



Western Piedmont
Council of Governments

Creative Regional Solutions Since 1968

MTP / CTP Update

2045 Metropolitan Transportation
Plan (MTP) & Comprehensive
Transportation Plan (CTP)

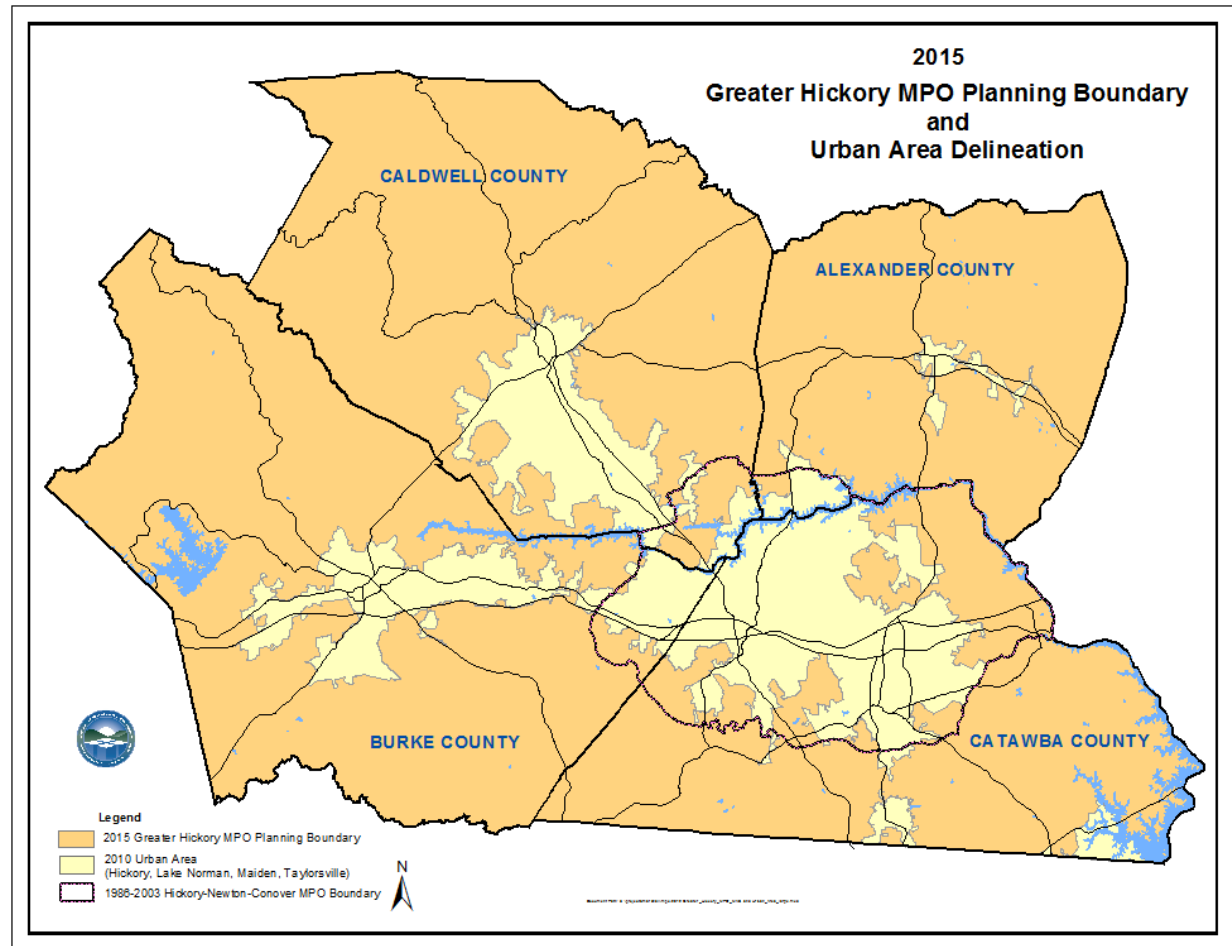
WPCOG / GHMPO Membership

- Cities and Towns:

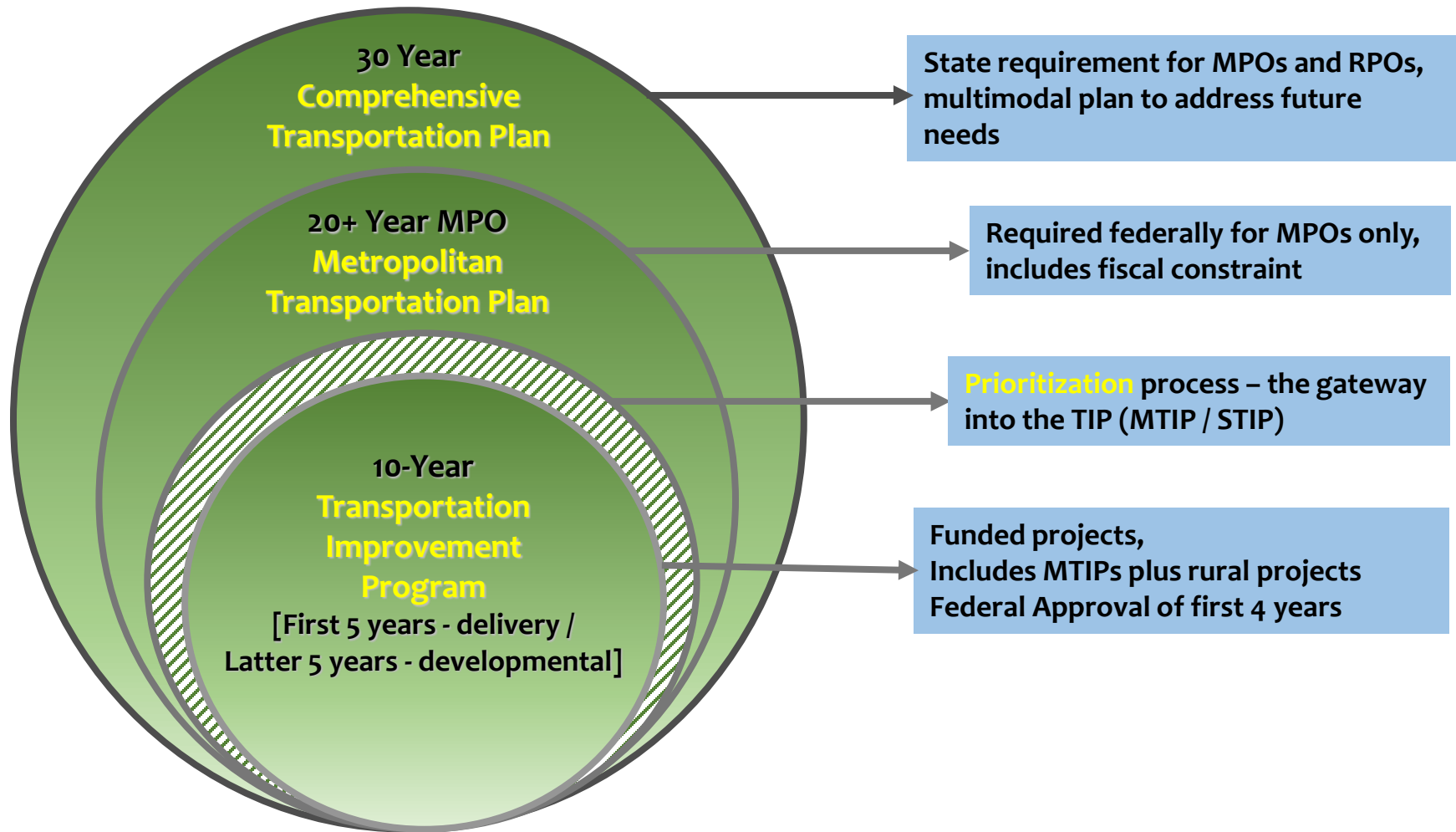
- Brookford
- Cajah's Mountain
- Catawba
- Cedar Rock
- Claremont
- Connelly Springs
- Conover
- Drexel
- Gamewell
- Glen Alpine
- Granite Falls
- Hickory
- Hildebran
- Hudson
- Lenoir
- Long View
- Maiden
- Morganton
- Newton
- Rhodhiss
- Rutherford College
- Sawmills
- Taylorsville
- Valdese

- Counties:

- Alexander
- Burke
- Caldwell
- Catawba

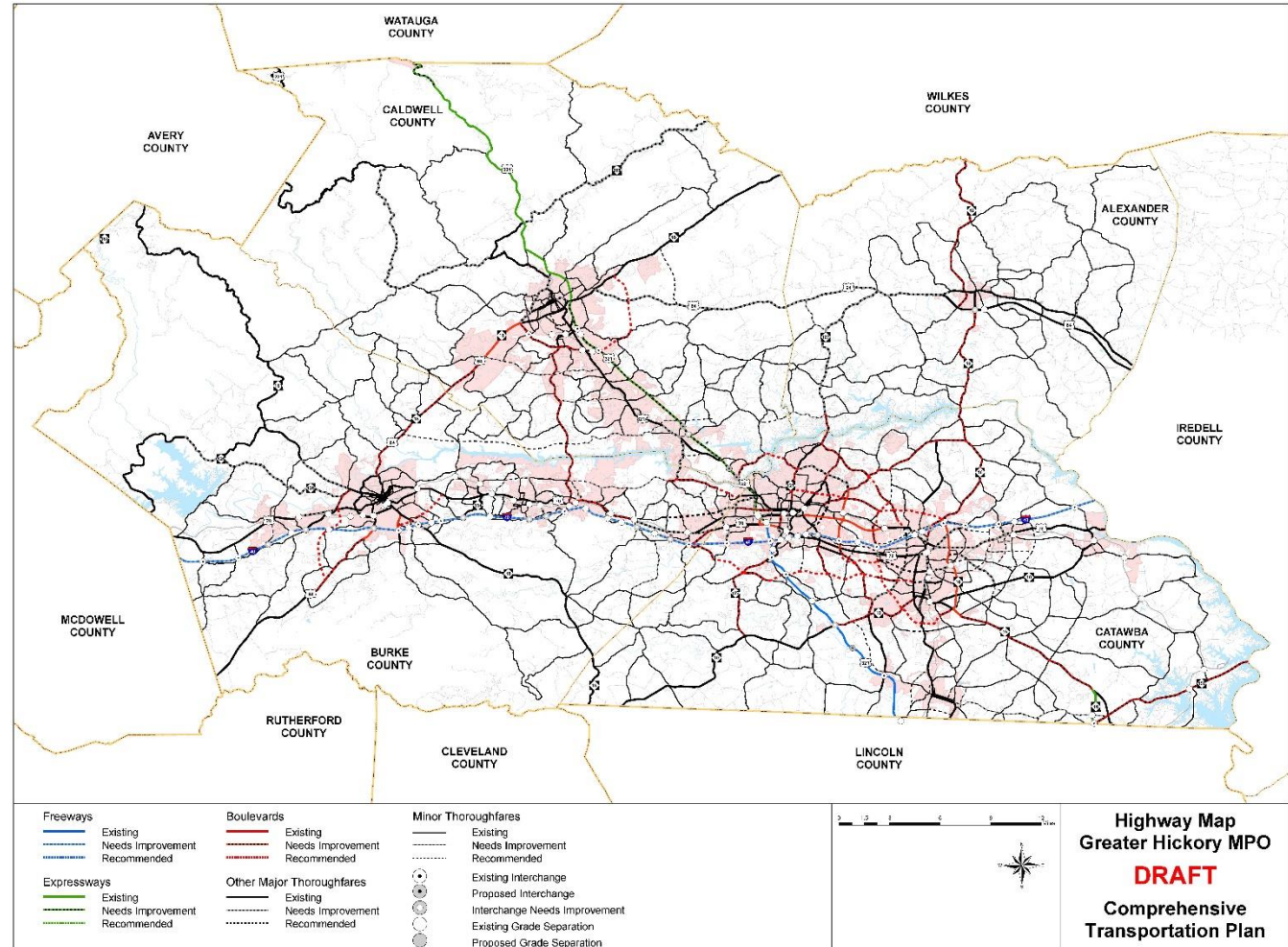


CTP > MTP > Prioritization > TIP



Comprehensive Transportation Plan (CTP)

- **Freeways**
 - I-40
- **Expressways**
 - US 321
- **Boulevards**
 - US 70
 - US 64 / NC 18
 - NC 16
 - NC 127 (Hickory)
 - Connelly Springs Rd
 - Malcolm Blvd
 - McDonald Pkwy
 - Springs Rd NE
 - Southwest Blvd
 - Various segments
- **Other Major Thoroughfares**
- **Minor Thoroughfares**



Metropolitan Transportation Plan (MTP)

- Update of prior 2040 LRTP
- 30-Year new MTP to 2045
- Fiscally Constrained
- Plan Chapters & Appendices
 - 1. Goals & Policies
 - 2. Performance Measures
 - 3. Existing & Projected Conditions
 - 4. Highways & Roads
 - 5. Financial Plan
 - 6. Public Transportation
 - 7. Bike & Pedestrian
 - 8. Safety & Security
 - 9. Natural Environment
 - 10. Title VI & Environmental Justice
 - 11. Public Involvement
 - 12. Freight
 - 13. Aviation
 - Appendices
 - Project Background
 - CTP Project List
 - CTP Maps

2040 Long Range Transportation Plan



Greater Hickory Metropolitan Planning Organization

Performance Measures

- Federal Goals

- Safety
- Infrastructure Condition
- Condition Reduction
- System Reliability
- Freight Movement & Economic Vitality
- Environmental Sustainability
- Reduced Project Delivery Delays

