

A RESOLUTION RECEIVING THE 2012 REPORT ON SAFE ROUTES TO SCHOOL
No. 78/2012-13

WHEREAS, *Carrboro Vision 2020* states that the “safe and adequate flow of bus, auto, bicycle and pedestrian traffic within and around Carrboro is essential”, and *Vision 2020* Policy 3.25 encourages pedestrian safety; and,

WHEREAS, the Carrboro Comprehensive Bicycle Transportation Plan of 2009 recommends implementing Safe Routes to School planning activities and events; and,

WHEREAS, the federal Safe Routes to School program was created in 2005 by the Federal Highway Administration to provide support for Safe Routes to School planning, projects, and promotions nationwide; and,

WHEREAS, the Town of Carrboro has partnered with elementary schools and other stakeholders to develop a Safe Routes to School Action Plan – supported by a North Carolina Department of Transportation service award – which has been adopted by the Board of Aldermen and endorsed by the Chapel Hill-Carrboro City Schools Board of Education; and,

WHEREAS, the Town of Carrboro has built a sidewalk on Elm Street with Safe Routes to School funding and collaborated with Carrboro Elementary and other stakeholders on encouragement and educational activities relating to Safe Routes to School, also utilizing Safe Routes to School funding;

WHEREAS, a sustained local Safe Routes to School program will serve to improve the safety, convenience, and fun of walking and bicycling to school for Carrboro elementary and middle school students;

NOW, THEREFORE BE IT RESOLVED by the Carrboro Board of Aldermen that the Board of Aldermen receives the Safe Routes to School in Carrboro: 2012 Report.

This is the 22nd day of January in the year 2013.

A RESOLUTION PROVIDING DIRECTION ON THE ESTABLISHMENT OF A
SAFE ROUTES TO SCHOOL IMPLEMENTATION COMMITTEE

Draft Resolution No. 79/2012-13

WHEREAS, *Carrboro Vision 2020* states that the “safe and adequate flow of bus, auto, bicycle and pedestrian traffic within and around Carrboro is essential”, and *Vision 2020* Policy 3.25 encourages pedestrian safety; and

WHEREAS, the Carrboro Comprehensive Bicycle Transportation Plan of 2009 recommends implementing Safe Routes to School planning activities and events; and

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WHEREAS, the Town of Carrboro has partnered with elementary schools and other stakeholders to develop a Safe Routes to School Action Plan – supported by a North Carolina Department of Transportation service award – which has been adopted by the Board of Aldermen and endorsed by the Chapel Hill-Carrboro City Schools Board of Education; and,

WHEREAS, a recommendation of the Action Plan is to establish an implementation committee; and,

WHEREAS, on May 22, 2012, along with adopting the Action Plan, the Board of Aldermen resolved that “Staff shall bring back a resolution appointing the current steering committee as the Safe Routes to School Implementation Committee, at some time in the future”;

NOW, THEREFORE BE IT RESOLVED by the Carrboro Board of Aldermen that the Board of Aldermen directs staff to:

1. Prepare a draft ordinance amending the Town Code to establish a Safe Routes to School Implementation Committee with the following voting and non-voting representatives:

Voting

Non-voting

2. Prepare a draft mission statement, using as a reference the Safe Routes to School Action Plan's recommendations, and basic Committee rules, to be included in the ordinance.
3. Share the draft ordinance with Chapel Hill-Carrboro City Schools in order to receive their input and gauge level of commitment.
4. Include ____ in the FY 2013-14 recommended budget as a budget for the Committee.
5. Bring the draft ordinance back to the Board of Aldermen for review and consideration of adoption.

This is the 22nd day of January in the year 2013.

Safe Routes to School in Carrboro

2012 Report

January 2013

Carrboro Planning Department



bikesafety skills

Background

Safe Routes to School (SRTS) is a program to make walking and bicycling to school safer and more convenient. Carrboro has had an active SRTS program since 2009, initiated with financial and technical support from NCDOT's SRTS program. The Carrboro Board of Aldermen has supported SRTS through its adoption of a landmark Action Plan in 2012. This plan was also endorsed by the Chapel Hill-Carrboro City Schools (CHCCS) Board of Education, the Carrboro Planning and Transportation Advisory Boards, and the Carrboro Greenways Commission.

Safe Routes to School has several benefits. Walking and cycling reduces car use, lessening emissions and reducing congestion around the school during drop-off and pick-up times. When kids use a bike or their own two feet to get to school, they get in part of the 60 minutes of daily physical activity recommended by health experts. With some exceptions, research has shown that children who actively commute to school are more likely to have higher levels of daily physical activity than those who arrive by car or school bus.¹ Active commuting to school gives kids time outdoors at a time when there is increasing concern for the youngest generation's disconnect with the natural world. Walking and bicycling to school are often done in groups. Neighborhoods have formed "walking school buses" of kids and parent chaperones when Carrboro Elementary has held Walk/Bike to School Day. McDougle Elementary has been known to occasionally have a "peloton" of kids cycling to school.

All of these benefits are contingent upon kids having safe and convenient active transportation routes and the knowledge of how to traverse them safely. The former is addressed by improving physical infrastructure and maintaining traffic enforcement. The latter is addressed by education, such as looking both ways before crossing the street, wearing a helmet, knowing the rules of the road, crossing at crosswalks, or honing bicycle skills. Safety also means personal security. When neighbors come together to form walking school buses or cycling pelotons, kids have the opportunity to travel in groups. "Corner captains" are parents or trusted neighbors stationed along a route to school who can greet kids each day and offer an extra set of eyes. With an active SRTS program and collaboration between parents, teachers, school administrators, the Town of Carrboro, and NCDOT, safe, active travel options can become commonplace for Carrboro schools.

Safe Routes to School Action Plan: A foundation for progress

It all starts with a great plan. In 2009, the Town received a service award from NCDOT to develop a Safe Routes to School Action Plan. The plan outlines infrastructure improvements, programs and activities, enforcement strategies, and educational efforts that serve to improve options for walking and cycling to school. Funding was provided by the grant award directly to a consulting team, who developed the plan and offered technical assistance. The two participating schools were Carrboro and McDougle Elementary Schools.

¹ National Center for Safe Routes to School. 2010. *Safe Routes to School and Health: Understanding the Physical Activity Benefits of Walking and Bicycling to School*. <http://www.saferoutesinfo.org/program-tools/safe-routes-school-and-health-understanding-physical-activity-benefits-walking-and-bic>.

Stakeholders

The Action Plan was prepared by consultants Greenways Inc. and Greene Transportation Solutions. The Action Plan Team – a steering committee composed of school principals, teachers, parents, staff from the CHCCS Transportation Department, the Chair of the Carrboro Transportation Advisory Board, and Town staff (Police, Fire, Planning, Recreation and Parks, Public Works) – guided the plan’s development from start to finish.

Public participation

The following dates provided opportunities for the Action Plan Team and interested community members to offer input.

- December 7, 2009: Action Plan Team Kickoff Meeting at Town Hall
- Spring 2010: Consultant site visits to schools
- May 3, 2010: Public Open House @ Carrboro Elementary
- June 1-2, 2010: Student travel tallies and parent surveys
- June 15, 2010: Board of Aldermen receives update on SRTS programs
- September 21-23, 2010: Student travel tallies and parent surveys
- October 11, 2010: Action Plan Review Meeting @ McDougle Elementary
- October 30, 2010: Map of recommendations @ McDougle Elementary Fall Festival
- February 15, 2011: Presentation to the Board of Aldermen

Input was also received at other times via email and phone.

Draft plan “on tour”

On February 15, 2011, the Board of Aldermen received a report on the plan from the consulting team. The Board adopted a resolution directing that the plan be shared with the CHCCS Board of Education, the two schools’ PTAs, and school administrators; that staff continue to work with the schools and PTAs to further Safe Routes to School education; and that the plan be posted on the Town website.

The following presentations of the draft plan were made by Town staff:

- February 7, 2012 – McDougle Elementary PTA
- April 19, 2012 – CHCCS Board of Education

Carrboro PTA was made aware of the draft plan and offered an opportunity to receive a presentation but did not request one. The draft plan was also posted on the Town’s transportation webpage.

Review, adoption, and endorsement

Town advisory boards then reviewed the plan and recommended approval to the Board of Aldermen.

- May 1, 2012 – Board of Aldermen sets public hearing
- May 3, 2012 – Joint advisory board presentation (Planning Board and Transportation Advisory Board)
- May 17, 2012 – Planning Board and TAB recommendations for approval
- May 21, 2012 – Greenways Commission recommendation for approval

After holding a public hearing, the Board of Aldermen adopted the Action Plan on May 22, 2012. This provides a foundation for continued progress toward the plan's goal of increasing the percentage of children walking and bicycling to school to 25% by year 2015.

