



Frequently Asked Questions

A Regional Framework

What is the Triangle Regional Transit Program?

The Triangle Regional Transit Program is based upon work of the region's two planning organizations. In 2009, the Capital Area Metropolitan Planning Organization MPO (CAMPO) and the Durham-Chapel Hill-Carrboro MPO (DCHC MPO) completed work on the 2035 Long Range Transportation Plan. The plan recommends a high-quality, regional transit system to serve the Triangle, promoting closer connections and providing more travel choices for our growing population. The vision includes increased bus service throughout the region, and rail transit service connecting Chapel Hill, Durham, the Research Triangle Park, Morrisville, Cary, Raleigh, Garner, Clayton and Wake Forest.

Why are transit improvements needed?

The Triangle Region has experienced an extraordinary rate of growth in past years. Now home to 1.5 million people, the U.S. Census estimates that the area's population is expected to increase to 2.5 million people by 2035. The region's transportation system is straining under current demand. High levels of congestion are now commonplace and are anticipated to worsen with time. Simply increasing highway capacity is no longer a viable option because of costs and impacts to our air and water quality. In order to maintain our high quality of life, attract new residents and compete in the global marketplace, we need a better multi-modal transportation system which offers transportation choices including improved bus and rail transit service.

The needs of the region include:

- A need to enhance mobility,
- A need to expand the quality of transit options,
- A need to support economic growth,
- A need to support the university travel market, and
- A need to focus growth.

How do the region's cities/towns tie into station location/development?

Municipalities, counties, transit service providers, universities and medical/hospital centers, the Metropolitan Transportation Organizations and Triangle Transit began meeting collectively in the fall of 2010 and early 2011 to study one-on-one to plan station features and station area land use. Types of stations, amenities at a station including parking and bus connections and the impact on area development have all been part of the discussions. Station locations and types are subject to change.

How would the Raleigh-Durham International Airport be connected to the system?

RDU International Airport is currently – and will continue to be – served by Triangle Transit which links passengers to Raleigh, Durham, Cary and Chapel Hill. Presently, Triangle Transit's regional bus routes service RDU Airport, Monday through Friday from 6:00 a.m. to 10:00 p.m., and Saturdays from 6:40 a.m. to 6:40 p.m. Using the RTP Regional Bus Transfer Center, airport passengers may make bus connections to Raleigh, Durham, Cary, and Chapel Hill. As the regional transit plan is implemented, connections to the airport will be enhanced, likely first using additional bus service. In a later stage, rail could be built to link the airport's terminals with the regional transit system.

At the October 2007 meeting of the Special Transit Advisory Commission (STAC), RDU's Airport Manager reaffirmed the airport's ongoing commitment to enhance transit service connections and to



develop an airport-to-rail link as previously envisioned and included in the STAC's final recommendations for major regional transit infrastructure investments.

How would the RBC Center be served by transit?

The Wake Corridor Alternatives Analysis Conceptual Screening included a fixed-guideway transit alignment loop directly serving the RBC Center. Further analysis eliminated the alignment for the following reasons:

- **Low Daily Transit Ridership.** While the RBC Center hosts over 150 sporting and entertainment events annually, most events are held in the evenings and weekends and would attract few peak hour work trips.
- **Added Cost.** An alignment serving the RBC Center would have less direct routing than other alignment alternatives considered. Assuming light rail technology is selected, this would add approximately \$80 million per mile, making it difficult to offset by low ridership.
- **Increased Travel Time.** Serving the RBC Center would add approximately an additional mile to the transit alignment and increase the travel time for the entire line, resulting in lower ridership across the entire system, particularly during peak periods.
- **Insufficient Right-of-Way.** Accessing the RBC Center with a fixed guideway transit alignment would require a connection from either the North Carolina Railroad Company (NCR) right-of-way or Chapel Hill Road to Trinity Road using either Youth Center Drive or Blue Ridge Road. Youth Center Drive is not a feasible route for fixed guideway service because it would result in unacceptable impacts to the Westover neighborhood which is located along the west side of the road. Impacting the significant natural features which are part of the State Fairgrounds on the east side of Youth Center Drive would also be unacceptable. Along Blue Ridge Road, there is insufficient right-of-way to support fixed guideway transit service because of the current congestion, need for future roadway expansion and the proposed grade separation of Blue Ridge Road and the NCR corridor. In addition to this, development on the NC State University College of Veterinary Medicine campus on the east side of Blue Ridge Road and the historic State Fairgrounds facilities along the west side of the road preclude right-of-way expansion.