- Local Goals

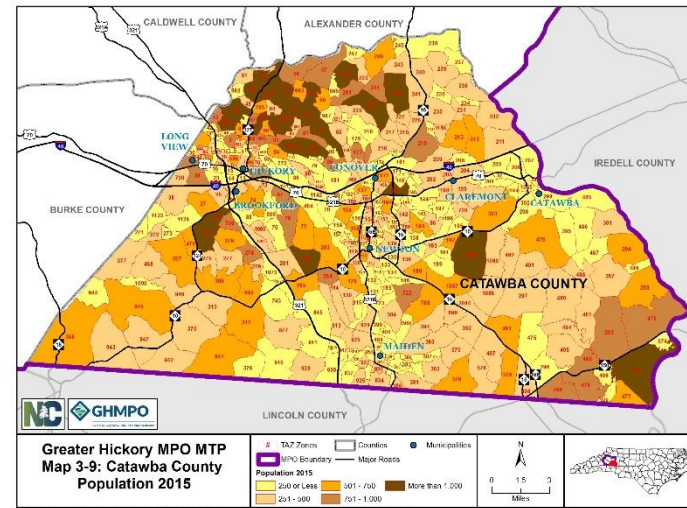
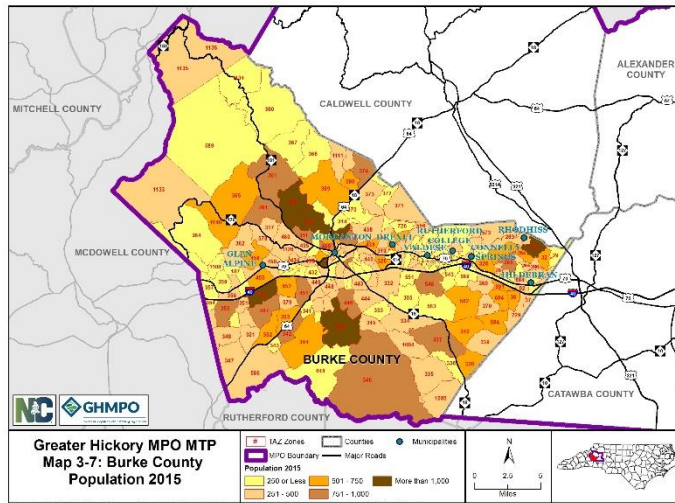
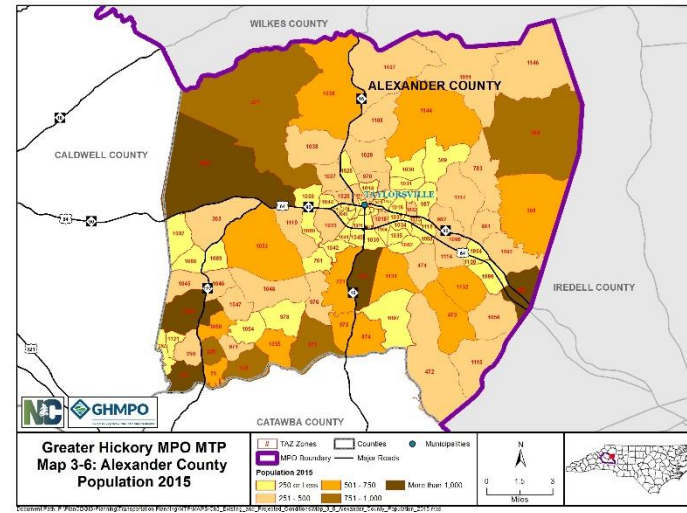
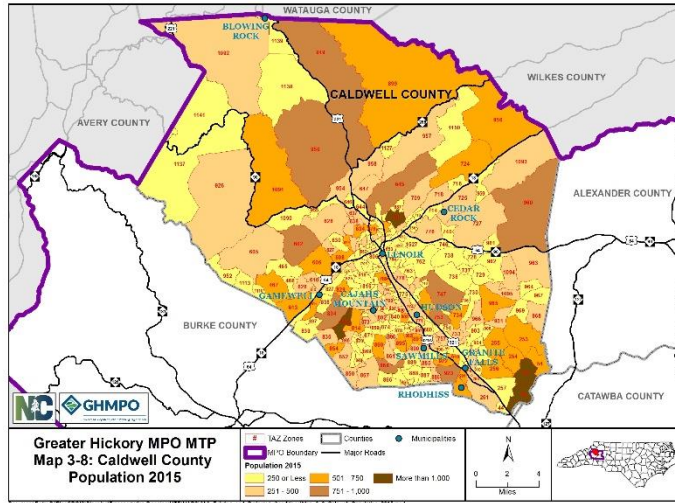
- Public Transit
- Bicycle and Pedestrian
- Environmental Justice & Title VI
- Environmental Stewardship
- Public Outreach
- Economic Development
- Highways

