Transportation Information Management System 1

# North Carolina Pupil Transportation Service Indicators Report

# 2011-2012



Public Schools of North Carolina State Board of Education Department of Public Instruction



### PUBLIC SCHOOLS OF NORTH CAROLINA

**DEPARTMENT OF PUBLIC INSTRUCTION** | June St. Clair Atkinson, Ed.D., *State Superintendent* WWW.NCPUBLICSCHOOLS.ORG

### April 2, 2012

North Carolina pupil transportation professionals respond daily to a large variety of circumstances and challenges as they provide an essential service to nearly 800,000 students. Some districts serve large geographic areas; others serve relatively small areas. There are populous, rapidly growing urban districts and very rural ones, some of which are seeing population loss. Such disparate conditions have a large impact on the ability of the State to provide a uniform level of transportation service across LEAs. In addition to variations in geography and demography, variations in local policy affect the everyday experiences of students as they travel to and from school.

One of the most important tools available to Local Education Agencies (LEAs) in our state is the Transportation Information Management System (TIMS). TIMS, a systems initiative of the North Carolina Department of Public Instruction (through a software license with Education Logistics, Inc.), provides an LEA with a digital, geographic planning tool for student transportation. It features important optimization tools that can be used to improve the efficiency of transportation services. Use of TIMS (or another approved system) is required of all LEAs by G.S. 115C-240(d).

In addition to the benefit derived from the optimization tools, uniform reporting from TIMS makes possible the production of LEA-level and statewide data. In this document, data from all LEAs have been collected and summarized. The goal is to give school transportation providers and local policy makers a tool that will help them assess the quality of the services they provide. In this, its sixth year, the report continues to provide detailed data on service and operations that are available from no other source. We trust that this information will be useful to LEAs in the transportation planning process.

We want to express appreciation to the TIMS coordinators and data managers statewide who maintain this information, provided as part of annual LEA data submissions. Further, the TIMS support staff at UNC Charlotte and ITRE are to be commended for their ongoing support and coordination in the compilation of these data.

Ben Matthews, Director School Support Division

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### SCHOOL SUPPORT DIVISION

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### Notes on the 2011-2012 Indicator Data

#### **AVERAGES FOR THE STATE**

Throughout the report, North Carolina Averages are calculated from base data rather than from LEA averages.

#### **ANNUAL CHANGE SYMBOLS**

These symbols are used in several instances to denote direction of change in an Indicator from the previous year.

- + Increase
- Decrease
- = No change

#### VARIATIONS IN CODING

Data used in this report are gathered from the one hundred fifteen GIS datasets maintained in school district transportation departments across North Carolina. Though most LEAs use the same software, data coding practices can vary considerably. In some instances, this is due to varying levels of expertise on the part of the data managers; in others, to varying levels of demand being placed upon the data in support of operations; in still others, simply to preference.

#### **Bell TIMES AND PROGRAMS**

These data are probably most affected by differences in the ways that data managers approach the use of multiple arrival and departure times at schools. Accommodations can involve the use of programs (special school day schedules with their own, non-standard bell times), purposely incorrect school bell times or school arrival/departure windows, and secondary datasets devoted to transportation for exceptional programs. LEAs use of TIMS isn't driven by the needs of this report and shouldn't be, but one effect of varied approaches across LEAs is to make it difficult to avoid comparing apples with oranges—or even to tell an apple from an orange. The data items most affected by the use (or lack) of programs are 'Average School Bell Time Range' and 'Percentage of Buses Revisiting the Same School PM'.

#### DATA USED/DATA EXCLUDED

For 'theoretical' reasons—in an effort to make them more meaningful—not all Indicators reflect all the data. The set of data covered by an Indicator is noted in the section of the report devoted to it.

#### **OMITTED VALUES**

Data can exhibit a number of problems that don't prevent students from being transported but can make reported values unsuitable for individual examination or inclusion in a descriptive static. If you find that some values have been omitted, it is for this reason.

TIMS Service Indicators Table of Contents							
Page	Service Indicator	State Average					
2–3	Average Student Ride Time, AM	22 minutes					
2–3	Average Distance to School, Riders	4.34 miles					
2–3	Average Distance to School, All Students	4.33 miles					
4–5	Average of Longest 5% of Student Ride Times	67 minutes					
4–5	Average Distance to School for Longest 5% of Ride Times	8.38 miles					
6–7	Average of Student-to-Stop Distances < 1 Mile	476 feet					
6–7	% of Stop Distances > .5 & < 1 Mile	1.25					
6–7	% of Stop Distances < 1 Mile = 0	27.79					
8–9	Earliest Morning Pickup Time*	5:48 AM					
8–9	School Arrival Time for Earliest Morning Pickup*	7:40 AM					
10–11	Percent of Routes with Multiple Runs from the Same School	6.90					

#### **Operations Choices Affecting Service**

12	Range of School Start Times	62 minutes
13	Average Number of Runs per Rte, PM	1.71
13	Percent of Routes with More than One Run, PM	48.95
	*State-wide value is the median .	
14	Contacts	_

#### TIMS Service Indicators Table of Contents

### Student Ride Times, AM

### DEFINITIONS

This Indicator represents the experience of students in EC and Regular datasets, all programs. Ride times and distances to school equal to 0 are excluded as errors in the data.

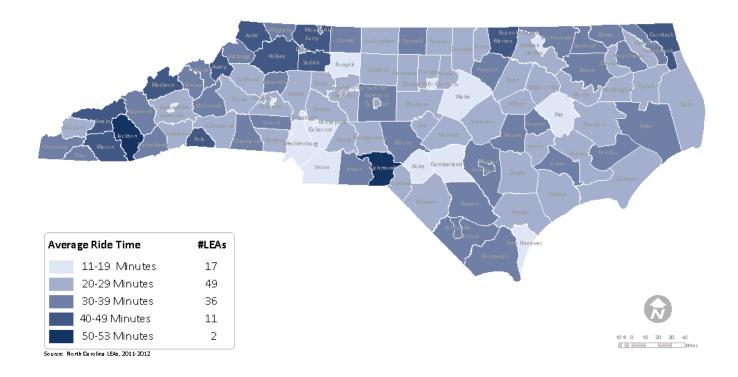
- Average Ride Time (Minutes): Average of all bus riders' AM travel to school. This includes only time spent on a moving bus: time spent waiting for a transfer bus to arrive isn't included. Ride times of 0 are excluded as errors.
- Average Distance to School, Riders Only (Miles): TIMS calculates a student's distance to school by finding the shortest path along the street network. This will not necessarily be the path the bus actually travels. Average distance from home to school for bus riders is shown to provide context for the average morning ride time. Distances of 0 are excluded as errors.
- Average Distance to School, All Students (Miles): The average distance for all students enrolled is shown for comparison to the distance for bus riders.

