

May 31, 2019



ACTIVE
R
TO SCHOOL

The logo features the text "ACTIVE ROUTES TO SCHOOL" in a bold, sans-serif font. The word "ACTIVE" is on the top line. The word "ROUTES" is on the second line, with the letter "R" being significantly larger than the other letters. The word "TO SCHOOL" is on the third line. The letters "R", "O", and "O" in "ROUTES" and "TO SCHOOL" are replaced by icons: a person in a wheelchair, a person on a bicycle, and another person on a bicycle, respectively. The word "ACTIVE" is followed by an icon of two people walking. The word "TO" is followed by an icon of two people walking. The word "SCHOOL" is followed by an icon of a person on a bicycle.

A North Carolina
Safe Routes to School Project
2013–2019

SUMMARY REPORT

Active Routes to School Project

Summary Report

The percentage of children walking and bicycling to school nationwide has decreased greatly within just a few decades,¹ while the childhood obesity rate has risen dramatically. According to the National Survey of Children's Health, 19.3 percent of North Carolina youth ages 10–17 are obese, ranking 5th highest in the nation.

School-based programs have the potential to enhance children's development, health, and well-being—and, in turn, their academic achievement. The potential for positive results is important, as research suggests safe, supportive, and health-promoting schools enhance student achievement.²

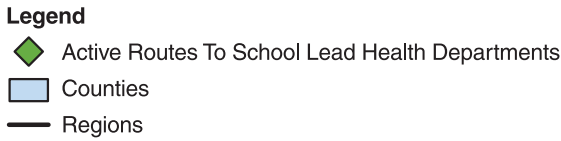
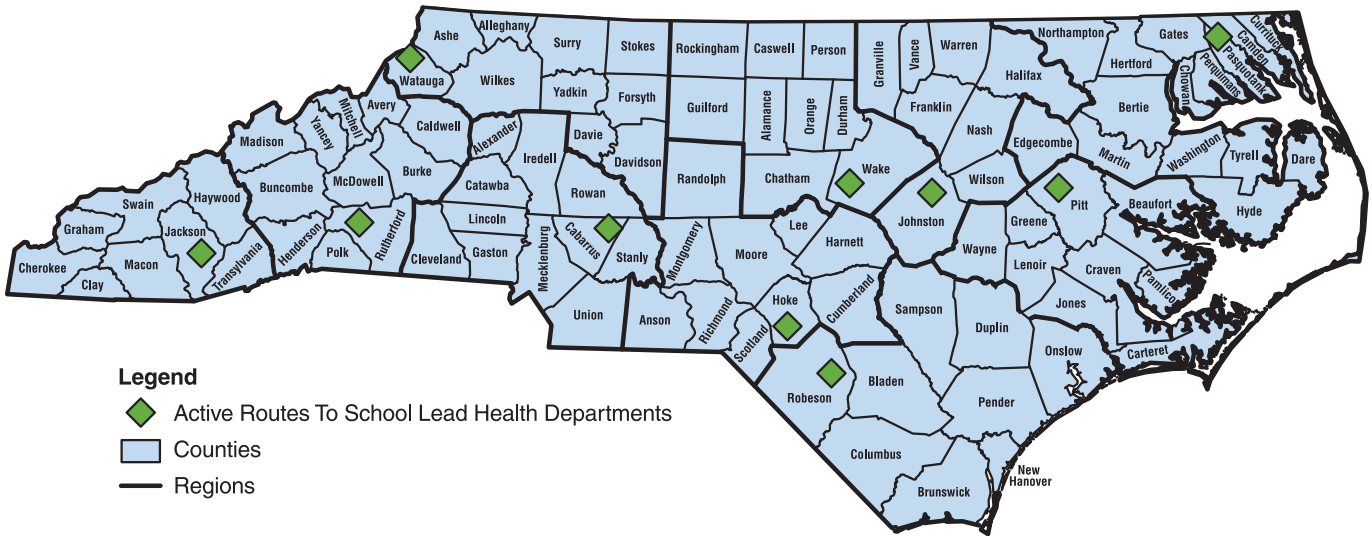
Safe Routes to School (SRTS) initiatives are school-based programs and have been proven to have many benefits for students.³ Studies have shown that SRTS initiatives increase walking and biking to school, address traffic dangers and improve safety for students, support increased physical activity among students and help students form healthy habits that can last a lifetime and decrease the risk of chronic disease and obesity.