What about those who don't utilize transit?

All Triangle residents will benefit from a regional transit network, even if they choose not to use it. The implementation of a regional transit system will create new construction jobs and permanent employment in transit operations and maintenance. The denser, mixed-use development typical of station areas will enhance the tax base. People living and working around stations will be able to walk, bicycle or drive shorter distances to access goods and services. The reduction in the rate of traffic growth in higher density areas will make driving easier and improve air and noise quality.

General Process

What is an Alternatives Analysis process?

Alternatives Analysis (AA) is a process required by the Federal Transit Administration for projects where fixed guideway transit is being considered and Federal funding may be pursued. The purpose of an AA is to analyze and compare all reasonable transportation alternatives for addressing defined mobility problems or achieving specific goals in the corridor. The process provides the public and local decision makers with the information necessary to select the most appropriate transit investments for which more detailed studies will be undertaken.



What happens after the Alternatives Analysis process is completed?

A key outcome of the AA process is a Locally Preferred Alternative (LPA), which defines the preferred transit alignment or route, the locations of all stops or stations, and the recommended vehicle technology (e.g. light rail (LRT), commuter rail (CRT), bus rapid transit (BRT), or bus). The next step in the federal process is Preliminary Engineering (PE) coupled with an Environmental Impact Statement (EIS). Through this work the LPA design will be further refined and a detailed assessment of the proposed project's effects on the human and natural environment will be undertaken. If the project is approved following PE/EIS, it will move into final design followed by construction. The entire process, from AA to completion of construction and the start of service, can take up to 10 years.

What is the current schedule, how long will this take?

The current Alternatives Analysis phase will take about one year. Once the LPA has been selected, by the two metropolitan planning organizations (CAMPO, DCHC), an application will be made to the Federal Transit Administration to enter the federal New Starts process. Once approved, the federal process from the draft environmental phase through design, engineering and construction to opening day runs about 10 years.

What major transit paths or corridors are being considered?

The transit corridors being studied in the Alternatives Analysis (AA) process are:

- **The Wake County Corridor** begins in the vicinity of the Triangle Metro Center, just south of I-40, in Research Triangle Park and follows the existing North Carolina Railroad corridor to Downtown Raleigh where it turns northward, continuing on the CSX corridor to near Triangle Town Center. The Wake County Corridor may include future extensions from Triangle Town Center to Wake Forest and from downtown Cary to Apex.
- **The Durham/Orange County Corridor** begins in Chapel Hill in the vicinity of the University of North Carolina Campus and roughly follows the US 15/501 corridor north to the City of Durham, where it turns eastward to follow the existing NCRR corridor to approximately the Triangle Metro Center in Research Triangle Park.
- **The Durham/Wake County Corridor** would involve a study of transit corridor options that follow the existing NCRR corridor from Durham through Research Triangle Park and Downtown Raleigh toward the Wake-Johnston County line. (This is often referred to as the "regional corridor.")

Since the entire plan cannot be funded, the purpose of the AA is to identify the Locally Preferred Alternative (LPA) most likely to receive federal funding assistance and those that should be funded within the first 25 years of the program with future revenue sources.

What is a corridor? What is an alignment? Do they overlap?

A **corridor** is a broad geographical study area for future transportation projects that follows a general route such as a rail right of way, local road or highway with defined end points. An **alignment** is a route traveled by a transit line. Within each corridor there may be several alignment options. Some of the corridors in the Triangle region overlap because different lengths or segments are considered along the same path. Some of the alignments may overlap because of the technical feasibility of travel along or over certain rights of way or roads.

How many corridors were considered? What were they based on? What makes each corridor different?