The Chapel Hill-Carrboro City Schools Board of Education reviewed the Action Plan on April 19, 2012. On Thursday, October 4, 2012, the Board approved a resolution of support for the Action Plan. The resolution states:

Be it, therefore, resolved that the Board of Education supports the Safe Routes to School Action Plan and directs administration to consider the recommendations in future capital planning and other initiatives.²

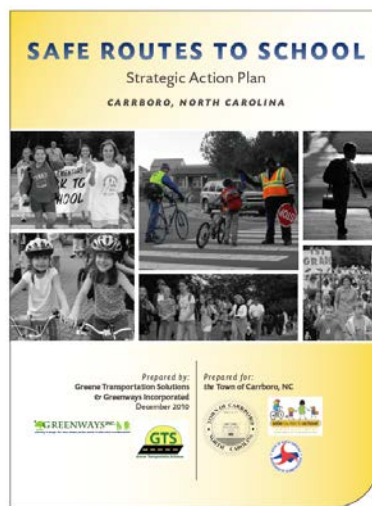
Goals

The full list of goals of the plan, established by the Action Plan Team at the kickoff meeting, is ambitious but achievable:

- Increase the percentage of children walking and bicycling to school to 25% by year 2015.
- Expand walk zones so that less people ride the bus and more people walk or bicycle to school.
- Implement incentive programs for participating kids.
- Relieve parents' fears about walking and bicycling.
- Create a culture that encourages walking.
- Reduce vehicular miles traveled.
- Calm traffic and enforce traffic laws.
- Develop encouragement / incentive programs that will include all children (including the ones that cannot walk or bicycle to school).
- Develop new greenways.
- Educate parents and children on the benefits of walking and bicycling.
- Incorporate pedestrian and bicycle safety in PE classes.
- Increase school board participation and support.

² CHCCS Board of Education agendas and minutes may be found here:
http://www.chccs.k12.nc.us/site_res_view_folder.aspx?id=7c1d2ea6-9607-40bf-9185-da3b3bbc2db1.

- Incorporate/consider SRTS guidelines in new site selection.
- Provide greater connectivity between neighborhoods and schools.
- Develop guidelines and set priorities for actual projects that will encourage and increase walkers (will require DOT support).
- Conduct neighborhood education and support initiatives to address current opposition.
- Develop programs for working parents.
- Involve/develop collaboration with local businesses and agencies for park and walk locations and sponsorships.
- Have bi-lingual education and encouragement plans.
- Create and maintain evaluation and monitoring subgroups such as a Safe Routes to School advocacy group that would champion this plan and evaluate its progress.



Elm Street Sidewalk

A plan is a foundation for improvement, but only a start. It is equally important that the plan's recommendations are implemented and new facilities are built expeditiously. A sidewalk deferred could mean a whole generation of kids missing out on a safe travel option. Time is of the essence.

To that end, it was timely that in September 2009, the Town received one of 13 infrastructure grants from NCDOT to cover the costs of building a sidewalk on Elm St. Constructed between May and August 2012, this approximately 950-foot sidewalk will provide an option to walk separately from vehicle travel. Sungate Design Group provided the design and construction engineering, and White Oak Construction was the contractor.



Elm Street before the sidewalk



Elm Street sidewalk

Walking and bicycling encouragement activities

Also in 2009, the Town received a non-infrastructure grant from NCDOT for various “Walk n’ Roll” encouragement activities at Carrboro Elementary. The grant period was from Fall 2010 through all of 2011. At the events, kids had fun while learning about walking and cycling safety. The events involved close coordination between the Town, Carrboro Elementary, stakeholder groups like Carrboro Bicycle Coalition and the ReCYCLery, bike shops, parents and students. The success of these events is evident from school travel data (below), the programs it helped to spur at Carrboro Elementary, and anecdotes from the events.

Walk and Bike to School Day – Fall 2010

On October 6, 2010 – International Walk to School Day – the Town and Carrboro Elementary held its own Walk/Bike to School event. Estimated participation was over 100 students. Students received giveaways when they arrived at school, and parents were able to enjoy free coffee from Open Eye Café. Many students made walking school bus signs. The Town Hall parking lot became a “Park and Walk” location for students living too far from the school to walk, but who wanted to participate anyway.



Grant funds supported the printing of a banner that was posted at the intersection of Estes and Greensboro St.



The park-and-walk crowd gathers at Town Hall before walking to school



Walking along the new sidewalk on Ashe St.



Parking bikes at the south bike rack



A "walking school bus" arrives



Another walking school bus

Bike Safety Rodeo – March 2011

The Town partnered with Carrboro Elementary, members of the Carrboro Transportation Advisory Board, the ReCYCLery, Cycle 9, Back Alley Bikes, Cyclicious (UNC), and others to hold a Bike Safety Rodeo on March 20, 2011. Multilingual fliers were distributed to all students to advertise the event, which took place on a Sunday.

Overall, 56 kids attended, along with their parents. Stations included registration, helmet fit, bike check-up, balance practice, rules of the road, and on-road practice. Bicycle safety materials were handed out, and a bike safety video, “Bike Safe, Bike Smart” (produced by the National Highway Traffic Safety Administration – NHTSA) was played at the balance practice station. A Carrboro Police Dept. officer and League of American Bicyclists-certified cycling instructor were on-hand to teach kids rules of the road. They then were able to practice on-road cycling in a controlled (coned-off) lane on Shelton St. At the end of the lane, they received bike helmets, bike locks, reflective stickers, safe bicycling bookmarks, Carrboro Elementary water bottles, and food donated by the school and PTA.

The incentive table had a bucket for donations toward the purchase of a new bike rack for the school. When one parent found out the school was in need of a new bike rack, shortly thereafter, he made an inquiry to purchase a used bike rack from a store in Chapel Hill. This he donated to the school, showing that sometimes events can lead to unexpected rewards.

Many volunteers – including several faculty and staff of Carrboro Elementary – were essential in making the event happen.



Learning rules of the road (photo: Heidi Perry)



Negotiating the obstacles at the balance practice station (photo: Heidi Perry)



ReCYCLery director Rich Giorgi fixes a bike (photo: Heidi Perry)



Carrboro Police Officer Ward teaches rules of the road (photo: Heidi Perry)

Bike Fix-It Day – April 2011

The Town, Carrboro Elementary, and the ReCYCLery partnered to hold a Bike Fix-It Day on April 17, 2011. The motivation for the event was that some kids have bikes but may not be able to easily afford tune-ups. At the event, about 10 persons received bike check-ups, minor repairs and tune-ups; some kids received free bicycle helmets, reflective stickers, and other gear. Turnout may have been smaller in part due to the substantial number of tune-ups that happened at the Bike Safety Rodeo.



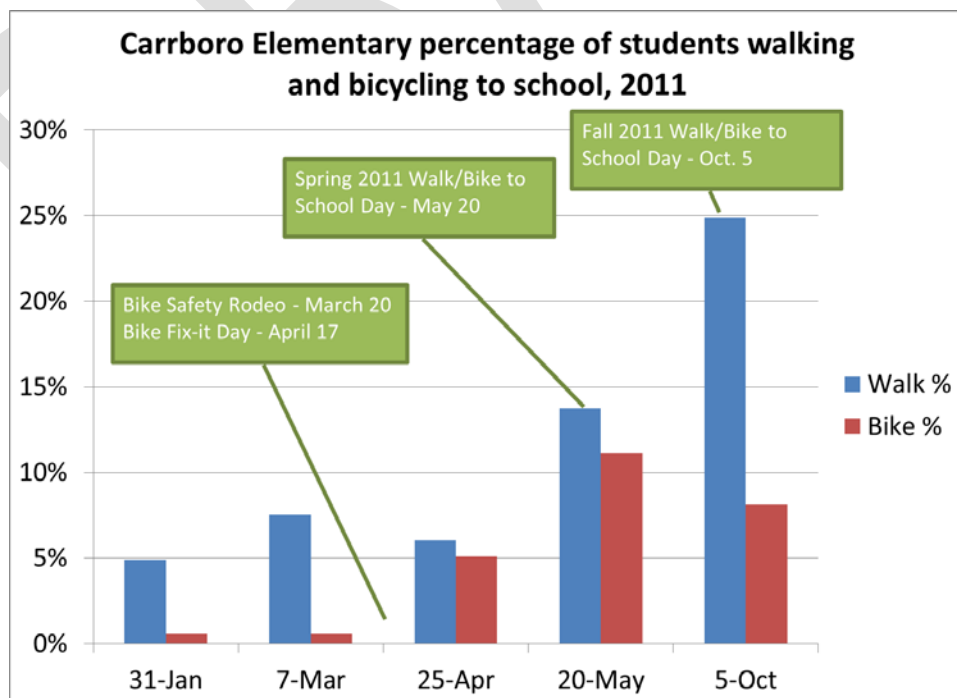
Walk and Bike to School Day – Spring 2011

With the momentum building from the spring's previous bike-related events, the Town and Carrboro Elementary partnered to hold a spring version of Walk and Bike to School Day on Friday, May 20, during National Bike Month. The Board of Aldermen had already designated May as Bike Month and May 16-20 as Bike to Work Week, so the event was well-timed.



