

Meeting Notes

Wake Forest, NC Comprehensive Transportation Plan

May 23rd, 2018 @ 2 PM, Technical Steering Committee Meeting #3



Attendees

Bill Crabtree, Wake Forest
Candace Davis, Wake Forest
Jennifer Delcourt, NC Active Routes to School
Eric Keravuori, Wake Forest
Holly Miller, Wake Forest
Suzette Morales, Wake Forest Project Manager
Chip Russell, Wake Forest
Colleen Sharpe, Citizen
Brendie Vega, Wake Forest
J. Scott Lane, Stantec Project Manager
Erica Ortman, Stantec
Erin Puckett, Stantec
Mike Rutkowski, Stantec

Synopsis of Comments

Mr. Lane welcomed the group to the third Technical Steering Committee for the Wake Forest Comprehensive Transportation Plan Update and asked each person to introduce themselves by name. He then introduced Ms. Delcourt, acknowledging her work in bicycle safety education, and her current role in the NC Active Routes to School program. Ms. Delcourt presented with information shown in a PowerPoint™ slide deck (attachment #1). She responded to questions about the CAMPO SRTS sub-committee (describing its purpose) and acknowledged the town's role in the N.C. Watch for Me campaign.

Mr. Lane then discussed the agenda for the evening's public symposium, noting its time, location, and general format (two back-to-back sessions, each comprised of an interactive presentation followed by mapping of public input at three tables broken out by mode of travel). He also noted that the survey (issues) will be closing down at the end of May.

The group then discussed bicycle and pedestrian facilities and issues, both validating and suggesting edits to the bicycle, pedestrian, and greenway facilities map in front of them. These comments from the Technical Steering Committee included the following; additional written comments on the map are shown as an attachment (attachment #2):

- Address sidewalks on Ligon Mill Road
- Dangerous intersection crossing and curvature on Ligon Mill Road
- Update several sections of "proposed" greenway to completed (refer to map comments)

- Burlington Mills / Forrestville Road intersection improved (now shown as an intersection of concern)
- Need to review NC 98 corridor study (Eric Keravuori to provide to Mr. Lane)
- Need to coordinate with the City of Raleigh, Wake County, and Town of Rolesville to address “edge” issues
- More street labeling on maps, and label schools

The group’s attention was directed to the agenda, which contained the following future meeting information:

- Combined Technical and Policy Committee Meeting: June 27 at 3 pm

Mr. Lane thanked the Steering Committee for their attendance. The meeting adjourned at approximately 3:15pm.

Action Items:

1. (Wake Forest) Homework: Take 5 photos of potential transportation projects or issues that you notice in Wake Forest before next Technical Steering Committee meeting by end of May
2. Survey closing at end of May
3. Eric Keravuori to send NC 98 corridor study information to Mr. Lane
4. Revise map layers (existing facilities), per notes provided by Steering Committee and staff.

attachments: (1) Jennifer Delcourt presentation, (2) Steering Committee map comments



Jennifer Delcourt

*Active Routes to School Region 5
Coordinator*

Counties Served:

Alamance, Caswell, Chatham, Durham,
Guilford, Orange, Person, Rockingham,
and Wake

ATTACHMENT #1
Jennifer Delcourt Presentation



What is Safe Routes to School (SRTS)?



E.K. Powe Elementary BTSD, Durham

“Safe Routes to School (SRTS) is a national and international movement to create safe, convenient, and fun opportunities for children to bicycle and walk to and from schools.” *(Safe Routes to School National Partnership)*

NC Safe Routes to School Program

- Started in 2005
- Housed at NC DOT Bike/Ped Division
- State Coordinator – Ed Johnson
- Funds infrastructure and non-infrastructure grants
- Focuses on grades K-8 and projects within 2 miles of schools



Active Routes to School Project

- 2013 - 2019
- A North Carolina Safe Routes to School Project
- Unique partnership between NC Department of Transportation and NC Division of Public Health
- 10 Regional Coordinators
- Aligns with local initiatives, collaborates with many partners



Active Routes to School Goal

Increase the number of elementary and middle school students who safely walk and bike to school.



Fewer kids are biking and walking



1969

48% walked or biked
12% driven

(U.S. DOT, 2009)

2009

13% walked or biked
44% driven

Impact on school traffic

School travel by private vehicle accounts for 10-14% of morning rush hour traffic.