STATE-WIDE AVERAGES	2011-12	2010-11
Average Ride Time	22	23
Average Distance to School, Riders Only	4.34	4.34
Average Distance to School, All Students	4.33	4.35

#### **ABOUT SERVICE**

A child's ride time should correspond roughly to the distance from home to school. However, the expected correspondence is compromised by anything that slows or delays the bus or causes it to depart from the shortest path used to calculate distance to school. LEA policies and site-specific conditions that are beyond the LEA's control impact student ride time. Policies that can result in longer ride times include the placement of programs for exceptional children and the use of larger buses. The frequency and location of school bus stops also has a significant impact. For instance, locating school bus stops in private subdivisions and routing buses on short deadend roads takes additional time and results in longer rides. Student population density, traffic congestion, and speed limit are site-specific conditions over which an LEA has little control.

## Average Student Ride Time, A.M.



### TIMS Service Indicators, 2011-2012: Student Ride Times, AM

		Aver Distan Scho	ce to			Aver Distan Sche	ice to			Ave Distar Sch	nce to
LEA	Avg Ride Time	Riders Only	All Stu.	LEA	Avg Ride Time	Riders Only	All Stu.	LEA	Avg Ride Time	Riders Only	All Stu.
Alamance-Burlington	22-	3.85+	3.77+	Edgecombe	27-	5.20-	5.03+	Chapel Hill- Carrboro	14=	2.52-	2.36+
Alexander	34+	5.07-	5.37+	W-S/Forsyth	17=	3.63-	3.72+	Pamlico	38-	7.56-	7.60+
Alleghany	35-	4.76-	5.07+	Franklin	37+	5.86-	5.83+	Pasquotank	28-	4.66+	4.39-
Anson	33=	5.85-	5.86-	Gaston	25=	2.93-	3.09+	Pender	26-	6.10-	6.15+
Ashe	49-	7.62-	7.66+	Gates	34=	7.17-	7.11+	Perquimans	38-	7.01-	6.71+
Avery	43+	5.94+	6.07+	Graham	22-	6.20+	5.68+	Person	29+	5.32+	5.66+
Beaufort	25+	6.36+	6.32+	Granville	24+	5.50+	5.32+	Pitt	17-	4.18-	4.15+
Bertie	33=	8.54-	9.00+	Greene	39+	7.46-	7.22+	Polk	40+	6.50+	6.45+
Bladen	34+	7.70+	7.56+	Guilford	23+	3.97+	3.78+	Randolph	34+	5.35+	5.38+
Brunswick	35=	6.99+	6.97+	Halifax	24=	7.59-	7.61-	Asheboro	27+	2.13-	2.26+
Buncombe	24-	4.01+	4.03+	Roanoke Rapids	12+	1.79+	1.30+	Richmond	50+	4.23+	4.34+
Asheville	16+	2.88-	3.13+	Weldon	19+	3.84+	4.28+	Robeson	23-	4.19+	4.50+
Burke	23=	4.01+	4.39+	Harnett	26-	5.20-	5.18+	Rockingham	27-	4.84-	4.82+
Cabarrus	18=	3.64+	3.68+	Haywood	35-	4.6+	4.62+	Rowan-Salisbury	24=	3.93-	4.05+
Kannapolis	19+	1.95+	1.87+	Henderson	27=	4.22-	4.28+	Rutherford	29+	4.73+	4.90+
Caldwell	26=	3.92-	4.08+	Hertford	35+	6.76+	6.73+	Sampson	33+	7.21+	7.13+
Camden	35-	8.70+	8.25+	Hoke	19-	5.71-	5.50+	Clinton	30-	3.79+	3.99+
Carteret	22=	5.11-	5.19+	Hyde	31-	12.68-	9.59+	Scotland	24-	4.67-	4.62-
Caswell	35+	9.27+	9.06+	Iredell-Statesville	23=	4.82+	4.88+	Stanly	28+	4.07+	4.03+
Catawba	20=	4.48-	4.35+	Mooresville	17=	2.76-	2.71+	Stokes	39-	5.77-	5.68+
Hickory	21+	2.77+	2.57+	Jackson	51+	5.74-	5.82+	Surry	41+	5.36-	5.75+
Newton-Conover	17-	2.60-	2.85+	Johnston	22+	4.20-	4.28+	Elkin	23+	3.57+	4.15+
Chatham	28=	5.02+	5.32+	Jones	30-	6.91-	7.22-	Mount Airy	34+	2.51+	2.95+
Cherokee	31-	5.40-	5.41-	Lee	24-	4.28-	4.40+	Swain	48-	6.19+	6.00+
Edenton/Chowan	28-	8.85+	8.37+	Lenoir	26=	4.91+	5.01+	Transylvania	32=	5.11+	5.05+
Clay	31-	5.87+	5.77+	Lincoln	30=	4.81+	4.74+	Tyrell	27-	6.02+	5.20+
Cleveland	36+	4.87+	4.75+	Macon	48-	5.26-	5.12+	Union	19+	3.73+	3.81+
Columbus	33+	6.35+	6.35+	Madison	45+	9.01+	9.17+		25+	3.86-	4.11+
								Vance			
Whiteville	34=	4.40+	4.20-	Martin	26=	4.60-	4.75-	Wake	16=	4.28-	4.02-
Craven	26=	5.51+	5.34+	McDowell	36+	5.49-	5.40+	Warren	40=	6.76-	7.35+
Cumberland	17-	3.17+	3.29+	Charlotte-Meck.	13-	3.37-	3.43-	Washington	23-	5.58+	5.37+
Currituck	41+	7.90-	7.95+	Mitchell	38+	5.81-	5.76+	Watauga	32+	4.95-	5.33+
Dare	22=	4.81-	4.47+	Montgomery	27+	5.25+	5.45+	Wayne	33+	4.29-	4.51+
Davidson	28=	4.50+	4.48+	Moore	32-	5.19-	5.27+	Wilkes	44+	4.92+	5.29+
Lexington	20=	2.25+	2.31-	Nash- Rocky Mount	27+	5.54+	5.00+	Wilson	23-	4.03+	3.62+
Thomasville	16=	1.82+	2.06+	New Hanover	19-	3.45+	3.37+	Yadkin	45-	5.00-	5.57+
Davie	23-	5.30-	5.61+	Northampton	33+	7.98+	8.1+	Yancey	39-	5.61-	5.59+
Duplin	28+	5.73+	5.85+	Onslow	20=	4.68+	4.43+				
Durham	22=	3.61-	3.76+	Orange	26=	5.61+	5.62+	State Average	22-	4.34=	4.33-

Symbols indicate change from previous year: + - later time or longer distance, — - earlier time or shorter distance, = - no change, no symbol - new data this year. Source: NC Local Education Agencies 2011-2012 TIMS Data. Compiled at UNC Charlotte Urban Institute.

