

NCDOT SAFE ROUTES TO SCHOOL PROGRAM

Kids and families in NC are walking and biking

North Carolinians want choices in how they travel for work, errands, school and recreation. Communities in North Carolina are part of a growing nationwide desire to increase walking and biking to school using Safe Routes to School (SRTS) strategies like driver education, signage, enforcement and special events like Walk to School Day. (Read further for more information about strategies.)

Many students aren't able to walk to school. Schools with few or no walkers can still be part of SRTS through strategies like pedestrian safety education, walk at school programs and remote meeting spots that allow students to walk or ride the remainder of the route to school.

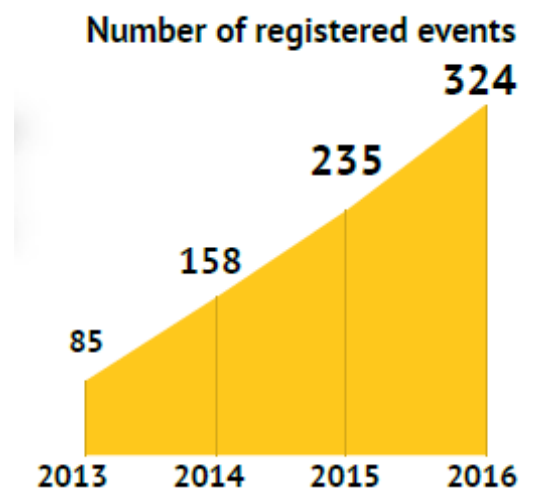
What is NCDOT's Safe Routes to School Program doing?

Helping meet the goals set forth in the Strategic Highway Safety Plan, Statewide Bicycle and Pedestrian Plan and NC Vision Zero, NCDOT's Safe Routes to School Program works to make walking and bicycling to school safer and to encourage more students and families to use these modes where possible.

Through a joint partnership between the NCDOT Safe Routes to School program and the NC Division of Public Health, ten Active Routes to School Regional Coordinators help to implement Safe Routes to School strategies in communities across North Carolina.

From July 2016 through June 2017, the Active Routes to School Program has reached people of all ages across the state:

- Walk to School Day events: 73,633 participants
- Walk/bike programs that occur on a regular basis: 15,616 students
- Let's Go NC! NCDOT Walking and Bicycling Skills Program: 292 teachers trained; 14,280 students taught
- Changes in community or transportation plans that support walking and biking to or at school/ plans to address safety feature near a school: 14 changes
- Planning for Built Environment changes, for example, sidewalks, cross walks and safety features near schools: 16 plans



North Carolina's Walk to School Day participation has grown tremendously in the past four years. Based on research conducted as part of the NC Active Routes to School Project, NC communities that hold Walk to School Day events are more likely to show increases in walking and biking.

The reasons behind Safe Routes to School

While there are many reasons communities want more walking and biking to school, the fact that children are not getting the physical activity they need and that walking to school is a missed opportunity have played a major role. There are community-wide benefits, too: less cars on the road, more options for walking and biking for all ages and more opportunities for community members to connect with their neighbors. Meanwhile, students arrive at school alert and ready to learn.

Fewer children walk or bicycle to school than did so a generation ago:

- In 1969, 48 percent of students between the ages of 5 and 14 walked or bicycled to or from school.¹
- In 2009 (the most recent year when this data was collected), 13 percent of students between the ages of 5 and 14 walked or bicycled to or from school.²
- In 1969, 89 percent of students in grades K through eight who lived within one mile of school usually walked or bicycled to school.³
- In 2009, only 35 percent of students in grades K through eight who lived within one mile of school usually walked or bicycled to school even once a week.⁴

Parents driving their children to school make up 10-14% of morning rush hour traffic nationwide.⁵

In NC, 15% of children ages 5-17 live within one mile of their school and 34% live within two miles, however, only 4% walk or ride a bicycle to school at least once a week.⁶

Safe Routes to School programs make sense

Safe Routes to School programs have been shown to:

- improve children's mental and physical health;
- increase the number of students who walk or bike to and from school;
- make it safer for students to walk or bike to or from school;
- and lower health care and transportation costs for school districts and families.

