

8.0

SEVEN PLANNING FACTORS

Under the Intermodal Surface Transportation Efficiency Act (ISTEA), all MPOs were required to consider 15 planning factors in the development of transportation plans and programs. With the enactment of the Transportation Equity Act for the 21st Century (TEA-21), the number of planning factors was reduced to seven. TEA-21 requires MPOs to consider projects and strategies that will address the following objectives.

8.1 Economic Vitality

The Mecklenburg-Union MPO has worked extensively over the years with NCDOT and other state and federal agencies on transportation projects that enhance the economic prosperity of the area.

A significant development is the formation of a regional transportation alliance involving the four MPOs in the Charlotte Region. The new organization, CRAFT (Charlotte Regional Alliance for Transportation), is committed to ensuring that the economic growth and vitality of the entire area will be complemented by a transportation system developed in a regional manner. The alliance marks a coordinated effort to guide the Charlotte region in broader planning to serve the rapidly merging urban areas. The four MPOs in the Charlotte region – Cabarrus-South Rowan, Gaston, Rock Hill-Fort Mill and Mecklenburg-Union – have signed a Memorandum of Agreement for working cooperatively on regional transportation issues and have begun meeting on an adopted schedule.

Also important is the completion of I-485, and widening of I-77 and I-85. These freeways will continue to provide important access to other parts of the country, and benefit the MUMPO area economy by improved transportation for people and goods and by increased tourism. The implementation of an efficient transportation system including mass transit options will preserve the area's reputation as a desirable place to locate businesses.

8.2 Safety and Security

MUMPO takes a number of measures to increase the safety and security of the transportation system for all users.

CDOT produces an annual inventory of high accident locations to identify where there may be a need for safety improvements. Projects are then developed to improve the conditions. NCDOT also conducts similar studies and has a safety program to address these needs.

MUMPO also supports the implementation of other projects including the camera enforcement programs aimed at reducing red-light running infractions. Further efforts supported by MUMPO to ensure the safety and security of its users include:

- the construction of median guardrails on freeways,
- the replacement of deficient bridges and structures,
- the construction of sidewalks on all non-freeway road projects,
- the addition of bike lanes on roadways, and
- programs to improve safety at school crossings.

8.3 Accessibility and Mobility Options

Increasing the accessibility and mobility options available to people and for freight is one of the most important objectives of MUMPO. This is achieved by:

- integrating land use and transportation planning,
- providing the necessary resources to enhance the existing transportation system,
- expanding the existing transit system,
- implementing fixed route mass transit options, and
- expanding shipping facilities at Charlotte/Douglas International Airport.

Land use and transportation policies are being instituted that support transit ridership, walking and bicycling, and reduce the dependency on the automobile. More compact development patterns at activity centers and along transit corridors will make the transit system more economically self-sustaining. In neighborhoods, transit-oriented development that emphasizes a mix of uses and easy pedestrian access to shopping and services could reduce the need to drive.

The Mecklenburg-Union urban area has been a major shipping hub for the Southeast. Continued support of this hub is provided through widening and maintaining the interstate system and improved access to the multi-modal facility at Charlotte/Douglas International Airport and other intermodal facilities in the area.

8.4 Environmental Protection, Energy Conservation Promotion, and Quality of Life Improvements

MUMPO is committed to protecting and enhancing the environment, promoting energy conservation, and improving the quality of life for citizens living, working or visiting the area. The member governments within the urban area look to protect its important resources by enacting environmentally sensitive land use policies, transportation choices, and promoting air quality education programs. Land use policies include buffers around the rivers and streams, impact fees for runoff caused by impervious surfaces, and roadway designs that mitigate runoff impacts in critical watershed areas. Land use decisions are being made to direct growth to reduce travel demand, which in turn leads to energy conservation and reduced pollutants.

8.5 System Integration and Connectivity

MUMPO has developed and supports programs and projects that enhance the integration and connectivity of a multi-modal transportation system.

- ▶ The current expansion of the airport provides a critical link for movement of goods between rail, highway, and air.
- ▶ Ambitious transit plans provide opportunities for people to enjoy a more mobile system that allows them to access all parts of the urban area.
- ▶ Park-and-ride lots provide auto commuters an opportunity to access the current bus system and will be available for the planned rapid transit system.
- ▶ Bike racks on buses allow people the flexibility to access bus stops by bike, improving the efficiency of the system.
- ▶ MUMPO's policy to add sidewalks to non-freeway roadways enables citizens to leave their vehicle at home for short trips.

CDOT is also emphasizing connectivity between neighborhoods (whether by vehicular, bicycle, pedestrian or a combination of the three). Providing and expanding connectivity is creating a linked network that can minimize congestion and reduce unnecessary trips on thoroughfares.

8.6 Efficient System Management and Operations

Congestion Management System

In 1994 the Mecklenburg-Union Technical Coordination Committee prepared a Congestion Management System in cooperation with the North Carolina Department of Transportation. The system was implemented in 1995 and identifies improvements to reduce traffic congestion at intersections throughout the planning area. Projects are selected for inclusion in the City of Charlotte's Capital Improvement Program or the North Carolina Transportation Improvement Program. The City continues to coordinate with NCDOT on this effort through installation and monitoring of coordinated traffic signals and video surveillance cameras.

Traffic Monitoring System

The City of Charlotte assists the North Carolina Department of Transportation by collecting site-specific information on Highway Performance Management System sample locations. Both the City and the State complete counts at these locations. In a typical year, the City of Charlotte collects the following travel data throughout the planning area:

- up to 500 48-hour automatic traffic counts;
- up to 250 12-hour manual traffic counts;
- approximately 50 radar speed studies; and
- travel time surveys.

In addition, the City performs speed and classification automatic traffic counts. Each September, the City of Charlotte conducts vehicle occupancy surveys at 23 locations in the Uptown area (Charlotte's central business district). The City annually updates Uptown's off-street parking

inventory and peak-hour demand for parking. This includes verifying the existing inventory of parking supply, identifying new parking supply and collecting information on parking rates.

Safety Management System

The Charlotte Department of Transportation compiles accident data on all streets within Mecklenburg County except the freeways. This data is used to identify hazardous locations. CDOT holds monthly safety meetings to develop low-cost safety treatments to reduce accidents at problem locations. The safety improvements might include supplemental signing, pavement marking revisions, signal timing changes, turn prohibitions, and pedestrian and traffic safety educational campaigns. The City works with NCDOT's Traffic Engineering Branch in implementing safety improvements on the State highway system.

These "non-capital" measures are complemented by a program of capital improvements. CDOT develops a Traffic Operations Plan every two years that describes capital projects designed to improve safety at hazardous intersections. This plan lists the City's high-accident locations and high-congestion locations, and recommends improvement measures. The Traffic Operations Plan is used to select intersection safety improvement projects for inclusion in the City's Five-Year Capital Improvement Program or the North Carolina Transportation Improvement Program.

8.7 Preservation of the Existing System

MUMPO has worked with NCDOT for many years in establishing and maintaining a transportation planning program that incorporates a standard set of planning principles as recommended by the Federal Aid Highway Act of 1962. The planning principles require the development of a safe and efficient transportation system by:

- maximizing utilization of the existing facilities,
- increasing operational efficiency and altering travel demands when appropriate, and
- minimizing adverse impacts to the natural, social and economic environments.

The Mecklenburg-Union urban area is also committed to providing the necessary resources for maintaining and preserving the existing and future transportation system.