### Longest 5% of Student Ride Times

### DEFINITIONS

This Indicator represents the experience of students in EC and Regular datasets, all programs.

- Average of Longest 5% of Student Ride Times (Minutes): The longest 5% of ride times for each LEA were pulled from TIMS data and averaged.
- Average Distance for Longest 5% of Ride Times (Miles): The student-to-school distance for a child is the distance along the shortest path that a bus could travel between a child's home and the child's school, according to the TIMS digital map maintained by the LEA. It is not the distance the child actually travels. This indicator shows the average of the student-to-school distances for the longest 5% of student ride times within each LEA.

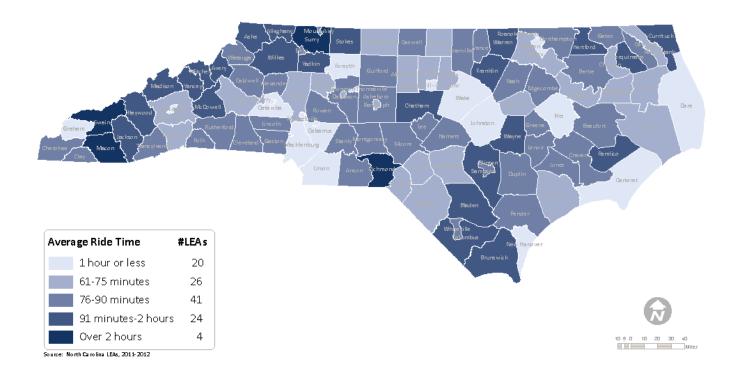
STATE-WIDE AVERAGES	2011-12	2010-11
Average of Longest 5% of Student Ride Times	67	69
Average Distance for Longest 5% of Ride Times	8.38	8.32

The state-wide values are the averages of the combined sets of each LEA's longest 5% of ride times and the distances to school associated with them.

#### **ABOUT SERVICE**

By highlighting extreme ride times, this indicator illustrates the experience of the students who are receiving what is arguably the worst service as it is measured by the ride time indicator.

## Average of Longest 5% of Student Ride Times



### TIMS Service Indicators, 2011-2012: Longest 5% of Student Ride Times

LEA	Average of Longest 5% Ride Times	Avg Dist for Longest 5% Ride Times	LEA	Average of Longest 5% Ride Times	Avg Dist for Longest 5% Ride Times	LEA	Average of Longest 5% Ride Times	Avg Dist for Longest 5% Ride Times
Alamance-Burlington	69-	7.67+	Edgecombe	77-	9.33-	Chapel Hill- Carrboro	37-	3.59-
Alexander	84-	7.71+	W-S/Forsyth	55+	7.25-	Pamlico	103+	13.74+
Alleghany	93-	10.05-	Franklin	101+	8.36+	Pasquotank	85-	7.56+
Anson	83+	10.39+	Gaston	77+	5.26+	Pender	81-	12.85+
Ashe	107-	12.84+	Gates	79-	7.29-	Perquimans	92+	11.46-
Avery	107+	11.79+	Graham	53-	10.87+	Person	73+	10.49-
Beaufort	78+	13.35+	Granville	78+	11.78+	Pitt	59-	8.19+
Bertie	84=	15.27=	Greene	84-	8.34-	Polk	89+	10.74+
Bladen	101+	16.95+	Guilford	79+	8.02-	Randolph	84-	8.10-
Brunswick	99+	13.61+	Halifax	66+	13.32-	Asheboro	73+	2.13-
Buncombe	70-	6.62-	Roanoke Rapids	32+	2.28+	Richmond	122+	6.04-
Asheville	40+	3.45+	Weldon	54-	7.70-	Robeson	67-	6.19+
Burke	71-	6.25-	Harnett	82-	8.79+	Rockingham	74-	8.06-
Cabarrus	54+	7.40+	Haywood	98+	10.68+	Rowan-Salisbury	76+	7.73+
Kannapolis	47+	2.32-	Henderson	74+	6.60+	Rutherford	87+	8.6+
Caldwell	85+	6.14-	Hertford	103+	12.61+	Sampson	91+	12.34+
Camden	70-	13.23-	Hoke	61+	12.89+	Clinton	85-	5.76+
Carteret	57-	11.17-	Hyde	71-	21.66-	Scotland	73-	9.38-
Caswell	84+	14.41+	Iredell-Statesville	63+	8.89+	Stanly	79+	6.31+
Catawba	54-	7.14+	Mooresville	42-	3.68+	Stokes	103-	10.62+
Hickory City	67+	5.06+	Jackson	120+	10.17-	Surry	121+	7.34-
Newton-Conover	56-	8.75+	Johnston	56+	7.47-	Elkin	88+	4.14-
Chatham	96+	10.45+	Jones	82-	16.12+	Mount Airy	80+	2.17+
Cherokee	84-	9.74+	Lee	76-	6.22-	Swain	122-	10.66+
Edenton/Chowan	65-	14.16+	Lenoir	76-	8.96-	Transylvania	82+	8.65-
Clay	88-	11.39+	Lincoln	80+	6.06+	Tyrell	74-	12.44-
Cleveland	88+	6.25-	Macon	124-	6.98-	Union	57+	8.79+
Columbus	92+	14.59+	Madison	106+	9.42-	Vance	87-	6.04+
Whiteville	79+	6.62+	Martin	74+	9.74-	Wake	53-	9.93-
Craven	79+	11.54-	McDowell	98+	11.71+	Warren	102-	10.81-
Cumberland	61-	6.31+	Charlotte-Meck.	45-	7.88-	Washington	61+	7.62-
Currituck	117+	17.87+	Mitchell	97+	14.84+	Watauga	87+	10.44+
Dare	58+	7.60-	Montgomery	78+	10.95+	Wayne	104-	6.92+
Davidson	78+	6.43+	Moore	88-	7.07-	Wilkes	118+	9.31+
Lexington	69+	4.65+	Nash - Rocky Mount	76+	8.95+	Wilson	75-	5.86-
Thomasville	35+	1.96-	New Hanover	58-	6.83+	Yadkin	104-	9.19+
Davie	71+	9.86+	Northampton	87+	11.32+	Yancey	103-	8.32+
Duplin	83+	9.61-	Onslow	62+	8.62-			
Durham	64-	6.44-	Orange	72-	9.98-	State Average	67-	8.38+

Symbols indicate change from previous year: + - later time or longer distance, — - earlier time or shorter distance, = - no change, no symbol - new data this year. Source: NC Local Education Agencies 2011-2012 TIMS Data. Compiled at UNC Charlotte Urban Institute.

