

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 seamlessly integrated set of transportation services that provide travel choices to support economic development and that:

- *are compatible with the character and development of our communities,*
- *are sensitive to the environment,*
- *improve quality of life, and*
- *are safe and accessible for all.*

The 2045 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

The two Metropolitan Planning Organizations have worked together to develop a common set of goals and objectives that are designed to achieve the region's overall vision. Goals are short statements of intent; objectives provide two to four priorities within each goal on which we want to focus. This plan is based on eight goals and their supporting objectives:

1. Connect People. Objectives:

- a) Connect people to jobs, education and other important destinations using all modes
- b) Ensure transportation needs are met for all populations, especially the aging and youth, economically disadvantaged, mobility impaired, and minorities.

2. Promote Multimodal and Affordable Travel Choices. Objectives:

- a) Enhance transit services, amenities and facilities.
- b) Improve bicycle and pedestrian facilities.
- c) Increase utilization of affordable non-auto travel modes.

3. Manage Congestion and System Reliability. Objectives:

- a) Allow people and goods to move with minimal congestion and time delay, and with greater predictability.
- b) Promote Travel Demand Management (TDM), such as carpooling, vanpooling and park-and-ride.
- c) Enhance Intelligent Transportation Systems (ITS), such as ramp metering, dynamic signal phasing and vehicle detection systems.

4. Stimulate Economic Vitality. Objectives:

- a) Improve freight movement.
- b) Link land use and transportation.
- c) Target funding to the most cost-effective solutions.
- d) Improve project delivery for all modes.

5. Ensure Equity and Participation. Objectives:
 - a) Ensure that transportation investments do not create a disproportionate burden for any community.
 - b) Enhance public participation among all communities.

6. Improve Infrastructure Condition. Objectives:
 - a) Increase the proportion of highways and highway assets rated in 'Good' condition.
 - b) Maintain transit vehicles, facilities and amenities in the best operating condition.
 - c) Improve the condition of bicycle and pedestrian facilities.

7. Protect the Environment and Address Climate Change. Objectives:
 - a) Reduce mobile source emissions, greenhouse gas emissions and energy consumption.
 - b) Minimize negative impacts on the natural and cultural environments.

8. Promote Safety and Health. Objectives:
 - a) Increase the safety of travelers and residents.
 - b) Promote public health through transportation choices.

4.3 Performance Measures of Effectiveness and Target Values

As part of the same process for creating the Goals and Objectives, the two MPOs developed a set of common Performance Measures related to the objectives that would enable tracking progress over time. Measures fall into one of three categories: i) those that can be determined quantitatively using analytic methods and data already available, ii) those that can be determined quantitatively, but will require new analysis methods and/or additional data, or iii) those that would need to use more qualitative methods, such as surveys or focus groups, to judge our progress.

Performance measures that are currently quantifiable were determined for three comparative conditions:

- 2015 – This is the current condition. It is the 2015 population and employment using the 2015 transportation network (e.g., highways and transit service).
- 2045 E+C – This is the “Existing plus Committed” (E+C) network which includes the existing and under-construction transportation network and the 2045 population and employment.
- 2045 – This is the 2045 MTP transportation network plan as adopted by the two MPOs using the 2045 population and employment.

Although the measures are common to both MPOs, each MPO may choose different target values they wish to achieve for each measure based on conditions and priorities specific to each MPO. The two MPOs will continue to develop or refine specific target values and to use these values in prioritizing the implementation of projects.

The performance measures have been crafted to align with new and developing performance requirements under the Federal FAST Act, the nation's transportation law. Both MPOs have approved FAST Act compliant performance measures and targets for transit asset state-of-good-repair and for safety. Additional FAST-Act compliant measures and targets will be adopted through subsequent amendments to this Plan. The MPOs will continue to coordinate with NCDOT and other agencies to adopt Highway Safety Improvement Program measures as they are required.