(McDonald, Brown, Marchetti, Pedroso, 2011)



A North Carolina Safe Routes to School Project

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Walking and Biking to School in North Carolina



Image: Provided by Joel Cranford

- 15% of NC children ages 5-17 live within 1 mile of their school
- 34% live within 2 miles, however...
- **Only 4%** walk or bike to school at least once a week

(Source: NC State Center for Health Statistics, 2011)

Individual barriers to walking and bicycling to school

- Long distances 62%
- Traffic danger 30%
- Adverse weather 19%
- Fear of crime danger 12%

(CDC, 2005)



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Safe Routes to School & Physical Activity



“Children who walk or bicycle to school have better cardiovascular fitness than children who do not actively commute to school.”^{5,6}



“In a study of adolescents, 100% of the students who walked both to and from school met the recommended levels of 60 or more minutes of moderate to vigorous physical activity on weekdays.”⁸

Source - Safe Routes to School as a Promising Strategy to Address Childhood Obesity: A Review of the Research (Safe Routes to School National Partnership)

active kids learn better

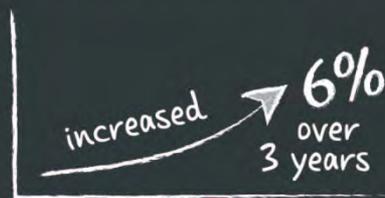


physical activity at school is a win-win for students and teachers

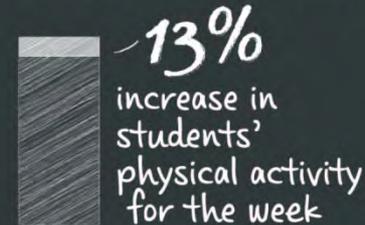
GRADES:



STANDARDIZED TEST SCORES:



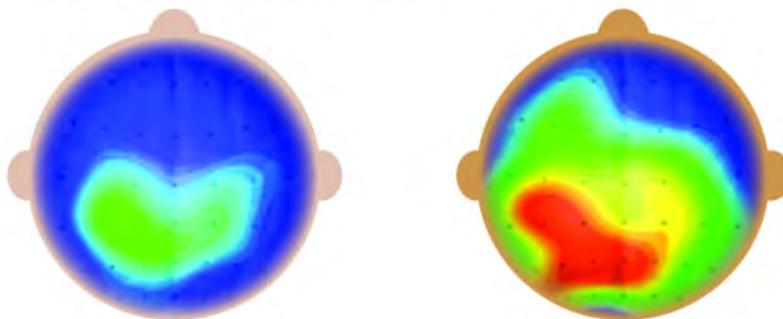
JUST ONE PHYSICALLY ACTIVE LESSON CREATES:



21% decrease in teachers' time managing behavior

physically active kids have more active brains

BRAIN SCANS OF STUDENTS TAKING A TEST:



after 20 minutes of sitting quietly

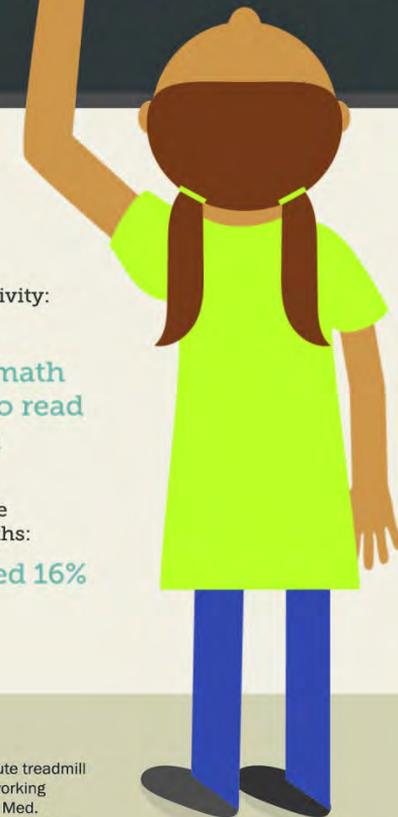
after 20 minutes of walking

Red areas are very active; blue areas are least active.

MORE RESULTS:

after 20 minutes of physical activity:
students tested better in reading, spelling & math and were more likely to read above their grade level

after being in a physically active afterschool program for 9 months:
memory tasks improved 16%



SOURCES: Donnelly J.E. and Lambourne K. (2011). Classroom-based physical activity, cognition, and academic achievement. *Prev Med*, 52(Suppl 1):S36-S42. Hillman C.H. et al. (2009). The effect of acute treadmill walking on cognitive control and academic achievement in preadolescent children. *Neuroscience*, 159(3):1044-1054. Kamiyo K. et al. (2011). The effects of an afterschool physical activity program on working memory in preadolescent children. *Dev Sci*, 14(5):1046-1058. Kibbe D.L. et al. (2011). Ten years of TAKE 10!: integrating physical activity with academic concepts in elementary school classrooms. *Prev Med*, 52(Suppl 1):S43-S50. Nelson M.C. and Gordon-Larson P. (2006). Physical activity and sedentary behavior patterns are associated with selected adolescent health risk behaviors. *Pediatrics*, 117(4): 1281-1290.