### Student-to-Stop Distances, AM

### DEFINITIONS

This set of Indicators considers the lengths of students' walks from their homes to their stops. It represents the experience of students in EC and Regular datasets, all programs. Distances of 0 are included; negative distances are excluded as data errors. Under the assumption that no child in North Carolina walks a mile or more to their stop and since some students travel to their stops via private conveyance, distances of 1 mile and greater were removed from consideration. 2.6% of riders statewide have distances to stop greater than 1 mile.

- Average of Student-to-Stop Distances < 1 Mile, AM: The average walk from home to stop for distances less than one mile. In feet.
- % of Stop Distances .5 & < 1 Mile: This small percentage of all riders represents those with the longest walks to stops and others who ride to a stop. A bus is not to deviate from its path for a distance of less than one half mile for fewer than ten students (except in the cases of unescorted pupils in

State-wide Averages	2011-12	2010-11
Average of Student-to-Stop Distances < 1 Mile, AM	476	469
% of Stop Distances > .5 & < 1 Mile	1.25	1.33
% of Stop Distances < 1 Mile = 0	27.79	28.55

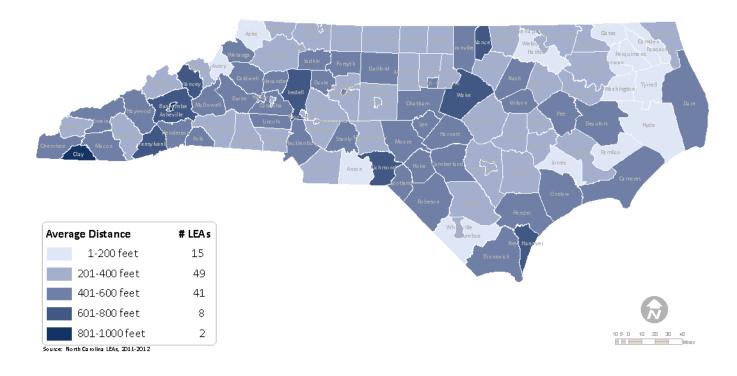
grades K-3 or special education pupils) and no child can be required to walk more than 1 mile to a stop.

% of Stop Distances < 1 Mile = 0: Percent of students with stop distances less than one mile that are picked up immediately in front of their home.

#### **ABOUT SERVICE**

The student-to-stop distance has two interpretations for service. Individuals typically see a very short distance to stop as positive for service. However, when a bus makes a greater number of stops in order to provide students with bus-to-door service, the student ride times generally increase.

## Average of Student-to-Stop Distances



### TIMS Service Indicators, 2011-2012: Student-to-Stop Distances, AM

LEA	Avg of Dist <1 Mile	% of Dist > .5 & <1 Mile	% of Dist <1 Mile = 0	LEA	Avg of Dist < 1 Mile	% of Dist > .5 & <1 Mile	% of Dist < 1 Mile = 0	LEA	Avg of Dist < 1 Mile	% of Dist > .5 & <1 Mile	% of Dist <1 Mile = 0
Alamance- Burlington	280-	0.80+	43.77-	Edgecombe	348-	0.66-	37.17+	Chapel Hill- Carrboro	575+	1.38-	20.58-
Alexander	454-	1.78-	29.05-	W-S/Forsyth	550+	1.20+	19.99-	Pamlico	180+	0.60-	70.39-
Alleghany	300+	2.50+	59.33-	Franklin	320+	0.81-	53.09+	Pasquotank	184+	0.77+	66.08-
Anson	188-	0.78-	70.15-	Gaston	308-	0.82+	36.50-	Pender	462+	2.29-	39.99-
Ashe	153+	0.70-	82.49-	Gates	73-	0.50-	77.78+	Perquimans	40-	0.00-	89.77+
Avery	88-	1.17-	75.36+	Graham	217-	1.17-	71.85+	Person	224+	0.45+	43.70+
Beaufort	453+	2.15+	35.63+	Granville	434-	2.35-	47.24+	Pitt	576+	0.44-	14.40-
Bertie	293=	0.22=	36.50=	Greene	307-	0.44-	46.92+	Polk	548+	5.93+	55.90-
Bladen	330-	0.56-	40.92+	Guilford	414-	1.18-	32.24-	Randolph	288+	1.40+	54.92-
Brunswick	511+	1.78+	27.92-	Halifax	190-	0.82+	56.85+	Asheboro	239-	0.00-	27.60+
Buncombe	614+	3.46-	31.45-	Roanoke Rapids	543+	0.94+	10.23-	Richmond	718+	7.6+	41.44-
Asheville	804-	2.34-	6.49+	Weldon	240-	0.31-	47.23+	Robeson	444-	1.76-	31.62+
Burke	530+	0.88-	25.84-	Harnett	599+	3.62+	26.34-	Rockingham	350-	0.73-	39.42+
Cabarrus	393+	0.44-	23.65-	Haywood	548+	3.35+	34.57-	Rowan- Salisbury	354-	1.73+	51.81+
Kannapolis	251-	0.32-	40.92+	Henderson	532-	2.49-	31.15+	Rutherford	226+	0.99+	64.85+
Caldwell	417-	1.26-	35.21-	Hertford	237-	1.99-	63.83+	Sampson	380-	1.01+	37.78-
Camden	124-	0.00-	69.32+	Hoke	415+	1.27+	27.16+	Clinton	394+	0.44-	30.58-
Carteret	517-	2.57-	37.00+	Hyde	127+	0.26-	71.31-	Scotland	506-	3.26-	32.53+
Caswell	206-	1.15-	77.98+	Iredell- Statesville	638-	3.01-	23.74+	Stanly	511+	1.52-	30.89-
Catawba	477+	1.79+	30.31-	Mooresville	346-	0.43-	16.44+	Stokes	379+	2.84+	53.87-
Hickory	591+	2.48+	20.30-	Jackson	252+	1.69+	73.61-	Surry	399-	1.38-	47.47+
Newton-Conover	269-	0.29-	41.94-	Johnston	400+	0.68+	34.18-	Elkin	342-	1.77-	42.70+
Chatham	591-	3.08+	32.65-	Jones	150+	1.01+	74.75-	Mount Airy	332-	0.17-	42.22+
Cherokee	422+	3.73+	55.84-	Lee	482+	1.80+	31.21-	Swain	526-	1.82+	29.91+
Edenton/Chowan	104-	0.19-	67.84-	Lenoir	271+	1.49-	54.91+	Transylvania	717-	5.45-	26.70+
Clay	990+	9.94+	26.47-	Lincoln	468+	1.45-	31.74-	Tyrell	128-	0.47-	70.39+
Cleveland	257-	0.73-	51.94-	Macon	494+	3.25+	46.06-	Union	270-	0.42-	34.21+
Columbus	193+	0.63+	59.77-	Madison	364+	2.55+	65.39+	Vance	705+	6.18+	30.34-
Whiteville	253+	0.99+	48.15-	Martin	261+	2.29+	64.16-	Wake	647+	1.41+	12.15-
Craven	360-	1.10-	31.84-	McDowell	508-	2.19+	40.84+	Warren	357-	0.56-	38.63-
Cumberland	521+	0.18-	11.72-	Charlotte- Meck.	585-	0.56-	9.87-	Washington	196-	0.83-	64.34-
Currituck	329+	0.70+	45.59-	Mitchell	201-	1.10-	66.55+	Watauga	492+	2.35-	42.60-
Dare	451-	1.67+	29.57+	Montgomery	355-	3.24+	60.19+	Wayne	376-	0.46-	26.47+
Davidson	350+	1.44+	48.50-	Moore	472+	3.82+	50.98-	Wilkes	235+	0.64-	56.50-
Lexington	596-	2.09+	25.24+	Nash- Rocky Mount	465+	0.27+	18.88-	Wilson	462+	0.74+	28.07-
Thomasville	341+	0.00=	25.59-	New Hanover	663-	3.30-	23.67-	Yadkin	528+	0.88-	36.71-
Davie	521-	1.43-	30.59+	Northampton	249-	0.56-	49.20+	Yancey	738-	6.90-	31.15+
Duplin	317-	0.50-	40.72+	Onslow	485+	2.14+	30.05-				
Durham	349-	0.20-	34.71+	Orange	292+	1.36+	62.39+	State Average	476+	1.25-	27.79-

