

# North Carolina Pupil Transportation Service Indicators Report

2009-2010





## PUBLIC SCHOOLS OF NORTH CAROLINA

STATE BOARD OF EDUCATION William C. Harrison, Ed.D., Chairman and Chief Executive Officer DEPARTMENT OF PUBLIC INSTRUCTION June St. Clair Atkinson, Ed.D., State Superintendent WWW.NCPUBLICSCHOOLS.ORG

## August 6, 2010

School transportation staffs have just completed a year in which they found their funding strained as a result of the national economy. The coming year promises more of the same. Concurrent with a funding shortfall, demands on transportation budgets continue to increase, that increase due in part to population growth but also to programs that require the transporting of students far beyond their home schools. The identification and implementation of feasible efficiency measures has perhaps never been so important a task for North Carolina's Transportation Directors.

While the need to provide a suitable level of service to students has not diminished, neither has the difficulty of balancing that goal with a need for efficiency. North Carolina pupil transportation professionals respond daily to a large variety of circumstances and challenges in their operations. Some districts serve large geographic areas; others serve relatively small areas. There are populous, rapidly growing urban districts as well as 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 in their trips to and from school.

Since drivers' salaries and fuel costs consume over half of a district's transportation budget, they are likely targets for efforts to increase efficiency. 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, the uniform use of TIMS makes possible the production of LEA-level and statewide data. In this document, operational data for all LEAs have been collected and summarized to provide school transportation planners and local policy makers with a self-assessment tool. The data contained in this report reflect a combination of physical realities and policy decisions made by LEAs. In this, its fourth 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 continue to maintain and who provided this information as part of their annual 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

Derek Graham, Section Chief Transportation Services

## SCHOOL SUPPORT DIVISION

## Notes on the 2009-2010 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 TIMS datasets maintained in school districts across North Carolina. Though all 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**

The data are probably most affected by differences in the ways that TIMS data managers approach the use of multiple arrival and departure times at schools. Accommodations can involve the use of programs, incorrect school bell times, incorrect 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 those concerned with 'Earliest Morning Pickup Time', 'Average School Bell Time Range' and 'Percentage of Buses Revisiting the Same School PM'.

## ELKIN AND MT. AIRY

Until the 2009-2010 school year, Elkin and Mt. Airy Cities' data were kept in the same dataset as Surry County's. Separate reports weren't generated for them so values for them were not available for the report. That situation has been addressed and they stand alone in this year's report. Year-to-year change symbols are absent from their entries.

## 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.

	TIMS Service Indicators Table of Conte	ents
Page	Service Indicator	State Average
2–3	Average Student Ride Time, AM	23 minutes
2–3	Average Distance to School, Riders	4.37 miles
2–3	Average Distance to School, All Students	4.27 miles
4–5	Average of Longest 5% of Student Ride Times	70 minutes
4–5	Average Distance to School for Longest 5% of Ride Times	8.58 miles
6–7	Average of Student-to-Stop Distances < 1 Mile	470 feet
6–7	% of Stop Distances > .5 & < 1 Mile	1.39
6–7	% of Stop Distances < 1 Mile = 0	29.04
8–9	Earliest Morning Pickup Time*	5:52 AM
8–9	Arrival Time for Earliest Morning Pickup*	7:38 AM
10–11	Percent of Routes with Multiple Runs from the Same School	6.89
	Operations Choices Affecting Service	
12	Range of School Start Times	62 minutes
13	Average Number of Runs per Rte, PM	1.65
13	Percent of Routes with More than One Run, PM	47.01
14	Contacts	_

<sup>\*</sup>State-wide values are the median .

## **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.

## 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. Ride times and distances 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.

Average Distance to School, All Students (Miles): The average distance for all students enrolled is shown for comparison to the distance for bus riders.

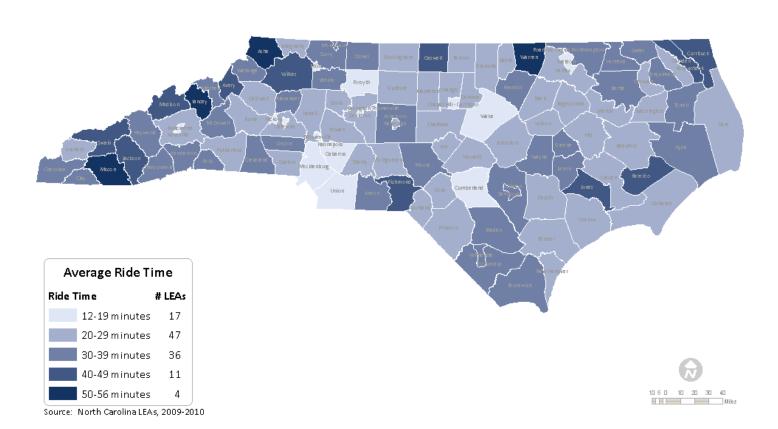
## ABOUT SERVICE

A child's ride time should correspond roughly to the distance

STATE-WIDE AVERAGES	2009-10	2008-09
Average Ride Time	23	24
Average Distance to School, Riders Only	4.37	4.36
Average Distance to School, All Students	4.27	4.23

from home to school. However, the expected correspondence is compromised by anything that alters the consistent progress of the bus (such as stopping for children) or causes the bus 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. LEA policies that can result in longer ride times include the placement of programs for exceptional children and the use of fewer, 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 dead-end 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, 2009-2010: Student Ride Times, AM