Physical Activity and Mental Health

There is some evidence that for youth, physical activity:

1. Protects against and reduce symptoms of depression and anxiety
2. Increases self-esteem

There is stronger evidence that for adults, physical activity:

1. Protects against and reduces symptoms of depression and anxiety
2. Improves sleep and reduces sleep disruption
3. Delays onset and reduces symptoms of aging-related cognitive decline
4. May protect against psychological distress and enhance well-being
5. May be associated with self-esteem

Source: *Physical Activity Guidelines Advisory Committee Report, 2008, US DHHS*





Leading Causes of Child Injury in Wake County

1. MVC Traffic-Occupant
2. Assault
3. MVC Traffic-Pedestrian
4. MVC Traffic-Pedestrian
5. Falls
6. Unintentional
7. Suffocation
8. Burns
9. Struck By or Against
10. Natural/Environmental
11. Factors
12. Bicycle Injury/Crashes



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Engineering



Creating safe, connected, and comfortable places for bicycling and walking

Education

Equipping people with the knowledge, skills and confidence to bike and walk



Encouragement

Fostering a culture that supports and encourages active transportation



Enforcement



Building safe and responsible behaviors on the road and building respect among all road users

Evaluation



Monitoring efforts to active transportation and planning for the future

Equity



Increasing access and opportunity for all residents, including disadvantaged, minority and low income populations

Encouragement

- Increases popularity of walking and bicycling
- Is an easy way to start SRTS programs
- Emphasizes fun of walking and biking

Example: Walk and Bike to School Day Events

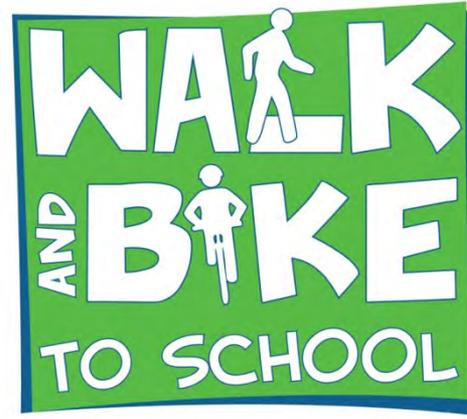


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Walk and Bike to School Days

- One-time events are about:
 - Having FUN!
 - Trying it out
 - Bringing the school community together
 - Building awareness



Remember: Events can occur on school campus and may take place anytime during the month.

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Ongoing Programs

Ongoing programs that encourage walking and biking to school:



Eastway Elementary School, Durham

- Walking School Bus
- Bicycle Trains
- Walk-at-School Programs
- Park-and-Walk Programs
- Remote Drop-off Programs

Education

- Teaches safety skills
- Creates safety awareness
- Fosters life-long safety habits
- Includes parents, neighbors and other drivers

Example: Let's Go NC! child pedestrian and bicycle safety curriculum



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Enforcement

- Increases awareness of pedestrians and bicyclists
- Improves driver behavior
- Helps children follow traffic rules
- Decreases parent perceptions of danger

Examples: Watch For Me NC Campaign, crossing guards, targeted law enforcement



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Engineering

- Creates safer, more accessible settings for walking and bicycling
- Can influence the way people behave

Example: Adding crosswalks and sidewalks, school site design guidelines



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Walkability Checklist

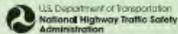
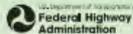
How walkable is your community?

Take a walk with a child and decide for yourselves.

Everyone benefits from walking. These benefits include: improved fitness, cleaner air, reduced risks of certain health problems, and a greater sense of community. But walking needs to be safe and easy. Take a walk with your child and use this checklist to decide if your neighborhood is a friendly place to walk. Take heart if you find problems, there are ways you can make things better.

Getting started:

First, you'll need to pick a place to walk, like the route to school, a friend's house or just somewhere fun to go. The second step involves the checklist. Read over the checklist before you go, and as you walk, note the locations of things you would like to change. At the end of your walk, give each question a rating. Then add up the numbers to see how you rated your walk overall. After you've rated your walk and identified any problem areas, the next step is to figure out what you can do to improve your community's score. You'll find both immediate answers and long-term solutions under "Improving Your Community's Score..." on the third page.



