



Dr. Martin Luther King, Jr. Day Celebration in Concord - Photo from James Nix, Independent Tribune

Background

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (1994) is a product of Title VI of the Civil Rights Act of 1964. Title VI prohibits discrimination on the basis of race, color, and national origin and Stafford Act prohibits discrimination based on distribution of benefits based on income. Executive Order 12898 and the US DOT Order on Environmental Justice address persons belonging to the following groups: blacks, Hispanics, Asian Americans, and American Indians, Alaskan Natives, and low-income (persons with household income below the US Department of Health and Human Services poverty guidelines). The Cabarrus-Rowan MPO has mapped these populations using 2011 – 2015 American Community Survey data and factored their geographic concentrations in the development of the 2045 MTP.

Federal guidance for MPOs when developing the MTP includes the evaluation of transportation projects to determine that they do not burden environmental justice areas when compared to the overall network of current and committed future projects. The Cabarrus Rowan MPO uses the results of environmental justice mapping and analysis to inform their decisions when selecting the projects that are included in the MTP, the Strategic Priority process and the Metropolitan Transportation Improvement Program.

Federal Executive Order 12898 sets out requirements for transportation and Environmental Justice. Even though the term “environmental justice” is not in federal legislation, the concept and its application have been developed through a succession of court cases, federal regulations and memoranda, and Executive Orders.

Environmental Justice seeks to ensure that minority and low income populations:

1. Have access to the decision- making process;
2. Realize benefits from investments that are commensurate with the population as a whole;
3. Do not shoulder a disproportionate share of the negative effects and burden resulting from the implementation of transportation projects;
4. Do not incur a disproportionate share of the financial cost.

The primary intent is to demonstrate that minority and low-income communities would not be disproportionately affected in an adverse manner under the MTP. The Environmental Justice requirements also influence public involvement, and these requirements are satisfied under the MPO's Public Participation Plan and the additional outreach steps taken for the MTP public involvement efforts in minority and low-income communities.

Environmental Justice is a concept intended to avoid the use of federal funds for projects, programs, or other activities that generate disproportionate or discriminatory adverse impacts on minority or low-income populations. Environmental justice requires the MPO to examine the allocation of benefits and burdens, historically and currently, and planned for the future; to ensure that minority and low-income communities are treated equitably in the provision of transportation services and projects; and to provide full participation for minority and low-income communities to advise the MPO during its planning and decision-making process.

This effort is consistent with Title VI of the 1964 Civil Rights Act, and is promoted by the U.S. Department of Transportation (USDOT) as an integral part of the long-range transportation planning process, as well as individual project planning and design. The environmental justice assessment incorporated in the MTP update is based on three basic principles, derived from guidance issued by the USDOT:

- The planning process should minimize, mitigate, or avoid environmental impacts (including economic, social, and human health impacts) that affect minority and low-income populations with disproportionate severity.
- The benefits intended to result from the transportation planning process should not be delayed, reduced, or denied to minority and low income populations.
- Any community potentially affected by outcomes of the transportation planning process should be provided with the opportunity for complete and equitable participation in decision-making.

Access to the Decision-making Process

The MPO endeavors to develop and carry out a public involvement process that not only reduces obstacles to participation by minority and low-income communities, but also actively seeks out their input. Elements of the MTP are available online and at public venues such as planning departments and county offices. Notices of the public review periods are published in local newspapers and sent by email to community groups, neighborhood associations, and government agencies. Public meetings are held with minority and low-income focus groups in the majority minority community of East Spencer, Centerview Neighborhood Association in Kannapolis, and the Logan Community Center in Concord to obtain feedback on elements of the MTP including goals and objectives, financial projections, and project priorities.

