

## 2. What is the Plan?

This document contains the 2045 Metropolitan Transportation Plans for CAMPO and the DCHC MPO. These plans are the guiding documents for future investments in roads, transit services, bicycle and pedestrian facilities and related transportation activities and services to match the growth expected in the Research Triangle Region.

### 2.1 Why Do We Need A Plan?

A transportation plan is essential for building an effective and efficient transportation system. The implementation of any transportation project, such as building a new road, adding lanes to a highway, purchasing transit buses, constructing a rail system, or building bicycle lanes with a road widening project, often requires several years to complete from concept to construction.

Once a community determines that a project is needed, there are many detailed steps to be completed: funding must be identified; analysis must be completed to minimize environmental and social impacts; engineering designs must be developed, evaluated, and selected; the public must be involved in project decisions; right-of-way may have to be purchased; and finally, the construction must be contracted and completed.

No matter which step one might consider the most important in this long process, the project always begins with the regional transportation plan. In fact, this basic planning concept is so important, that federal regulations require that a project must be identified in a metropolitan transportation plan in order for it to receive federal funding and obtain federal approvals.

Federal regulations not only require a metropolitan transportation plan, the regulations stipulate the contents of the plan and the process used in its development. The plan must have:

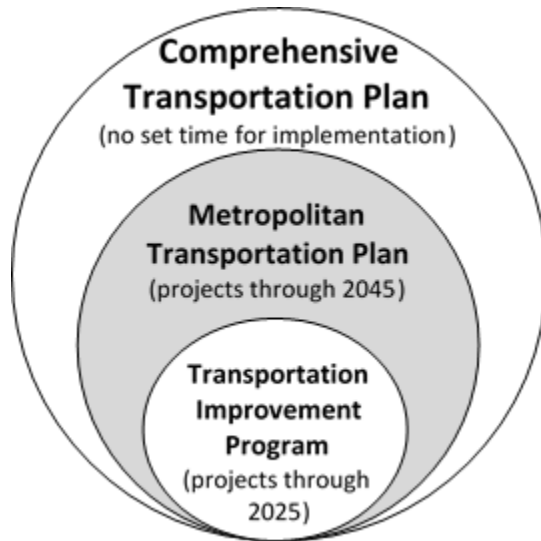
- A vision that meets community goals.
- A multi-modal approach that includes not only highway projects, but provides for other modes such as public transportation, walking, and bicycling.
- A minimum 20-year planning horizon.
- A financial plan that balances revenues and costs to demonstrate that the plan is financially responsible and constrained.
- An air quality analysis to show that forecasted emissions will not exceed air quality emissions limits, when a region is subject to air quality conformity requirements.
- A public involvement process that meets federal guidelines, and is sensitive especially to those groups traditionally left out of the planning process.

Regions like the Research Triangle must develop these plans at least every five years, and must formally amend these plans if regionally significant transportation investments are added, deleted or modified in the plans.

## 2.2 What Is In The Plan

Metropolitan areas in North Carolina prepare two distinct, but related **types of transportation plans**:

Figure 2.2.1



1. Comprehensive Transportation Plans (CTPs) are “needs-based.” They show all the existing and new and expanded major roads, transit services, bicycle and pedestrian facilities and related transportation activities that are needed to meet the growth and mobility aspirations of our citizens over the long term. The CTP has *no* defined future date by which the facilities and services would be provided, nor is it constrained by our ability to pay for facilities and services or the impacts of these facilities and services on our region’s air quality.
2. Metropolitan Transportation Plans (MTPs) are “revenue-based.” They show the new and expanded roads, transit services, bicycle and pedestrian facilities and related transportation activities that we believe we can pay for and build by the year 2045, and that will meet federal air quality standards.

This document focuses on the second of these two types of plans: the Metropolitan Transportation Plan that shows what we can achieve by 2045 with anticipated funding and that will preserve air quality. The road project lists in Appendix 1 include a separate list of projects that are beyond the funding ability of the MTP, but are included in the Comprehensive Transportation Plan.

The facilities and services in a MTP are a subset of the facilities and services in a CTP. Figure 2.2.1 shows this relationship between the MTP and CTP, and also the plans’ relationship to the Metropolitan Transportation Improvement Program (MTIP), the ten-year program of projects that is also developed for metropolitan areas and that serves as the main implementing document of the MTPs for those projects and services that use state and federal funding. The current MPO-adopted MTIP covers fiscal years 2018-2027.

This document compiles the MTPs for the two areas under the jurisdiction of the organizations with the main responsibility for transportation planning in the Research Triangle Region:

1. The Capital Area Metropolitan Planning Organization (Capital Area MPO, or CAMPO) which covers all of Wake County and portions of Franklin, Granville, Harnett and Johnston Counties; and
2. The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization (Durham-Chapel Hill-Carrboro MPO, or DCHC MPO) which covers all of Durham County and parts of Orange and Chatham Counties.