In 2013, the NC Department of Transportation, Bicycle and Pedestrian Division and the NC Division of Public Health, Community and Clinical Connections for Prevention and Health Branch partnered to create Active Routes to School (ARTS), the North Carolina SRTS project. The goal of the project was to increase the number of elementary and middle school students who safely walk and bike to school.

ARTS was organized regionally to maximize its reach across the state. Funding for the project was distributed to 10 lead local county health departments/districts representing multi-county local health department regions. The lead health departments hired and housed the ARTS Regional Coordinators and coordinated efforts across the region.



1. "2009 National Household Travel Survey (NHTS)," U.S. Department of Transportation Federal Highway Administration. (January 2010). <http://nhts.ornl.gov/publications.shtml>
2. <http://www.nasbe.org/wp-content/uploads/2019/02/How-Schools-Work-2014.pdf>; page 3.
3. <https://www.saferoutespartnership.org/safe-routes-school/101/benefits>



Region	Counties Included in Region	Lead Health Department/District
1	Cherokee, Clay, Graham, Haywood, Jackson, Macon, Swain and Transylvania	Jackson County Department of Public Health
2	Avery, Buncombe, Burke, Caldwell, Henderson, Madison, McDowell, Mitchell, Polk, Rutherford, and Yancey	<ul style="list-style-type: none"> • Rutherford/Polk/McDowell District Health Department (2013–2018) • Caldwell County Health Department (2018–2019)
3	Alleghany, Ashe, Davie, Davidson, Forsyth, Stokes, Surry, Yadkin, Watauga and Wilkes	Appalachian District Health Department
4	Alexander, Cabarrus, Catawba, Cleveland, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, Stanley and Union	Cabarrus Health Alliance
5	Alamance, Caswell, Chatham, Durham, Guilford, Orange, Person, Randolph, Rockingham and Wake	Wake County Human Services
6	Anson, Cumberland, Harnett, Hoke, Lee, Montgomery, Moore, Randolph, Richmond and Scotland	Hoke County Health Department
7	Franklin, Granville, Halifax, Johnston, Nash, Vance, Warren and Wilson	Johnston County Public Health Department
8	Bladen, Brunswick, Columbus, Duplin, New Hanover, Onslow, Pender, Robeson and Sampson	Robeson County Department of Public Health
9	Bertie, Camden, Chowan, Currituck, Dare, Edgecombe, Gates, Hertford, Hyde, Martin, Northampton, Pasquotank, Perquimans, Tyrrell and Washington	Albemarle Regional Health Services
10	Beaufort, Carteret, Craven, Greene, Jones, Lenoir, Pamlico, Pitt and Wayne	Pitt County Health Department

The Project

The ARTS project consisted of three key phases: assessment, implementation and evaluation.

1. Assessment

Baseline assessment data was collected in 2014 and assessments were repeated annually each subsequent year. A summary report for each year was developed to provide an overview of how the ARTS project met its goal to increase the number of North Carolina elementary and middle school students that safely walk to school. The NC Highway Safety Research Center (HSRC) was contracted to coordinate and analyze the data collection process for the project. The reports include an analysis of the changes in the percentage of K–8 students who walk and bicycle to school, changes in participating schools' readiness to support safe walking and bicycling and provide recommendations to the program design based on these data. These reports are available **online**.⁴

During the assessment phase, ARTS Regional Coordinators conducted regional assessments that focused on K–8 schools to learn more about walking and biking to school efforts, awareness-raising activities, school-specific programming, trainings/workshops, and policy and environmental changes. Three instruments were used to collect data related to students' school travel modes, parents' perception of walking and bicycling to school, and schools' interest and engagement with walking and bicycling: (1) the Parent Survey; (2) the Student Travel Tally; and (3) the Active Travel Readiness Scale.