Symbols indicate change from previous year: + - later time or longer distance, - - earlier time or shorter distance, = - no change, no symbol - new data this year.

Source: NC Local Education Agencies 2011-2012 TIMS Data. Compiled at UNC Charlotte Urban Institute.

### **Earliest Morning Pickup Time**

### DEFINITIONS

The Indicator covers all stops used by students in all programs and datasets.

- **Earliest Morning Pickup Time:** This is the earliest time that a bus arrives at a stop to pick up a child.
- **Arrival Time:** The time that students boarding at the earliest pickup location arrive at school. If more than one student uses the earliest stop, or if more than one stop share the earliest time, the arrival time of the child with the longest ride time is shown.

### **ABOUT SERVICE**

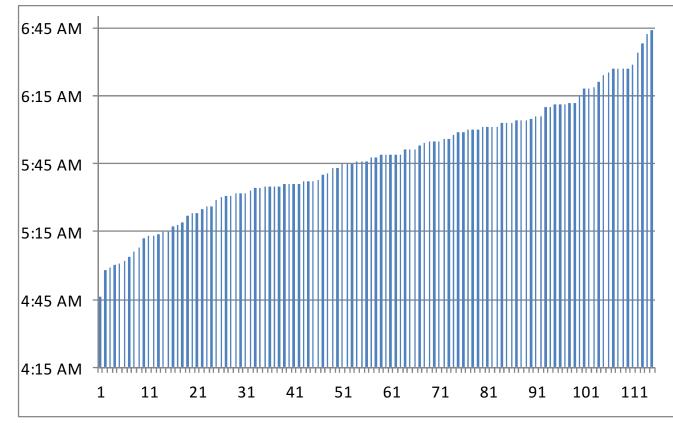
Extremely early pickup times are obviously, in themselves, an issue of service. When coupled with a long ride, an early

State-wide Median	2011-12	2010-11
Earliest Morning Pickup Time	5:48 AM	5:52 AM
Arrival Time	7:40 AM	7:40 AM

pickup might present a student with a particularly challenging start to the day.

Very early pickup times for students may be caused by several things. Use of early bell times that necessitate early run starts is one.

These data represent one or more students at one stop, not the overall average. The LEA ride time averages (pages 4-5) yield a better understanding of how these specific cases relate to a district's overall operations.