Table 2-2: Highway System Performance Measures

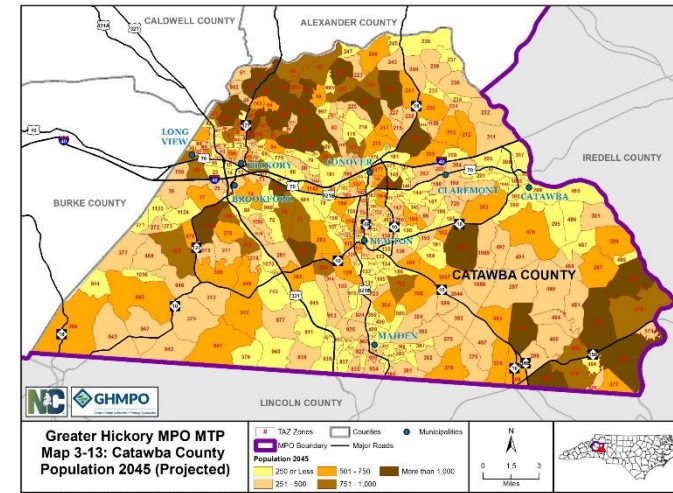
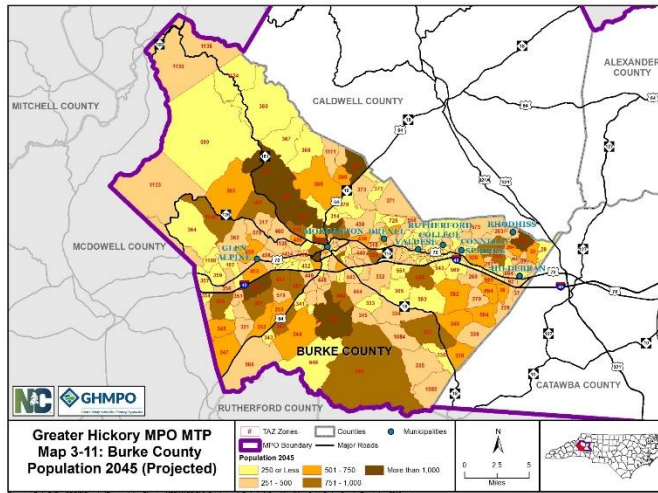
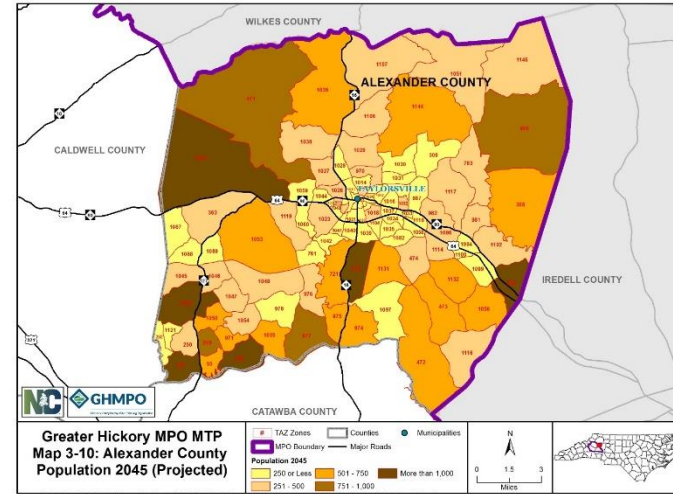
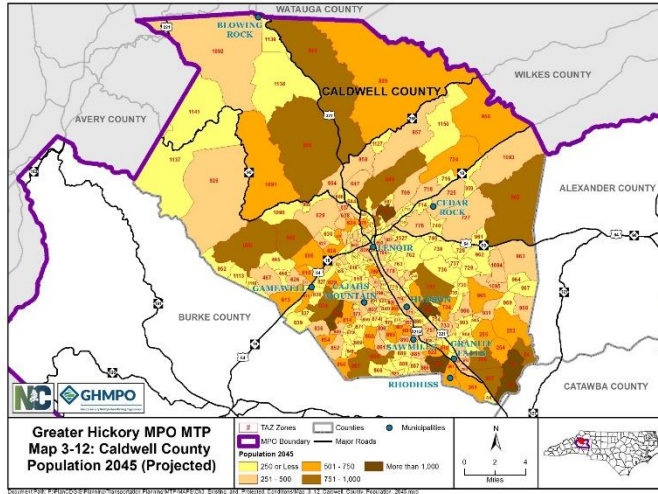
NATIONAL GOAL AREA	RULEMAKING CATEGORY	PERFORMANCE MEASURE
Safety	Safety	Number of Fatalities
		Rate of Fatalities
		Number of Serious Injuries
		Rate of Serious Injuries
		Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries
Infrastructure Condition	Infrastructure	Percentage of Pavements in Good Condition (Interstate)
		Percentage of Pavements in Poor Condition (Interstate)
		Percentage of Pavements in Good Condition (Non-Interstate NHS)
		Percentage of Pavements in Poor Condition (Non-Interstate NHS)
		Percentage of Bridges in Good Condition (NHS)
		Percentage of Bridges in Poor Condition (NHS)
System Reliability	System Performance	Percent of Reliable Person-Miles Traveled (Interstate)
		Percent of Reliable Person-Miles Traveled (Non-Interstate NHS)
Freight Movement & Economic Vitality	System Performance	Truck Travel Time Reliability (TTTR) for the Interstate System
Environmental Sustainability	System Performance	Total Emissions Reduction
Congestion Reduction	System Performance	Annual Hours of Peak Hour Excessive Delay (PHED) Per Capita on the National Highway System (NHS)
		Percent of Non-Single Occupancy Vehicle (SOV) Travel