The Parent Survey and Student Travel Tally instruments were both developed by the National Center for Safe Routes to School and have been used by more than 12,000 schools around the country. The Parent Survey captured the usual travel mode of students and parents' perceptions about walking and bicycling between home and school. In July 2014, HSRC developed an augmented Parent Survey instrument designed specifically for the ARTS project evaluation. The augmented Parent Survey retained all questions from the standard Parent Survey and included three additional questions about parents' levels of walking and bicycling activity, as well as students' walking and bicycling activity after school and on the weekend. The Student Travel Tally was a show-of-hands accounting of students' travel modes to and from school. The Active Travel Readiness Scale was developed by HSRC, informed by Evenson and colleagues' (2007) work, and measured the perceived school climate for active travel in children. The Active Travel Readiness Scale measured the ARTS Coordinators' perception of schools' interest



4. <https://www.communityclinicalconnections.com/active-routes-to-school>

in and engagement with walking and bicycling to, from and at school. Each quarter, ARTS Regional Coordinators assigned a score of 0 (“No interest, No activity”) to 5 (“Lots of interest, Many activities, Seeking more to do”) for three to five schools with which they worked intensely.

2. Implementation

From 2013–2019, ARTS Regional Coordinators worked across NC to implement the ARTS project. The ARTS project was designed to:

Increase the number of one-time awareness-raising events.

ARTS Regional Coordinators supported one-time walking—and bicycling—focused events (e.g., Walk to School Day, Bike to School Day) that highlighted the fun of walking and bicycling. These events were designed to generate excitement about walking and bicycling safely to, from and at school.

2,939

one-time awareness-raising events were held between 2014 and 2019.

Increase the number of on-going programs that encourage walking and biking to, from and at school.

ARTS Regional Coordinators worked with schools to develop on-going walking and biking programs including those that supported groups of students walking or biking together to, from and at school and walking or biking programs or clubs that convene regularly at school (a minimum of one time per month), throughout the school year.

347

347 on-going walking and biking programs were initiated between 2014 and 2019.

“Active Routes to School has been an essential part of what we’ve been able to achieve with our Safe Routes program at Northwoods Elementary. The advice, knowledge and support from our regional coordinator has been invaluable when planning yearly events such as Walk and Bike to School Days. Most importantly, the support of Active Routes to School has helped us create weekly walking programs, allowing us to do valuable, ongoing safety instruction for our students.”

—Safe Routes to School Parent Coordinator, Wake County

“Our students come from Asheville City, Buncombe County and Henderson County; therefore, it is not realistic for most of our students to walk from home. This is a central location so that all children can participate. It also helps bring awareness to the community when they see such a large group walking in the neighborhood.”

—School Operations Coordinator, Buncombe County

“We encourage our students to walk or bike to school. This training (Bike Safety), and the helmets, get our kids off to a great start. We so appreciate the community involvement in equipping our students with the tools and knowledge to keep them safe. This event helps prepare students for the National Bike to School Day.”

—Principal, Dare County

Increase the number of trainings on how to implement Safe Routes to School activities.

ARTS Regional Coordinators conducted education activities for teachers and parents on how to implement Safe Routes to School activities. Children were taught and encouraged to practice and develop safe pedestrian and bicycle behaviors while promoting healthy transportation choices and active lifestyles that can be carried into adulthood.

90,801 teachers and students were trained between 2014 and 2019.

Increase the number of policies that support walking and biking to, from and at school, such as first dismissal for walkers and bikers

ARTS Regional Coordinators helped local communities and schools create, enact and implement policies to support active and healthy community environments that encourage safe walking and bicycling and physical activity by children.