Seventeen (17) corridors of varying lengths were considered between the first and second round of public workshops. The corridors were divided into shorter segments for greater manageability in planning and to better reflect the actual and projected population along those segments. Each



corridor was then evaluated using a set of criteria (described below) to see how it performed individually and in comparison with other corridors and segments in the evaluation.

What are the criteria being used to evaluate and screen corridors? Where did they come from?

- **Mobility** (rail trips per mile, i.e. the more rides per mile the better)
- **Socioeconomic** (population density, job density, concentration of low income and/or minority populations)
- **Land Use** (activity centers (business districts, colleges and universities, employment centers, fairgrounds, arenas, hospitals), public/regulatory support, and development potential within ½ mile of the corridor)
- **Financial** (total capital cost per rider and per rail trip, operations & maintenance costs)
- **Public Input**

They have not been weighted; no specific importance was pre-assigned to any or all of the criteria. The criteria were developed through a collaborative effort by staff members of the two metropolitan planning organizations in the Triangle (CAMPO, DCHC), the Triangle J Council of Governments and Triangle Transit.

What are the exact corridors and alignments (including grade crossings), stations and park-and-rides?

The Project Staff investigated and analyzed 17 corridors to identify the best-performing segments and alignments within those corridors. Changes necessary to at-grade crossings, (separations, closures) potential impacts due to right of way acquisition and other technical details which require more extensive study have not been determined. They will be evaluated and discussed in future rounds of public workshops.

During the AA phase of the project, candidate stations will be identified based on locations recommended during previous studies, those proposed by local jurisdictions, and stakeholder and public input. The Project Team will assess and screen each candidate station location based on a set of evaluation criteria. Those candidate station locations carried forward through the screening process will be incorporated into the LPA and will be subject to a more detailed level of station analysis, planning and design during subsequent phases of the project.

How were the various conceptual alternatives screened to form the fewer detailed alternatives?

Conceptual alternatives for each of the three corridors include vehicle technologies (e.g. light rail, traditional bus, bus rapid transit, commuter rail, etc.), alignments and station locations. Each was evaluated with two key questions: 1) Does the alternative meet the Purpose & Need of the project? 2) Does the alternative have any fatal flaws? In some cases, the alignment did not serve sufficient riders or adversely impacted the environment or a historical landmark such that it has a fatal flaw. Eliminating certain alternatives results in a smaller set of detailed alternatives. A combination of technologies, alignments and stations form a recommended Locally Preferred Alternative for each corridor.

Outside of downtown Raleigh, Why are most of the detailed Alignment Alternatives located within the existing railroad corridor?

The Wake Corridor Alternatives Analysis evaluated routes along which fixed-guideway transit service located either within or outside of the existing railroad corridor could connect activity centers. The major roadways within the overall study corridor that were considered for fixed-guideway service west of downtown Raleigh included Chapel Hill Road, Hillsborough Street, and Western Boulevard. North of downtown Raleigh, streets considered included Capital Boulevard, Atlantic Avenue, and Old Wake Forest Road were evaluated for fixed-guideway service.

The existing railroad corridor emerged as the most viable and cost-effective routes by which to connect the activity centers (stations) for the following reasons:

- **Capacity to support fixed guideway transit.** The Alternatives Analysis found that there is insufficient right-of-way to support fixed guideway transit service within the major roadways in the Wake Corridor. Current levels of congestion, the need for future roadway expansion within the existing roadway corridors and the presence of existing development along these roadways prevents the acquisition of the additional property that would be needed for further widening.
- **Dependable, time competitive advantage.** Because the railroad corridors are separate from roadways and traffic, they are not subject to the increasing congestion or the potential delays and uncertainties created by accidents and weather conditions. This means that rail transit service within the railroad corridors will arrive and depart from stations on schedule, providing predictable travel options.
- **Capital cost sharing.** Implementing rail transit service within the railroad corridors is anticipated to be reduced by infrastructure improvements that have and are being made for current freight and Amtrak service as well as improvements that will be part of the future Southeast High Speed Rail project.
- **Minimal environmental and community impacts.** Because much of the construction will take place within the existing railroad corridors that already include freight and Amtrak passenger operations, implementation of rail transit service is not anticipated to introduce substantial impacts to environmental and cultural resources or minority and low-income populations.
- **Supports local transportation and land use plans.** Use of the railroad corridor is supported by state and local stakeholders and consistent with local and regional land use and transportation planning efforts.