Average Distance to School						Aver Distan Sch			Avei 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	21=	3.87-	3.61+	Edgecombe	28+	5.42+	4.81-	Chapel Hill- Carrboro	14+	2.58-	2.34-
Alexander	34=	5.23-	5.19+	W-S/Forsyth	16-	3.64=	3.69+	Pamlico	41+	7.91+	7.17+
Alleghany	28-	5.02+	5.08+	Franklin	36+	5.86+	5.77+	Pasquotank	28-	4.49+	4.43+
Anson	33-	6.22+	5.97+	Gaston	25-	2.90-	3.07+	Pender	25=	6.04-	5.71+
Ashe	56+	9.31+	8.91+	Gates	34=	7.29+	7.11+	Perquimans	38=	7.11+	6.67-
Avery	43+	5.82+	3.73-	Graham	23=	5.96-	5.66-	Person	28-	5.28+	5.36+
Beaufort	26-	6.44+	6.17+	Granville	23+	5.35+	5.18+	Pitt	23+	4.13-	3.64+
Bertie	33+	9.18+	8.70+	Greene	38-	7.53+	7.25+	Polk	39=	6.38+	5.97+
Bladen	31-	7.61-	7.39+	Guilford	22+	3.80+	3.58+	Randolph	34=	4.89+	5.20+
Brunswick	38+	7.05-	6.98-	Halifax	24-	8.01+	8.01+	Asheboro	22-	2.24+	2.30+
Buncombe	24-	3.96-	3.99+	Roanoke Rapids	12-	1.72-	1.29-	Richmond	41+	4.03-	3.33-
Asheville	15-	2.82=	2.90-	Weldon	15-	3.76-	3.75+	Robeson	22-	4.15-	4.08+
Burke	22+	3.90+	3.92-	Harnett	27+	5.11-	5.04-	Rockingham	29=	4.87-	4.78+
Cabarrus	19-	3.64-	3.63-	Haywood	36+	4.42+	4.55+	Rowan-Salisbury	26-	4.06+	3.93-
Kannapolis	19+	2.00+	1.84+	Henderson	30+	4.20+	4.04=	Rutherford	28-	4.62-	4.60-
Caldwell	22-	4.13-	4.24-	Hertford	32=	6.64+	6.31+	Sampson	31=	7.16-	7.08-
Camden	40+	8.86-	8.07+	Hoke	20-	5.71+	5.32+	Clinton	31+	3.77+	3.95+
Carteret	22+	5.21-	5.06-	Hyde	37+	12.57+	9.93-	Scotland	26-	5.10+	4.80-
Caswell	41+	9.27+	8.98+	Iredell-Statesville	24-	4.72+	4.76+	Stanly	26=	3.75+	3.69+
Catawba	20-	4.41+	4.31+	Mooresville	17+	2.78+	2.65+	Stokes	39-	5.75+	5.44+
Hickory	18-	2.74+	2.47+	Jackson	47-	5.61-	3.60-	Surry	39+	5.23+	4.59+
Newton-Conover	17-	2.63-	2.90+	Johnston	22+	4.39+	4.38+	Elkin	15	2.75	2.35
Chatham	27-	4.96+	5.06+	Jones	43+	7.13-	7.48+	Mount Airy	32	2.34	2.53
Cherokee	33-	5.24-	5.23-	Lee	29+	4.25-	4.32+	Swain	49+	5.91+	4.25-
Edenton/Chowan	28-	8.67-	8.29+	Lenoir	30+	4.86+	4.93+	Transylvania	35-	5.04+	4.86-
Clay	30-	5.49-	4.27-	Lincoln	30-	4.75+	4.67-	Tyrell	32+	6.13-	5.17-
Cleveland	36+	4.79+	4.62+	Macon	54+	5.05+	4.83+	Union	19=	3.74-	3.82-
Columbus	34=	6.16+	6.11+	Madison	47-	8.81+	8.83+	Vance	25=	3.91-	4.09+
Whiteville	33+	4.53+	4.37+	Martin	25+	4.03-	4.01-	Wake	17-	4.41+	4.15-
Craven	26=	5.42+	5.15+	McDowell	35-	5.23-	4.01-	Warren	53=	7.28+	6.57-
Cumberland	19-	3.30+	3.25+	Charlotte-Meck.	16-	3.51-	3.56-	Washington	28+	5.64-	5.27-
Currituck	42-	7.32-	7.83+	Mitchell	32-	5.42+	5.37+	Watauga	30+	4.97-	5.29+
Dare	24-	4.95-	4.55-	Montgomery	23-	4.66-	5.01-	Wayne	31+	4.97-	4.42+
Davidson	28-	4.54-	4.53-	Moore	35-	5.27+	4.84=	Wilkes	41=	4.19+	5.06+
Lexington	19-	1.92-	2.25+	Nash- Rocky Mount	25=	5.34-	4.59-	Wilson	24-	4.00=	3.62+
Thomasville	17+	1.80=	1.91+	New Hanover	21+	3.32+	3.13-	Yadkin	37-	4.75+	5.27+
Davie	23-	5.19-	5.26-	Northampton	30+	7.85+	7.71+	Yancey	50+	5.73-	5.40-
Duplin	27-	5.81+	5.72+	Onslow	20-	4.60+	4.30+	,			
Durham	20-	3.69+	3.77+	Orange	26=	5.66-	5.53-	State Average	23-	4.37+	4.27+