112 school-level, school district, municipal-level or regional safe routes to school policies or plans were adopted or revised between 2014 and 2019.

“This program has made a great impact in my school as more students are excited about running and walking. It has helped students who do not play sports feel part of a team as they help their class achieve their goals, and this year’s fitness testing scores show that each grade level participating in the program has improved their pacer scores and shuttle run scores. I hope that this program is still around in the future so I may continue to expand this program.”

—PE Teacher, Carteret County

Identify safety features near schools (within two miles) such as sidewalks, cross walks and bike lanes that need improvement.

Infrastructure changes may not only improve safety for children, but they may also encourage more walking and bicycling by the public. In addition to working directly with schools, ARTS Regional Coordinators worked within communities to identify opportunities for open use of



recreational facilities (e.g., free community access to recreational facilities without a formal partnership or agreement with another party) and Complete Streets projects (e.g., community roads that are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities) to improve access to physical activity.

18

walkability or bikability assessments were conducted and 9 safety features were completed between 2014 and 2019.

“It was really interesting to see that some of the most important benefits didn’t cost much money—it was more about figuring out what would have the most impact in the right places.”

**—Kannapolis City
Public Works Director**

3. Evaluation

The ARTS project was evaluated to determine if the aims of the strategies were met and to assure that resources were directed toward efforts that showed the greatest likelihood of success.

In addition to tracking the activities of the ARTS Regional Coordinators, the evaluation examined student travel behavior, parents’ perception of walking and biking to school, and schools’ readiness to adopt walking and biking.

The main evaluation goals included:

- Measure changes in the percentage of K–8 students in North Carolina who walk and bicycle to school in settings where those activities are feasible.
- Measure changes in participating schools’ readiness to support safe walking and bicycling.
- Measure changes in participating families’ walking and bicycling activity.

Quantitative and anecdotal evidence supports the conclusion that the components of the ARTS project were readily adopted by schools and school districts because:

- They do not require ongoing financial or administrative commitments
- They are compatible with schools’ and districts’ desire to foster health and well-being of their students
- Parents, staff and students can see the results in the form of more alert, happier and better performing students and
- The highlighted promotional events (e.g., Walk to School Day, Bike to School Day) are relatively simple to set up and operate.

Lessons learned by the ARTS Regional Coordinators highlight several insights that schools, community partnerships and others can use to successfully implement a Safe Routes to School program for their schools and school districts.

Advice from the Active Routes to School Coordinators

1. Establish a positive relationship with every school and school district.

Identify a connection.

Build relationships with a person or people at the school who can facilitate an introduction for them and/or their program. ARTS Regional Coordinators accomplished this by finding someone connected to the school who could provide an introduction or by using community partners/family/friends to establish that connection.

Establish credibility.

The ARTS Regional Coordinators discovered they needed to establish themselves as credible and reliable partners to overcome the reluctance of schools to participate in the program because ARTS is not considered part of the standard school curriculum. The ARTS Regional Coordinators had to be “on their game” when they were introduced to a new school to show that they were knowledgeable about the benefits and costs (e.g., time, money, resources) of the program for the school. This means they had to know what resources the school already had, as well as have a clear understanding of how the program could be implemented at that school while being well prepared to answer any questions or concerns.

Show commitment.

Building a relationship goes beyond the initial introduction. ARTS Regional Coordinators regularly attended important school events, like the School Health Advisory Council meetings, to show a high level of commitment and support to the school. Attending these meetings/events also gave the ARTS Regional Coordinators the opportunity to explain the ARTS project and how the school could get involved.

Identify priorities.

It was important for the ARTS coordinators to identify what the school and other partners were focused on so they could articulate how the ARTS program related to and supported their priorities.



Persevere.