## Earliest Morning Pickup Time

#### **Count of LEAs**

8

**Earliest Pickup Time** 

### TIMS Service Indicators, 2011-2012: Earliest Morning Pickup Time

LEA	Earliest Pickup AM	Arrival Time	LEA	Earliest Pickup AM	Arrival Time	LEA	Earliest Pickup AM	Arrival Time
Alamance-Burlington	5:34 AM+	7:45 AM+	Edgecombe	5:48 AM-	7:25 AM-	Chapel Hill-Carrboro	6:24 AM+	7:25 AM=
Alexander	6:04 AM+	7:45 AM-	W-S/Forsyth	5:33 AM=	7:00 AM+	Pamlico	5:36 AM-	7:45 AM-
Alleghany	5:55 AM-	7:42 AM=	Franklin	5:23 AM-	8:32 AM+	Pasquotank	5:40 AM+	7:20 AM+
Anson	5:25 AM-	7:15 AM+	Gaston	5:49 AM-	7:55 AM-	Pender	5:31 AM-	7:45 AM-
Ashe	5:45 AM+	7:32 AM-	Gates	6:34 AM+	8:00 AM-	Perquimans	6:04 AM+	8:06 AM+
Avery	5:51 AM+	7:55 AM-	Graham	6:18 AM+	7:30 AM=	Person	6:25 AM+	7:52 AM-
Beaufort	5:35 AM-	7:45 AM+	Granville	6:10 AM+	7:10 AM-	Pitt	5:06 AM-	7:41 AM+
Bertie	5:31 AM-	8:20 AM+	Greene	5:55 AM-	8:05 AM+	Polk	6:11 AM-	8:00 AM+
Bladen	4:58 AM-	7:37 AM+	Guilford	5:04 AM-	7:25 AM=	Randolph	5:45 AM=	7:43 AM+
Brunswick	4:59 AM-	7:49 AM+	Halifax	5:46 AM-	7:25 AM=	Asheboro	6:05 AM-	7:30 AM=
Buncombe	5:13 AM-	7:42 AM-	Roanoke Rapids	6:44 AM+	7:18 AM+	Richmond	6:00 AM=	8:16 AM+
Asheville	6:27 AM+	7:25 AM-	Weldon	6:38 AM+	7:25 AM-	Robeson	6:00 AM+	7:35 AM+
Burke	5:13 AM-	7:40 AM-	Harnett	5:12 AM-	7:56 AM+	Rockingham	5:51 AM+	7:25 AM-
Cabarrus	5:37 AM+	7:45 AM+	Haywood	5:46 AM+	7:55 AM-	Rowan-Salisbury	5:18 AM-	6:47 AM-
Kannapolis	6:03 AM-	7:10 AM-	Henderson		7:06 AM-	Rutherford		7:25 AM-
Caldwell	5:15 AM-	6:51 AM-	Hertford	5:35 AM-	7:43 AM-	Sampson	5:17 AM-	7:20 AM-
Camden	6:27 AM+	7:40 AM=	Hoke	6:06 AM+	7:15 AM-	Clinton	5:37 AM-	8:15 AM+
Carteret	6:15 AM+	7:48 AM+	Hyde	5:58 AM+	7:30 AM+	Scotland	5:43 AM-	7:45 AM+
Caswell	5:32 AM-	6:52 AM+	Iredell-Statesville	5:35 AM-	7:15 AM-	Stanly	5:37 AM-	7:30 AM=
Catawba	6:04 AM-	8:05 AM-	Mooresville	6:19 AM-	7:15 AM-	Stokes	5:26 AM+	7:25 AM-
Hickory City	5:49 AM-	8:10 AM+	Jackson	5:51 AM-	8:55 AM+	Surry	5:01 AM-	7:43 AM-
Newton-Conover	6:12 AM+	7:23 AM-	Johnston	5:29 AM-	7:05 AM+	Elkin	6:11 AM-	7:53 AM-
Chatham	4:46 AM-	7:40 AM-	Jones	5:38 AM-	7:25 AM-	Mount Airy	6:10 AM+	7:19 AM-
Cherokee	6:01 AM+	7:45 AM+	Lee	5:43 AM+	7:00 AM-	Swain	5:26 AM+	7:50 AM+
Edenton/Chowan	6:27 AM+	7:40 AM=	Lenoir	5:36 AM+	7:30 AM=	Transylvania	5:53 AM-	7:46 AM+
Clay	6:21 AM+	7:55 AM=	Lincoln	5:41 AM+	7:30 AM+	Tyrell	6:27 AM+	7:47 AM+
Cleveland	6:01 AM+	7:50 AM+	Macon	6:03 AM+	8:47 AM-	Union	6:00 AM+	7:20 AM-
Columbus	5:46 AM-	7:40 AM=	Madison	6:01 AM-	7:50 AM-	Vance	5:49 AM+	7:49 AM-
Whiteville	5:54 AM-	7:26 AM=	Martin	6:06 AM-	7:30 AM-	Wake	5:30 AM-	7:08 AM-
Craven	5:32 AM+	6:34 AM-	McDowell	5:45 AM-	7:55 AM-	Warren	5:48 AM+	7:55 AM+
Cumberland	5:32 AM+	7:09 AM-	Charlotte-Meck.	5:08 AM+	6:46 AM-	Washington	6:18 AM=	7:40 AM=
Currituck	5:00 AM-	8:00 AM+	Mitchell	5:49 AM-	7:50 AM=	Watauga	5:49 AM-	7:39 AM+
Dare	6:29 AM+	7:20 AM=	Montgomery	5:55 AM-	7:40 AM-	Wayne	5:15 AM+	7:55 AM+
Davidson	5:56 AM+	9:47 AM+	Moore	5:35 AM+	7:40 AM-	Wilkes	5:14 AM+	7:32 AM+
Lexington	5:19 AM-	7:00 AM+	Nash- Rocky Mount	5:36 AM+	7:30 AM+	Wilson	6:01 AM+	7:20 AM-
Thomasville	6:42 AM=	7:25 AM=	New Hanover	6:03 AM+	7:15 AM-	Yadkin	5:59 AM-	7:57 AM-
Davie	6:12 AM-	8:05 AM=	Northampton	5:59 AM-	7:55 AM=	Yancey	5:36 AM+	7:35 AM-
Duplin	5:22 AM-	7:40 AM-	Onslow	5:02 AM-	7:00 AM-			
Durham		7:15 AM+	Orange		7:20 AM-	State Median	5:48 AM-	7:40 AM

Source: NC Local Education Agencies 2011-2012 TIMS Data. Compiled at UNC Charlotte Urban Institute.

### % of Routes with Multiple Runs from the Same School

### DEFINITIONS

This Indicator includes only afternoon portions of routes for the default program for Regular Transportation. The calculation counts each bus with multiple same-school runs once, whether it visits the school two, three or more times.

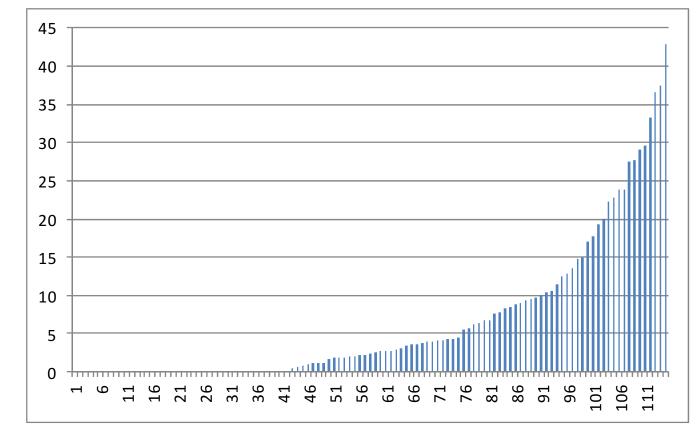
### **ABOUT SERVICE**

Multiple runs from the same school require that a second and possibly third load of students wait at the school in the afternoon while the bus completes its prior run. This is often unproductive time for students and the staff members charged

STATE-WIDE AVERAGES	2011-12	2010-11
Percent of Routes with Multiple Runs from the Same School	6.90	6.60

with their supervision. The use of multiple runs to the same school is an efficiency strategy used by districts that has direct impact on children 's waiting time.