## **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.

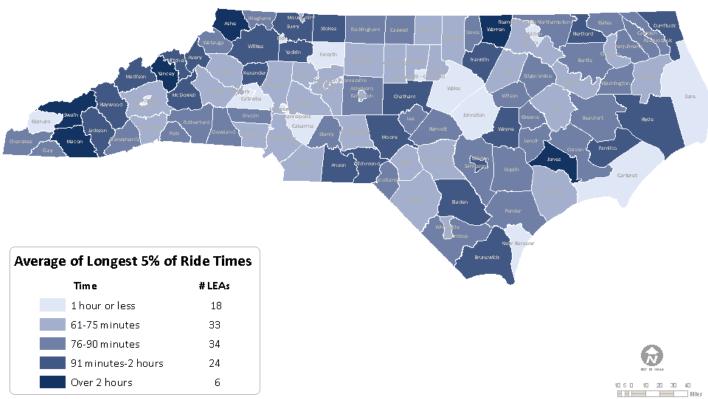
STATE-WIDE AVERAGES	2009– 10	2008- 09
Average of Longest 5% of Student Ride Times	70	73
Average Distance for Longest 5% of Ride Times	8.58	8.29

The state-wide values are the averages of the combined sets of each LEAs 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



Source: North Carolina LEAs, 2009-2010

TIMS Service Indicators, 2009-2010: 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	65-	7.48-	Edgecombe	85+	10.15-	Chapel Hill- Carrboro	36+	3.38-
Alexander	95+	6.91-	W-S/Forsyth	50-	7.55+	Pamlico	108+	12.32-
Alleghany	86-	10.80+	Franklin	98+	8.38+	Pasquotank	79-	7.65-
Anson	95-	11.43-	Gaston	74-	4.67+	Pender	78=	12.87-
Ashe	127+	13.78+	Gates	82=	8.24+	Perquimans	89-	12.28+
Avery	109+	11.38+	Graham	49+	11.02+	Person	69-	11.52+
Beaufort	88+	12.64+	Granville	66+	10.21-	Pitt	73+	7.24-
Bertie	84+	16.02+	Greene	89-	9.71+	Polk	89-	8.48+
Bladen	95-	18.29+	Guilford	73-	8.00+	Randolph	82=	7.43-
Brunswick	102+	13.80+	Halifax	62-	13.37+	Asheboro	62+	2.17-
Buncombe	70-	7.35+	Roanoke Rapids	30-	2.23-	Richmond	106-	7.24-
Asheville	35-	3.18-	Weldon	53-	9.36+	Robeson	63-	6.03-
Burke	69+	7.11-	Harnett	82+	7.86+	Rockingham	81=	8.61-
Cabarrus	50-	6.19=	Haywood	97-	10.10-	Rowan-Salisbury	74-	7.03-
Kannapolis	49+	2.71+	Henderson	75-	6.78+	Rutherford	83-	9.60+
Caldwell	65-	7.54-	Hertford	92+	12.50-	Sampson	80-	11.4+
Camden	89+	15.03+	Hoke	61=	11.54+	Clinton	91+	5.05+
Carteret	59-	13.39-	Hyde	93+	23.26+	Scotland	80-	11.75+
Caswell	90+	13.99+	Iredell-Statesville	64-	8.57+	Stanly	76=	6.37+
Catawba	59-	6.98+	Mooresville	42+	3.96+	Stokes	102-	9.34-
Hickory City	65=	5.32+	Jackson	109+	12.16+	Surry	100+	6.49+
Newton-Conover	53-	7.03-	Johnston	58+	8.82+	Elkin	48	6.14
Chatham	91+	10.57+	Jones	135+	10.69-	Mount Airy	74	1.49
Cherokee	83-	8.53+	Lee	84+	5.84-	Swain	134+	11.15+
Edenton/Chowan	72-	13.24-	Lenoir	87+	10.00+	Transylvania	82-	7.73+
Clay	86-	9.59+	Lincoln	77+	5.57-	Tyrell	75+	11.53+
Cleveland	88+	6.31-	Macon	148-	8.77+	Union	61-	9.29+
Columbus	83+	12.78+	Madison	108-	15.15+	Vance	86-	6.86-
Whiteville	74+	5.35+	Martin	73-	8.46-	Wake	56-	9.97+
Craven	77-	12.44-	McDowell	91-	7.88-	Warren	136+	12.01+
Cumberland	63-	6.00-	Charlotte-Meck.	63-	9.65+	Washington	76+	7.13-
Currituck	120-	16.06+	Mitchell	92-	11.53-	Watauga	77-	10.77-
Dare	60-	14.47+	Montgomery	71-	10.38-	Wayne	95-	5.78-
Davidson	73-	5.91-	Moore	96-	8.08+	Wilkes	110+	9.19+
Lexington	66-	2.19+	Nash - Rocky Mount	73+	8.31-	Wilson	77-	6.34+
Thomasville	34+	1.92-	New Hanover	59-	5.75-	Yadkin	107+	7.16-
Davie	67-	9.53=	Northampton	77-	9.04-	Yancey	131+	7.85-
Duplin	81-	10.39+	Onslow	68-	9.70+	,		
- Independent	~-							

## Student-to-Stop Distances, AM

#### **DEFINITIONS**

This set of Indicators is concerned with 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. Under the assumption that no child in North Carolina walks a mile or more and since some students travel to their stops via private conveyance, distances of 1 mile and greater were removed from consideration. These account for 2.6% of riders statewide.