Source: <https://www.fhwa.dot.gov/tpm/about/regulations.cfm>

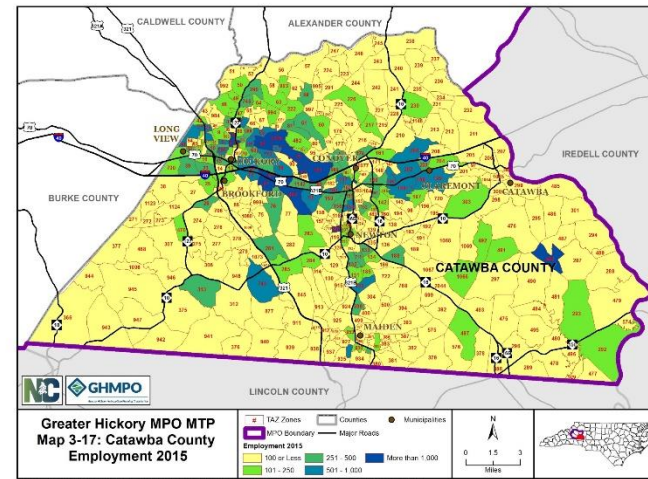
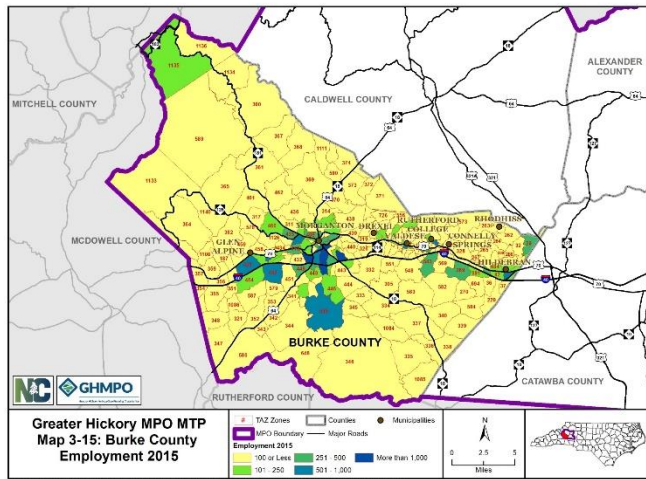
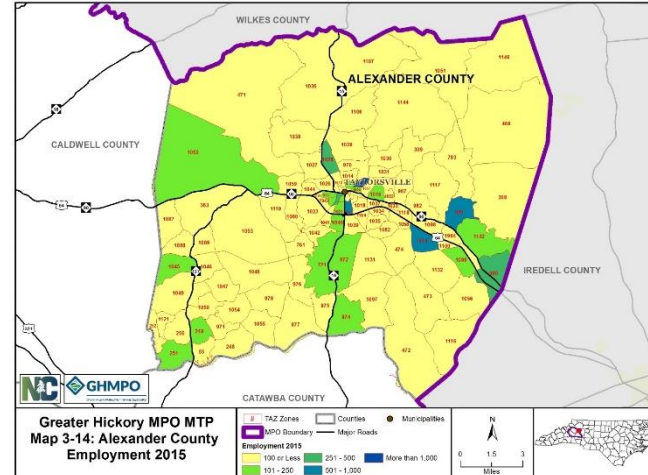
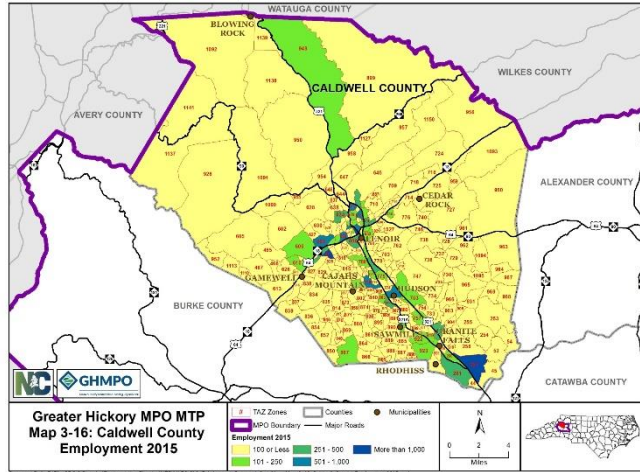
Existing Population (2015)