To advertise, as with the previous fall, a flyer was sent home with every Carrboro Elementary student, and a banner was placed at the Estes-Greensboro intersection.

As can be seen in the chart below, morning counts show a substantial increase in walking and cycling on May 20 as compared to previous counts. The increase in cycling on April 25 may be due to the Bike Safety Rodeo and Bike Fix-it Day's influence of bikes' popularity as a travel mode. Combined, 132 students, or 25 percent of enrollment, walked or cycled to school on May 20, achieving – for one day, at least – the Action Plan's 2015 goal. (The Oct. 5 counts will be discussed in the next section.)



Each day the week of May 16-20, members Spoke 'N' Revolutions, the high school cycling group, came to speak at morning assembly on various aspects of bike safety and maintenance. They also talked about their then-upcoming bike trip from Alabama to Canada, recreating the Underground Railroad route. The group gave out helmets purchased by the SRTS grant to kids who asked questions.



A completely full bike corral at Carrboro Elementary



Spoke N' Revolutions group



Carrboro Elementary's newly donated bike rack, also full



A *third* bike rack full of bikes

Walk and Bike to School Day – Fall 2011

Building on the success of the spring 2011 event, the Town and Carrboro Elementary held Fall 2011 Walk and Bike to School Day on International Walk to School Day, October 5. As can be seen from the above graph, while cycling decreased from 11.1% to 8.1% of enrollment (still an impressive percentage), the number of students walking to school rose to 25%. In total, a third of all Carrboro Elementary students used active transportation to get to school. This was a great way to cap off the Walk/Bike to School Days supported by the SRTS grant.



Students gather at Town Hall before walking to school



Students and parents arrive from Ashe St. as a volunteer takes counts



The bike corral fills up



Following the bear tracks



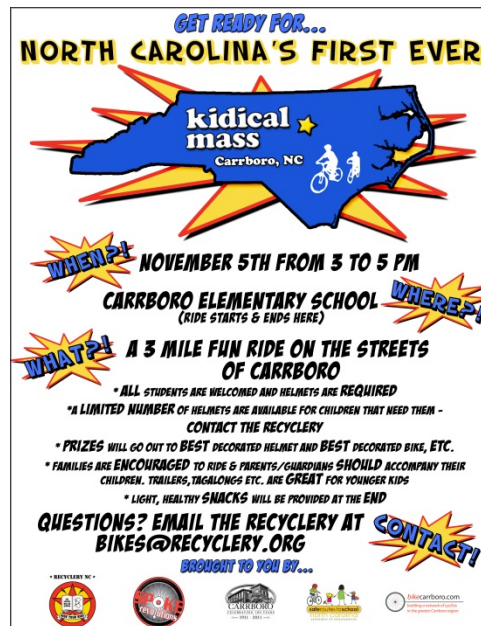
A map with stickers showing from where kids walked or biked

Kidical Mass

Kidical Mass is a leisurely group bike ride for children and their families. It was first held in Eugene, Oregon, in 2008, and since then, there have been Kidical Masses all around the country.³ The ReCYCLery, partnering with the Carrboro Bicycle Coalition, Spoke N' Revolutions, Carrboro Elementary, and the Town, organized the first Kidical Mass on Sunday, November 5, 2011. The scheduled included a pre-ride gathering with giveaways such as bike gear (including helmets for kids that did not have one), stickers, and buttons and post-ride

³ <http://www.kidicalmass.org/>

healthy food options (fruit and water) along with a raffle. Bike-related incentives provided at the event were in part supported by the NCDOT SRTS encouragement grant.



Flyer from the first Kidical Mass



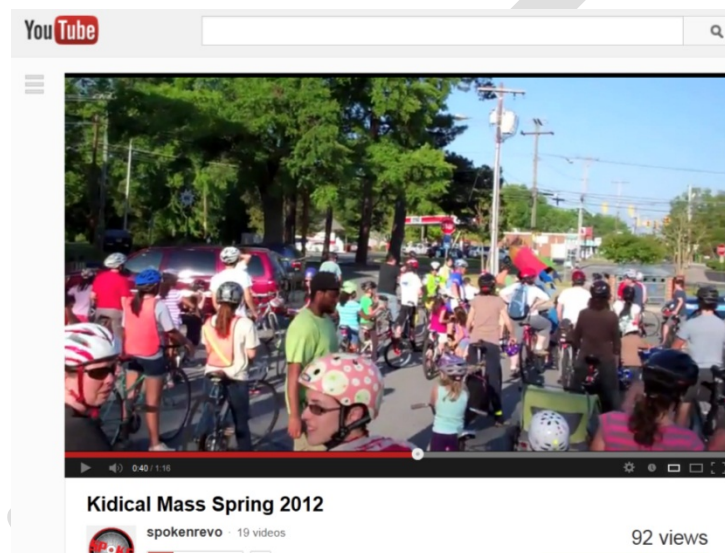
Kids learning turning hand signals before the ride (photo: Kevin Hicks)

Attendance was approximately 120 (about 60 kids and 60 adults). Starting and ending at the Carrboro Elementary drop-off circle, the ride followed a pirate ship bike through the Oak-Poplar neighborhood.

The ride struck a balance by serving as an opportunity for younger cyclists to ride in the street but also providing a semi-controlled setting with adult rider accompaniment and police holding traffic at a major intersection. The effect was to make efforts to ensure safety yet take advantage of low-speed, low-volume neighborhood streets to orient kids with in-street riding.

A second Kidical Mass was held on Monday, April 16, from 5:00 to 7:00 pm, starting from Carrboro Town Commons. The ride was part of Earth Week activities organized by the Carrboro Recreation and Parks Department. Assisting with the ride were Carrboro Elementary staff and PTA, the ReCYCLery, Carrboro Bicycle Coalition, Spoke N' Revolutions, bike shops, and the Planning and Police Depts. Overall, 87 people participated in the ride: 40 kids, 26 adults, and 21 volunteers.

This event was held after the SRTS encouragement grant period was completed, so while it could not avail itself of these funds, it is an example of a program that continued to thrive post-grant.



Screen capture of a YouTube video of Kidical Mass 2, produced by Kevin Hicks, Spoke N' Revolutions

Carrboro's third Kidical Mass was held nearly a year to the day after the inaugural version – November 3, 2012. It was organized by the ReCYCLery with many of the same organizations and Town Departments as the previous two rides providing assistance.



Flyer for the 3rd Kidical Mass

The ride set a record with 168 total participants. As with the previous rides, there were giveaways, healthy food, a raffle, and education on bike safety.

	Total Participants	0-5	youth	teen	adult
Kidical Mass Bike Ride NOV 2012	168	28	50	6	84

Carrboro Rec & Parks' record of number of participants in the 3rd Kidical Mass

With such success from the first three Kidical Mass rides, more rides are being planned for the near future.