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

STATE-WIDE AVERAGES	2009-10	2009-09
Average of Student-to-Stop Distances < 1 Mile, AM	470	445
% of Stop Distances > .5 & < 1 Mile	1.39	1.38
% of Stop Distances < 1 Mile = 0	29.04	30.51

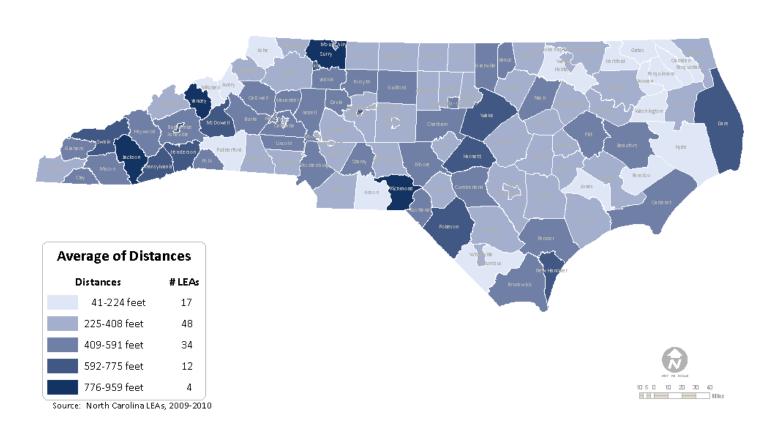
in grades K-3 or special education pupils) and no child can be required to walk more than 1 mile to a stop.

% 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 door service, the overall time students ride the bus increases.

# Average of Student-to-Stop Distances



TIMS Service Indicators, 2009-2010: 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	300-	1.02+	44.55+	Edgecombe	313+	0.31+	40.95-	Chapel Hill- Carrboro	569-	1.46-	20.94-
Alexander	486-	1.57-	32.50+	W-S/Forsyth	547+	1.23+	21.35-	Pamlico	162+	1.02+	75.86+
Alleghany	259-	1.50-	63.36-	Franklin	296-	0.96-	52.02+	Pasquotank	165+	0.73+	69.85-
Anson	198+	0.95+	70.90-	Gaston	311-	0.43-	39.05+	Pender	457+	2.35+	38.56-
Ashe	169-	1.11-	80.37+	Gates	66+	0.41+	76.73+	Perquimans	41-	0.00=	86.50+
Avery	193-	2.62+	61.19+	Graham	411+	1.16-	51.60-	Person	234-	0.07+	39.68+
Beaufort	473+	2.58+	34.57+	Granville	412-	2.56-	45.37-	Pitt	459-	1.73-	21.58-
Bertie	290+	0.42+	39.57+	Greene	310+	0.69+	47.47-	Polk	461-	4.82-	60.75+
Bladen	372+	1.14-	37.28-	Guilford	409-	1.63-	34.11-	Randolph	262+	0.00=	46.88-
Brunswick	511-	1.86+	30.54-	Halifax	166-	0.50-	59.98+	Asheboro	230+	0.00=	28.64-
Buncombe	552-	3.13-	36.81+	Roanoke Rapids	481-	0.63-	12.44+	Richmond	789+	8.49+	37.27-
Asheville	760-	2.16-	6.80+	Weldon	254+	0.82+	45.33-	Robeson	680-	5.19-	25.17+
Burke	509+	0.70+	17.44-	Harnett	594-	3.50-	27.22+	Rockingham	400-	1.14-	35.75+
Cabarrus	393-	0.48-	24.18+	Haywood	573+	3.61+	34.92-	Rowan- Salisbury	382+	1.78+	48.80-
Kannapolis	292+	0.93+	39.71-	Henderson	609+	3.21+	28.04+	Rutherford	224-	1.22-	67.85+
Caldwell	468+	2.38-	40.36-	Hertford	108-	0.81-	79.27+	Sampson	378+	1.04+	38.01-
Camden	126+	0.09+	67.47-	Hoke	382+	0.95+	27.06-	Clinton	350+	0.60-	34.00-
Carteret	524-	3.33-	36.79-	Hyde	125-	0.48+	71.11+	Scotland	571-	4.33-	33.56-
Caswell	283-	1.65-	73.40+	Iredell- Statesville	536+	1.56+	24.41-	Stanly	500+	1.54-	33.56-
Catawba	453-	1.55-	31.20+	Mooresville	340+	0.58+	16.48-	Stokes	327+	2.38-	61.31-
Hickory	500-	1.92-	22.99-	Jackson	813+	6.77+	35.62-	Surry	959+	8.37+	14.72-
Newton-Conover	324+	1.55-	46.21-	Johnston	268+	0.26-	41.64-	Elkin	741	2.58	11.02
Chatham	589+	3.87+	37.13-	Jones	102-	0.24-	77.18-	Mount Airy	530	2.15	11.40
Cherokee	404+	3.06-	58.25-	Lee	405+	2.20+	47.11-	Swain	647-	1.20+	22.38+
Edenton/Chowan	131-	0.41+	67.78+	Lenoir	257-	1.19+	55.39-	Transylvania	758+	6.70+	28.70+
Clay	508-	3.60-	45.40+	Lincoln	437+	1.93+	38.80-	Tyrell	237+	2.46+	66.67-
Cleveland	251-	0.99-	55.36-	Macon	531+	3.19+	44.33-	Union	274+	0.47-	34.56-
Columbus	183+	0.38-	60.47-	Madison	290+	1.25+	68.24+	Vance	572-	4.06-	34.04+
Whiteville	227+	1.22+	53.97+	Martin	272+	1.81-	62.16-	Wake	633-	1.08-	12.39+
Craven	351-	1.01-	32.29-	McDowell	654+	2.59-	31.45-	Warren	394+	2.24-	41.68-
Cumberland	478+	0.33-	12.97-	Charlotte- Meck.	591+	0.44+	9.95-	Washington	217+	0.99-	65.19+
Currituck	316-	0.71-	47.39-	Mitchell	203-	0.99+	68.26+	Watauga	402-	2.23-	50.76-
	592-	2.30-	22.00-		408+	2.01-	40.24-	Wayne	347+	0.46-	29.32-
Dare				Montgomery							
Davidson	342-	1.20+	48.56+	Moore Nash-	434+	3.59+	51.89-	Wilson	270-	0.74+	54.17-
Lexington	720-	3.69-	11.54+	Rocky Mount	433+	0.20-	21.84-	Wilson	384+	0.45-	30.08+
Thomasville	345+	0.07-	25.90-	New Hanover	774+	5.41+	22.95-	Yadkin	493-	2.65-	36.57+
Davie	588+	2.38+	27.95-	Northampton	238-	0.54-	48.28+	Yancey	788+	7.29+	28.44-
Duplin	315-	0.61-	42.72+	Onslow	398-	2.75+	45.04+				
Durham	407+	0.27-	31.65-	Orange	262-	0.99-	65.99+	State Average	470+	1.39+	29.04-