Therefore, this is *one document*, so that those interested in transportation planning in the Research Triangle Region have a single, consistent reference to consult, but *two plans*, since there are state and federal requirements that each MPO be responsible for the plans, projects & services, funding, and air quality requirements within its jurisdiction.

This point merits emphasis: The selection of projects and allocation of funding to them is an *independent* decision by each MPO. This single document is a way to help these organizations make more consistent and complementary decisions within their spheres of authority, and to communicate these decisions to the citizens of the region.

To distinguish these lines of authority, this document is color-coded. Text and tables with a white background apply to both MPOs.

Text and tables highlighted in this green color apply only to the Durham-Chapel Hill-Carrboro MPO.

Text and tables highlighted in this yellow color apply only to the Capital Area MPO

Figure 2.2.2 summarizes key features of the two types of plans and different areas of authority, and indicates what is included in this version of the single regional document.

Figure 2.2.2

Authority	Capital Area MPO		Durham-Chapel Hill-Carrboro MPO	
Name of the Plan	CAMPO 2045 <b>Metropolitan Transportation Plan</b>	CAMPO <b>Comprehensive Transportation Plan</b>	DCHC MPO 2045 <b>Metropolitan Transportation Plan</b>	DCHC MPO <b>Comprehensive Transportation Plan</b>
Area Covered	Wake County and parts of Franklin, Granville, Harnett and Johnston Counties	Same as CAMPO Metropolitan Transportation Plan	All of Durham and parts of Orange and Chatham Counties	Same as DCHC MPO Metropolitan Transportation Plan
Who requires this plan?	Federal Government	State Government	Federal Government	State Government
Plan's Horizon Year	2045	No Set Year	2045	No set year
Is this plan fiscally constrained?	Yes	No	Yes	No
Must this plan meet air quality standards?	Yes	No	Yes	No
What officially constitutes the plan?	All MTP maps, lists of projects, and the text of this document that applies either generally or specifically applies to the CAMPO area	Just the set of CTP maps that apply to the CAMPO area (no text, list of projects or written report)	All MTP maps, lists of projects, and the text of this document that applies either generally or specifically applies to the DCHC MPO area	Just the set of CTP maps that apply to the DCHC MPO area (no text, list of projects or written report)
What projects are included in the plan?	New and expanded facilities and services	Existing, new and expanded facilities and services	New and expanded facilities and services	Existing, new and expanded facilities and services
Is the plan included in this version of the document	Yes	No, but additional CTP roads are listed in Appendix 1	Yes	No

Figure 2.2.3 shows a map of the two MPO areas, outlined in purple, as well as two other important geographic areas to consider as one consults this plan:

1. The Triangle Air Quality Region, shown in white, which consists of all of Wake, Durham, Orange, Franklin, Granville, Harnett and Johnston Counties, plus four townships in northeastern Chatham County; and

- The Triangle Regional Model (TRM) “modeled area,” outlined in red, which indicates the area covered by the region’s travel demand forecasting model: the tool that estimates future travel on existing and planned roads and transit services (see Section 5.3). Most of the data highlighted in this document represents travel within this modeled area.