## Percent of Routes with Multiple Runs from the Same School



**Count of LEAs** 

### TIMS Service Indicators, 2011-2012: % of Routes with Multiple Runs from the Same School

LEA	% of Routes with Multiple Runs from Same School	LEA	% of Routes with Multiple Runs from Same School	LEA	% of Routes with Multiple Runs from Same School
Alamance-Burlington	22.22+	Edgecombe	2.65+	Chapel Hill-Carrboro	0.00=
Alexander	0.00=	W-S/Forsyth	2.26+	Pamlico	4.17+
Alleghany	0.00=	Franklin	12.77+	Pasquotank	0.00=
Anson	0.00=	Gaston	13.62-	Pender	2.15-
Ashe	0.00=	Gates	0.00=	Perquimans	0.00=
Avery	0.00=	Graham	0.00=	Person	0.00-
Beaufort	4.21=	Granville	9.43+	Pitt	0.54-
Bertie	0.00=	Greene	1.96+	Polk	0.00=
Bladen	1.19+	Guilford	9.50-	Randolph	7.78-
Brunswick	0.00=	Halifax	0.00=	Asheboro	10.53-
Buncombe	36.54+	Roanoke Rapids	0.00=	Richmond	22.73-
Asheville	10.34=	Weldon City	6.67+	Robeson	17.04+
Burke	23.81-	Harnett	1.71+	Rockingham	4.10+
Cabarrus	0.00=	Haywood	14.86=	Rowan-Salisbury	1.78+
Kannapolis	6.25+	Henderson	37.5=	Rutherford	0.00=
Caldwell	29.17+	Hertford	5.71+	Sampson	0.00=
Camden	4.00=	Hoke	1.11-	Clinton	3.85=
Carteret	1.02-	Hyde	0.00=	Scotland	2.70=
Caswell	0.00=	Iredell-Statesville	0.48-	Stanly	12.50-
Catawba	4.22-	Mooresville	2.78+	Stokes	1.14+
Hickory	8.33-	Jackson	2.56+	Surry	0.00=
Newton-Conover	33.33=	Johnston	3.62+	Elkin	42.86+
Chatham	5.56-	Jones	0.00=	Mount Airy	0.00=
Cherokee	4.44-	Lee	6.67-	Swain	9.09=
Edenton/Chowan	0.00=	Lenoir	0.88+	Transylvania	20.00-
Clay	0.00=	Lincoln	27.68+	Tyrell	0.00=
Cleveland	2.92+	Macon	19.23=	Union	2.45-
Columbus	0.00=	Madison	0.00=	Vance	23.86=
Whiteville	0.00-	Martin	1.79+	Wake	11.48+
Craven	27.45+	McDowell	10.00+	Warren	0.00=
Cumberland	0.00=	Charlotte-Meck.	0.11+	Washington	0.00=
Currituck	8.89+	Mitchell	3.12+	Watauga	0.00=
Dare	9.76-	Montgomery	8.47-	Wayne	14.78-
Davidson	1.78+	Moore	3.48+	Wilkes	29.55+
Lexington	0.00=	Nash- Rocky Mount	0.00-	Wilson	3.96-
Thomasville	7.69=	New Hanover	0.00-	Yadkin	6.35+
Davie	17.81=	Northampton	0.00=	Yancey	0.00=
Duplin	0.00=	Onslow	2.00-		
Durham	3.54+	Orange	0.00=	State Average	6.90+

Symbols indicate change from previous year: + - later time or longer distance, — - earlier time or shorter distance, = - no change, no symbol - new data this year. Source: NC Local Education Agencies 2011-2012 TIMS Data. Compiled at UNC Charlotte Urban Institute.

### TIMS Service Indicators, 2011-2012: School Start Times, AM

A larger range of bell times makes it easier to use buses efficiently without revisiting the same school. Revisiting a school, as noted on pages 10 and 11, can be detrimental to service levels. The State values for First and Last are medians. The Range is the average.

	School Start Times			School Start Times				School Start Times			
LEA	First	Last	Range	LEA	First	Last	Range	LEA	First	Last	Range
Alamance-Burlington	7:45	12:00p	255-	Edgecombe	7:40	9:00	80-	Chapel Hill-Carrboro	7:50	8:45	55-
Alexander	7:50	8:05	15-	W-S/Forsyth	7:25	9:15	110-	Pamlico	7:50	8:00	10=
Alleghany	7:50	8:05	15-	Franklin	7:30	11:00	210-	Pasquotank	7:15	8:05	50-
Anson	7:20	8:25	65=	Gaston	7:45	8:30	45=	Pender	7:30	8:45	75=
Ashe	7:45	8:20	35+	Gates	8:00	8:05	5=	Perquimans	8:00	8:05	5-
Avery	7:50	8:15	25=	Graham	7:50	8:00	10=	Person	7:50	8:30	40=
Beaufort	7:50	9:00	70=	Granville	7:25	9:00	95=	Pitt	7:15	8:30	75-
Bertie	7:30	7:45	15-	Greene	8:00	8:00	0=	Polk	7:50	8:15	25=
Bladen	7:40	8:05	25=	Guilford	7:30	11:40	250=	Randolph	7:45	9:00	75+
Brunswick	7:45	8:55	70+	Halifax	7:30	8:00	30=	Asheboro	7:40	8:20	40=
Buncombe	7:45	8:45	60=	Roanoke Rapids	7:30	8:30	60=	Richmond	8:00	10:30	150=
Asheville	7:55	8:30	35=	Weldon City	7:30	8:15	45=	Robeson	7:45	8:30	45+
Burke	7:40	8:20	40-	Harnett	7:35	8:20	45=	Rockingham	7:20	9:00	100=
Cabarrus	7:15	2:00p	405+	Haywood	8:00	9:00	60=	Rowan-Salisbury	7:20	9:45	145+
Kannapolis	7:15	8:40	85+	Henderson	7:50	8:30	40=	Rutherford	7:30	8:45	75=
Caldwell	7:50	9:00	70+	Hertford	7:45	8:15	30=	Sampson	7:35	8:30	55+
Camden	8:00	8:20	20-	Hoke	7:50	9:00	70=	Clinton	7:15	9:00	105+
Carteret	7:35	8:15	40-	Hyde	7:35	7:35	0-	Scotland	7:40	9:00	80-
Caswell	7:45	8:30	45=	Iredell-	7:30	8:55	85-	Stanly	7:50	8:40	50-
Catawba	7:15	8:15	60-	Mooresville	7:30	8:45	75=	Stokes	7:30	8:30	60=
Hickory	7:20	8:15	55-	Jackson	8:00	8:10	10=	Surry	7:45	8:30	45+
Newton-Conover	7:30	8:15	45+	Johnston	7:10	11:00	230=	Elkin	8:00	8:05	5+
Chatham	7:50	8:20	30+	Jones	7:30	8:05	35=	Mount Airy	7:40	8:10	30=
Cherokee	7:50	8:21	31-	Lee	7:30	8:00	30=	Swain	7:50	8:05	15=
Edenton/Chowan	7:50	8:00	10+	Lenoir	7:45	8:15	30=	Transylvania	8:00	8:20	20=
Clay	8:00	8:00	0=	Lincoln	7:45	8:15	30-	Tyrell	7:45	7:50	5=
Cleveland	7:40	9:00	80=	Macon	7:30	8:30	60=	Union	7:15	9:00	105=
Columbus	7:45	9:15	90=	Madison	8:00	8:35	35+	Vance	7:50	9:00	70=
Whiteville	7:50	9:10	80=	Martin	7:25	8:10	45=	Wake	7:25	9:15	110=
Craven	7:30	9:00	90=	McDowell	7:50	8:31	41-	Warren	8:00	8:30	30-
Cumberland	7:30	9:30	120=	Charlotte-Meck.	7:15	9:15	120=	Washington	8:00	8:00	0=
Currituck	7:30	8:30	60=	Mitchell	7:20	8:30	70=	Watauga	7:45	8:30	45+
Dare	7:55	8:30	35=	Montgomery	7:45	8:00	15=	Wayne	7:30	10:50	200=
Davidson	7:40	8:30	50=	Moore	7:20	9:00	100+	Wilkes	7:45	8:30	45=
Lexington	7:30	8:20	50=	Nash- Rocky Mount	7:25	10:30	185+	Wilson	7:30	11:00	210=
Thomasville	7:30	8:00	30=	New Hanover	7:30	9:15	105=	Yadkin	7:55	8:06	11+
Davie	7:55	8:45	50=	Northampton	7:30	8:00	30=	Yancey	7:40	8:00	20=
Duplin	7:50	8:20	30-	Onslow	7:09	8:45	96=				
Durham	7:20	9:15	115-	Orange	7:30	9:30	120+	State	7:40	8:30	62-

