

4. Our Vision And How We Will Achieve It

4.1 Our Vision

The region has a common vision of what it wants its transportation system to be:

a seamless integration of transportation services that offer a range of travel choices and are compatible with the character and development of our communities, sensitive to the environment, improve quality of life and are safe and accessible for all.

The *2040 Metropolitan Transportation Plan* commits our region to transportation services and patterns of development that contribute to a distinctive place where people can successfully pursue their daily activities.

4.2 Goals and Objectives

Each MPO has adopted goals and objectives that are designed to achieve the region's overall vision, given the particular characteristics and aspirations of the communities that make up each MPO.

The Capital Area MPO's goal is to develop a regional transportation network that is...

Sustainable

- ❖ Encourage state and local governments to manage growth by linking land use patterns, plans and policies with transportation networks, plans and policies through regional coordination.
- ❖ Encourage equitable funding from state and Federal sources by examining the distribution formulae and recommending changes to ensure transportation revenues collected locally are used to fund local projects.
- ❖ Identify new and alternative funding sources for constructing and maintaining transportation infrastructure to decrease reliance on state and Federal funds.

Efficient, Safe & Reliable

- ❖ Ensure maximum regional mobility through improvements to and maintenance of the road and highway network.
- ❖ Provide an interconnected transportation network by improving communication and cooperation between the metropolitan area governments, transportation agencies, freight carriers, law enforcement, emergency services and transportation users.
- ❖ Improve the process for identifying, evaluating and prioritizing critical transportation projects with more emphasis on public involvement and multi-modal equity.
- ❖ Maximize transportation system efficiency and safety by promoting alternative, new and innovative means other than adding general-purpose traffic lanes.

Affordable & Accessible

- ❖ Promote land use policies and infrastructure projects that support transit, walking and bicycling in local and regional plans.
- ❖ Promote the health and economic benefits of walking and bicycling as practical modes of transportation.
- ❖ Enhance and expand services for alternative modes of transportation including but not limited to transit, walking and bicycling through increased funding and cooperative regional planning.

The Durham-Chapel Hill-Carrboro Metropolitan Planning Organization's goals and objectives are:

1. Overall Transportation System

Goal: A safe, sustainable, efficient, attractive, multi-modal transportation system that: supports local land use; accommodates trip-making choices; maintains mobility and access; protects the environment and neighborhoods; and improves the quality of life for urban area residents.

Objectives:

- a) Establish performance standards that will measure the effectiveness of the urban area's overall transportation system in supporting access to goods, services, activities, and destinations.
- b) Select and program transportation projects, which are consistent with community goals and are a cost-effective use of funds.
- c) Develop and maintain a multi-modal regional transportation model that reflects travel patterns and incorporates innovative techniques for evaluating the impacts of proposed transportation investments on travel and land use patterns.
- d) Promote non-automobile transportation alternatives and create efficient connections between all transportation modes.
- e) Conserve natural resources and reduce the rate of energy consumption.
- f) Develop cooperative strategies with employers to reduce congestion and increase the efficiency of the transportation system.
- g) Use transportation funds based on the priority needs of the urban area, in keeping with community values.
- h) Seek additional funding and funding sources to ensure implementation of the long range plan.
- i) Monitor the implementation of the Plan and the targets through the biannual TIP process.
- j) Ensure that the transportation needs are met for all populations, especially for the youth and elderly, the mobility impaired, and the economically disadvantaged.
- k) Work cooperatively with the North Carolina Department of Transportation, neighboring Metropolitan Planning Organizations and Rural Planning Organizations and other transportation-related organizations to address the transportation issues of the broader region.

2. Multi-Modal Street and Highway System

Goal: An attractive multi-modal street and highway system that allows people and goods to be moved safely, conveniently, and efficiently.

Objectives:

- a) Establish performance standards and report on the condition and effectiveness of the multi-modal street and highway system.
- b) Create multi-modal street patterns that: encourage safe pedestrian, bicycle, and vehicular travel; provide access to public transportation; and ensure connectivity.
- c) Develop and implement level of service (LOS) standards for the urban area that are based on a cooperative agreement between state and local agencies.
- d) Preserve and enhance the traffic carrying capacity of arterial street systems, while minimizing traffic intrusion in residential neighborhoods.
- e) Identify and recommend design standards that establish safe speeds; increase pedestrian and bicycle usage of streets; and enhance the attractiveness and appeal of the street and highway system.