Above all the ARTS Regional Coordinators indicated that it is important not to give up. Even when it's challenging to get into a school, keep showing up. Not only can the interest in the program change from year to year, the high rate of staff turnover in schools can be a benefit. If one PE teacher or principal wasn't interested in the program one year, there might be a new staff person who is interested the next.

2. Show that you respect and understand the schools.

Preparation is key.

Many schools in NC are in areas where walking and biking to and from school is not feasible. The ARTS Regional Coordinators assessed school locations, resources and strengths before meeting with school staff so that they were well prepared to propose, viable, "out of the box" ideas that school staff could realistically consider and support.

Appreciate differences in school needs.

ARTS Regional Coordinators quickly learned that there is no "one size fits all" approach to working with schools. The needs of schools differ from district to district and often from school to school within the same district. ARTS Regional Coordinators customized their programs to meet the needs of each individual school.

Know school strengths.

The ARTS Regional Coordinators also said that it is important to recognize the strengths of each school and focus on what the school was already doing well.

3. Offer a program/initiative that aligns with the goals of the schools.

Schools are under pressure to reach the academic goals established for them so much so that anything that seems to take attention away from these priorities may not be considered unless it will help achieve these goals. The Safe Routes to School program model, on which the Active Routes to school project was based, aligns with many of the national School Health guidelines.





Highlight academic benefits.

The ARTS Regional Coordinators quickly learned that discussing the benefits of the ARTS project (e.g. healthier students, improved academic performance⁵) was a strong selling point. The ARTS Regional Coordinators used a “here’s what the program will do for your school and students” approach to gain approval for implementing ARTS activities.

Emphasize low-cost of ARTS.

Having a program that was low-cost or no-cost and easy to implement was a positive point for the ARTS Regional Coordinators.

Speak in their language.

Schools, like many organizations have key words and phrases that resonate with their staff. The ARTS Regional Coordinators had to “learn the language” of their schools to effectively communicate how the goals of the ARTS project aligned with those of the schools.

4. Always work toward sustainability

The goal of the ARTS project was to increase the number of policies and practices that supported on-going pedestrian and bicycle safety programs that were offered regularly at schools.

Leverage special events.

The ARTS Regional Coordinators suggest using special events to encourage schools to develop policies and practices that supported ongoing programs (e.g., bicycle safety training for all 4th grade students, daily walk at school programs) and to encourage walking and bicycling. They found that these programs were more sustainable over time as the students, staff and parents would request the continuation of the programs even if there were major staff changes at the school.

Cultivate champions.

One major key to the success of the ARTS project was the ARTS Regional Coordinator’s ability to find a school champion who had the passion for and commitment to the ARTS project. These champions helped them navigate school practices and policies, garnered support for the changes they were requesting and ensured that the activities continued from year to year.



5. <https://www.saferoutespartnership.org/safe-routes-school/101/benefits>

The Results

- Students whose schools participated in Walk to School Day were between six and eight times more likely than students whose schools did not participate in Walk to School Day to start walking between home and school.
- Students who attended schools that conducted pedestrian or bicycle safety skills trainings were four times more likely to walk to school than students whose schools did not carry out safety skills trainings. Such trainings did not appear to impact how students got home from school.
- Walking and biking to school most commonly occurred among students whose parents perceived walking and biking to school as fun and healthy for their child.
- Students attending schools with in-school champions were 60 percent more likely to walk to school and twice as likely to walk home from school as students whose school lacked a champion. Students whose schools had a champion AND held a Walk to School Day event were nine times more likely to walk to school as students whose schools had neither a champion nor a Walk to School Day event.
- In 2018, among six data-collecting and readiness-rated schools, an increase in the schools' average Active Travel Readiness ratings was associated with an increase in walking and biking to school. This result suggests that ARTS Regional Coordinators' assessments of schools' Active Travel Readiness is closely associated with schools' participation in walking and biking to and from school and suggests that the Readiness scale may prove a statistically valid and reliable means of explaining and predicting students' walking and biking participation.





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Branch NORTH CAROLINA
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