Pedestrian Road Safety Audit Guidelines and Prompt Lists



FHW02-SA-07-OCT
July 2007



U.S. Department of Transportation
Federal Highway Administration



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Evaluation

Is the program making a difference?

Parent Survey About Walking and Biking to School

Dear Parent or Caregiver,
Your child's school wants to learn your thoughts about children walking and biking to school. This survey will take about 5 - 10 minutes to complete. We ask that each family complete only one survey per school year for their children attend. If more than one child from a school brings a survey home, please fill out the survey for the child with the next birthday from today's date.

After you have completed this survey, send it back to the school with your child or give it to the teacher. Your responses will be kept confidential and neither your name nor your child's name will be associated with any results.
Thank you for participating in this survey!

+ CAPITAL LETTERS ONLY – BLUE OR BLACK INK ONLY +

School Name: _____

1. What is the grade of the child who brought home this survey? Grade (PK,K,1,2,3...)

2. Is the child who brought home this survey male or female? Male Female

3. How many children do you have in Kindergarten through 8th grade?

4. What is the street intersection nearest your home? (Provide the names of two intersecting streets)
_____ and _____

Place a clear 'X' inside box. If you make a mistake, fill the entire box, and then mark the correct box.

5. How far does your child live from school?
 Less than ¼ mile ½ mile up to 1 mile More than 2 miles
 ¼ mile up to ½ mile 1 mile up to 2 miles Don't know

Place a clear 'X' inside box. If you make a mistake, fill the entire box, and then mark the correct box.

6. On most days, how does your child arrive and leave for school? (Select one choice per column, mark box with X)

Arrive at school	Leave from school
<input type="checkbox"/> Walk	<input type="checkbox"/> Walk
<input type="checkbox"/> Bike	<input type="checkbox"/> Bike
<input type="checkbox"/> School Bus	<input type="checkbox"/> School Bus
<input type="checkbox"/> Family vehicle (only children in your family)	<input type="checkbox"/> Family vehicle (only children in your family)
<input type="checkbox"/> Carpool (Children from other families)	<input type="checkbox"/> Carpool (Children from other families)
<input type="checkbox"/> Transit (city bus, subway, etc.)	<input type="checkbox"/> Transit (city bus, subway, etc.)
<input type="checkbox"/> Other (skateboard, scooter, inline skates, etc.)	<input type="checkbox"/> Other (skateboard, scooter, inline skates, etc.)

Place a clear 'X' inside box. If you make a mistake, fill the entire box, and then mark the correct box.

7. How long does it normally take your child to get to/from school? (Select one choice per column, mark box with X)

Travel time to school	Travel time from school
<input type="checkbox"/> Less than 5 minutes	<input type="checkbox"/> Less than 5 minutes
<input type="checkbox"/> 5 - 10 minutes	<input type="checkbox"/> 5 - 10 minutes
<input type="checkbox"/> 11 - 20 minutes	<input type="checkbox"/> 11 - 20 minutes
<input type="checkbox"/> More than 20 minutes	<input type="checkbox"/> More than 20 minutes
<input type="checkbox"/> Don't know / Not sure	<input type="checkbox"/> Don't know / Not sure

+

Safe Routes to School Students Arrival and Departure Tally Sheet

+ CAPITAL LETTERS ONLY – BLUE OR BLACK INK ONLY +

School Name: _____ Teacher's First Name: _____ Teacher's Last Name: _____

Grade: (PK,1,2,3...) _____ Monday's Date (Please count each individual) _____ Number of Students Enrolled in Class: _____

• Please conduct these counts on two of the following three days: Tuesday, Wednesday, or Thursday. (Three days would provide better data if counted).
 • Please do not conduct these counts on Mondays or Fridays.
 • Before asking your students to raise their hands, please read through all possible answer choices so they will know their choices. Each Student may only answer once.
 • Ask your students as a group the question "How did you arrive at school today?"
 • Then, read each answer choice and record the number of students that raised their hands for each. Place just one character or number in each box.
 • Follow the same procedure for the question "How do you plan to leave for home after school?"
 • You can conduct the counts once per day but during the count please ask students both the school arrival and departure questions.
 • Please conduct this count regardless of weather conditions (i.e., ask these questions on rainy days, too).