## **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

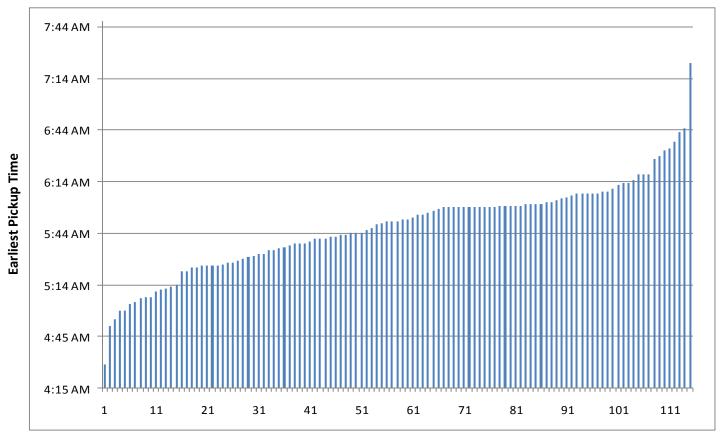
STATE-WIDE MEDIAN	2009-10	2008-09
Earliest Morning Pickup Time	5:52 AM	5:51 AM
Arrival Time	7:38 AM	7:45 AM

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 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** 

TIMS Service Indicators, 2009-2010: Earliest Morning Pickup Time

LEA	Earliest Pickup AM	Arrival Time	LEA	Earliest Pickup AM	Arrival Time	LEA	Earliest Pickup AM	Arrival Time
Alamance-Burlington	5:39 AM	7:20 AM	Edgecombe	5:13 AM	7:24 AM	Chapel Hill-Carrboro	6:38 AM	7:25 AM
Alexander	6:00 AM	7:45 AM	W-S/Forsyth	5:45 AM	7:00 AM	Pamlico	5:44 AM	7:52 AM
Alleghany	6:03 AM	7:50 AM	Franklin		8:09 AM	Pasquotank	5:07 AM	7:52 AM
Anson	5:35 AM	7:30 AM	Gaston		8:10 AM	Pender	6:00 AM	7:15 AM
Ashe	5:26 AM	7:50 AM	Gates		8:00 AM	Perquimans	6:00 AM	7:50 AM
Avery	5:53 AM	8:01 AM	Graham		7:30 AM	Person	6:28 AM	8:00 AM
Beaufort	6:11 AM	7:34 AM	Granville		7:15 AM	Pitt	5:25 AM	
Bertie	6:00 AM	7:30 AM	Greene		8:05 AM	Polk	6:13 AM	7:49 AM
Bladen	5:04 AM	7:50 AM	Guilford		7:20 AM	Randolph		7:50 AM
Brunswick	5:12 AM	7:39 AM	Halifax		7:10 AM	Asheboro	6:08 AM	7:17 AM
Buncombe	5:31 AM	7:38 AM	Roanoke Rapids		7:20 AM	Richmond	6:01 AM	8:00 AM
Asheville	6:44 AM	7:20 AM	Weldon		7:32 AM	Robeson	6:05 AM	7:30 AM
Burke	5:28 AM	7:45 AM	Harnett		8:05 AM	Rockingham		7:38 AM
Cabarrus	5:26 AM				7:58 AM			6:45 AM
		7:00 AM	Haywood			Rowan-Salisbury	5:08 AM	
Kannapolis	6:08 AM	7:20 AM	Henderson		7:32 AM	Rutherford	5:53 AM	7:46 AM
Caldwell	5:52 AM	7:16 AM	Hertford		7:55 AM	Sampson	5:26 AM	7:48 AM
Camden	5:52 AM	8:00 AM	Hoke		7:15 AM	Clinton	5:30 AM	7:19 AM
Carteret	6:06 AM	7:27 AM	Hyde		7:30 AM	Scotland	6:07 AM	7:24 AM
Caswell	5:42 AM	7:45 AM	Iredell-Statesville	6:01 AM		Stanly		7:30 AM
Catawba	5:58 AM	8:45 AM	Mooresville		7:05 AM	Stokes	5:32 AM	7:35 AM
Hickory City	5:39 AM	8:25 AM	Jackson		8:20 AM	Surry		8:05 AM
Newton-Conover	6:08 AM	7:50 AM	Johnston		7:00 AM	Elkin	7:24 AM	8:15 AM
Chatham	5:27 AM	7:45 AM	Jones		7:40 AM	Mount Airy	6:08 AM	7:30 AM
Cherokee	6:00 AM	7:35 AM	Lee		7:15 AM	Swain	4:55 AM	7:40 AM
Edenton/Chowan	6:09 AM	7:45 AM	Lenoir		7:30 AM	Transylvania	6:02 AM	
Clay		7:55 AM	Lincoln		7:57 AM			7:45 AM
Cleveland	6:01 AM	7:55 AM	Macon		9:22 AM	Union	5:51 AM	7:00 AM
Columbus	5:52 AM	7:45 AM	Madison		8:00 AM	Vance	5:39 AM	8:00 AM
Whiteville	6:04 AM	7:40 AM	Martin		7:32 AM	Wake	5:42 AM	7:23 AM
Craven	5:38 AM	7:25 AM	McDowell		8:00 AM	Warren	5:14 AM	7:45 AM
Cumberland	5:33 AM	7:55 AM	Charlotte-Meck.		6:50 AM	Washington	5:56 AM	7:30 AM
Currituck	5:00 AM	7:53 AM	Mitchell	5:25 AM	7:25 AM	Watauga	6:14 AM	8:01 AM
Dare	6:16 AM	7:30 AM	Montgomery	5:48 AM	7:35 AM	Wayne	5:59 AM	7:55 AM
Davidson	5:43 AM	6:50 AM	Moore	5:23 AM	7:30 AM	Wilkes	5:08 AM	7:35 AM
Lexington	5:45 AM	7:50 AM	Nash- Rocky Mount	5:35 AM	7:25 AM	Wilson	6:01 AM	7:50 AM
Thomasville	6:33 AM	7:02 AM	New Hanover	6:02 AM	7:20 AM	Yadkin	5:28 AM	8:05 AM
Davie	6:09 AM	7:40 AM	Northampton	6:08 AM	7:40 AM	Yancey	5:05 AM	7:34 AM
Duplin	5:40 AM	7:55 AM	Onslow		6:17 AM			
Durham	5:33 AM	7:20 AM	Orange		6:04 AM	State Median	5:52 AM	7:38 AM

