



Wake County *transit plan*



CONNECTING PEOPLE, CONNECTING THE COUNTY

EXECUTIVE SUMMARY

People love to be connected. In our cyberspace driven world, people can stay connected pretty much all of the time. Connecting by text or phone or email is fast, but people still need to move around and get to places physically, not just digitally.

In Wake County, our citizens are continually looking for the best ways to get around, to connect

with their jobs and their friends, to connect our cities and towns with each other.

People want to move around easily—by car, bus, train and plane, or even by bicycle. They want to get to work, to school, and to shopping, restaurants, medical appointments, museums and symphony halls. They want to get to parks and lakes, to



Wake County Population							
Jurisdiction	2000	2005	2010	2015	2020	2025	2035
Apex	20,212	27,203	37,476	47,646	58,690	70,870	98,638
Cary	94,536	115,967	133,812	148,281	160,512	171,446	189,419
Fuquay-Varina	7,898	12,207	17,937	25,254	33,590	43,070	65,463
Garner	17,787	22,406	25,745	35,386	46,278	58,602	87,543
Holly Springs	9,192	15,190	24,661	29,685	34,875	40,404	52,478
Knightdale	5,958	6,938	11,401	18,979	27,922	38,310	63,422
Morrisville	5,208	12,829	18,576	20,733	22,615	24,354	27,400
Raleigh	276,094	338,357	402,825	449,846	490,982	529,060	596,038
Rolesville	907	1,742	3,786	5,985	8,560	11,536	18,696
Wake Forest	12,588	19,792	29,218	35,674	42,450	49,751	65,927
Wendell	4,247	5,042	5,845	9,103	12,908	17,300	27,845
Zebulon	4,046	4,606	4,433	6,750	9,444	12,545	19,970
Angier	—	—	103	672	1,375	2,214	4,299
Clayton	—	—	—	81	181	301	600
Unincorporated Wake County	169,173	176,514	185,175	199,995	210,441	217,816	223,350
Total Wake County	627,846	758,793	900,993	1,034,069	1,160,823	1,287,579	1,541,088

greenways and trails. Many people today find that transit is the right way to access many of these destinations.

The ability to get from here to there supports the local economy and sustains a community.

Whether you are an employer or employee, retired or a student, your ability to get around and be connected is a significant factor in your quality of life. Transportation—and more specifically, transit choices—plays a key role in a dynamic and vibrant local economy.

As Wake County catapults toward becoming a major economic region—the chart above shows population is projected to top 1 million by 2015 and 1.5 million by 2035—transportation and transit will have a tremendous influence on the overall quality of life and the region's economic development. Existing bus service is currently experiencing record ridership and provides transportation to thousands of people daily, but it may not be adequate for a region that is growing as rapidly as ours. As the population increases, there will be more people on the roads and more trips per person, and the average trip will take longer.

Transit, whether bus or rail, gives us the opportunity to provide alternatives and choices. Because our County is part of a complex region, a multi-modal strategy of buses and commuter trains—and, depending on funding, light rail—will build a more complete transportation system for the future.

Wake County would become better connected, using bus and rail to position us for a 21st century that is proving to be more competitive than ever.

Why Wake County?

While Wake County is not responsible for road construction or maintenance (by state statute, this responsibility lies with municipalities and the state Department of Transportation), state legislation gives the County the authority to place a half-cent transit sales tax before voters for consideration. The legislation also authorizes new and increased vehicle registration fees.

At 857 square miles, Wake County is large and encompasses 12 municipalities with different concerns, goals and interests. The

majority of these municipalities see transit as an important part of their future.

With the responsibility to consider placing the sales tax on the ballot and increasing vehicle registration fees, Wake County set out to craft a transit plan that is based on the goals and objectives of the municipalities and stakeholders, and offers future choices for its citizens. Wake County has taken a similar leadership role in countywide water/sewer and solid waste disposal planning and in drawing up a comprehensive open space plan.