School travel data

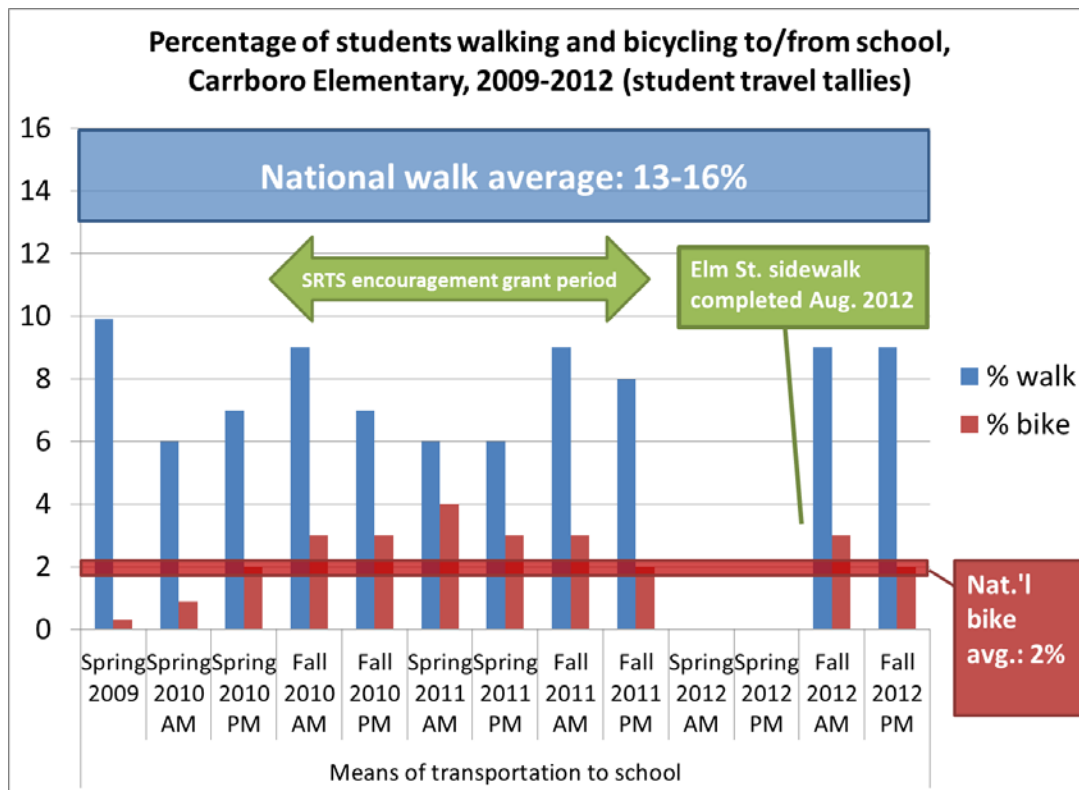
Evaluation is a critical component of a successful SRTS program. Through student travel tallies, parent surveys, and spot counts, the Town of Carrboro has been tracking travel patterns to the two schools. The travel tallies and parent surveys were developed by the National Center for Safe Routes to School, which has a web feature that allows Town staff to enter the data and create reports. Student travel tallies are conducted through a hand count by teachers during class. Parent surveys are sent via email blasts to parent email lists by the school administration.

Travel mode to and from school

Carrboro Elementary student travel tallies

Reported by student travel tallies, data show that Carrboro Elementary is in the 6 to 10% range for walking to school, somewhat below the national average of 13 to 16% walking to and from

school, respectively.⁴ In Fall 2010, at the beginning of the SRTS Non-infrastructure (encouragement) grant period, the percentage of students bicycling to school rose from less than 2% to 2-4%. As described above, the percentage can vary greatly based on the day, with as high as 25% walking reported on Fall 2011 Walk/Bike to School Day and 11% cycling on Spring 2011 Walk/Bike to School Day.



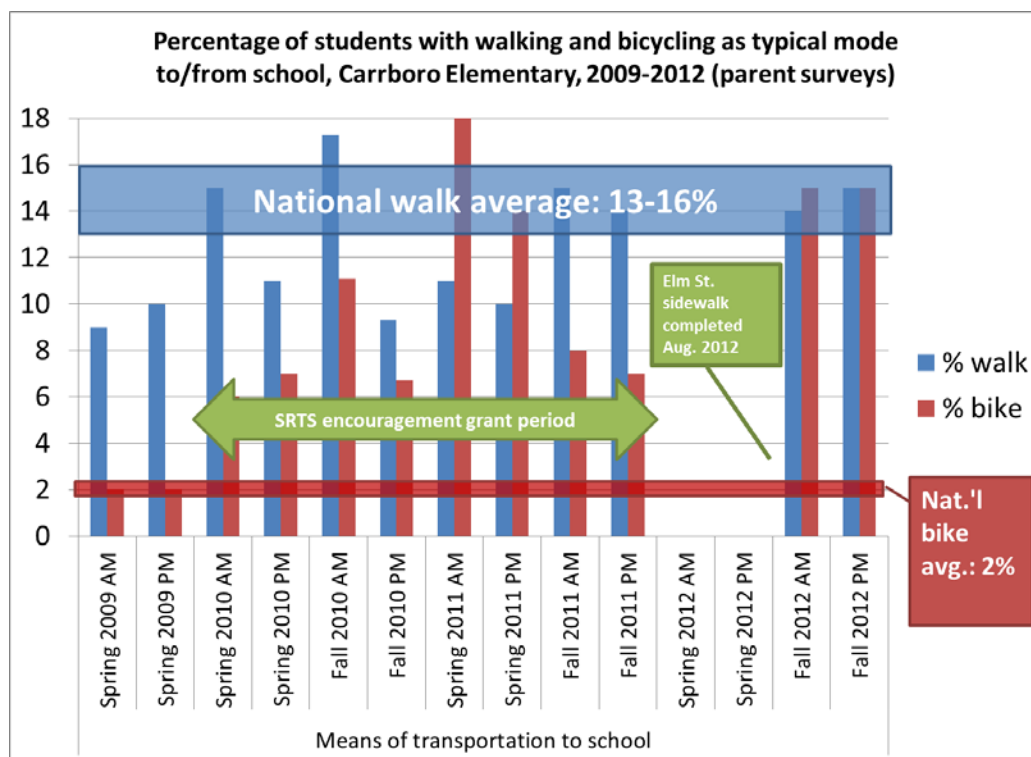
The chart above provides the context for the Town's Infrastructure and Non-infrastructure SRTS grants in terms of changes in walk/bike mode share. However, it is still likely too early to tell the effect of the Elm St. sidewalk project, though walking rates in Fall 2012 were reported at the upper end of the 6-10% range, while cycling continued to be at or above the national average.

The chart does not include other infrastructure projects constructed in the vicinity, such as the Ashe St. sidewalk, completed in summer 2010 with funds from the American Recovery and Reinvestment Act (ARRA).

⁴ National Center for Safe Routes to School. (2010). *Safe Routes to School Travel Data: A Look at Baseline Results from Parent Surveys and Student Travel Tallies*.

Carrboro Elementary parent surveys

As can be seen, there are sometimes discrepancies between mode split reported by student travel tallies compared with parent surveys. Research by UNC professor Noreen McDonald and others has shown however, that both are generally reliable for reporting travel mode.⁵

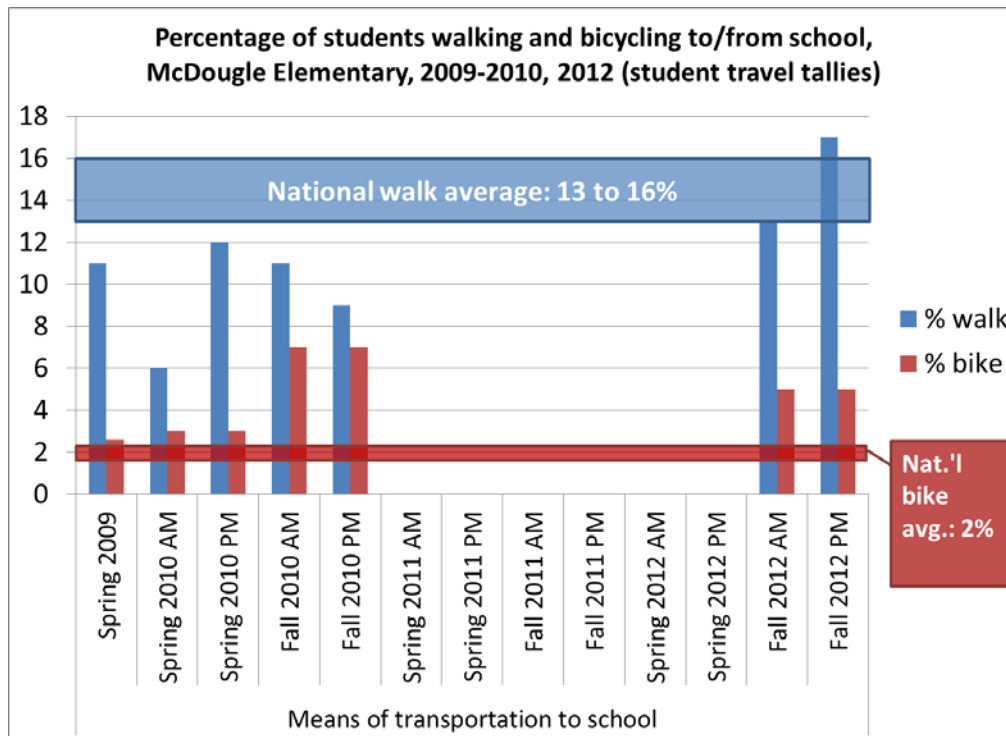


McDougle Elementary student travel tallies

More travel tallies and parent surveys were conducted at Carrboro compared with McDougle, since the SRTS Infrastructure and Non-infrastructure projects were focused on the former. However, the development of the Action Plan coincided with Spring 2009 to Fall 2010 data. Tallies and surveys were taken again in the Fall of 2012.