Plan or Project Benefits

The investments in transportation infrastructure included in this MTP will benefit the MPO's population in several ways including increased mobility, safety, time savings, and economic development/opportunity. People in poorer households without a reliable vehicle, or with no vehicle at all, have a reduced level of mobility and access to jobs. On average, minorities are more dependent on transit, have higher occupancy levels in automobiles through carpooling or

car sharing, and have lower levels of vehicle ownership. A high percentage of African-American, Hispanic, and Asian households have no vehicle and are more frequent users of alternative modes of transportation.

The transit service planned in the 2045 MTP will disproportionately benefit low-income populations that do not have access or financial means for personal vehicles and/or the disabled who may not be able to operate a vehicle. The CR MPO currently has 3 transit operators in the area with all of them providing fixed route service of some form. All of them provide targeted service to these populations either through stop placement, route location, or door-to-door service. The minority and low income (MLI) population mapping for CR MPO shows good transit service coverage in relation to both MLI census block areas and zero vehicle ownership populations. However, the Hispanic population is more dispersed geographically and not clustered near transit route service. Transit dependent MLI populations in the outer county areas (northwest in Rowan and northwest of Kannapolis, east of 85 and south along the county line in Cabarrus) have fewer options for mobility.

The Salisbury Transit and Rider Transit service providers have taken additional steps in the past four years to reach out to the Spanish language community and provide additional service and new stops in low-income communities. Salisbury Transit has met with various Hispanic community leaders and groups to introduce and promote transit services along with a Language Line that is available to assist with translations of all types of documents and materials on various platforms. Bus route schedules and other informational flyers are printed in Spanish and the Transit Operator is bilingual and assists with access to other bilingual staff.

New fixed route service added by Salisbury Transit includes weekend Express Routes, added stops to the Greyhound bus station, extending Route 2 service to the Lash Drive Community. New stops

included Crosswinds, Fleming Heights, Lakewood Apts., Food Lion on Statesville Boulevard and extended service to accommodate new businesses, I.E. Wallace Commons Shopping Center, medical facilities on Julian Road, Jake Alexander Boulevard, the Morlan Park area, Highway 150, and multi-family communities such as Salisbury Village Apartments.

Rider Transit bus schedules are printed in Spanish and important notices, particularly related to service changes and holiday schedules are posted in both English and Spanish. The web site is fully translatable into many languages, including Spanish. Their customer service team uses a set of "I speak" cards to determine what language the person speaks/understands and use written notes and language services such as Google Translate as needed to communicate. Bus Operators have been instructed to provide the Customer Service number to Spanish speaking passengers.

Rider Transit added Sunday service in 2013, directly operates ADA Paratransit services and will be adding a new Rider Express service to the Charlotte Area Transit Service's light rail in the spring of 2018.

Rider Transit is working to ensure that all new stops, or stops being improved, are ADA accessible and has recently implemented new NCDOT approved bus stop standards. In 2017, Rider Transit did a full assessment of every stop in the system, ranking them in order in terms of the current level of accessibility, and created a transition plan to continue to make the system more accessible in the coming years. Older stops that need improvements are prioritized by stop usage. When new stops are added to the system, a concrete pad and/or sidewalks, or a hard level surface with connectivity to the common means of egress are installed.

For safety and security, all stops with 6 to 9 riders per day are scheduled for seating and solar lighting and stops with 10 or more riders per day

are scheduled to receive a shelter, seating, trash can and solar lighting. Shelters are designed to accommodate a mobility device adjacent to the fixed seating. Although there is no stop level surveillance, all the buses are equipped with both internal and external cameras providing 360 degree external coverage around the bus while on route.

As the CR MPO grows more densely populated, transit service will become more efficient and accessible. Future daytime service connecting from the Rider Transit Center to the light rail station at the University of North Carolina Charlotte campus will open up job, education and service opportunities to transit dependent populations in the CR MPO. In addition, feeder service is planned from the Rowan Express to the Rider Transit Center, which would connect to light rail. The growth in private transportation network companies (TNC) such as Uber and Lyft have begun to provide affordable, on-demand, door to door service in communities across the US for households without vehicles. The future of these TNCs includes both shared use and autonomous vehicle services that will provide first and last mile accessibility to open mobility to more of the transportation challenged population.