A strong foundation for this plan was built by several other organizations that have weighed in or studied transportation/transit issues in Wake County and the Triangle Region at various times over the past decade. These include:

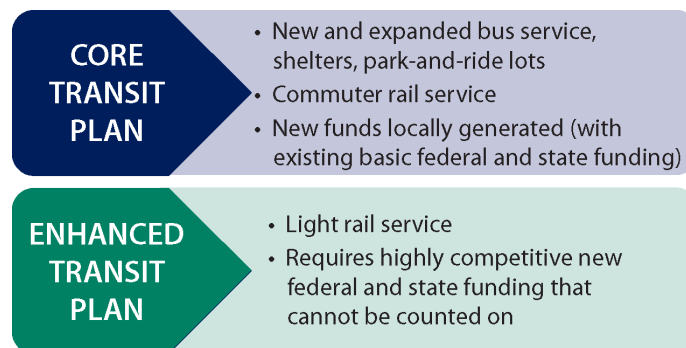
- Original Triangle Transit Authority (TTA) Plan
- Special Transit Advisory Committee (STAC)
- NC 21st Century Committee on Transportation
- Blue Ribbon Committee on the Future of Wake County
- Capital Area Metropolitan Planning Organization (CAMPO) and Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (DCHC)—Long-Range Transportation Plans (LRTP)

A Practical Approach: Under Promise and Over Deliver

This plan is based on extensive studies, evaluation of options and a series of conservative assumptions. One of the goals in the development of the financial plan (also referred to as the financial model) is to be conservative on all assumptions.

One of the key assumptions in the financial plan is the question about “new federal and state revenues.” In order to be conservative and not assume funding that is not guaranteed (and some people would say is not likely to occur), the plan is presented in two components:

- The **CORE TRANSIT PLAN**, which is focused on what we can do with local funds and relies only on existing basic federal and state funding, and
- The **ENHANCED TRANSIT PLAN**, which assumes new highly competitive federal and state funding.



The Core Transit Plan is largely based on expanded bus service in Wake County, particularly in the early years. That’s because bus service can quickly serve more citizens in more locations and requires less infrastructure—the roads already exist, so expanding service is a matter of adding buses, drivers and infrastructure to support bus stops, such as shelters and sidewalks.

The Core Transit Plan also includes commuter rail, which is presented in later years, because rail takes longer to plan, design and build. The expanded bus service and rush-hour commuter rail can be funded with money projected to be locally generated from the sales tax, vehicle registration fees and rider fares (some federal and state grants currently help fund local bus services; we expect that to continue). The commuter rail portion would also need a funding partnership with Durham County.

The light rail portion of this plan would need new federal and state funding that we will compete for but cannot count on. The addition of light rail would be the Enhanced Transit Plan.

Studies for the Core and Enhanced Transit Plans


Extensive studies have been underway for the last two years to explore expanded bus service in Wake County and future rail investment in the Triangle Region, encompassing Wake, Durham and Orange counties. The Wake County Transit Plan is a collaborative effort between Wake County, Triangle Transit, CAMPO, City of Raleigh/Capital Area Transit (CAT), Town of Cary C-Tran, North Carolina State University Wolfline and all municipalities in Wake County.

The study prepared existing demographic, land use and travel pattern analyses to describe the market for transit in the study area. The analysis also generated data regarding ridership propensity, transit-supportive density, passenger boarding and alighting count, ridership survey, relationship to proposed rail investments, and travel patterns to help recommend areas for new or improved bus service.

The focus of the current Long-Range Transportation Plans (LRTP) developed by CAMPO and DCHC is a set of transportation investments for our area, including:

- New and expanded roads
- Transit facilities and services, including bus and rail
- Bicycle and pedestrian facilities, both independent projects and in concert with road projects
- Marketing and outreach efforts to encourage carpooling or transit use
- Using advanced technology to make transit and road investments more effective
- Road projects that improve safety and traffic flow

**choose
how you move**



You live in Fuquay-Varina and work in downtown Raleigh. To get there:
Now: Drive
Transit Plan Options:

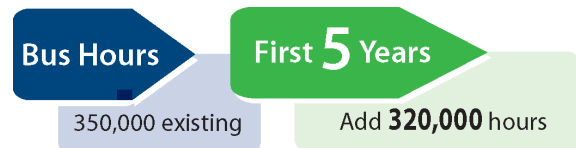
1. Drive to Fuquay-Varina park-and-ride and take commuter bus to downtown Raleigh, or
2. Drive to Wake Tech park-and-ride and take bus to downtown Raleigh, or
3. Drive.