Source: NC Local Education Agencies 2010-2011 TIMS Data. Compiled at UNC Charlotte Urban Institute.

### TIMS Service Indicators, 2011-2012: Runs per Route, PM

Average Runs per Route: The average number of separate runs (trips) each bus makes in the afternoon. % of Routes >1 Run: The percentage of buses making more than one run in the afternoon. A bus is considered to have completed a run when it has unloaded

	Avg Runs	% Rtes	Avg Runs % Rtes			Avg Runs	% Rtes	
LEA	per Route	> 1 Run	LEA	per Route	> 1 Run	LEA	per Route	> 1 Run
Alamance-Burlington	1.54+	49.36+	Edgecombe	1.06+	6.19+	Chapel Hill-Carrboro	2.78-	98.33+
Alexander	1.00=	0.00=	W-S/Forsyth	2.72+	96.89-	Pamlico	1.08+	8.33+
Alleghany	1.00=	0.00=	Franklin	1.32+	30.39+	Pasquotank	1.48=	47.83=
Anson	1.26=	23.61=	Gaston	1.54-	50.70-	Pender	1.32-	29.03-
Ashe	1.09=	8.89=	Gates	1.00=	0.00=	Perquimans	1.00=	0.00=
Avery	1.23+	22.58+	Graham	1.00=	0.00=	Person	1.06-	5.63-
Beaufort	1.22-	19.61-	Granville	1.21-	16.98-	Pitt	1.47-	47.00-
Bertie	1.00=	0.00=	Greene	1.12+	11.76+	Polk	1.00=	0.00=
Bladen	1.01+	1.19+	Guilford	2.32+	90.83+	Randolph	1.11+	10.18+
Brunswick	1.31+	28.91+	Halifax	1.00=	0.00=	Asheboro	2.05-	94.74-
Buncombe	1.59+	52.31+	Roanoke Rapids	2.25=	91.67=	Richmond	1.27-	27.27-
Asheville	2.14-	96.55=	Weldon	1.73-	53.33-	Robeson	1.23+	20.37+
Burke	1.31-	30.48-	Harnett	1.23+	22.65+	Rockingham	1.25+	25.19+
Cabarrus	2.89-	97.15-	Haywood	1.22=	21.62=	Rowan-Salisbury	1.46-	42.02-
Kannapolis	2.72+	100=	Henderson	1.37+	33.33-	Rutherford	1.24+	23.53+
Caldwell	1.44-	42.50-	Hertford	1.07+	7.14+	Sampson	1.03=	2.96=
Camden	1.00=	0.00=	Hoke	1.91-	90.00-	Clinton	1.38+	38.46+
Carteret	1.09+	9.18+	Hyde	1.00=	0.00=	Scotland	1.42+	40.54+
Caswell	1.00=	0.00=	Iredell-Statesville	1.74-	70.95-	Stanly	1.17-	17.31-
Catawba	1.33+	31.49+	Mooresville	2.00=	100.00=	Stokes	1.23+	22.73+
Hickory	2.21-	91.67+	Jackson	1.00=	0.00=	Surry	1.00=	0.00=
Newton-Conover	1.48+	44.83=	Johnston	2.00-	69.20+	Elkin	1.86-	57.14-
Chatham	1.06-	5.56-	Jones	1.00=	0.00=	Mount Airy	1.00=	0.00=
Cherokee	1.04-	4.44-	Lee	1.22-	20.95-	Swain	1.09=	9.09=
Edenton/Chowan	1.00=	0.00=	Lenoir	1.13+	12.77+	Transylvania	1.23=	22.86=
Clay	1.00=	0.00=	Lincoln	1.29-	27.68-	Tyrell	1.00=	0.00=
Cleveland	1.03+	2.92+	Macon	1.19=	19.23=	Union	2.50-	97.86+
Columbus	1.05-	5.040-	Madison	1.00=	0.00=	Vance	1.31=	26.14=
Whiteville	1.11-	11.11-	Martin	1.02+	1.79+	Wake	2.69+	93.78-
Craven	1.35+	28.10-	McDowell	1.09+	9.09+	Warren	1.00=	0.00=
Cumberland	1.62+	60.54+	Charlotte-Meck.	2.98+	98.95+	Washington	1.00=	0.00=
Currituck	1.38+	37.78+	Mitchell	1.09+	9.38+	Watauga	1.39+	39.02+
Dare	1.32+	29.27+	Montgomery	1.10=	8.47-	Wayne	1.31+	29.52+
Davidson	1.31+	30.11+	Moore	1.30+	29.66+	Wilkes	1.27+	27.08+
Lexington	2.30+	95.65+	Nash-	1.37+	35.45+	Wilson	1.48-	38.66-
Thomasville	2.08=	100.00=	New Hanover	1.81+	73.91+	Yadkin	1.11+	6.35+
Davie	1.18=	17.81=	Northampton	1.00=	0.00=	Yancey	1.05=	5.13=
Duplin	1.00-	0.00-	Onslow	1.67+	56.64+			
Durham	2.08+	97.34+	Orange	1.72+	70.31+	State Average	1.71+	48.95+

Source: NC Local Education Agencies 2011-2012 TIMS Data. Compiled at UNC Charlotte Urban Institute.

### 2011-2012 TIMS Service Indicator Report

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