Why was the prior effort not successful?

In 1995, Triangle Transit began to develop a planned rail system for the region that would operate between Duke University/ Durham and north Raleigh, with future extensions west to Chapel Hill. During final design, global demand increased the cost of construction materials. In addition, the federal government imposed stricter financial guidelines and performance criteria for transit projects nationwide. The project was withdrawn in late 2006 after realizing that the local funding source could not support the increased cost of the project nor easily adapt to the changes to federal guidelines. Triangle Transit, the region's two metropolitan planning organizations (MPOs), the Triangle J Council of Governments and Regional Transportation Alliance subsequently developed a new strategy to meet future mobility needs of the region. The first step was the creation of the Special Transit Advisory Commission (STAC) which generated a new region-wide transit vision and funding recommendations. The STAC's recommendations formed the basis of the Joint 2035 Long Range Transportation Plan (LRTP) which was adopted by the Capital Area MPO (CAMPO) and the Durham-Chapel Hill-Carrboro MPO (DCHC MPO) in June 2009.

Financial/Political Process

How would the Triangle Regional Transit Program be funded?

Nationwide, similar communities have recognized that major transportation investments can only be realized through strong local funding. With the support of a cross-section of stakeholders including business, community and environmental interest groups, the general public and local government, the STAC's funding recommendations were advanced by the passage of NC House Bill 148, which authorizes the region's three counties to hold referenda on a one-half cent sales tax on discretionary purchases (excluding food, medicine, mortgage and utilities). If approved by voters,

this local funding, which is essential to qualify and be eligible for matching Federal and State dollars, would be used to pay for the proposed transit projects, including expansion of local and express bus services and rail projects within selected corridors.

What is the referendum process?

The General Assembly of North Carolina enacted House Bill 148, in August 2009, which gives authority to the Wake, Durham and Orange counties in the Triangle to hold a referendum for a one half-cent sales tax increase to specifically fund public transportation. Once transit and financial plans have been completed, commissioners could vote on whether to ask local boards of election to schedule a referendum in their county – whether during a regularly scheduled election or a special election. The earliest referendum date would be late 2011. For more information on the bill visit this online link: <http://www.ncga.state.nc.us/Sessions/2009/Bills/House/PDF/H148v6.pdf>.

Who ultimately makes the decisions on transit plans for the Triangle?

Metropolitan planning organizations (MPOs) have been established by the federal and state government to make decisions about transportation investments within their jurisdictions. Triangle Transit, in collaboration with federal, state and local government partners is leading the implementation of the transit component (Triangle Regional Transit Program) of the 2035 Long Range Transportation Plan. The plan was jointly adopted by our region's two MPOs: Capital Area MPO (CAMPO) and the Durham-Chapel Hill-Carrboro MPO (DCHC MPO). The governing boards of the MPOs are comprised of elected and appointed officials from the counties and the municipalities in the region as well as Triangle Transit. Recently established state legislation now requires the Durham, Orange and Wake Boards of County Commissioners to adopt financial plans for the transit projects within their respective jurisdictions.

How much will this cost?

The cost of a transit project in a corridor will vary substantially depending on the actual length of the alignments, property acquisition requirements and the type of transit technology that is selected as the Locally Preferred Alternative (LPA). Initial cost estimates will be developed as part of each county's financial plan. Final costs will be determined once the project has entered into the engineering and design phase under the Federal New Starts process.

What are the economic impacts and benefits of public transportation?

- Provides travel options
- Can reduce travel time and delays
- Enhances travel reliability
- Creates regional connectivity
- Can create jobs and improve access to employment centers
- Saves money by lowering out-of-pocket expenses
- Increases the region's economic competitiveness
- Reduces the dependence on fossil fuels
- Reduces growth of future traffic congestion
- Conserves energy
- Reduces air pollution emissions
- Promotes livable, sustainable communities



Educational Considerations

How do universities/technical colleges tie into the program?