The Recommended Core Transit Plan



Recommended Bus System Highlights

The current bus system, which includes CAT, C-Tran, Triangle Transit and the North Carolina State University Wolfline, provides about 350,000 bus service hours. That would nearly double by adding about 320,000 service hours in the first five years (roughly another 107 buses, based on 3,000 hours per bus), creating more choices for citizens all over Wake County.



Recommendations in this plan include commuter, local and local circulator routes, along with capital projects (streets/stops/sidewalks/park-and-ride lots) needed to support the bus network. As the population grows and changes, or if light rail services are funded and built at a later date, bus services will be added to accommodate the growth and to connect to new services.

Bus System Costs

The capital costs and operating costs for the bus plan are about \$329 million, with the local share of that about \$139 million.

Bus System Costs

First Five Years (FY14-18)*	TOTAL	Non-Local Share	Local Share	Non-Local	Local
Capital Costs	\$284,797,000	\$185,118,000	\$99,679,000	65.00%	35.00%
Operating Costs**	\$43,988,000	\$4,399,000	\$39,589,000	10.00%	90.00%
Total	\$328,785,000	\$189,517,000	\$139,268,000	—	—

*All dollars are FY10

**Does not include Rural Transit Services (i.e., Wake TRACS) or current service operating assistance provided through County Vehicle Registration Revenues



Recommended Commuter Rail System Highlights

Commuter rail would operate within the existing NCRR Railroad right-of-way from Garner to West Durham, covering 37 miles and operating every 30 minutes during peak hours and every 60 minutes during the midday and evenings. Travel time is estimated to be 52 minutes. A total of 12 station locations are proposed.

	TOTAL	Wake Share	Durham Share
Capital Costs	\$650,000,000	\$330,000,000	\$320,000,000



Commuter rail in Alexandria, VA



More buses more often, more routes

- Garner to Durham (with Durham County paying its share)
- Capital elements include stations, park-and-ride lots, rail line
- \$650 million estimated cost (2011 dollars)
- Wake County share: \$330 million (could complete this using locally generated funding)

what it will cost you

If your household income is \$75,000, you'll pay an estimated \$94 more in sales tax each year.

Everyone who owns a vehicle would pay \$10 more in vehicle registration fees.

See Appendix I for a range of income levels and vehicle registration fees by municipality.

The locally generated funding would come from the half-cent sales tax, if it is approved by voters in a referendum, and from increased vehicle registration fees.

- The **sales tax**, if approved, would generate an estimated \$55 million to \$60 million annually in the early years of the plan. The sales tax does not apply to food, medicine, utilities and housing.

A household making \$61,426 (the 2010 Median Household Income for Wake County) would pay an estimated \$74 more in sales tax.

- **Vehicle registration fees** would increase by \$10 per car. (This requires action by the Wake County Board of Commissioners to approve a \$7 increase per vehicle and by the Triangle Transit Board of Trustees to approve a \$3 increase.)

How We'll Pay for It

The Core Transit Plan—expanded bus services and commuter rail—will be paid for with local funds, without relying on federal or state funding beyond what is already provided for bus. The financial model for this plan demonstrates a conservative set of assumptions, meaning that it relies mostly on what we can control (local funding) but not that which is out of our control (state and federal funding).



ENHANCED TRANSIT PLAN: Light Rail

The Enhanced Transit Plan would add the first phase of a light rail system. It would operate between downtown Cary and north Raleigh, covering 13.9 miles with 16 stations. It would operate every 10 minutes during peak hours and 20 minutes off-peak. It would take about 28 minutes to get from downtown Cary to north Raleigh (Millbrook Road). Building off previous studies that identified the best corridors to consider county-wide, recent studies identified this section as the best place to start. The corridor is expected to have a higher number of riders in the near term and future years, better serve existing low-income and minority communities, and connect better with future planned development areas.

