will need to enter the address to Mt. Bethel Church into the PM Transportation Location field (highlighted in green) and assign the student based on this Alternate Address.

See Next Slides for Corrected Student Information

Transportation Information

Location: 158 HERITAGE VIEW RD School: 304 - BETHLEHEM ELEMENTARY SCHOOL

Walk Dist. to School: 2.27 mi. Eligibility: 0 - Eligible Grade: 04

Drive Dist. to School: 2.27 mi. User Eligibility: 99 - Default value - no Elg. code yet Program:

Geo Dist. to School: 2.27 mi.

Home Stop Right Side Pickup Available Special Ed / IEP Max. Ride Time:

Additional Transportation

AM Location: AM Shuttle: [None]

AM School Walk Dist.: AM School Drive Dist.: AM School Geo Dist.:

AM Eligibility:

PM Location: 9042 NC HWY 127 PM Shuttle: [None]

PM School Walk Dist.: 1.27 mi. PM School Drive Dist.: 1.27 mi. PM School Geo Dist.: 1.27 mi.

PM Eligibility: 99 - Default value - no Elg. code yet

Student Trips

Active Stops Only

Type	P/U Location	D/O Location	Bell Time	Stop ID	Time at Stop	Stop Description	Stop Dist.	Route Code
To School	158 HERITAGE VIEW RD	249 BETHLEHEM ELEMENTARY S...	8:00 AM	304.020	7:02 AM	CREEKSIDE LN & HERITAGE VIEW RD	0.03 mi.	195
From School	249 BETHLEHEM ELEMENTARY S...	9042 NC HWY 127	3:10 PM	304.062	3:20 PM	MT. BETHEL CHURCH - AFTERSCHOOL PROG	0.0 mi.	171

School: 304 Sch Dist (Walk): 2.27 mi Location: 158 HERITAGE VIEW RD

Grade: 04 Sch Dist (Drive): 2.27 mi SIS Addr: 158 HERITAGE VIEW RD

Program: Sch Dist (Geo): 2.27 mi Eligibility: 0 School Path: Walk Path: Apt.

Modified: 09/22/2022 02 Created: 07/23/2012 User ID: TRANSFACAC User Elg: 99 SpEd / IEP Home Stop

Student Contact Information

City: HICKORY State / Prov: NC Zip / Postal: 28601 Publish in Directory

Primary Phone: 828-495-4163 Secondary Phone: Email:

AM Transportation

Location: 9042 NC HWY 127 Eligibility: 99 Sch Dist (Walk): Sch Dist (Drive): Sch Dist (Geo):

Shuttle: Sch Dist (Drive): 1.27 mi Sch Dist (Geo): 1.27 mi

AM Trn D: AM Trn T: AM Bus D: OD-Bndy: Local1: Local3:

PM Trn D: PM Trn T: PM Bus D: OD-Cnly: Local2: Local4:

Trip Table Contacts Student Needs Extra Info

Add	Edit	Delete	Quick Assign	Refresh	Active	Schedule	Deassign	New Stop	Columns
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inactive Flag	P/U Location	Stop Description	Run C...	Time@Stop	Stop Dist				
1	158 HERITAGE VIEW RD	CREEKSIDE LN & HERITAGE VIEW RD	MTWJF--	7:02 AM	0.0133				
2	249 BETHLEHEM ELEMENTARY S...	MT. BETHEL CHURCH - AFTERSCHOOL PROG	MTWJF--	3:20 PM	0.0000				

By entering the address to Mt. Bethel Church (9042 NC HWY 127) into the PM Alternate Location for this student (highlighted in green), TIMS now correctly shows the student PM Stop Distance as 0.0 miles (a door stop at the church)

Staff children that ride the bus to/from the school where their parent works will need to be managed in a similar fashion, as will children riding to/from grandparents house, daycare or any other non-home address location.

The new TDTIMS Diagnostic: Student Stop Distance > Half-Mile will create a spreadsheet of all students with a stop distance greater than 0.49 miles.

See next slides for information about the Stop Distance Diagnostic.

Bus Passes Reports
-Diagnostic: Route Riders Schdst <= 0 [12.4]
-Diagnostic: Students Stop Distance > Half Mile [12.4]
-Diagnostic: Students Stop not on Rte [12.4]
-TDTIMS: ALL STUDENTS ARCHIVE [12.4]
-TDTIMS: All Rider Distances [12.4]
-TDTIMS: Count of Valid Riders [12.4]
-TDTIMS: RIDERS ARCHIVE [12.4]
-TDTIMS: Student Archive [12.4]
-TDTIMS: Student Transportation Archive [12.4]
-Workbook: Count of Valid Riders [12.4]

The new diagnostic is located in Edulog Reports under User Defined > Bus Passes Diagnostic: Student Stop Distance > Half-Mile

Remember: a stop distance of a half-mile or more is not necessarily incorrect. Students may live on a long no-travel road or in the back of a sub-development that only has a corner stop at the main entrance.

The Stop Distance Diagnostic will create a spreadsheet inside the C:\TDTIMS folder on your server. The spreadsheet is sorted by PM Stop Distance and then by AM Stop Distance. For students with a transfer stop, the PM1 fields would be the 2nd bus they ride in the afternoon, the one that most likely drops them off at home or an afterschool location. The PM2 fields would only be populated if you have students doing a “double transfer” in which they switch buses twice and ride 3 different buses home. The PM2 Stop Distance would be of interest for these children.

For AM Stop Distances, only the one column needs to be reviewed.

H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V												
stu_schdist	drive	stua	loc	am_stop_desc	am_tripasn	dist	stop	pm_tripasn	dist	stop	pm1_rte_id	pm1_stop_desc	pm1_tripasn	dist	stop	pm2_rte_id	pm2_stop_desc	pm2_tripasn	dist	stop	pm3_rte_id	pm3_stop_desc	pm3_tripasn	dist	stop	
14.004				ARBOR SPRINGS DR & BOWMAN HILLS RD	3.53	72		0	1			ARBOR SPRINGS DR & BOWMAN HILLS RD	3.53	72												
6.5625				GLASS RD & PARSONVILLE RD	0.5	94		0	1			GLASS RD & PARSONVILLE RD	0.5	94												
15.6212				198 EAST ALEXANDER MIDDLE SCHOOL DR	15.36	04		15.36	0																	
2.0799				ALEXANDER HERITAGE DR & HERITAGE FARM RD	0			14.01	1																	
-2				ALLENDALE LN & MILLERSVILLE RD	13.57	62		13.57	1																	

- 1) Sort the spreadsheet, large to small, by PM2 Distance to Stop: review and correct any extreme values that are not valid.
- 2) Sort the spreadsheet, large to small, by PM1 Distance to Stop: review and correct any extreme values that are not valid.
- 3) Sort the spreadsheet, large to small, by PM Distance to Stop: review and correct any extreme values that are not valid.
- 4) Sort the spreadsheet, large to small, by AM Distance to Stop: review and correct any extreme values that are not valid.

Reminder: A stop distance greater than a half-mile is not always incorrect but extreme stop distances (7 miles, 15 miles, etc.) are surely invalid.