

PLAN HIGHLIGHTS

Transportation System Management (TSM)/Intelligent Transportation System (ITS)

- The plan recommends extensive integration of bicycle and pedestrian projects provide alternative means of transportation that are critical in providing mobility choices.
- The MPOs, NCDOT, and private consultants have completed an **ITS Plan** to further coordinate investments in incident management services during peak travel hours, electronic tolling, and electronic message signs.
- Ongoing TSM efforts** will include driveway access and parking management policy, capacity improvements to congested roadway intersections, roundabouts at appropriate intersections, traffic calming devices in residential neighborhoods, synchronized traffic signal systems, and additional projects.
- Coordinated use of advanced transit technologies** such as automated vehicle locator (AVL), automated passenger counter (APC), mobile data terminals (MDT), electronic fare collection, and automated passenger scheduling software will increase schedule efficiency and punctuality, and improve customer service.

Fixed Guideway/Premium Transit Services

- Light Rail Transit** – there will be 56 miles of light rail transit in the region (Triangle Transit, Capital Area Transit/CAT, Durham Area Transit/CAT, Chapel Hill Transit/CHT, Cary Transit/CAT, RTP, Morrisville, Cary, Raleigh and North Raleigh. Light rail transit operates on tracks that are often separated from roadways and buildings, and can handle a high volume of passengers along major travel corridors.
- Commuter Rail** will connect Wake Forest, downtown Raleigh, and Clayton. In comparison to light rail transit and commuter rail transit stations.
- 60 express and regional bus routes** will provide fast connections to major employment and activity centers in the area in addition to suburban, rural, and town locations that currently have no bus routes.
- Bus Rapid Transit (BRT)** will serve the NC 86, NC 54, and US 15-501 corridors in Chapel Hill. BRT can use separate roadway lanes and preferred treatment at intersections to rival the ridership capacity of rail transit but at a lower cost.

Highways

- CAMPO** – 75 percent of roadway projects (or 463 roadway miles) will increase the capacity of existing roadways. 25 percent of the projects (or 123 roadway miles) will be new roads, adding 57 new roadway miles.
- DCCH MPO** – 40 percent of roadway projects will increase the capacity of existing roadways, adding 104 miles of new roads, adding 57 new roadway miles. Sample safety projects include installation of traffic signals, turn lanes, wider approach lanes, roundabouts and bridge separations for intersections, limitation of traffic signals, turn lanes, and turning movements on major thoroughfares, traffic calming devices in neighborhoods, and bicycle and pedestrian safety education.
- Interstates:** Most interstate and US highways will be widened or improved, including I-40, I-85, I-440, US 70, US 15-501, US 64, US 264, US 401, and NC 540.
- I-40 High-Occupancy Vehicle-Toll (HOV-HOT) Lanes:** Exclusive HOV-HOT lanes will be added along I-40 (between US 15-501 in Durham County to Wade Ave. in Wake County). Single Occupied Vehicles (SOV) can pay a toll to use the exclusive lane while vehicles with a specified number of passengers can use them for free.
- East End Connector:** A new 4-lane freeway between NC 147 and US 70 will provide a direct freeway connection between the northern and southern parts of the Triangle and Research Triangle Park.
- NC 540:** Additions of western and southern sections to complete the beltline system in Wake County.

Bicycle and Pedestrian

- Sidewalks** will connect to destinations and provide access to transit service.
- The off-road bicycle projects** include greenways and trails that are shared with pedestrians.
- The on-road bicycle projects** include wide lanes, separate bicycle lanes, specially striped shared roadways on urban streets, and extended 4-foot shoulders on rural roads.

Travel Demand Management (TDM)

- TDM includes strategies and actions that reduce the demand for single Occupant Vehicle (SOV) trips and spread traffic volumes away from the peak travel periods to **improve traffic flow**. These TDM strategies are implemented based on employer incentives and voluntary participation.
- Durham County has a **Commuter Trip Reduction Ordinance** to motivate large employers to implement TDM programs.
- The 7-Year Triangle Region TDM Plan has already implemented carpool matching, vanpooling, and employer-based programs to support several TDM programs.

Bus Transit

- 247 local bus routes** will serve all major travel destinations in the region (Triangle Transit, Capital Area Transit/CAT, Durham Area Transit/CAT, Chapel Hill Transit/CHT, Cary Transit/CAT, RTP, Morrisville, Cary, Raleigh and North Raleigh. Light rail transit operates on tracks that are often separated from roadways and buildings, and can handle a high volume of passengers along major travel corridors.
- Bus service improvements** will include new and extended routes, and on some routes, greater service frequency and extended evening and weekend hours.
- Feder bus routes** will frequently serve future light-rail and commuter rail transit stations.
- 60 express and regional bus routes** will provide fast connections to major employment and activity centers in the area in addition to suburban, rural, and town locations that currently have no bus routes.
- Circulator service** will provide intensive bus service (every 10 minutes) to connect destinations within employment centers such as central Raleigh, Durham, and RDU airport.
- Park & Ride lots** will be dispersed around the periphery of the region and along major transportation corridors. This will help reduce the number of vehicles on congested roadways.