Step 1. Fill in the weather conditions and number of students in each class.
Step 2. AM - "How did you arrive at school today?" Record the number of hands for each answer.
 PM - "How do you plan to leave for home after school?" Record the number of hands for each answer.

Key	Weather So sunny Re-rainy Overcast Sleazy	Student Tally Number in class when count made	Walk	Bike	School Bus	Family Vehicle Only with children from your family	Carpool Riding with children from other families	Transit City bus, subway, etc.	Other Skate-board, scooter, etc.
Sample AM		2	0	2	3	0	3	0	1
Sample PM		1	0	3	3	0	1	2	0
Tues. AM									
Tues. PM									
Wed. AM									
Wed. PM									
Thurs. AM									
Thurs. PM									

Please list any disruptions to these counts or any unusual travel conditions to/from the school on the days of the tally.

+





Safe Routes to School (SRTS) programs work



today, few kids actively travel to school

TRAFFIC SPEED AND VOLUME, AND LACK OF SIDEWALKS, ARE THE MAIN BARRIERS

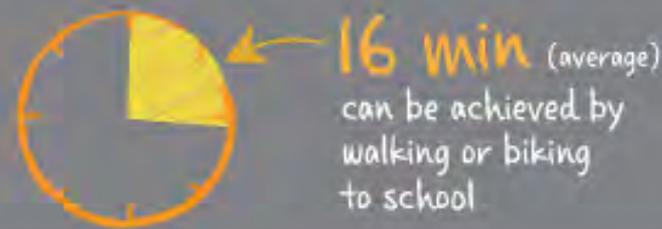
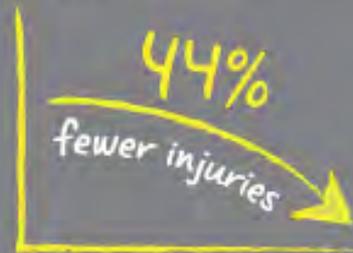
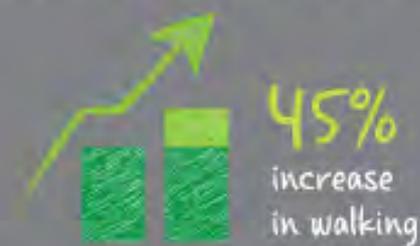
compared to 48% in 1969
13% walk or bike now

among those living within 1/4 mile of school
just 56% walk or bike

kids are more active when walking and biking are safe

AFTER IMPLEMENTING SAFE ROUTES TO SCHOOL PROGRAMS:

OF THE RECOMMENDED 60 MINUTES OF DAILY ACTIVITY:



SOURCES: McDonald NC, et al. (2011). U.S. school travel, 2008: an assessment of trends. *Am J Prev Med*. 41:146-151. Chelton C, et al. (2012). The safe routes to school program in California: an update. *Am J Public Health*. 102(6):e8-e11. Airport RW, et al. (2008). Barriers to and facilitators of walking and bicycling to school: formative results from the non-motorized travel study. *Health Educ Behav*. 35(2):221-244. Timperio A, et al. (2006). Personal, family, social, and environmental correlates of active commuting to school. *Am J Prev Med*. 30(1):45-51. Bassett DR, et al. (2013). Estimated energy expenditures for school-based policies and active living. *Am J Prev Med*. 44(2):108-113. Stewart O, et al. (2014). Multistate evaluation of safe routes to school programs. *Am J Health Promot*. 28(3 Suppl):S88-S86. DiMaggio C and D.G. (2013). Effectiveness of a safe routes to school program in preventing school-aged pedestrian injury. *Pediatrics*. 131(2): 290-296.

Equity

- Work to support safe, active, and healthy opportunities for children and adults in low-income communities, communities of color, and beyond.
- Incorporate equity concerns throughout the other E's to understand and address obstacles, create access, and ensure safe and equitable outcomes.



Policy Opportunities

- Land uses and zoning
- Complete Streets
- Development requirements (ordinances, UDOs)
- School siting
- School site design
- School travel policies



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Vision Zero for Youth

Focusing on the safety of children can propel Vision Zero initiatives

- Starting near schools
- School-based safety projects
- Youth safety as a component of Vision Zero
 - Automated enforcement
 - School safety = neighborhood safety
 - education