In addition, the MPO members are beginning to invest in the pedestrian network for the urban/municipal core, which will also assist in the mobility of the low income and disabled. The MPO has expressed by resolution its support of pedestrian facilities in all new TIP projects, so newly constructed infrastructure will not be built as a barrier to populations or groups that disproportionately rely on a municipal sidewalk system as a mode of transportation to access transit, shopping, and other services. Municipalities in the CR MPO with populations under 5,000 have been able to access Transportation Alternative Program (TAP) funds through the North Carolina Department of Transportation to retrofit existing sidewalks and intersections with handicapped ramps to improve accessibility in commercial areas and older neighborhoods.

Negative Impacts

Individual projects in the 2045 MTP may have potential negative impacts that will be studied more in depth during the project development and design. Although many impacts can be mitigated through context sensitive design, some impacts are unavoidable due to the conflict between providing increased capacity and mobility with encroachment onto private property. Often, a project's net impact is not always entirely clear and can be perceived differently by neighbors in the same block. Some projects increase property values, mobility, and economic development while resulting in changes to neighborhood character, land use, or relocation. MPO staff did limit the scope of several projects such as the US 52 relocation to reduce the potential impacts to neighborhoods and businesses. There are very few highway projects (if any) in the 2045 MTP that will impact historically underserved areas either positively or negatively. Most minority and low-income areas are served by a grid street pattern where traffic is dispersed evenly without the need for additional capacity and congestion is limited to the I-85 corridor, areas with active road construction, or peak hour incidents. Although it is difficult at the planning stages of project development to conclusively pinpoint the overall impact of the transportation projects in this Plan, additional analysis has been done to identify projects with the potential to disrupt minority or low-income populations.

Analysis and Evaluation

As part of this MTP update, the Cabarrus-Rowan MPO has identified the geographic distribution of minority and low-income (MLI) populations using 2011-2015 American Community Survey data in order to assess the effects of various transportation investments in the plan. Evaluating the distribution of transportation projects in transportation plans exhibits whether projects, service and programs are equitably allocated between Environmental Justice areas and non-Environmental Justice Census block groups. It must be stressed that the environmental justice screening conducted for this study is not intended

to quantify specific impacts. As described above, it is intended to guide the development of a plan that is equitable in terms of both costs and benefits.

A critical purpose of this screening is identifying projects in the MTP that have the potential to affect communities of special interest. When individual studies begin as part of project implementation, more detailed analyses, including field surveys and additional public outreach, will be needed to identify and minimize specific community impacts on a project-by-project basis. The following methodology was used to identify communities subject to environmental justice screening.

Block group data from the recently released 2011-2015 American Community Survey (ACS) was used to establish areas of low-income and minority population concentrations. Based on comments from a previous federal Certification Review, the population groups analyzed were expanded. The distributions of populations of interest (African-American, Hispanic, Asian, Native American, and low-income persons) were calculated within each block group. If individuals from any one of these categories in a particular block group comprised more than the percentage overall for Cabarrus and Rowan Counties, they were flagged for analysis for that demographic category.

Table 10-1 - Population Percentage by County

Population Group	Cabarrus County	Rowan County
African American	16.5%	16.1%
Hispanic	9.8%	8.0%
Asian	3%	1%
Minorities	25.4%	22.6%
Low Income *	12.5%	18.1%

*Low income population was based on the Federal Poverty Rate.

Thematic maps were prepared to graphically depict concentrations of each population group by block group. Block groups were shaded to represent concentrations of populations with natural breaks adjusted to highlight populations at or near the target percentage. When overlaid with proposed roadway projects, these maps provided

a useful tool for analyzing and communicating impacts.