Source: NC Local Education Agencies 2009-2010 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.

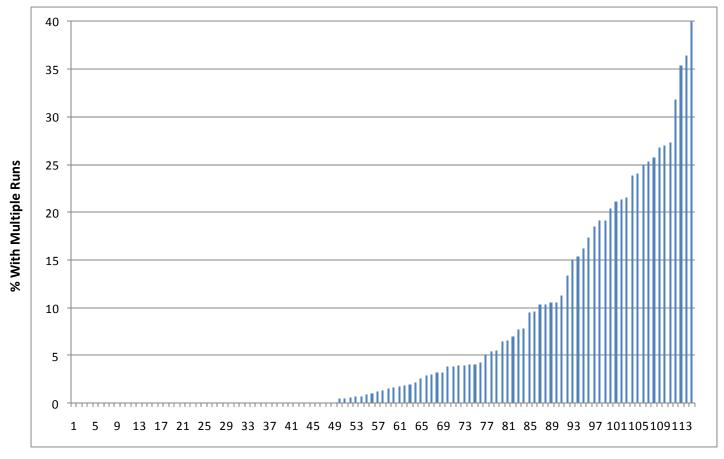
## **ABOUT SERVICE**

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	2009-10	2008-09
Percent of Routes with Multiple Runs from the Same School	6.89	7.32

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, 2009-2010: % 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	24.09+	Edgecombe	0.00-	Chapel Hill-Carrboro	0.00=
Alexander	0.00=	W-S/Forsyth	4.04+	Pamlico	4.00+
Alleghany	0.00=	Franklin	9.57+	Pasquotank	0.00-
Anson	0.00-	Gaston	21.33-	Pender	5.43+
Ashe	0.00-	Gates	0.00=	Perquimans	0.00=
Avery	0.00-	Graham	0.00=	Person	1.37=
Beaufort	4.21+	Granville	2.86-	Pitt	0.54-
Bertie	0.00=	Greene	0.00=	Polk	0.00=
Bladen	0.00=	Guilford	10.53+	Randolph	7.02-
Brunswick	0.00=	Halifax	0.00=	Asheboro	10.53-
Buncombe	27.31-	Roanoke Rapids	0.00-	Richmond	25.27-
Asheville	10.34=	Weldon City	13.33=	Robeson	18.52-
Burke	36.45+	Harnett	1.26-	Rockingham	3.23+
Cabarrus	0.00-	Haywood	16.22-	Rowan-Salisbury	1.78+
Kannapolis	3.23=	Henderson	31.82-	Rutherford	0.00=
Caldwell	15.00-	Hertford	5.56-	Sampson	0.00=
Camden	4.00=	Hoke	0.00=	Clinton	3.85-
Carteret	3.00+	Hyde	0.00=	Scotland	0.00-
Caswell	0.00=	Iredell-Statesville	0.97+	Stanly	25.00-
Catawba	5.08-	Mooresville	0.00=	Stokes	0.00=
Hickory	17.39+	Jackson	0.00=	Surry	0.00=
Newton-Conover	40.00-	Johnston	0.96-	Elkin	0.00
Chatham	7.87+	Jones	0.00=	Mount Airy	0.00
Cherokee	19.15+	Lee	2.13+	Swain	9.52+
Edenton/Chowan	0.00=	Lenoir	1.64+	Transylvania	25.71-
Clay	0.00=	Lincoln	27.03-	Tyrell	0.00=
Cleveland	4.07-	Macon	15.38+	Union	1.86+
Columbus	0.00=	Madison	0.00=	Vance	23.86=
Whiteville	0.67-	Martin	0.00=	Wake	11.32-
Craven	20.39-	McDowell	6.56+	Warren	0.00=
Cumberland	0.00=	Charlotte-Meck.	0.00-	Washington	0.00=
Currituck	0.00=	Mitchell	0.00-	Watauga	0.00=
Dare	26.83+	Montgomery	10.34+	Wayne	21.15-
Davidson	0.59-	Moore	0.74+	Wilkes	21.59+
Lexington	0.00=	Nash- Rocky Mount	1.92-	Wilson	35.34-
Thomasville	7.69+	New Hanover	0.54+	Yadkin	6.45+
Davie	19.18+	Northampton	0.00=	Yancey	0.00=
Duplin	0.00=	Onslow	3.79-		
Durham	2.62+	Orange	1.52+	State Average	6.89-