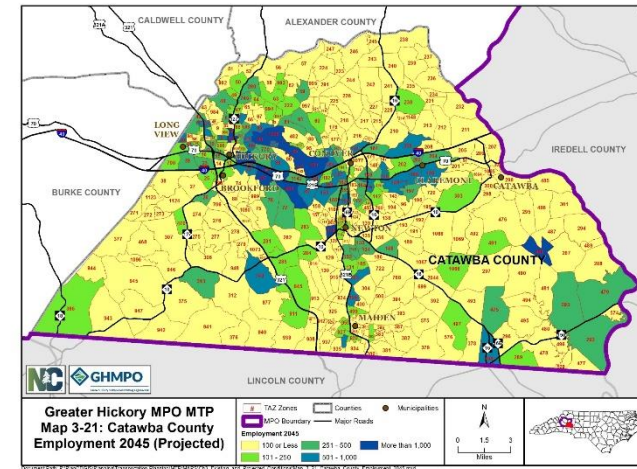
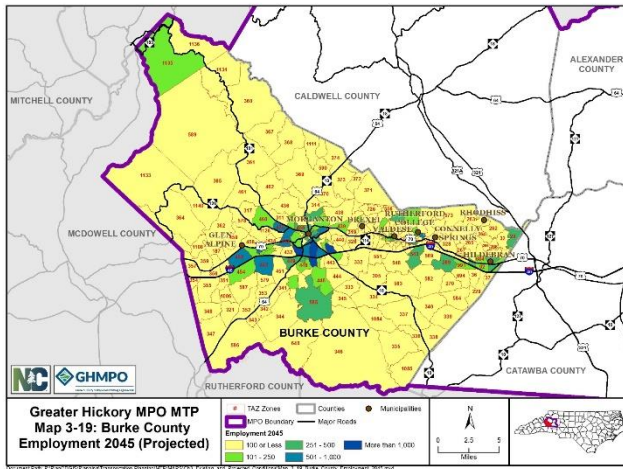
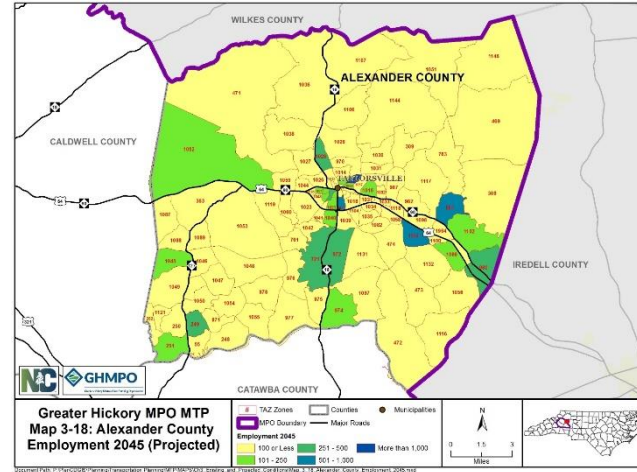
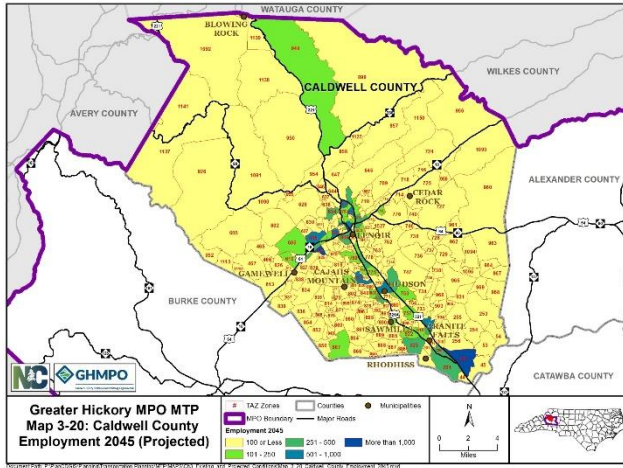
Projected Population (2045)



Existing Employment (2015)



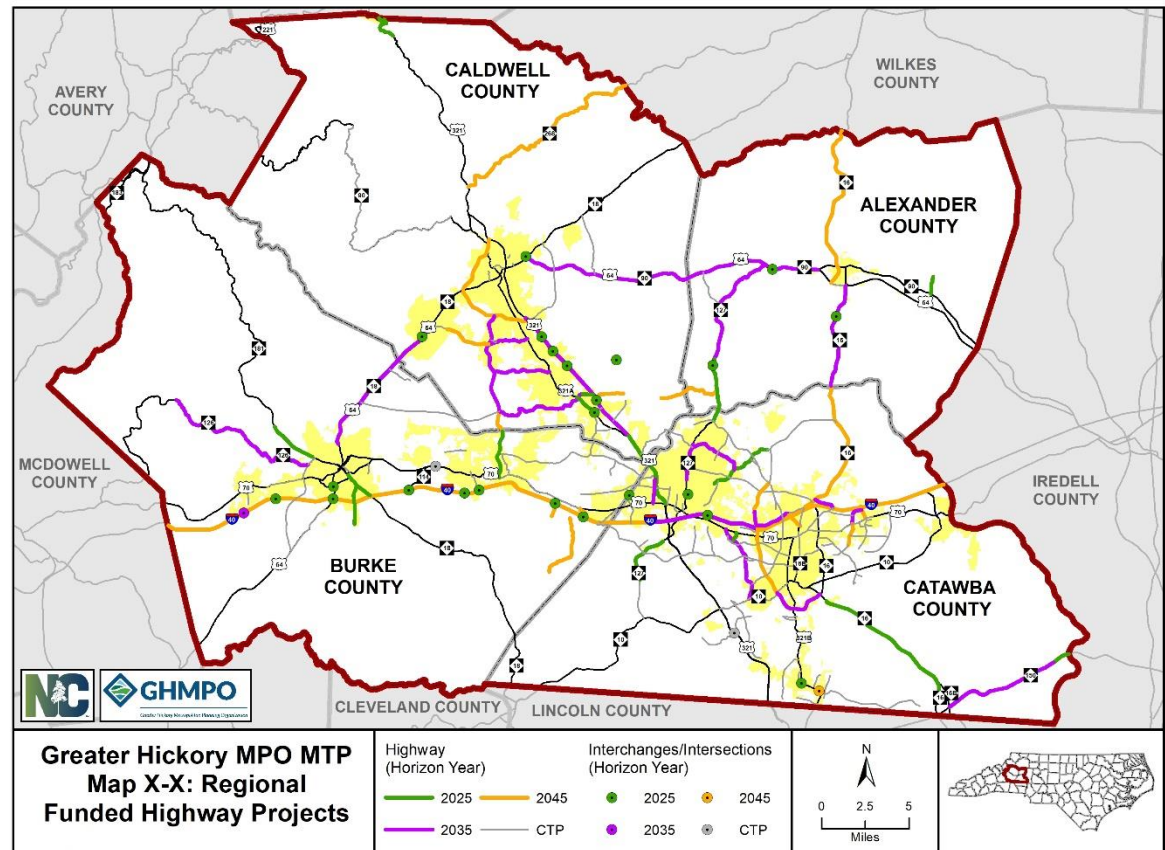
Projected Employment (2045)