The details

- By walking or biking to school, children can meet an average of 25 percent of their recommended daily physical activity.⁷
- Students who get more physical activity do better in school.⁸
- Nationwide, 650,000 parent surveys reveal that walking to and from school increased from less than 14 percent to more than 17 percent of all trips between 2007-08 and 2014 when the National Safe Routes to School Program was operating at its greatest capacity.⁹
- Safe Routes to School programs can increase walking and biking to school by five percent each year over five years. Comprehensive programs saw the greatest increase.¹⁰
- Pedestrian and bicyclist crash trends examined in 18 states over a 16-year period found that school-aged children experienced 23 percent fewer crash-related injuries than did adults.¹¹
- Schools and school districts benefit from nearby pedestrian and bicycle safety improvements through transportation cost savings, especially where many students are close enough to walk and bike.¹²

Communities are critical partners and leaders

Successfully increasing walking to school – or on the school campus – hinges on the passion and commitment of community members. Based on research conducted in North Carolina (which echoes what's been seen nationwide), programs with in-school champions are most likely to increase walking and biking. These champions might be a school nurse, PE teacher, principal, or other school staff. In some NC communities, elected officials have played a big role. Community partners such as representatives from public health, transportation, volunteer groups and law enforcement all help support the programs' work or can be champions as well.



Safe Routes to School strategies

Education: Education activities engage parents, neighbors and other drivers in the community to remind them about safe driving near walkers and bicyclists. Parents serve as role models for their children and play an important part in teaching them pedestrian and bicycle safety. Education activities also [teach students how to walk and bike safely](#) and the benefits of doing so.

Encouragement: Encouragement strategies generate excitement about walking and bicycling safely to school. Special events like International Walk to School Day and ongoing activities like walking school buses and bike trains can often be started relatively easily with little cost and a focus on fun.

Enforcement: Enforcement activities can help to change unsafe behaviors of drivers, bicyclists and pedestrians. The role of the police officers often goes beyond enforcing laws and can be included in all strategies of the SRTS program.

Engineering: Engineering addresses the built environment with tools that can be used to create safe places to walk or bike and can also influence the way people behave. Infrastructure changes may not only improve safety for children, but they also may encourage more walking and bicycling by the general public.

Evaluation: Evaluation is used to determine if the aims of the strategies are being met and to assure that resources are directed toward efforts that show the greatest likelihood of success. Also, evaluation can identify needed adjustments to the program while it is underway. [Tools to help](#) are already made.

For more information about each of these strategies, visit the National Center for Safe Routes to School's [Safe Routes to School Guide](#) and see the Resources listed below.



How to get started

Each school and community starts their SRTS program with different circumstances. For example, some schools have great places for walking and bicycling, but few students that take advantage of them. Other communities have few or no students who can safely walk and bike to school. Some communities do not have children walking or bicycling to school at all. Each situation presents an opportunity to improve the walking and bicycling conditions for students traveling to school while sometimes also offering at-school walking options.

While each situation is unique, the basic steps to starting a Safe Routes to School program include:

1. **Bring together the right people:** Identify people who want to make walking and bicycling to school safe and appealing for children and their families. Sharing concerns, interests and knowledge among a variety of community members with diverse expertise can enable groups to tackle many different issues.
2. **Hold a kick-off meeting:** The kick-off meeting has two main goals - to create a vision and generate next steps.
3. **Gather information and identify issues:** Collecting information can help to identify needed program elements and provide a means to measure the impact of the program later.
4. **Identify solutions:** Solutions to issues identified by the group will include a combination of education, encouragement, engineering and enforcement strategies.
5. **Make a plan:** The SRTS plan does not need to be lengthy but should include education, encouragement, engineering and enforcement strategies, a time schedule, a map of the area covered by the plan and an explanation of how the program will be evaluated.
6. **Get the plan and people moving:** There are things that can be done right away without major funding, so some elements of the SRTS plan can begin while waiting on other parts.
7. **Evaluate, adjust and keep going:** After the program begins, careful monitoring will identify which strategies work well and which are not going as planned.