- 13.9 miles constructed from downtown Cary to north Raleigh/ Millbrook Road.
- Capital elements include 16 stations, park-and-ride lots, rail line
- \$1.1 billion estimated cost (2011 dollars)

How We'll Pay for It

The Enhanced Transit Plan would need to be funded largely by the state and federal governments, as local funds would not be sufficient to pay for this system.

COMMUTER vs. LIGHT RAIL

Commuter and light rail are different types of trains that provide different services.

Commuter rail:

- Used primarily by people going to work, so connects employment centers and heavily populated residential areas
- Makes limited stops with service during peak morning and evening hours only
- Uses heavier diesel vehicles
- Can share existing track with freight rail

Light rail:

- Makes frequent stops
- Provides service all day and in the evening
- Tends to be used by job commuters as well as for social/tourist destinations
- Cars are powered by electricity
- Tracks are separate from freight rail

State funding would come from the General Assembly through the N.C. Department of Transportation as part of its annual budget process.

Federal funding would come in the form of transportation grants from the Federal Transit Administration. Those grants, particularly for large projects, are highly competitive grants that are awarded annually. Our County would compete with many others across the country for these grants.

What We Can Deliver

Using primarily LOCALLY GENERATED FUNDS, we can implement the Core Transit Plan:

1. We are confident that we can expand local bus service to municipalities, with additional or extended routes, and more frequent service. The majority of these improvements in bus service would happen within the first few years after a successful referendum.
2. We can also launch our first commuter train service that will run from Greenfield Parkway in Garner, through downtown Raleigh, North Carolina State University and downtown Cary to a station in Research Triangle Park. (This service would connect to Durham if Durham's Transit Plan is implemented.)

Our current financial projections suggest this service could be running by 2019 or 2020 depending on changes in commute times, revenues, and other factors.

If we have STATE and FEDERAL FUNDING, we can implement the Enhanced Transit Plan:

We would be able to establish our first light rail line that would extend from downtown Cary, through NC State and downtown Raleigh to Millbrook Road in north Raleigh. Our current financial projections suggest this service could be running about eight years after federal and state money is received.

How It Will Work

The Wake County Transit Plan is based on cooperation and agreement among Wake County, Triangle Transit, Capital Area Metropolitan Planning Organization and all municipalities. The key is that we all will be planning and acting jointly.

The Plan will be governed by Interlocal Agreements (ILA), one between the County and municipalities and the other between the County, Triangle Transit and the Capital Area Metropolitan Planning Organization. The ILAs charge Triangle Transit with implementing the approved Wake County Transit Plan and assigns future plan updates and amendments to be approved by the Triangle Transit Board of Trustees, the Transportation Advisory Committee of the Capital Area Metropolitan Planning Organization, and the Wake County Board of Commissioners.

CONCLUSION

Transportation and transit issues are complex and pose a challenge to growing urban areas the world over. The Wake County Transit Plan is a comprehensive approach to transit solutions crafted by its 12 municipalities in concert with transportation planners, transit experts and partner agencies. It is a plan that, for the first time, connects all municipalities, major employment centers, the airport, and universities and colleges, and also provides for regional connections to our neighboring counties of Durham and Orange.

While no transit system can relieve a highly populated area of traffic problems, it can give commuters more choices about how to get places, and options that could save travel time and allow them to use their travel time differently.

It is, of course, impossible to state with certainty today what the actual transit needs and costs of tomorrow might be, given that technology and our built environment are ever changing, but we do know this: Wake County has grown tremendously over the



last 30 years, it continues to grow today, and all indications point to continued growth. It is our responsibility to prepare for that growth.

The Wake County Transit Plan responsibly prepares for growth and takes crucial steps to meet the needs of busy citizens today by

offering them more choices for getting around. While no transit system can relieve a highly populated area of traffic problems, it can give commuters more choices about how to get places, and options that could save travel time and allow them to use their travel time differently.