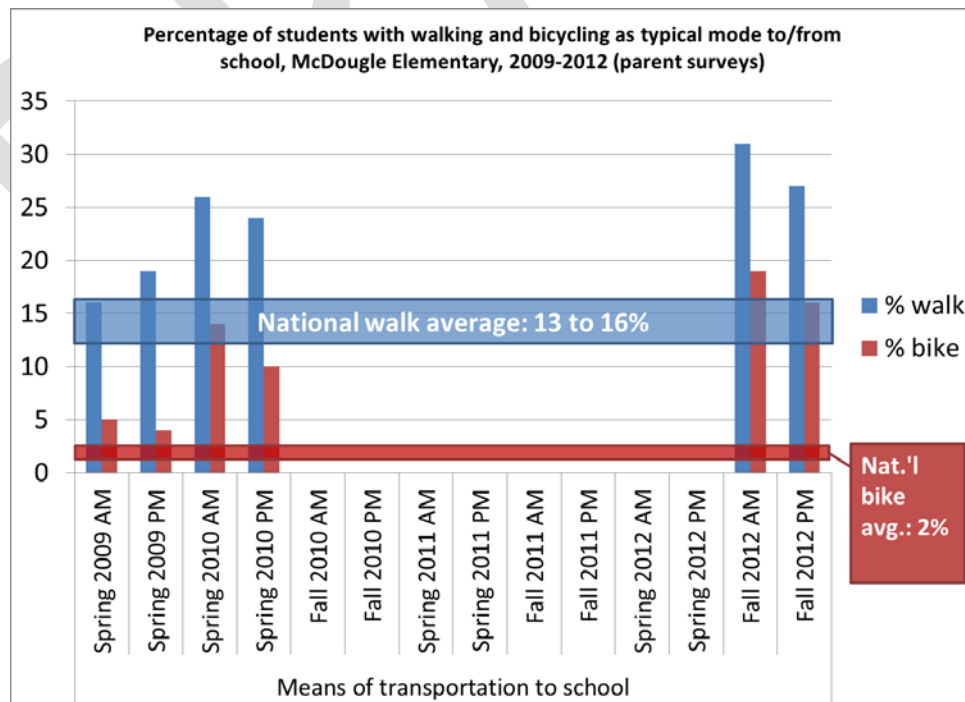
McDougle ranks generally in the 8-12% range for walking to school and 2-7% range for bicycling to school. The latest travel tallies reveal an increase in walking to 13-17%, but more tallies will need to be conducted to confirm if this is a trend.

⁵ McDonald, Noreen C., et al. (2011). Reliability and validity of the Safe Routes to school parent and student surveys. International Journal of Behavioral Nutrition and Physical Activity 2011, 8:56. <http://www.ijbnpa.org/content/8/1/56>



The chart does not include infrastructure projects such as the Old Fayetteville Rd. bike lanes and sidewalk project (Strowd Ln. to NC-54), completed in September 2010.

McDougle Elementary parent surveys



Why kids do or do not walk/bike to school – Parent surveys

The first graph of each time period below applies to parents of children who do not walk or bike to or from school. It shows what factors most affect parents' decisions to not allow their children to walk or bike.

The second graph applies to parents of children who do walk or bike to or from school. It shows what factors most affect parents' decisions to allow their children to walk or bike.

For example, “safety of intersections and crossings” means that a lack of safety at an intersection or crossing discourages parents from allowing walking or bicycling, while intersections or crossings along kids' routes to school that parents deem safe are a factor in their decision to allow walking or bicycling.

The first two graphs are from the Spring 2009 surveys for Carrboro and McDougle aggregated, and the second two are from the Fall 2012 surveys. (Intervening survey results are also available by contacting the Planning Department.)

A major takeaway from these graphs is that almost all factors can be affected by the policies and decisions of the Town of Carrboro, Chapel Hill-Carrboro City Schools, NCDOT, and-or other organizations. Traffic calming – for example, via the Town's Residential Traffic Management Plan (RTMP) or the creation of “slow zones” – can improve safety by lowering motor vehicle speeds. Safety of intersections and crossings can be improved with better pavement markings, curb extensions, better motorist visibility of pedestrians, and so forth.

In both survey periods, the top five factors for not allowing walking/bicycling are:

- Higher speeds
- Higher traffic
- Intersection/crossing risk
- Longer distances
- Lack of sidewalks or pathways

In 2012 compared with 2009, “amount of traffic” overtook “speed of traffic” as the top factor; “lack of sidewalks and pathways” went from fifth-most important to a tie with “distance” for fourth-most important. However, these were modest changes, probably within the margin of error. The important theme is that the top five factors stayed the same. Each of these were cited by half or more parents responding to the survey.

In both survey periods, the top four factors for allowing walking/bicycling are:

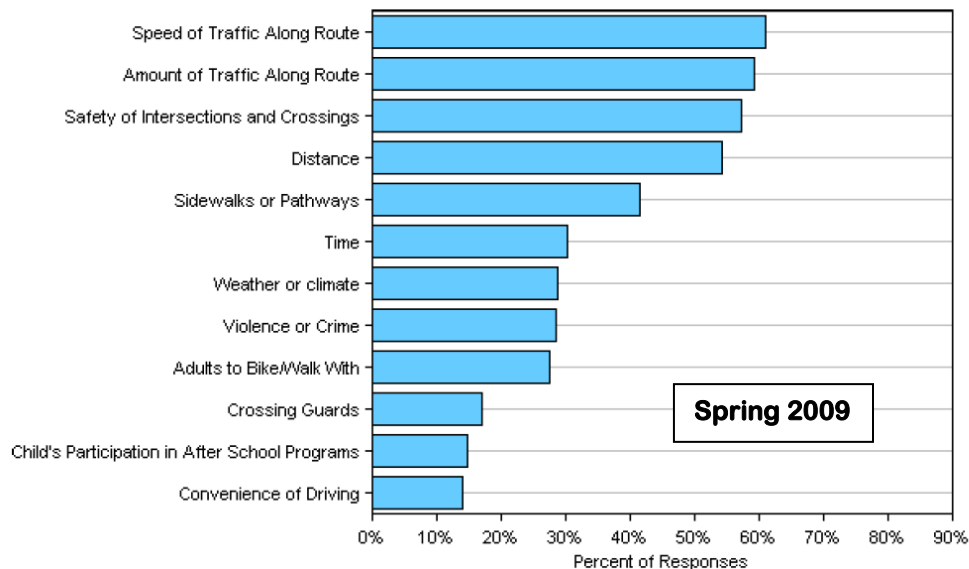
- Shorter distances
- Presence of sidewalks or pathways
- Intersection/crossing safety

- Presence of crossing guards

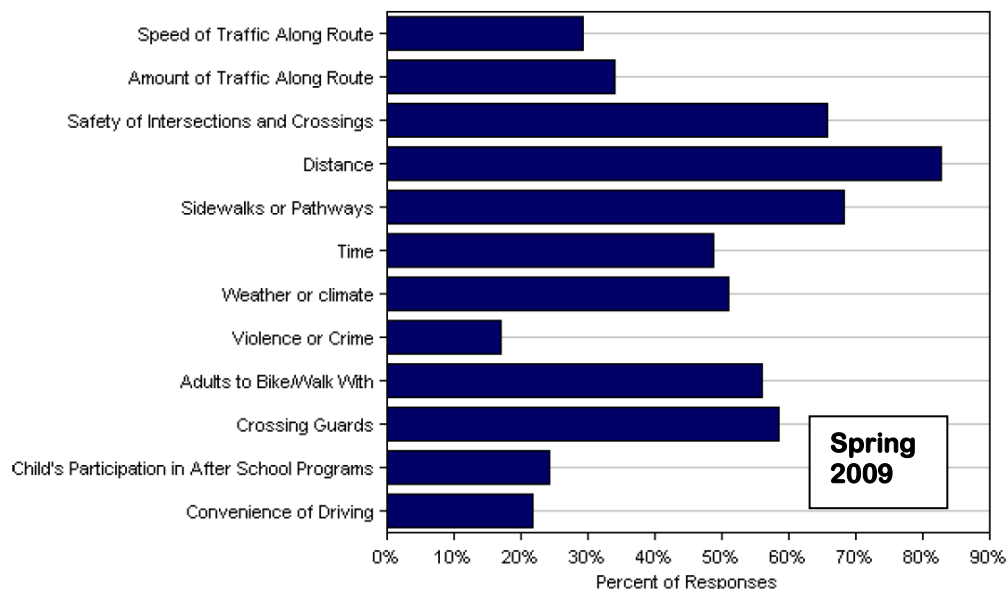
The fifth factor in Spring 2009 was “adults to walk/bike with” while fifth in Fall 2012 was “[lower] amount of traffic along route”, with several other factors not far behind. That “adults to walk/bike with” is important suggests that walking school buses and kid-parent “pelotons” are key encouragement activities.