TIMS Service Indicators, 2009-2010: School Start Times, AM

	School Start Times				School Start Times				Scho	ol Start	Times
LEA	First	Last	Range	LEA	First	Last	Range	LEA	First	Last	Range
Alamance-Burlington	7:45	12:00	255=	Edgecombe	7:40	9:00	80+	Chapel Hill-Carrboro	7:50	8:45	55=
Alexander	7:45	8:15	30=	W-S/Forsyth	7:15	9:15	120=	Pamlico	7:50	8:00	10=
Alleghany	7:55	8:10	15=	Franklin	7:44	8:30	46=	Pasquotank	7:50	8:40	50-
Anson	7:15	8:20	65=	Gaston	7:45	8:30	45+	Pender	7:30	8:45	75=
Ashe	7:55	8:00	5-	Gates	8:00	8:05	5=	Perquimans	8:00	8:10	10=
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	8:45	=08	Pitt	7:40	8:30	50-
Bertie	7:35	8:20	45-	Greene	7:30	8:00	30+	Polk	7:50	8:15	25=
Bladen	7:45	8:05	20=	Guilford	7:40	11:40	240-	Randolph	7:50	9:00	70-
Brunswick	7:40	8:05	25+	Halifax	7:30	8:00	30-	Asheboro	7:40	8:20	40-
Buncombe	7:45	8:45	60=	Roanoke Rapids	7:35	8:30	55=	Richmond	8:00	10:30	150+
Asheville	7:55	9:00	65+	Weldon City	7:30	8:15	45+	Robeson	7:30	8:30	60=
Burke	7:40	8:25	45=	Harnett	7:35	8:45	70=	Rockingham	7:20	9:00	100+
Cabarrus	7:15	9:30	135+	Haywood	8:00	9:00	60=	Rowan-Salisbury	7:20	9:30	130=
Kannapolis	7:30	8:40	70=	Henderson	7:50	8:30	40+	Rutherford	7:30	8:45	75+
Caldwell	7:40	8:30	50+	Hertford	7:45	8:20	35=	Sampson	7:45	8:30	45=
Camden	7:55	8:20	25=	Hoke	7:50	9:00	70=	Clinton	7:15	9:00	105+
Carteret	7:30	8:05	35=	Hyde	7:45	7:55	10=	Scotland	8:00	9:30	90=
Caswell	7:45	8:30	45=	Iredell-	7:30	8:50	80+	Stanly	7:50	9:00	70=
Catawba	7:15	8:55	100=	Mooresville	7:30	8:45	75-	Stokes	7:30	8:30	60+
Hickory	7:20	9:00	100+	Jackson	8:00	8:10	10-	Surry	7:50	8:00	10-
Newton-Conover	7:40	8:15	35+	Johnston	7:10	11:00	230-	Elkin	8:20	8:20	0=
Chatham	8:00	8:00	0=	Jones	7:45	8:00	15=	Mount Airy	7:40	8:10	30+
Cherokee	7:40	8:35	55+	Lee	7:30	8:00	30-	Swain	7:50	8:05	15-
Edenton/Chowan	7:55	8:00	5=	Lenoir	7:45	8:15	30=	Transylvania	8:00	8:20	20=
Clay	8:00	8:00	0=	Lincoln	7:45	8:30	45+	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	9:20	95=	Madison	8:00	8:20	20=	Vance	7:50	9:00	70=
Whiteville	7:50	9:10	80=	Martin	7:25	8:10	45=	Wake	7:25	9:30	125+
Craven	7:35	9:05	90=	McDowell	7:50	8:31	41+	Warren	7:55	8:30	35-
Cumberland	7:30	1:20	350=	Charlotte-Meck.	7:15	9:15	120=	Washington	8:00	8:00	0=
Currituck	7:30	8:30	60+	Mitchell	7:20	7:55	35+	Watauga	7:45	8:30	45=
Dare	8:00	8:30	30=	Montgomery	7:45	8:00	15=	Wayne	7:20	10:50	210+
Davidson	7:40	8:30	50=	Moore	7:45	8:15	30=	Wilkes	7:35	8:30	55+
Lexington	7:30	8:00	30-	Nash- Rocky Mount	7:29	10:30	181-	Wilson	8:00	11:00	180+
Thomasville	7:35	8:00	25=	New Hanover	7:30	9:15	105-	Yadkin	7:55	8:10	15+
Davie	7:55	8:45	50=	Northampton	7:30	8:00	30-	Yancey	7:40	8:00	20+
Duplin	7:30	8:20	50+	Onslow	7:10	8:45	95=	,			
Durham	7:25	9:00	95-	Orange	7:30	8:45	75+	State Average	7:40	8:30	62=

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. Source: NC Local Education Agencies 2009-2010 TIMS Data. Compiled at UNC Charlotte Urban Institute.