Two tips to jumpstart your efforts:

1. Contact your [Regional Active Routes to School Coordinator](#) to see how they can help.
2. Many communities find celebrating [Walk to School Day or Bike to School Day](#) is a great way to build enthusiasm and bring visibility to safety concerns or other barriers.

Learn more about starting a [Safe Routes to School program](#).

People and Resources to help

People

- Find your [Regional Active Routes to School Coordinator](#)
- Contact the North Carolina Safe Routes to School Coordinator:
Ed Johnson, RLA, ASLA
919.707.2604
erjohnson2@ncdot.gov

Resources

[Let's Go NC! Pedestrian and Bicycle Safety Skills K – 5 Curriculum](#)

[NCDOT SRTS How to Plan a Walk to School Day Event](#)

NC Division of Public Health and NCDOT [Active Routes to School Project](#)

[Watch for Me NC Pedestrian and Bicycle Safety Campaign](#)

[Walk and Bike to School Day](#)

[National Center for Safe Routes to School](#)

¹The National Center for Safe Routes to School. (2011). How Children Get to School: School Travel Patterns from 1969 to 2009. Available at http://saferoutesinfo.org/sites/default/files/resources/NHTS_school_travel_report_2011_0.pdf.

²Ibid.

³U.S. Department of Transportation. (1972). Nationwide Personal Transportation Survey, Transportation Characteristics of School Children. Available at <http://www.fhwa.dot.gov/ohim/1969/q.pdf>.

⁴The National Center for Safe Routes to School. (2011). How Children Get to School: School Travel Patterns from 1969 to 2009. Available at http://saferoutesinfo.org/sites/default/files/resources/NHTS_school_travel_report_2011_0.pdf.

⁵Ibid.

⁶North Carolina State Center for Health Statistics. (2011). Child Health Assessment and Monitoring Program (CHAMP). Available at <http://www.schs.state.nc.us/schs/champ/2011/topics.html>.

⁷Bassett, D.R., Fitzhugh, E.C., Heath, G.W., Erwin, P.C., Frederick, G.M., Wolff, D.L., ... Stout, A.B. (2013). Estimated Energy Expenditures for School-Based Policies and Active Living. *American Journal of Preventive Medicine*, 44(2), 108-113. <https://doi.org/10.1016/j.amepre.2012.10.017>

⁸Centers for Disease Control and Prevention. (2010). The association between school based physical activity, including physical education, and academic performance. Available at http://www.jumpinforhealthykids.org/userfiles/file/news/CDC_School-basedPA_Academics.pdf

⁹The National Center for Safe Routes to School. (2011). How Children Get to School: School Travel Patterns from 1969 to 2009. Available at http://saferoutesinfo.org/sites/default/files/resources/NHTS_school_travel_report_2011_0.pdf.

¹⁰McDonald, N.C., Steiner, R.L., Lee, C., Smith, T.R., Zhu, X., & Yang, Y. (2014). Impact of the Safe Routes to School Program on Walking and Bicycling. *Journal of the American Planning Association*, 80(2), 153-167. <http://dx.doi.org/10.1080/01944363.2014.956654>

¹¹DiMaggio, C., Frangos, S., Li, G. (2016). National Safe Routes to School Program and Risk of School-Age Pedestrian and Bicyclist Injury. *Annals of Epidemiology*, 26(6), 412-417. <https://doi.org/10.1016/j.annepidem.2016.04.002>

¹²McDonald, N.C., Steiner, R.L., Palmer, W.M., Bullock, A.N., Sisiopiku, V.P., Lytle, B.F. (2014) Costs of school transportation: quantifying the fiscal impacts of encouraging walking and bicycling for school travel. *Transportation*, 43(1), 159-175. 10.1007/s11116-014-9569-7

