



Salisbury Bike Race - Photo from Rowan Chamber of Commerce

The Cabarrus-Rowan MPO has an active membership and transportation planning process from project planning to programming to implementation to preservation. MPO members have taken ownership in the development of the transportation system. The 2045 MTP serves as the pathway for developing and managing this transportation system over the next 25 years.

The following goals were outlined at the beginning of this plan. Each goal is addressed through the various elements of the MTP. These elements include documentation of the ongoing efforts of the MPO to further each transportation mode through planning, programming or implementation.

To recap these goals, they are as follows:

### Street System Goal

Develop an efficient street and highway network for the Cabarrus-Rowan Urban Area

### Congestion Management Goal

Develop a thoroughfare system that minimizes

traffic congestion and maximizes system preservation

### Title VI and Environmental Justice Goal

Plan and promote a transportation system that does not disproportionately impact minority and low-income populations

### Bicycle and Pedestrian Goal

Promote development of an integrated bicycle and pedestrian network

### Public Transportation Goal

Support efforts to improve mobility for Urban Area residents

### Environmental Goal

Develop a transportation system, which preserves and enhances the natural and built environments

### Freight Goal

Develop a transportation system that encourages safe and secure movement of freight goods within and outside the Urban Area

## Street System

The Street System in the Cabarrus-Rowan MPO is important for just about every mode of transportation. Without good connecting streets, traffic congestion ensnares automobiles, buses, trucks, bicyclists, and pedestrians. The CR MPO is creating an efficient street and highway network through the CTP Highway Map and Street Index, fiscally constrained highway project list(s), collector street planning, and Congestion Management Process. Without these ongoing efforts, the street system will devolve into a series of underdeveloped streets that funnel traffic onto a few major thoroughfares causing traffic backups, accidents, and delayed emergency response times.

## Congestion Management

The development of a Congestion Management Process (CMP) is the MPO's systematic and comprehensive approach to congestion relief. The CMP has a series of goals and performance measures to monitor the current system through the use of the Metrolina Travel Model and NCDOT accident data. A baseline of congestion has been established through the CMP that can be used to compare future conditions for volume, capacity, delay, etc. The CMP can also be used to evaluate the effectiveness of strategies whether it is highway capacity expansion, transit service, intersection relief, or information/communication. The CMP plays a vital role in developing a transportation system that minimizes traffic congestion and maximizes mobility.

Emerging technologies such as autonomous and connected autonomous vehicles have the potential to increase the capacity of existing roadway facilities. Transportation Network Companies that provide on-demand services and the increased use of shared vehicles for door-to-door transportation or last mile travel from public transportation will also change the way our thoroughfares and urban streets function. The MPO will continue to monitor how these fast-moving changes recalibrate both congestion and level of service in our communities.

## Title VI and Environment Justice

The development of the 2045 MTP included additional outreach in MLI communities including focus groups in East Spencer, Kannapolis, and Concord. The intent of this effort is to provide targeted opportunities for communities who have historically been disenfranchised in the planning and project implementation process. Projects should be evaluated intermittently to assess their benefits and burdens on MLI communities and include any disproportionate impacts to the minority business community. Transit service is an important part of the MTP's benefit to the MLI community. Efforts in the CR MPO have been made to retain the affordability of transit service and make connections with goods, services, and potential job opportunities.

## Bicycle and Pedestrian

Bicycle and pedestrian planning and implementation are a vital part of the transportation vision for the CR MPO. It is also integral to the community visioning that several MPO members have pursued as part of comprehensive or strategic planning in addressing quality of life issues and urban street design. The CR MPO was part of the Livable Communities Blueprint (LCB) effort and has pursued other non-highway project planning efforts including an update to the LCB through the Carolina Thread Trail project. The CR MPO membership regularly submits successful applications for Transportation Enhancements, maintains a bicycle and pedestrian priority list for the TIP, and continues to fund several sidewalk and greenway projects through the MPO's CMAQ allocation. CR MPO members also pursue the integration of bicycle and pedestrian facilities into development plans that result in a walkable, bicycle-friendly physical environment. These efforts are really an outgrowth of community preservation that each respective local government continues to pursue and achieve outside the MPO process.