3. Public Transportation System

Goal: A convenient, accessible, and affordable public transportation system, provided by public and private operators, that enhances mobility and economic development.

Objectives:

- a) Establish performance standards and report on the condition and effectiveness of the public transportation system.
- b) Increase public transit ridership by enlarging the service area and increasing the frequency of service within the urban area.
- c) Coordinate transit service within the urban area by promoting high quality, seamless, integrated, and customer-friendly service.
- d) Expand ridesharing, carpool, and vanpool services and opportunities.
- e) Develop and implement alternatives to the use of single occupant vehicles, including high occupancy vehicle (HOV) facilities and regional rail services.
- f) Develop and implement the Regional Transit Plan.
- g) Develop a regional park and ride system for cars and bicycles to support transit services and encourage ridesharing.

4. Pedestrian and Bicycle System

Goal: A pedestrian and bicycle system that: provides a safe alternative means of transportation; allows greater access to public transit; supports recreational opportunities; and includes off-road trails

Objectives:

- a) Establish performance standards and report on the condition and effectiveness of the pedestrian and bicycle system.
- b) Maintain and implement a Regional Pedestrian Plan and a Regional Bicycle Plan.
- c) Identify and recommend ways that local governments may provide adequate staff and resources to meet the goals of their pedestrian and bicycle programs.
- d) Develop a regional bicycle and pedestrian policy that establishes linkages between activity centers and provides for access to public transit.
- e) Ensure that bicycle and pedestrian facilities are included in the planning, design, and construction of every roadway and development project, including the connection to external transportation facilities, in accordance with bicycle and pedestrian plans and local ordinances.
- f) Increase education about bicycling and walking, especially concerning the benefits of pedestrian and bicycle alternatives.
- g) Support the enforcement of motor vehicle, pedestrian and bicycle regulations.
- h) Pursue strong funding commitment for building both pedestrian and bicycle facilities.
- i) Provide greater safety for pedestrians and bicyclists of all levels of ability, and safer interaction with users of other modes of transportation.
- j) Encourage the efforts and activities of citizen advocacy groups for pedestrian and bicycling by providing information and support for their programs.

5. Integration of Land Use and Transportation

Goal: A Transportation Plan that is integrated with local land use plans and development policies.

Objectives:

- a) Establish performance standards and report on the integration and consistency of the Transportation Plan with local land use plans and development policies.
- b) Create transportation systems that enhance the livability of all communities.
- c) Identify the impacts of different land use patterns and site designs on travel behavior.
- d) Evaluate the changes in land use brought about by the expansion of existing transportation facilities and the construction of new facilities.
- e) Identify and recommend land use patterns, parking requirements and development policies that increase overall mobility and that improve and support transportation efficiency, and compact, mixed-use, transit-friendly, and walkable development

6. Protection of Natural Environment and Social Systems

Goal: A multi-modal transportation system which provides access and mobility to all residents, while protecting the public health, natural environment, cultural resources, and social systems.

Objectives:

- a) Establish performance standards and report on transportation impacts on the public health, natural environment, cultural resources, and social systems.
- b) Protect and preserve archaeological, historic, and culturally valuable areas.
- c) Identify and protect environmentally sensitive areas early in the planning process.
- d) Develop and implement modifications to the transportation system that reduce the rate of growth in vehicle miles traveled (VMT).
- e) Modify the transportation system to reduce the pollutants in highway runoff and the vehicle emissions, in accordance with federal, state and local Clean Air and Water legislation.
- f) Minimize the noise and dust generated by transportation facilities in neighborhoods and the urban area.
- g) Ensure that transportation facilities do not negatively affect disadvantaged populations disproportionately.
- h) Develop and implement a transportation system that supports the reduction of greenhouse gases and carbon production and is coordinated with local greenhouse gas and carbon reduction plans.

7. Public Involvement

Goal: An ongoing program to inform and involve citizens throughout all stages of the development, update, and implementation of the Transportation Plan.

Objective:

- a) Establish performance standards and report on the effectiveness of the public involvement element of the Transportation Plan.

- b) Encourage a broad cross section of citizens to take a proactive role in the transportation policy and planning process.
- c) Educate the public and elected officials, in order to increase public understanding of both the options and the constraints of transportation alternatives.
- d) Determine the public's knowledge of the metropolitan transportation system, and public values, attitudes and concerns regarding transportation.
- e) Determine which elements of the Transportation Plan would support or diminish the public's desired lifestyle.