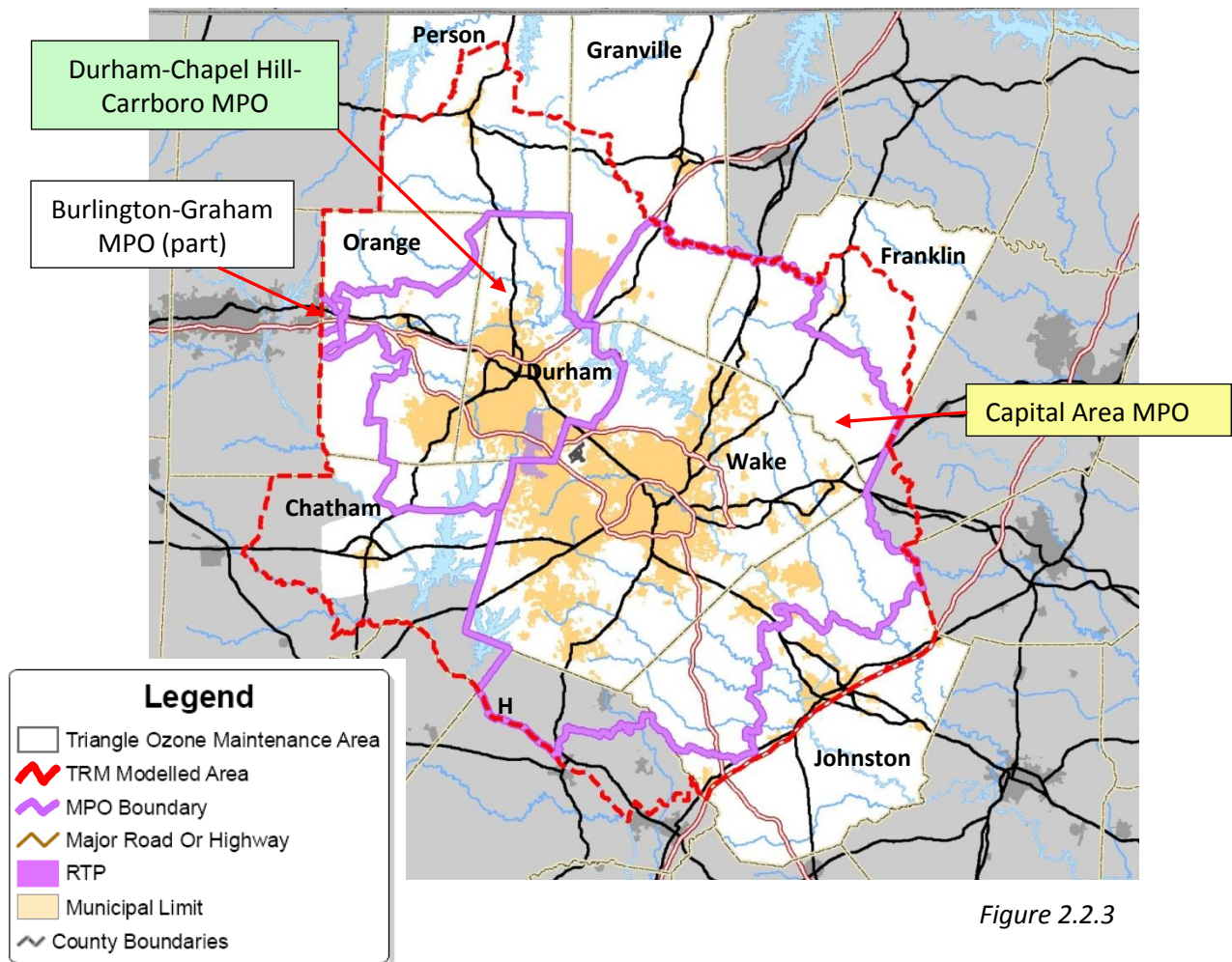


Figure 2.2.3

The core of the plan is the set of transportation investments described in Section 7, 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;
- Aviation facilities;
- Rail facilities for inter-city passenger and freight;
- Transportation Demand Management: marketing and outreach efforts that increase the use of alternatives to driving alone;
- Technology-Based Transportation Services: the use of advanced technology to make transit and road investments more effective, including planning for autonomous and connected vehicles; and
- Transportation Systems Management: road projects that improve safety and traffic flow without adding new capacity.

## 2.3 How Will The Plan Be Used?

Metropolitan Transportation Plans are used for several important decisions, including:

Programming projects. Only projects that appear in a Metropolitan Transportation Plan may be included in the Transportation Improvement Program (TIP) for funding.

Preserving future rights-of-way for roads and transit facilities. The state and local governments use Metropolitan Transportation Plans to identify land that may need to be acquired and to ensure that new development does not preclude the eventual construction of planned roads and transit routes.

Designing local road networks. Metropolitan Transportation Plans chiefly address larger transportation facilities with regional impact. Communities can then use these “backbone” projects to plan the finer grain of local streets and local transit services that connect to these larger facilities.

Making land use decisions. Communities use regional transportation plans to ensure that land use decisions will match the investments designed to support future growth and development.

Making private investments decisions. Businesses, homeowners and developers use these plans to understand how their interests may be affected by future transportation investments.

Identifying key plans and studies. State, regional and local agencies use this plan to outline more detailed plans and studies that will be undertaken leading to future projects and investments.

Key points from this section:

- The Comprehensive Transportation Plan (CTP) shows everything we would eventually like to do. The Metropolitan Transportation Plan (MTP) shows everything we think we can afford to do by the Year 2045. The Transportation Improvement Program (TIP) shows everything in the MTP that we plan to do through 2027 that involves state or federal funding.
- This single document includes the 2045 Metropolitan Transportation Plans for two planning areas: the Capital Area MPO and the Durham-Chapel Hill-Carrboro MPO. Each of these organizations retains independent authority within its area of jurisdiction.
- These plans will be used by local, state and federal agencies to allocate resources for specific road, transit, bicycle and pedestrian investments, to ensure that land is preserved for these investments and to match land use and development decisions with planned infrastructure investments.
- This document also includes lists of projects beyond the time frame of the 2045 MTP which are included in the two MPO CTPs, and links to more information about these projects.