Additional mapping provided in the 2045 MTP includes identifying the Hispanic population and block groups with zero vehicle ownership in relation to transit and roadway projects. An additional map was created for total minorities (African American, Asian, Hispanic, and Native American) and low-income population to target “hot spots” of disadvantaged populations for analysis.

Table 10-2 - MLI Census Block Data*

	Cabarrus County	Rowan County	CR MPO
Total Census Blocks	94	94	188
Minority or Poverty > average	58	52	110
Minority and Poverty > average	27	26	53
Minority > average	14	12	26
Poverty > average	17	14	31
Percentage MLI (Minority or Poverty > average)	62%	55%	58%

*Census block data was based on the 2011-2015 ACS.

Appendix 10-1 displays low-income and minority populations (2011-2015 ACS) with future highway projects.

Appendix 10-2 displays low-income and minority populations (2011-2015 ACS) with the current transit system projects.

Appendix 10-3 displays zero vehicle ownership (2011-2015 ACS) with the future highway projects and current transit system projects.

Appendix 10-4 displays a composite of MLI populations (2011-2015 ACS) with future projects and past highway projects.

Appendix 10-5 displays a composite of MLI populations (2011-2015 ACS) with current transit service and bicycle/pedestrian crash locations, bicycle/pedestrian crash data by census block and bicycle/pedestrian crash in comparison to MLI census blocks (NCDOT Bicycle/Pedestrian crash data 2007-14).

Analysis of Transportation Projects and Funding Within Minority and Low Income Areas

An analysis of the 2011-2015 American Community Survey data on minority and low-income populations indicated a number of areas of impact relating to environmental justice in the Cabarrus-Rowan MPO. These areas were mapped and a qualitative assessment was performed on the projects that directly affect those Census Block Groups through multi-modal transportation investment. This analysis was performed to determine the level of community impact and system access that these areas might receive in terms of transportation project apportionment and equity of service as part of the 2045 MTP.

To verify the quality of data and locational information from the American Community Survey and other sources, a detailed analysis of existing land use was cross-checked using current aerial photography, local planning knowledge of

the community and field surveys to determine if roadway projects would impact minority and low income communities and businesses.

The 2045 MTP roadway projects and other Federal, State and local projects within or adjacent to minority, low-income, composite minority and low income, Hispanic, and zero vehicle populations are listed in **Table 10-3 - 2045 MTP Projects in CR MPO Minority, Low Income and Zero Vehicle Areas** and **Table 10-4 Other Federal, State and Local Projects in CR MPO MLI and Zero Vehicle Areas**. The identification of project impacts on minority, low income and zero vehicle ownership census blocks captured all areas with the potential to affect communities at or near the County threshold averages. These projects have been identified for additional outreach, study, and project assessment including future identification of bicycle and pedestrian safety issues.

Table 10-3 - 2045 MTP Projects in CR MPO Minority, Low Income and Zero Vehicle Areas

Horizon Year	Project Index #	Project Description	African- American Cabarrus 16.5% Rowan 16.1	Low Income Cabarrus 12.5 Rowan 18.1%	Hispanic Cabarrus 9.8% Rowan 8%	Zero Vehicle Ownership Cabarrus 4.7% Rowan 6.8%
2025	54	Newsome Road Widening			X	
2025	32	Julian Road Widening			X	X
2025	11	I-85 Widening and Interchange improvements		X		
2025	30	Kimball Road Extension			X	X
2025	15	Mooresville Road Widening			X	X
2025	46	NC 73 Widening	X	X	X	X
2025	13	I-85 Widening	X	X	X	X
2025	17	Derita Road Widening	X		X	X
2025	36	Poplar Tent Rd Widening (Derita to George Liles Pkwy)	X			X
2025	52	Concord Mills Blvd Flyover	X			X
2035	34	Airport Pkwy Extension	X		X	X
2035	33	Mooresville Road	X	X	X	X
2035	63	North Main Street (Jackson Park to Kimball Rd)	X	X	X	X
2035	37	Poplar Tent Road (NC 73 to Derita Rd)	X		X	X
2035	39	Branchview Drive (NC 3) Dale Earnhardt Blvd to NC 73	X		X	X
2045	71	Poplar Tent Road (George Liles Pkwy to US 29)	X	X	X	
2045	69	Branchview Drive (NC 3) NC 73 to US 601		X	X	
2045	38	George Liles Pkwy (Roberta Rd to NC 49)	X	X	X	
2045	67	US 52 (County Line to north of Granite Quarry)		X	X	X