8. Safety and Security

Goal: Continue to improve transportation safety and ensure the security of the transportation system.

Objective:

- a) Reduce fatality, injury, and crash/incident rates on all modes.
- b) Reduce vulnerability of transportation facilities/users to terrorists, natural disasters and risks by implementing and monitoring an evacuation plan, and working with the regional emergency management team.
- c) Reduce economic losses due to transportation crashes and incidents.
- d) Improve the ability to identify high accident locations, and evaluate their impacts in TIP project prioritization.
- e) Provide a safe environment for transportation users through the "3 Es" (Engineering, Enforcement and Education).
- f) Increase transit safety and security for riders and employees.

9. Freight Transportation and Urban Goods Movement

Goal: Improve mobility and accessibility of freight and urban goods movement.

Objective:

- a) Relieve congestion on heavily-traveled truck routes, including through the encouragement of expanded rail transportation.
- b) Improve mobility and access to intermodal operations and facilities.
- c) Establish and designate truck routes consistent with federal, state and local regulations.

4.3 Performance Targets and Measures of Effectiveness

As part of the same process for creating the Goals and Objectives, the DCHC MPO developed a set of Performance Targets to provide a set of broadly based quantitative measures that evaluated the transportation plan from several different perspectives. The Targets mostly use measurements from the Triangle Regional Model (the region's travel demand model), such as the miles traveled, trips taken, congestion levels, and mode split (between automobiles, transit, bicycling and walking).

These measures, and the targets the MPO seeks to achieve with its investments, are shown in Figure 4.3.1, which compares the adopted 2040 MTP and Targets using the following format:

Comparison Data – this information provides contextual values for comparing the 2040 MTP and Target values:

- **2010** – This is the current condition. It is the 2010 population and employment using the 2010 transportation network (e.g., highways and transit service).
- **2040 E+C** – This is the no-build condition, or “Existing plus Committed” (E+C). It is the 2040 population and employment using the existing transportation network.
- **2040** – These are the values for the plan as adopted by the DCHC MPO. This is the 2040 population and employment using the 2040 MTP transportation network.

Targets – There are three Target values, **Good**, **Better** and **Best**. The use of more than one Target value helps to set a range of values that can be used for comparison.

The comparison of the 2040 MTP with the Performance Targets produces mixed results. The 2040 MTP produces substantial improvements in terms of efficiency, effectiveness and multi-modal use when compared to the no-build scenario (i.e., 2040 E+C). However, the Targets are very ambitious, having been set high to challenge the transportation planning process. As a result, several 2040 values come close to the Targets values but none of them meet the Target values.

Figure 4.3.1 Mobility Targets

		Comparison Data			Targets		
#	Mobility Targets	2010	2040 E+C	2040	Good	Better	Best
1	VMT Per Capita (daily miles)	31	31	31	30	29	28
2	Percent of population whose average trip time is greater than 15 minutes (all trips)	27%	44%	36%	25%	22%	20%
3	Average Travel Time: all peak trips (daily minutes)	15	17	15	14	13	12
4	Transit Mode Share: all trips	2.8%	2.3%	3.2%	5%	7%	10%
5	Percent SOV Trip Share: work trips	81%	82%	79%	78%	75%	72%
6	Percent Non-motorized Trip Share: all trips	10%	9%	10%	13%	14%	16%
7	Greenhouse Gas : annual per capita emissions from transportation sector (tons)	9.63	9.51	9.47	9.00	8.60	8.10
8	Cost of Congestion (daily; in million \$)	\$0.6	\$3.2	\$1.9	\$1.8	\$1.5	\$1.2
9	Percent of Poverty Households within 1/4 mile of transit	69%	67%	65%	80%	85%	90%

This report also presents a detailed analysis of Environmental Justice issues in section 9.2 – Critical Factors in Planning – Environmental Justice (EJ), and provides a comparison of the location of 2040 MTP projects and EJ populations in Appendix 8 – Environmental Justice Project Tables.

Key points from this section:

- Our MPOs have a single vision for what our region’s transportation system should achieve.
- Each MPO has adopted goals and objectives to accomplish this vision that reflect the unique characteristics and aspirations of the communities within the MPOs.