Spring 2009

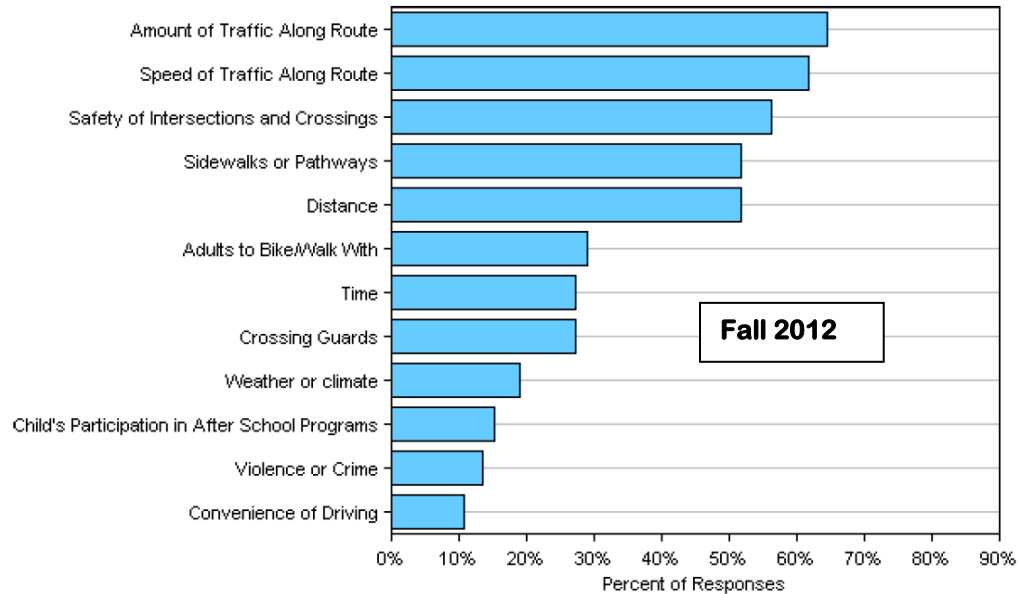
Issues reported to affect the decision to not allow a child to walk or bike to/from school by parents of children who do not walk or bike to/from school



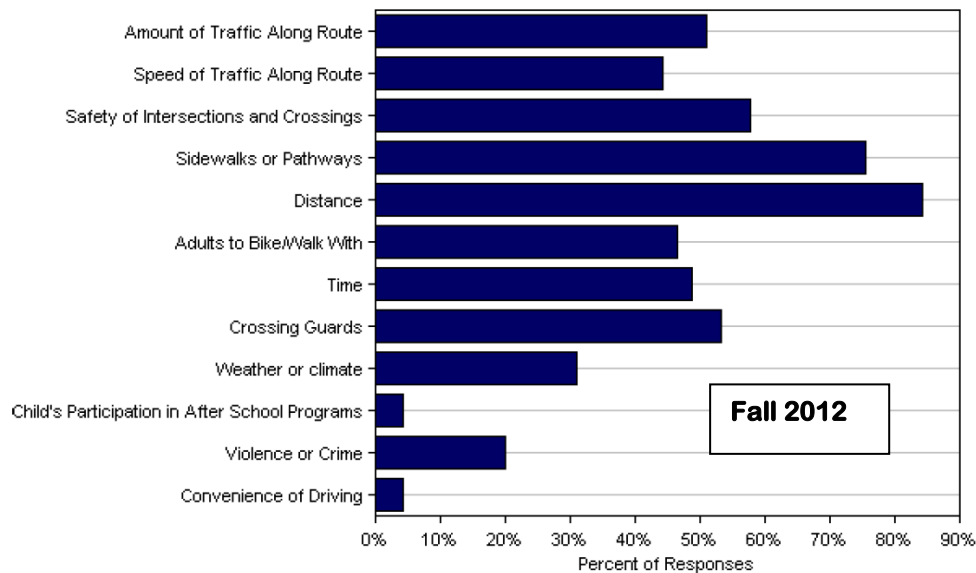
Issues reported to affect the decision to allow a child to walk or bike to/from school by parents of children who already walk or bike to/from school



Issues reported to affect the decision to not allow a child to walk or bike to/from school by parents of children who do not walk or bike to/from school



Issues reported to affect the decision to allow a child to walk or bike to/from school by parents of children who already walk or bike to/from school



Selected comments from parents

In addition to quantitative survey data, the comments that parents provide at the end of the survey represent informative qualitative information to identify challenges and opportunities. With these anonymous comments, the specific situations of kids traveling to and from school from parents' perspectives can be elucidated.

Below is a sampling of some of the comments from Fall 2012, the most recent survey.

A crossing guard on Greensboro near Bolin Forest, Weathervane, or Robert Hunt would make a big difference...

We need more bike racks at McDougle.

We would definitely walk more as a family if there was a good way to get from our area of Chapel Hill (the Umstead Park area) to Carrboro Elementary w/o having to deal with Estes...

Riding in groups is safest. She rides to school with her brother who is in 6th grade, but then biking home is an issue since the elementary school is released a half hour before middle school.

...More bike lanes and signs would help – but main obstacle is many drivers' lack of awareness and respect. We know many parents who would love to bike to school but do not feel safe on the road with drivers who are not careful...

We live in a walking zone so it seems only natural. no bus service. we drive them partially there and they walk most of the way with friends and other families.

The speed of cars on Main St is too high...

We live closest to Barrington Hills. I am not comfortable with the speed of traffic through that neighborhood and the fact that there are NO sidewalks.

I wish there were a sidewalk along Shelton St...Walking along Shelton St really scares me

We live on the border of the district for our elementary school, so walking or biking isn't feasible for us...

We would love and help with a bike or walking path that would connect Dairyland Rd to the crosswalks on Fayetteville Rd. Old 86...

We fill out this survey every year, asking for a safe route from Lake Hogan Farms to Carrboro Elementary. This must be the 6th year we've done this, so we're not holding our breath. We would love to be able to bike with the kids to school, but it is just not safe. The short stretch on Homestead Rd. is dangerous, and not worth the risk. A simple path

would fix the problem.

Our main concern has been our daughter's safety walking by herself. If she was with a group of friends or with adults we trust, we would let her walk to and from school. Currently, we let her brother walk to and from middle school.

Action Plan implementation

Implementation Committee

On May 22, 2012, along with adopting the Action Plan, the Board of Aldermen resolved:

Staff shall bring back a resolution appointing the current steering committee as the Safe Routes to School Implementation Committee, at some time in the future.

It is expected that the details of forming the Committee will be addressed during the January 2013 Board meeting and over subsequent months, as necessary.

Pine Street sidewalk

Construction of a sidewalk on the south side of Pine St. is Priority Project #4 in the SRTS Action Plan. This is a bond-funded sidewalk expected that is now substantially complete. The sidewalk provides a separate facility for walking from Greensboro St. to Hillsborough Rd., from which kids can access Shelton St. and Carrboro Elementary.

Hillsborough-James safety improvements

McDougle Elementary priority project #5 is to improve safety at the intersection of Hillsborough Rd. and James St., near Quail Roost Dr., by installing a curb extension and pavement marking improvements. Quail Roost Dr. leads to a back entrance to McDougle Schools, and some kids taking this route need to cross Hillsborough at the existing crosswalk.

According to Town data, 85th percentile speeds on Hillsborough at this location were between 39 and 46 MPH. 85th percentile speeds on James St. just southwest of the intersection were 29 in the northbound direction and 34 going southbound. The crosswalk is angled, meaning a longer distance crossing. Southbound right turns (from Hillsborough onto James) and northeastbound left turns (from James onto Hillsborough) are obtuse angles and can be done without much slowing down. The crosswalk markings had been transverse lines not easily visible from a distance, and school crossing signage was offset from the crosswalk. Southbound traffic is downhill with limited sight distance. Hillsborough is an arterial that receives traffic distributed from collectors and subcollectors to the north and south, such as Pathway Dr. James St. is likely a route for traffic from these neighborhoods to access NC-54. There is no crossing guard at this location.