Table 10-4 - Other Federal, State and Local Projects in CR MPO MLI and Zero Vehicle Areas

Horizon Year	Project Index #	Project Description	African- American Cabarrus 16.5% Rowan 16.1	Low Income Cabarrus 12.5 Rowan 18.1%	Hispanic Cabarrus 9.8% Rowan 8%	Zero Vehicle Ownership Cabarrus 4.7% Rowan 6.8%
TBD	B-171324	Town Creek Greenway (Correll St to Andrews St)	X	X		X
2026	P-5733	Upgrade Amtrak Station expand waiting space & parking	X	X		X
2018	EB-5732	Bruton Smith Blvd Sidewalk		X		
2018	EB-5902	Downtown Pedestrian Signal Upgrades (Concord)	X	X		X
2019	EB-5903	Union Street Sidewalk				
2018	EB-5619	Kelsey Scott Park Greenway		X		
2018	EB-5813	Grants Creek Greenway in Landis			X	
2024	EB-5844	Little Texas Road Sidewalk (Lane St to Dale Earnhardt Blvd)	X	X	X	X
2025	EB-5921	North Main Street Sidewalk (12th Street to 22nd Street)	X	X	X	
2020	EB-5861	Third Street Greenway to Yadkin River	X	X	X	X
2018		CK Rider Service Hub to Blue Line Extension (BLE) Light Rail	X	X		

Identifying and Measuring Benefits and Burdens

Current studies and guidance on Environmental Justice offer multiple measures to evaluate benefits and burdens of transportation projects and programs to MLI populations through the collection of data and the use of spatial analysis tools. The following list of performance measures includes ones that the CR MPO is currently undertaking such as evaluating transit service frequency, travel times and coverage to determine accessibility; evaluating transit stops for ADA compliance; and identifying zero vehicle ownership in relation to MLI census blocks. New evaluations will focus on crash data by census block with comparisons to statewide and national averages as well as safety evaluations and additional public outreach. These studies and data analyses will provide direction on how to improve access to opportunity and to mitigate adverse impacts on disadvantaged communities.

Mobility, Accessibility and Equity

- Evaluate transit service frequency, coverage, accessibility, and travel times by using transit planning data and demographic tools such as Remix with a ¼ mile buffer from transit service in relation to the minority and low income communities to evaluate accessibility to employment and educational opportunities, medical facilities, grocery stores and community services.
- Evaluate transit stops and access points to

transit service for ADA compliance including curbing ramps and safe landing zones.

- Identify zero vehicle ownership data and map with MLI populations for project selection criteria and additional outreach.

Safety and Security

- Comparison of crash data for vehicles, pedestrians and bicyclists in MLI areas compared to statewide and national averages.
- Evaluation of safe access to schools, parks and shopping in minority and low-income communities.
- Evaluate transit stops and facilities for safety and security including sight lines and lighting.

Public Outreach, Community Engagement and EJ Training

- Frequent outreach to the minority communities through workshops and community meetings.
- Create an informal advisory forum with civic and religious leaders to foster one on one small group dialogue to discuss transportation issues, concerns, processes and projects.
- MPO staff will seek out and participate training and peer exchanges to continuously develop better methodologies and benefit from the transfer of information so projects can be planned and implemented to improve access to opportunity for underserved and transportation distressed populations.