The following measures are used for this plan; some of the measures support more than one objective:

Performance Measure	FAST Act Target
% of work and non-work trips by auto that take less than 30 minutes	
% of work and non-work trips by transit that take less than 45 minutes	
% of urbanized area within ¼ mile of pedestrian facilities	
% of planned investment in existing roadways (versus new alignment).	
Amount and % of population and jobs in "travel choice neighbor-hoods:" areas accessible to light rail, bus rapid transit, commuter rail and frequent bus service (½ mile to stations, ¼ mile to frequent bus service)	
Amount and % of legally binding affordable housing units located with ½ mile of transit infrastructure stations or frequent bus service	
% of Environmental Justice population and total population within ½ mile of bus service, 1 mile of rail service, ½ mile of bike facilities or ¼ mile of sidewalk	
Per capita transit service hours	
Total transit boardings per capita	
% of bus stops meeting defined facility criteria (e.g. benches, shelters, arriving bus status)	
5-year average of expenditures on cycling/walking facilities	
Proportion of jurisdictions with ordinance requirements for sidewalk construction or in-lieu fees	
Transit, cycling and walking mode shares (overall, in transit corridors, in travel choice neighborhoods)	
Average clearance time for crashes on principal roadways	
Daily minutes of delay per capita	
Interstate Level of Travel Time Reliability	2-year: 80%, 4-year: 75%
Non-Interstate NHS Level of Travel Time Reliability	2-year: none, 4-year: 70%
% of peak hour travelers driving alone	
Total individuals provided TDM program and activity support	
# of employees working for Best Workplace for Commuters employers	
Vehicle miles of travel (VMT) per capita	
Amount of ITS investments	
% of lane miles with NCDOT unacceptable pavement condition rating	
Number and % of structurally deficient bridges	
% of reported potholes repaired within two days by NCDOT	
Interstate Pavement Condition (Good)	2-year: none, 4-year: 37%
Interstate Pavement Condition (Poor)	2-year: none, 4-year: 2.2%
Non-Interstate NHS Pavement Condition (Good)	2-year: 27%, 4-year: 21%
Non-Interstate NHS Pavement Condition (Poor)	2-year: 4.2%, 4-year: 4.7%
NHS Bridge Condition (Good)	2-year: 33%, 4-year: 30%
NHS Bridge Condition (Poor)	2-year: 8%, 4-year: 9%
% of transit equipment meeting or exceeding useful life benchmark	CAMPO: 30% DCHC MPO: GoDurham: 0% Chapel Hill Transit: 20% GoTriangle: 22%

Performance Measure	FAST Act Target
% of transit vehicles by asset class meeting or exceeding useful life benchmark	CAMPO: 30% DCHC MPO: GoDurham: 0%-50% Chapel Hill Transit: 10%-20% GoTriangle: 13%
% of transit facilities with condition rating below 3.0 on Federal Transit Administration Transit Economic Requirements Model scale	CAMPO: 40% DCHC MPO: GoDurham: 0%-50% Chapel Hill Transit: 0% GoTriangle: 0%
% of cycling facilities by type (bike lanes, shared use paths, etc.) rated in good condition	
# of public participants in each process by type (in-person, email, survey, social media)	
Environmental Justice requirements met by 2045 MTP	
# of non-motorized fatalities and serious injuries	↓ 6.02%/year (statewide)
# of total fatalities	↓ 5.59%/year (statewide)
Total fatalities rate (per 100 million vehicle miles traveled)	↓ 5.02%/year (statewide)
# of total serious injuries	↓ 6.77%/year (statewide)
Total serious injuries rate (per 100 million vehicle miles traveled)	↓ 6.12%/year (statewide)
% of adults who are physically active	
Minutes of truck delay per trip	
Freight buffer time index	
Interstate Truck Travel Time Reliability	2-year: 1.65, 4-year: 1.7
Average payback period of investments by mode	
% of TIP projects completed on-time (let to construction) by mode	
% of MTP projects built in the time period in which they first appeared	
% of TIP projects built in the time period in which they first appeared	
Emissions per capita from on-road mobile sources (ozone, carbon monoxide, particulate matter, greenhouse gases)	
Energy consumption per capita from transportation sources	

Section 6.5 of this plan includes the results of analyzing the performance measures. 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 2045 MTP projects and EJ populations in Appendix 12 – *Environmental Justice Project Tables*.

Key points from this section:

- Our MPOs have a single vision for what our region’s transportation system should achieve.
- Both MPOs adopted consistent goals and objectives to accomplish this vision, and a common set of performance measures to track progress towards the goals and objectives.
- Each MPO may choose different target values they wish to achieve, based on the conditions and priorities of the different MPOs.
- Performance measures are designed to align with Federal requirements under the FAST Act, the federal transportation law; and targets for safety and transit asset state of good repair are included as part of this version of the 2045 Metropolitan Transportation Plan