In response to letter written by a citizen in August 2011 with safety concerns at the intersection, Town staff began a process of implementing the safety improvements. The timeline below

reflects that process, which has been a constructive collaboration between the Town, NCDOT, and neighbors. The process began with a temporary trial version of the curb extension, as the SRTS Action Plan was in draft form at the time. During the trial installations, neighbors gave their feedback on positives, negatives, and crossing experiences, and even helped out with pedestrian counts and education on pedestrian safety. When the Board of Aldermen adopted the plan in May 2012, the Board provided the foundation for implementation of the permanent safety measure. The State Board of Transportation followed suit when, in November 2012, they approved funding to implement the measure, after a request was made by NCDOT Division 7 staff. The NCDOT District Engineer's office will be implementing the project, likely in summer 2013.



Installing the second trial curb extension and splitter island, August 2012

Another aspect of this project is the possibility of installing a rain garden during the installation of the curb extension. This would allow the project to not only provide benefits for pedestrian safety, but also stormwater management, allowing the Town to progress toward its stormwater runoff pollution reduction requirements under the Jordan Lake Rules. The Town's Environmental Planner has worked with an NC State stormwater engineer to determine the feasibility of a rain garden. With the support of the Town's 319 stormwater management grant, the engineer has produced rain garden drawings. The NCDOT District Engineer, NCDOT stormwater staff, and Town staff met in December 2012 to discuss this option further.

- In August 2011, a resident wrote to the Board of Aldermen expressing concerns about the safety of pedestrians crossing Hillsborough Rd. at the crosswalk north of James St. The Police Department, coordinating with the Planning and Public Works departments, followed up on these concerns, and staff and various neighbors have since been communicating regarding pedestrian safety at the intersection.
- In January 2012, staff requested that NCDOT upgrade the crosswalk with high-visibility (ladder-style) pavement markings and new signage.

- On March 22, 2012, Public Works and Planning staff installed a temporary traffic calming measure at the intersection, using orange cones and delineators to outline a curb extension and splitter island. The trial allowed for the collection of before-after motor vehicle speed data in order to estimate the effectiveness of a permanent measure. Eight traffic counters were placed in the vicinity of the intersection (one per approach or departure lane).
- On May 22, the Board of Aldermen adopted the Safe Routes to School Action Plan. The Hillsborough-James-Quail Roost safety improvements thus became part of an official guiding document for the Town.
- On July 3, Town staff submitted a conceptual sketch (Attachment B) of the curb extension and a pedestrian refuge island, a cost estimate, and the before-after data to NCDOT Division 7.
- On August 15, NCDOT installed high-visibility pavement markings at the crosswalk.
- On October 15, 2012, the NCDOT Division office installed new school warning signs and arrow plaques at the crosswalk.
- The Police Department included this intersection in its town-wide Pedestrian Safety Operation on Oct. 15-18. The operations at this intersection identified 22 motorists who did not yield to the pedestrian. In response, law enforcement officers issued 17 citations for failing to yield, 4 written warnings, and 1 citation for speeding.
- At its November 7-8, 2012, meeting, the State Board of Transportation approved \$40,000 in Small Construction Funds to install a permanent curb extension, pedestrian refuge island, and pavement marking upgrades at the intersection.

Main St. road diet

The Board of Aldermen has approved of a road diet concept for the four-lane section of Main St. between Hillsborough Rd. and Weaver St. This is Priority Project #7 in the Action Plan. A traffic study found there would be no unacceptable levels of service post-implementation and recommended that the road diet be implemented at the time of resurfacing. A preliminary pavement marking plan has been submitted to NCDOT.

NCDOT has stated that the resurfacing of W. Main St. is planned to occur in the late summer or early fall of 2013. This will be confirmed when NCDOT releases its resurfacing list and schedule of quantities.

This past fall, NCDOT painted dotted lines on the street to visualize the new lane configuration. Staff will continue to coordinate with NCDOT staff to receive updates on the implementation schedule.

For a background on this project, see the March 27, 2012, meeting agenda: http://townofcarrboro.org/BoA/Agendas/2012/03_27_2012.htm.

Jones Ferry Road safety improvements

Although Jones Ferry Road is not an Action Plan priority project, the intersection of Jones Ferry Rd. and Davie Rd. is only one mile from Carrboro Elementary via Davie, Fidelity, and Ashe. In response to citizen, aldermen, and Town staff concerns about the safety of the Jones Ferry Road corridor, NCDOT Division 7 and the NCDOT Triad Regional Traffic Engineer are working with the Town to design a road diet on Jones Ferry Rd. cross-section between Willow Creek Shopping Center and OWASA. This will add medians, bike lanes, a sidewalk on the north side of Jones Ferry Rd., and improvements at the Davie-Jones Ferry intersection.



Looking east from NC-54 bypass



Looking west from across the street from OWASA. The bus stop on the left is Carrboro's busiest.

Although not specifically a priority project, the Action Plan Map 3.4 does show a recommended sidewalk on the north side of Jones Ferry Rd.

At the time of this writing, design of this NCDOT-managed project is underway. Construction is expected to occur in the summer of 2013.

Davie Road sidewalk

This is another sidewalk project funded by the Town's Sidewalks and Greenways Bond, expected to be completed in September 2013. It is within one mile of Carrboro Elementary.

Safe routes to other schools

The Town continues to implement projects that improve safe, active travel options to other schools, such as those in Chapel Hill that are attended in part by Carrboro students, and Morris Grove Elementary, which opened after the application period for the SRTS grants and service award from NCDOT. Projects such as the Homestead-Chapel Hill High School Multi-use Path, Morgan Creek Greenway, Smith Level Rd. bike lanes and sidewalks, and Twin Creeks Greenway extension south are examples.

As Carrboro's third elementary school, the Town may wish to dialogue with Morris Grove Elementary to determine whether and how the SRTS program can support the improvement of active travel options for its students.

The federal Safe Routes to School program (see below) has applied to K-8 schools, but not high schools.

Federal Safe Routes to School program

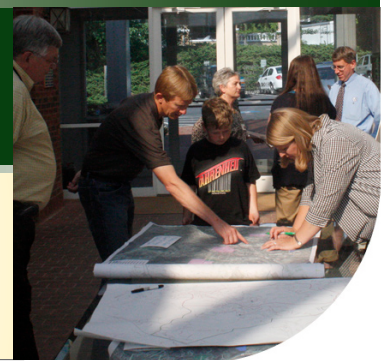
The federal Safe Routes to School program was established by SAFETEA-LU, the transportation bill adopted by Congress in 2005. It authorized funding that was distributed to states and municipalities for infrastructure projects, like sidewalks and bike facilities, and non-infrastructure projects, like encouragement and education programs. MAP-21, the most recent federal transportation bill, consolidated Safe Routes to School and other programs into the new, umbrella Transportation Alternatives Program (TAP). This means that there is effectively no independent federal SRTS program, but SRTS infrastructure projects and non-infrastructure activities are eligible to be funded by TAP. SRTS Coordinators are eligible to be paid with TAP funding, although the SAFETEA-LU mandate that each state have a coordinator was revoked by MAP-21. Also revoked was the SAFETEA-LU requirement that between 10 to 30 percent of SRTS funding in each state be dedicated specifically to non-infrastructure activities. Previously, there was no non-federal match requirement for SRTS funding. Now that it is under TAP, SRTS funding requires the typical minimum 20 percent match.

Some SRTS funding that was authorized by SAFETEA-LU remains available to states. It is not certain at how NCDOT will disburse any remaining SAFETEA-LU funds.

State Safe Routes to School Program

NCDOT has maintained an SRTS program since 2005. NCDOT has employed a full-time coordinator to administer the program and coordinate and provide assistance for cities, towns, and schools.

7 IMPLEMENTATION ACTION STEPS



Chapter Outline:

7.0 Overview 7.1 Implementation Action Steps Table

7.0 OVERVIEW

The successful implementation of this Action Plan will require a comprehensive approach that addresses engineering, education, encouragement, enforcement, and evaluation strategies explained in previous chapters. It will also take the dedication of local government staff, commitment of the school system and local schools, the creation of a SRTS Committee, and the continued support of local advocates and parents. This chapter serves as a simple, working implementation guide with key action steps.

The following steps are integral to achieving the goals and visions of this Plan. As guiding recommendations and the clearest representation of specific items to accomplish, they should be referred to often. With the exception of the first two steps (adoption of Plan and formation of an Advisory Committee), there is no particular order in which these should be addressed.