Triangle Employment

Triangle Population

Total Vehicle Miles Traveled (Daily)

Not only are we growing more, but we are traveling more. Since 1990, the average vehicle miles traveled per person in the Triangle by fifteen percent. This rapid growth in population and steady increase in personal travel have produced more congestion and delays on our roads despite the investments on our major roadways. During the same time period, the percentage of persons experiencing congestion in the Triangle, and the annual hours of delay for a traveler during the peak travel period has increased from 24 hours to 34 hours. These trends are expected to continue. Between the years 2000 and 2035, the daily vehicle miles of travel on our region's road network will increase from 38 million to a crushing 74 million – this will almost double the demand on our transportation system. The medical centers, universities, and technology firms that form the cornerstone of the regional economy will continue to grow, as well, and the region will add approximately 600,000 new workers by 2035.

Much of this phenomenal growth will likely occur as sprawl, which is generally assumed to increase traffic congestion and make transit service prohibitively expensive. In addition, the number of people who cannot drive, such as senior and low-income citizens, and households without automobiles, will continue to quickly increase. For example, the proportion of senior citizens will climb from 9.5% to 15% from the years 2000 to 2030.

Given these demographics and travel trends, the Triangle needs a transportation plan to help answer some important questions:

- What is the best way to serve future travel demand?
- What are the best kind of transit systems for the area?
- How do we preserve our high quality of life and the environment?
- Where do we find adequate resources to invest in our transportation infrastructure?

WHY DO WE NEED TO PLAN?

TOWARD A BALANCED TRANSPORTATION SYSTEM

Capital Area Metropolitan Planning Organization

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Triangle 2035 Transportation Plan

June 15, 2009
Durham-Chapel Hill-Carrboro Metropolitan Planning Organization

Capital Area Member Jurisdictions

Cities & Towns:

- Angier
- Apex
- Butner
- Cary
- Creedmoor
- Clayton
- Franklinton
- Fuquay-Varina
- Garner
- Holly Springs
- Knightdale
- Louisburg
- Morrisville
- Rolesville
- Wake Forest
- Wendell
- Youngsville
- Zebulon

Raleigh (MPO Lead Planning Agency)

Counties:

- Franklin
- Harnett
- Granville
- Johnston
- Wake

DCHC Member Jurisdictions

Cities & Towns:

- Durham (MPO Lead Planning Agency)
- Carrboro
- Chapel Hill
- Hillsborough

Counties:

- Durham
- Orange
- Chatham

Capital Area Technical Member Agencies

- North Carolina State University (NCSU)
- Capital Area Transit (CAT)
- Wake Coordinated Transportation
- Federal Highway Administration (FHWA)
- Federal Transit Authority (FTA)
- North Carolina Turnpike Authority (NCTA)

Durham-Chapel Hill-Carrboro Technical Member Agencies

- North Carolina Department of Transportation (NCDOT)
- North Carolina Board of Transportation (BOT)
- Research Triangle Foundation
- Triangle J Council of Governments (TJCOG)
- Raleigh-Durham Airport Authority
- Triangle Transit
- Greyhound

The Durham-Chapel Hill-Carrboro (DCHC) and the NC Capital Area Metropolitan Planning Organizations (MPOs) are responsible for the long-range transportation planning in the Greater Triangle Region of North Carolina. Federal regulations require MPOs to develop a Long Range Transportation Plan (LRTP) that encompasses a minimum twenty-year planning period, implements the local community vision, responds to environmental and financial constraints, and identifies the anticipated revenues to pay for the projects and services in the 2035 LRTP.

The 2035 LRTP is important because only projects that are identified in the 2035 LRTP are eligible for state and federal transportation financing. In addition, local planners use it to assist in the development review process, and in some cases can require reservation or dedication of right-of-way for future transportation projects.

The goal of the 2035 LRTP is to find the best solutions for addressing current and future traffic congestion on the roads, while at the same time, providing a balanced transportation system by investing in alternative forms of transportation such as transit, bicycling, and walking, for those citizens who do not drive.

The DCHC and Capital Area MPOs collaborated to develop the 2035 LRTP for the Triangle region. The MPOs worked with multiple local and state planning agencies, citizens, elected officials, and community leaders for over two years to identify and evaluate many roadway, rail and bus transit, bicycle, pedestrian, and other transportation projects. Planners evaluated the projects and services based on their level of safety and efficiency, contribution to providing a multimodal system, total costs, and sustainability.

The 2035 LRTP received federal approval on **June 15, 2009**, and conforms to all relevant federal air quality standards.