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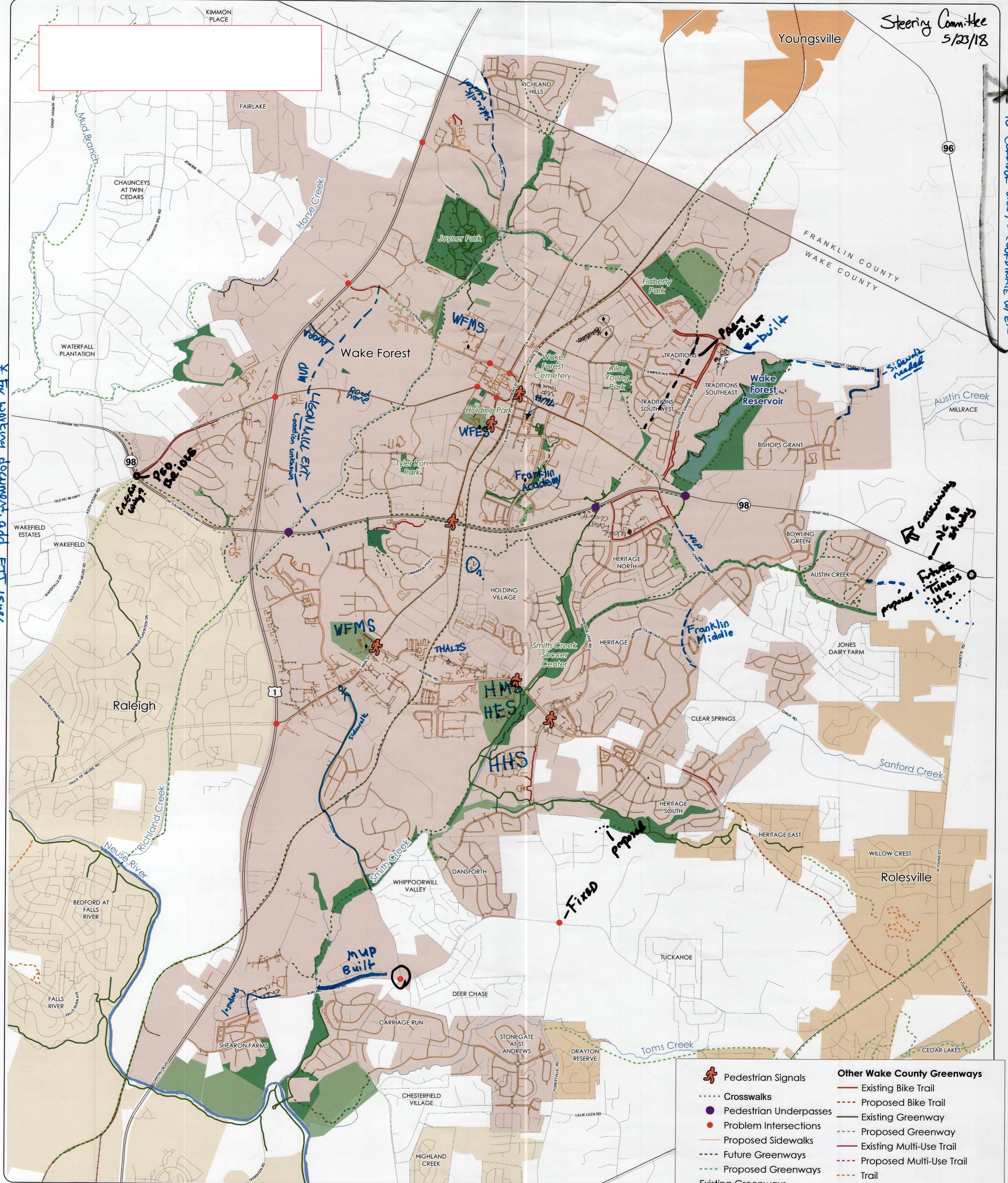
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Thank you!



A lifetime of being active can begin on the way to school.

98 Corridor Study - Coordinate w/ ER



* For covering document add EIS 15g

This map indicates Greenway and Pedestrian projects from these currently adopted plans:

- Pedestrian Plan (2006)
- Greenways and Open Space Plan (2009)
- Wake County Greenways (2014)



Pedestrian Signals	Other Wake County Greenways
Crosswalks	Existing Bike Trail
Pedestrian Underpasses	Proposed Bike Trail
Problem Intersections	Existing Greenway
Proposed Sidewalks	Proposed Greenway
Future Greenways	Existing Multi-Use Trail
Proposed Greenways	Proposed Multi-Use Trail
Existing Greenways	Trail
Paved / Boardwalk	Public Schools
Unpaved	Private Schools
Existing Multi-Use Path	Railroads
Greenway Open Space	County Boundaries
Parks	