## Public Transportation

Public transportation requires a consciousness towards improving mobility for those citizens

without automobiles. The CR MPO is fortunate to have two municipal transit systems, Concord/Kannapolis Area Transit and Salisbury Transit, as well as two express routes: South Rowan Express and Concord Express. Rowan and Cabarrus Counties also provide van service in the rural areas for those residents outside the urban core. This van service can provide additional feeder ridership for the urban systems and is coordinated to create a seamless transit experience for the patron/rider.

One recent development that will directly impact mass/public transportation is the completion of the Blue Line Extension Light Rail Line to UNCC within Mecklenburg County. Because of its proximity to the Cabarrus County line, this premium mass transit service will create many opportunities for feeder bus service from the CR MPO including the new feeder service from the Transit Center to the end of the Blue Line Extension by CK Rider. This service will alleviate congestion on the major traffic artery between Raleigh and Charlotte: I-85.

## Environment

The environment is a common thread through each of the transportation elements. Without preservation and protection of the environment, the transportation system functions only to serve moving objects such as cars or trains. The NC 73 Corridor Study is a new approach to land use and transportation planning that takes into context the need to grow places that facilitate movement by all modes of travel. CR MPO members have taken their local role in corridor preservation very seriously through establishing future right-of-way and cross sections for major corridors, small area plans, and their development ordinances. The emphasis on modes besides the automobile also reveals the CR MPO conscious effort to program and implement a transportation system that maximizes mobility for persons rather than the traditional highway expansion/capacity solution.

Looking into the future, climate change, mitigation of extreme weather events on the transportation system, and green house gases could be a focus of future MTPs efforts. As a qualitative assessment,

the CR MPO has a number of activities that will address this focus including transit expansion, ITS improvements, signal system upgrades, and diesel fleet conversion(s).

As the methodology to quantitatively measure green house gases evolves, the MPO's MTP will follow suit with incorporating these measures into subsequent MTPs. The progress towards reducing the carbon footprint and dependence on the single occupant vehicle is a difficult and daunting task and cannot be successfully addressed in one single 4 year update, but will take a prolonged education effort from the land use, environment, and transportation perspective. Likewise, communities will need to continue to prepare for severe weather events that can disrupt travel through flooding events or loss of facility use for periods of time.

## Freight

Freight has become a high priority for the state and federal government. The State of NC has recently completed a statewide Freight Plan in December 2017. The Plan included a few projects in the CR MPO area: I-85 widening, I-85 pavement rehabilitation, Rogers Lake Road Grade Separation, and 22nd Street Grade Separation. The MPO was also an active partner in the Charlotte Region's first regional Freight Study completed by CDM Smith. This study provided a lot of useful baseline data about the freight industry and the infrastructure that supports this industry. Fortunately, many of the existing CR MPO projects already support freight development and businesses and meet the intent of the Freight Goal.

Moreover, the MPO will and has plugged into the emergency management service and response community by participating in regional conference calls to respond to potential natural and man-made disasters. The sharing of information and efforts is invaluable to the preparation process. Freight travel depends on a predictable and safe transportation system. Disasters can compromise these components and inflict untold

costs on the freight trip for the carrier and receiver. The completion of projects identified through both freight study initiatives will improve safety and reliability of the movement of freight goods and enhance travel both into and out of the CR MPO area.