Table 7.1: Implementation Action Steps Table

Task	Lead Agency	Support	Details	Phase
Approve and Adopt this Plan (Town of Carrboro)	Town of Carrboro	Action Plan Steering Committee/School System	Official letter of approval expected by Fall/Winter 2010. Through adoption, the Plan becomes a legitimate planning document of the Town. Adoption shows that the plan has been a successful, supported planning process.	Short Term (2010)
Approve and Adopt this Plan (School System)	Chapel Hill-Carrboro City Schools	Chapel Hill-Carrboro City Schools, Town of Carrboro	Official letter of approval expected by Fall/Winter 2010. Through adoption, the Plan becomes a legitimate planning document and shows that the School system is making SRTS a priority. Adoption shows that the plan has been a successful, supported planning process.	Short Term (2010)
Form SRTS Advisory Committee	Action Plan Steering Committee	Town of Carrboro, Chapel Hill-Carrboro City Schools, NCDOT, active parents/residents	One of the most important steps in implementation is the continuation of a committee that would meet on a monthly or quarterly basis. The core group of the Action Plan's Steering Committee could provide the starting point. This group would help maintain the momentum established during this Action Plan. The group would "shepherd" the plan, be knowledgeable about the Plan, advocate for its implementation, assist the Town and schools in programming and grant writing, continue to make SRTS a priority for the schools, evaluate progress, re-examine priorities, and utilize the Action Plan document. The continuity of activity in the future is essential even if members come and go from this Committee.	Short Term (2010-2011)

Task	Lead Agency	Support	Details	Phase
Complete Priority Projects	Town of Carrboro	NCDOT	The priority cutsheets of SRTS engineering facility development includes the most important projects to improve connectivity and safety. Immediate attention to priority projects will have an immediate impact on walking conditions in and around the schools. First phase work that can be done at a low cost should be conducted first. All project cutsheets are found in Chapter 3.	Short-Medium Term (2011-2013)
Identify and Secure Specific Infrastructure Funding Sources for Project Implementation	Town of Carrboro, SRTS Committee	Chapel Hill-Carrboro City Schools, PTA/PTO, Durham-Chapel Hill-Carrboro MPO, and NCDOT	Having an adopted SRTS Action Plan in place will help when seeking funding for infrastructure implementation (through grants or state programs). Appendix C contains funding opportunities. The Town of Carrboro should also remain updated with the changing funding landscape. Stimulus funding and the transportation bill reauthorization are forthcoming at the time of this study.	Short Term (2011-2012) and continuous
Identify and Secure Specific Non-infrastructure Funding Sources for Project Implementation	Town of Carrboro, SRTS Committee	Chapel Hill-Carrboro City Schools, PTA/PTO, Durham-Chapel Hill-Carrboro MPO, and NCDOT	Having an adopted SRTS Action Plan in place will help when seeking funding for non-infrastructure implementation (through grants or state programs). Appendix C contains funding opportunities. The Town of Carrboro should also remain updated with the changing funding landscape.	Short Term (2011-2012) and continuous
Develop a Long Term Funding Strategy	Town of Carrboro, SRTS Committee	Chapel Hill-Carrboro City Schools, PTA/PTO, Durham-Chapel Hill-Carrboro MPO, and NCDOT	To allow continued development of the overall system, capital funds for bicycle and pedestrian facility construction should be set aside every year, even if only for a small amount (small amounts of local funding can be matched to outside funding sources). Funding for an ongoing maintenance program should also be included in the Town operating budget. Also, projects recommended in this Plan could be requested as additions to the state TIP (Transportation Improvement Program) list. Finally, federal legislation and funding should be monitored as a new transportation bill is likely in the near future.	Short Term (2011-2012) and continuous

Task	Lead Agency	Support	Details	Phase
Improve and Enforce School District Regulations	Chapel Hill-Carrboro City Schools	Chapel Hill-Carrboro City Schools, SRTS Committee, NCDOT	Policy recommendations suggested in Chapter 4 address a number of policies including busing and school siting that have a tremendous impact on the encouragement/discouragement of walking/bicycling to school. These policy recommendations should be discussed and considered by Town staff, school system staff, and the SRTS Committee. In many cases, policies should not be enforced until adequate and safe sidewalk and crosswalk infrastructure is provided.	Short Term (2011-2012)
Present this Plan to other local agencies and groups	Town of Carrboro, SRTS Committee	Chapel Hill-Carrboro City Schools	Presenting this plan to other local groups and agencies will help build community awareness and support for ongoing efforts. Possible groups to receive a presentation might include: the MPO, local bicycle store owners, regional transportation planners, health clubs and fitness facilities, the health department, schools and youth organizations, major employers, large neighborhood groups, etc.	Short Term (2011-2012) and continuous
Maintain contact and relationship with NCDOT Division 7	Town of Carrboro, NCDOT	SRTS Committee, Chapel Hill-Carrboro City Schools	Many bicycle and pedestrian engineering recommendations in this Plan are on state-owned roadways. It will be essential to stay informed about upcoming, planned NCDOT resurfacing and reconstruction projects. These are opportunities to make pedestrian enhancements around the schools. It will also be critical to keep NCDOT informed about priority projects for improvement in this Action Plan. Having an NCDOT Division representative on the SRTS Committee will be essential.	Short Term (2011-2012) and continuous
Ensure recommendations from this Plan become part of regional Comprehensive Transportation Plan (CTP) or Long Range Transportation Plan (LRTP)	Town of Carrboro, Durham-Chapel Hill-Carrboro MPO	SRTS Committee, NCDOT	Comprehensive Transportation Plans and Long Range Transportation Plans are updated regularly. The recommendations from this Plan should be submitted for CTP/LRTP update so that they are officially recognized by the region and State.	Short-Medium Term (2011-2014)

Task	Lead Agency	Support	Details	Phase
Education Program Priority #1	Chapel Hill-Carrboro City Schools (and local schools)	SRTS Committee, Town of Carrboro, Active parents and citizens	Integrate bicycle/pedestrian education into the school day. For details, see Chapter 5.	Short Term (2011-2012) and continuous
Education Program Priority #2	Town of Carrboro (Planning, Parks and Recreation, and Police), Chapel Hill-Carrboro City Schools	SRTS Committee, Local media, Local businesses	Start a comprehensive motorist/pedestrian/bicyclist safety campaign. For details, see Chapter 5.	Short Term (2011-2012) and continuous
Encouragement Program Priority #1	Chapel Hill-Carrboro City Schools (and local schools), Active parents and citizens, SRTS Committee	Town of Carrboro	Expand walking school bus programs. For details, see Chapter 5.	Short Term (2011-2012) and continuous
Encouragement Program Priority #2	Chapel Hill-Carrboro City Schools (and local schools)	Active parents and citizens, SRTS Committee, Local businesses	Begin mileage club/contests. For details, see Chapter 5.	Short Term (2011-2012) and continuous
Enforcement Program Priority #1	Town of Carrboro/Orange County (Police), Active citizens	NCDOT, SRTS Committee	Expand crossing guard program for all schools. For details, see Chapter 5.	Short Term (2011-2012) and continuous

Task	Lead Agency	Support	Details	Phase
Enforcement Program Priority #2	Town of Carrboro/Orange County (Police)	Chapel Hill-Carrboro City Schools (and local schools)	Involve local law enforcement officers and techniques. For details, see Chapter 5.	Short Term (2011-2012) and continuous
Be open to creative solutions.	Town of Carrboro	SRTS Committee, Chapel Hill-Carrboro City Schools, NCDOT, Durham-Chapel Hill-Carrboro MPO	In many cases, the most ideal pedestrian scenario (such as a complete street of bicycle lanes and sidewalks) will not be achievable because of ROW issues, homeowners issues, etc. Consider alternative, creative means such as traffic calming techniques (speed humps, chicanes, bulb-outs, and speed limit reductions).	Continuous/Ongoing
Enforce improper motorist, bicyclist, and pedestrian behavior around schools.	Town of Carrboro Police Department	SRTS Committee, Chapel Hill-Carrboro City Schools	Enforcement should be increased on motorist speed limits, use of bicycle helmets for children, and proper use of crosswalks by pedestrians through education, warnings, and if necessary, tickets.	Short Term (2011-2012) and continuous
Use Updated AASHTO Bicycle and Pedestrian Design Guides	Town of Carrboro	NCDOT	Adopting and implementing the Design Guidelines (Appendix D) is integral for the development of high-standard pedestrian and bicycle facilities. It will also be important to obtain new published AASHTO bicycle and pedestrian guidelines when published in 2010-2013. The updated bicycle guidelines are expected in 2010, while pedestrian guidelines will come 1-2 years later. Consider utilization of these new guidelines for facilities recommended in this Plan.	Short-Medium Term (2011-2015)
Update priority engineering projects every 1-2 years and work to complete all projects in the recommended network of this Action Plan.	SRTS Committee, Town of Carrboro	Chapel Hill-Carrboro City Schools, NCDOT	In 2012, reevaluate priorities based on what has been completed thus far by creating a new agenda of priority projects. Consider including priority projects that were not completed and consider updating certain aspects of the plan's design standards, programs, and policies based on innovations and new ideas since 2010.	Medium to Long Term (2012-2018)