TIMS Service Indicators, 2009-2010: Runs per Route, PM

			-					
LEA	Avg Runs per Route	% Rtes > 1 Run	LEA	Avg Runs per Route	% Rtes > 1 Run	LEA	Avg Runs per Route	% Rtes > 1 Run
Alamance-Burlington	1.58+	54.67+	Edgecombe	1.06=	6.14+	Chapel Hill-Carrboro	2.72+	98.25+
Alexander	1.00=	0.00=	W-S/Forsyth	2.71-	96.50-	Pamlico	1.08+	8.00+
Alleghany	1.04=	4.35=	Franklin	1.26+	25.49+	Pasquotank	1.43-	43.48+
Anson	1.20-	20.00-	Gaston	1.60-	55.92+	Pender	1.41-	36.96-
Ashe	1.00-	0.00-	Gates	1.00=	0.00=	Perquimans	1.00=	0.00=
Avery	1.18-	18.18-	Graham	1.00=	0.00=	Person	1.10=	9.59=
Beaufort	1.18+	17.65+	Granville	1.44-	40.95-	Pitt	1.44-	43.78-
Bertie	1.00=	0.00=	Greene	1.10+	9.62+	Polk	1.00=	0.00=
Bladen	1.00=	0.00=	Guilford	2.20=	89.79-	Randolph	1.08-	8.19-
Brunswick	1.00=	0.00=	Halifax	1.00=	0.00=	Asheboro	2.11=	100.00+
Buncombe	1.52-	45.38-	Roanoke Rapids	2.25=	91.67+	Richmond	1.30-	29.67-
Asheville	2.17=	96.55=	Weldon	1.53=	40.00=	Robeson	1.20-	19.63-
Burke	1.43+	42.06+	Harnett	1.15+	15.13+	Rockingham	1.28-	28.15-
Cabarrus	2.90+	98.17+	Haywood	1.24-	24.32+	Rowan-Salisbury	1.45+	41.94+
Kannapolis	2.65-	96.77=	Henderson	1.33-	31.82-	Rutherford	1.21+	20.00+
Caldwell	1.48-	45.00-	Hertford	1.07-	6.94-	Sampson	1.03=	2.96+
Camden	1.00=	0.00=	Hoke	1.92-	91.95-	Clinton	1.39+	38.46+
Carteret	1.07+	7.00+	Hyde	1.00=	0.00=	Scotland	1.52-	51.85-
Caswell	1.00=	0.00=	Iredell-Statesville	1.75+	71.36+	Stanly	1.34-	29.81-
Catawba	1.24-	24.35-	Mooresville	1.97-	97.22-	Stokes	1.21-	21.35-
Hickory	2.30-	91.30=	Jackson	1.00=	0.00=	Surry	1.06-	6.48-
Newton-Conover	1.45-	44.83-	Johnston	1.76+	47.76+	Elkin	2.00	100.00
Chatham	1.08+	7.78+	Jones	1.00=	0.00=	Mount Airy	1.00	0.00
Cherokee	1.19+	19.15+	Lee	1.12-	11.70-	Swain	1.10+	9.52+
Edenton/Chowan	1.00=	0.00=	Lenoir	1.13+	11.81+	Transylvania	1.26-	25.71-
Clay	1.00=	0.00=	Lincoln	1.31-	28.83-	Tyrell	1.00=	0.00=
Cleveland	1.04-	4.07-	Macon	1.17+	17.31+	Union	2.59+	96.27-
Columbus	1.06-	6.45-	Madison	1.00=	0.00=	Vance	1.28+	26.14+
Whiteville	1.11-	9.87-	Martin	1.00=	0.00=	Wake	2.63-	94.45+
Craven	1.33-	25.66-	McDowell	1.06=	5.88+	Warren	1.00=	0.00=
Cumberland	1.56-	55.15-	Charlotte-Meck.	2.54+	95.27+	Washington	1.00=	0.00=
Currituck	1.26+	26.32+	Mitchell	1.00=	0.00=	Watauga	1.47-	46.51-
Dare	1.29+	29.27+	Montgomery	1.09+	8.62+	Wayne	1.30-	28.24-
Davidson	1.28-	27.66-	Moore	1.01=	0.74+	Wilkes	1.20=	20.00+
Lexington	2.68=	90.91=	Nash-	1.31-	28.37-	Wilson	1.42-	38.35-
Thomasville	2.15+	100.00+	New Hanover	1.75-	71.89+	Yadkin	1.10+	6.45+
Davie	1.19+	19.18+	Northampton	1.00=	0.00=	Yancey	1.03+	2.56+
Duplin	1.01=	0.86+	Onslow	1.71+	56.54+			
Durham	1.99-	94.44-	Orange	1.61-	60.61-	State Average	1.65+	47.01-

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 all students. All the runs a bus makes constitute its route. Only the pm portions of routes are considered here. Source: NC Local Education Agencies 2009-2010 TIMS Data. Compiled at UNC Charlotte Urban Institute.

## 2009-2010 TIMS Service Indicator Report

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