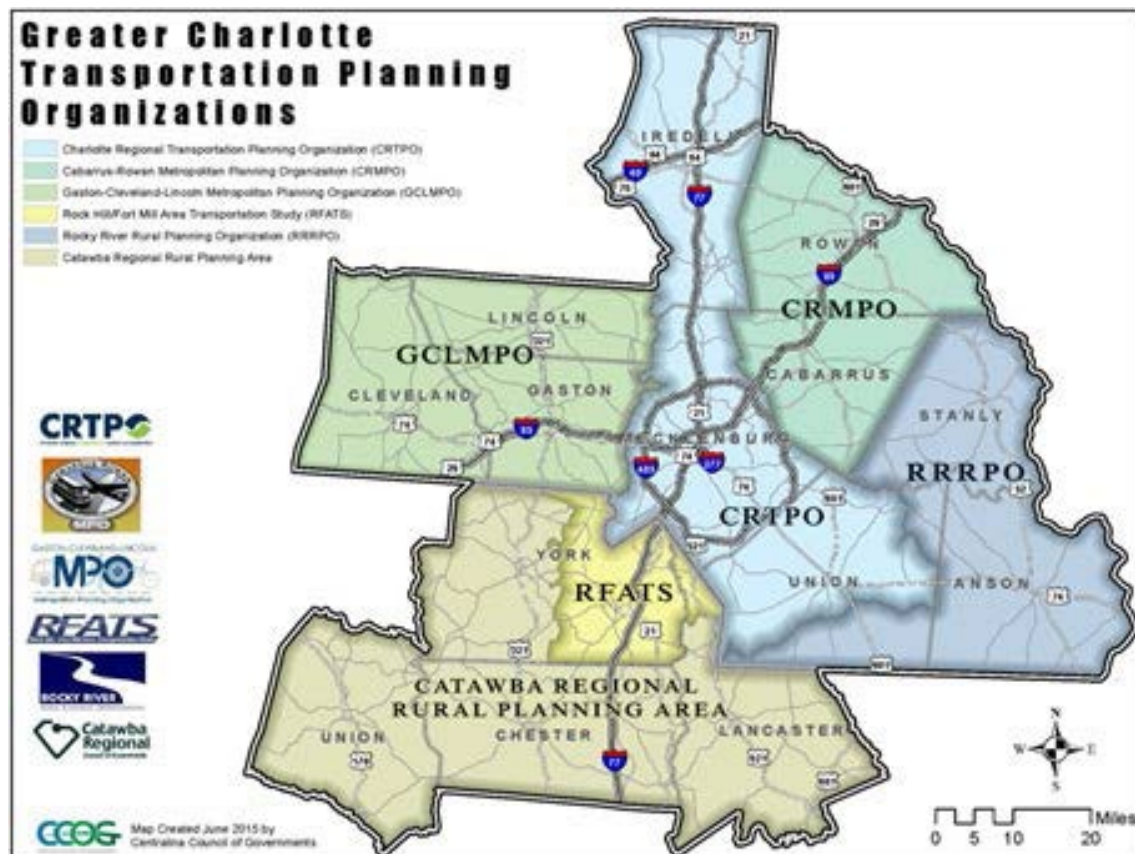
### Regional Collaboration

The CR MPO continues to work effectively with the partners in the Metrolina Region and is an active partner in regional efforts. The CR MPO has supported the Charlotte Regional Alliance for Transportation (CRAFT), Metrolina Regional Model, Fast Lanes Study, Ramp Metering Study, Freight Study, and Interagency/Transportation Conformity with the available staff resources.

CRAFT's role is to enhance communication among local and regional entities, promote awareness of regional issues/concerns, and to provide an educational forum in the Charlotte metropolitan bi-state region. The Metrolina Region continues to grow together as part of a mega-region that stretches from south of Atlanta to north of Raleigh. The consumer or traveler does not recognize MPO,

county, city, or state lines as a barrier to mobility. But it is important for transportation decision makers to be responsive to local needs and reflect those needs/demands in plans and programs in the context of regional discussions. Decisions can only be rationally made and evaluated through better coordination, and communication which has improved substantially over the past 20 years.

On many occasions, the Cabarrus-Rowan MPO has shown leadership in fostering better communication and coordination with its' Metrolina neighbors as well as state and federal partners. Each successive iteration of the federal TEA has implored and challenged local and state governments to strive for this nexus with long term plans and programs. The Cabarrus-Rowan MPO has embraced this challenge as an opportunity to elevate the Metrolina Region to greater multi-model planning heights with routinely successful collaborative results. This success is due in no small part to the leadership of the MPO county and municipal members and their innovative and progressive vision!



Charlotte Regional Alliance for Transportation (CRAFT)