Colleges and universities are critical components of a successful transit system, and the region's three largest universities are on the study corridors, and others can be accessed by shuttles.

Design, Technology and Implementation

What are the steps for introducing rail transit?

The Alternatives Analysis will determine whether rail is appropriate for a particular corridor. Once the decision is made to implement rail and funding has been secured, the more detailed environmental and design studies will begin. In the meantime, bus services can be increased in the corridor to build up ridership prior to rail service starting.

What is the difference between Light Rail and Commuter Rail?

Light rail (commonly referred to as Light Rail Transit, or LRT) uses lightweight rail cars operating on a fixed guideway and driven electrically from an overhead power line. They typically operate singly or in short trains of up to four cars, and are well suited for closely-spaced stations. Light rail can operate on its own exclusive track (in a rail corridor) or in downtown streets next to traffic lanes.

Commuter rail (often called Commuter Rail Transit or CRT) is rail service that often makes use of existing freight and passenger rail (Amtrak) tracks. Local CRT service is typically limited to peak travel periods, such as the morning and evening commute times or rush hours. The trains are usually powered by diesel engines and stations are farther apart than with LRT.

What would stations be like? (see newly added FAQ at the end)

The characteristics and features of stations would vary by location. All stations would have passenger amenities such as platforms, shelters, benches, lighting, bike racks, maps, ticketing equipment, and signage as well as connecting bus routes. Some stations will have parking and where economic conditions are favorable, new high-density, mixed-use development (housing, retail, office, etc.) that is consistent with local government plans may emerge.

How will the transit system be connected?

All successful rail programs have an integral, coordinated bus system, and the Triangle Regional Transit Program will be no exception. Expanded bus service will be the first phase to be rolled out. Improved scheduling, additional service and longer hours will be implemented to ensure that this expanded network will adequately connect to the rail lines.

Why are certain areas omitted from this stage of planning? (Knightdale, Carrboro, Mebane)

The study corridors were recommended in an earlier study by the Special Transit Advisory Commission STAC and subsequently incorporated into the MPOs jointly adopted Long Range Transportation Plan. As changes in land use and development support modified travel patterns, these areas can be considered for future service.

How will you make sure that activity centers (towns, universities, main attractions) are included?

The Long Range Transportation Plan was developed with input from the public and private sector employers, local governments and community and business groups including but not exclusive to Chapel Hill, Durham, the Research Triangle Park, Morrisville, Cary, Raleigh and Wake Forest. UNC-Chapel Hill, Duke, NC Central, NC State, Meredith, Peace, and other institutions will be served by either the rail network, or shuttles. Stations will be designed to ensure maximum usage to these and other activity centers.



Public Involvement

What is the public's role in all workshops? How will the public comments collected be used?

By attending a public workshop or viewing the materials available online at **ourtransitfuture.com**, the public is receiving the most recent information about the Triangle Regional Transit Program. The public will have an opportunity to indicate their understanding of the evaluation process and criteria (ridership, cost, socioeconomic factors, and land use). Public input is the fifth criteria that will help guide efforts to select the best-performing corridors to advance to further study that will end with the selection of a Locally Preferred Alternative (LPA).

How can the public stay informed about the Triangle Regional Transit Program?

Public input is essential for the success of the Triangle Regional Transit Program, especially for determining the preferred options. A Public Involvement Steering Committee (composed of planning and transportation directors of municipalities and counties in the Triangle) has been charged with overseeing the education and outreach efforts.

All of our public workshop materials, resources and handouts can be found at our Web site: **ourtransitfuture.com**. Comments may also be submitted by postal mail or emailed to the Web site at: **info@ourtransitfuture.com** at any time. All public comments will be part of the final report on the Alternatives Analysis.

*This list is maintained by the Public Involvement staff of the Triangle Regional Transit Program. More questions requiring answers and general comments may be sent to **info@ourtransitfuture.com**. This list will be expanded by other more detailed information and be augmented by frequently asked questions.*

Triangle Regional Transit Program – P.O. Box 530 – Morrisville NC 27560
www.ourtransitfuture.com 800-816-7817