- Horizon Year 2025
 - 2016-2025
- Horizon Year 2035
 - 2026-2035
- Horizon Year 2045
 - 2036-2045

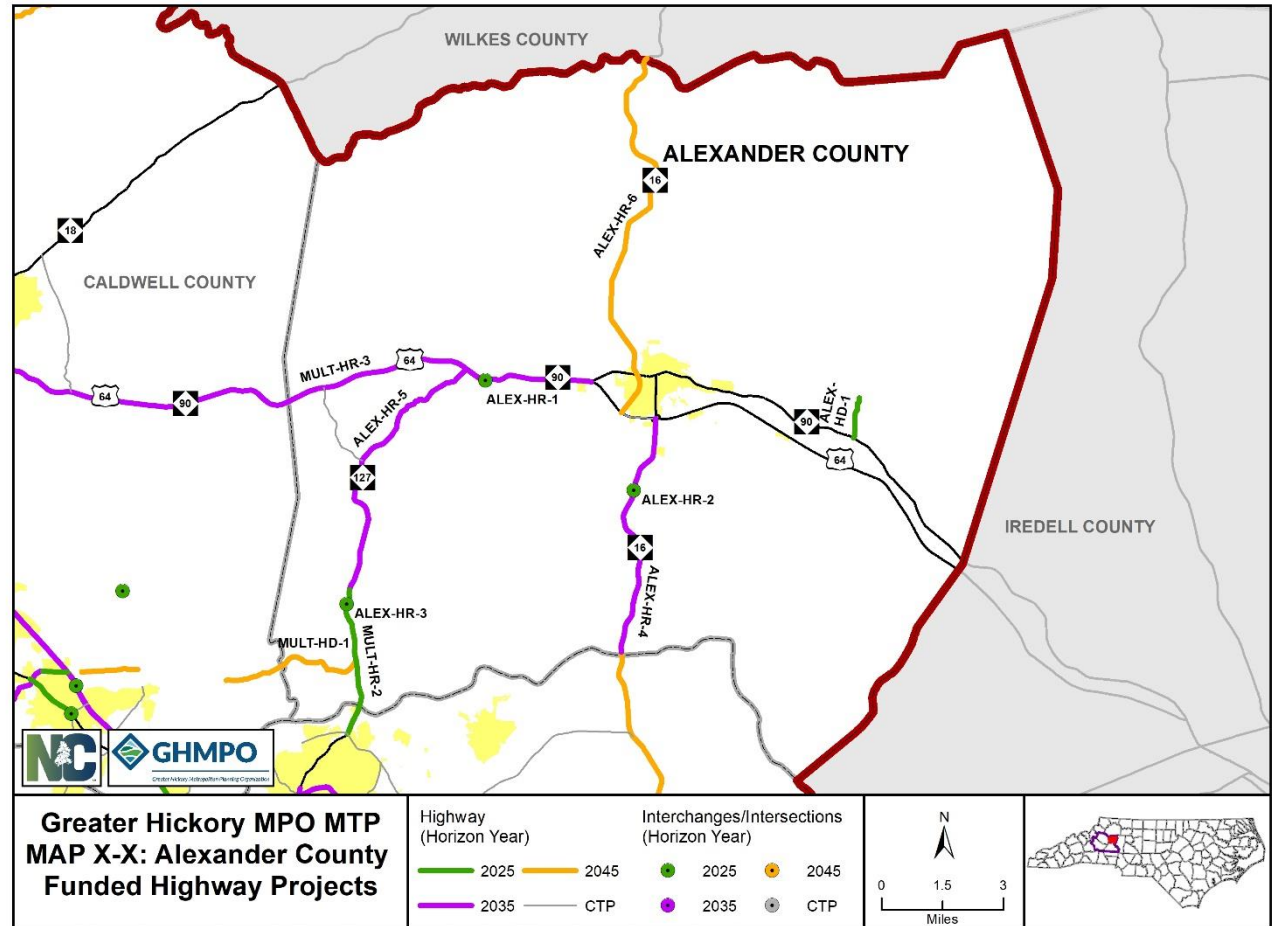
Table 5.2 Total Highway Project Costs by Horizon

MTP Horizon	Projected Revenue	Highway Projects Estimated Cost
2025	\$673,749,332	\$508,625,000
2035	\$925,542,334	\$786,423,000
2045	\$1,315,331,614	\$1,120,522,000
Full MTP	\$2,914,623,280	\$2,415,570,000



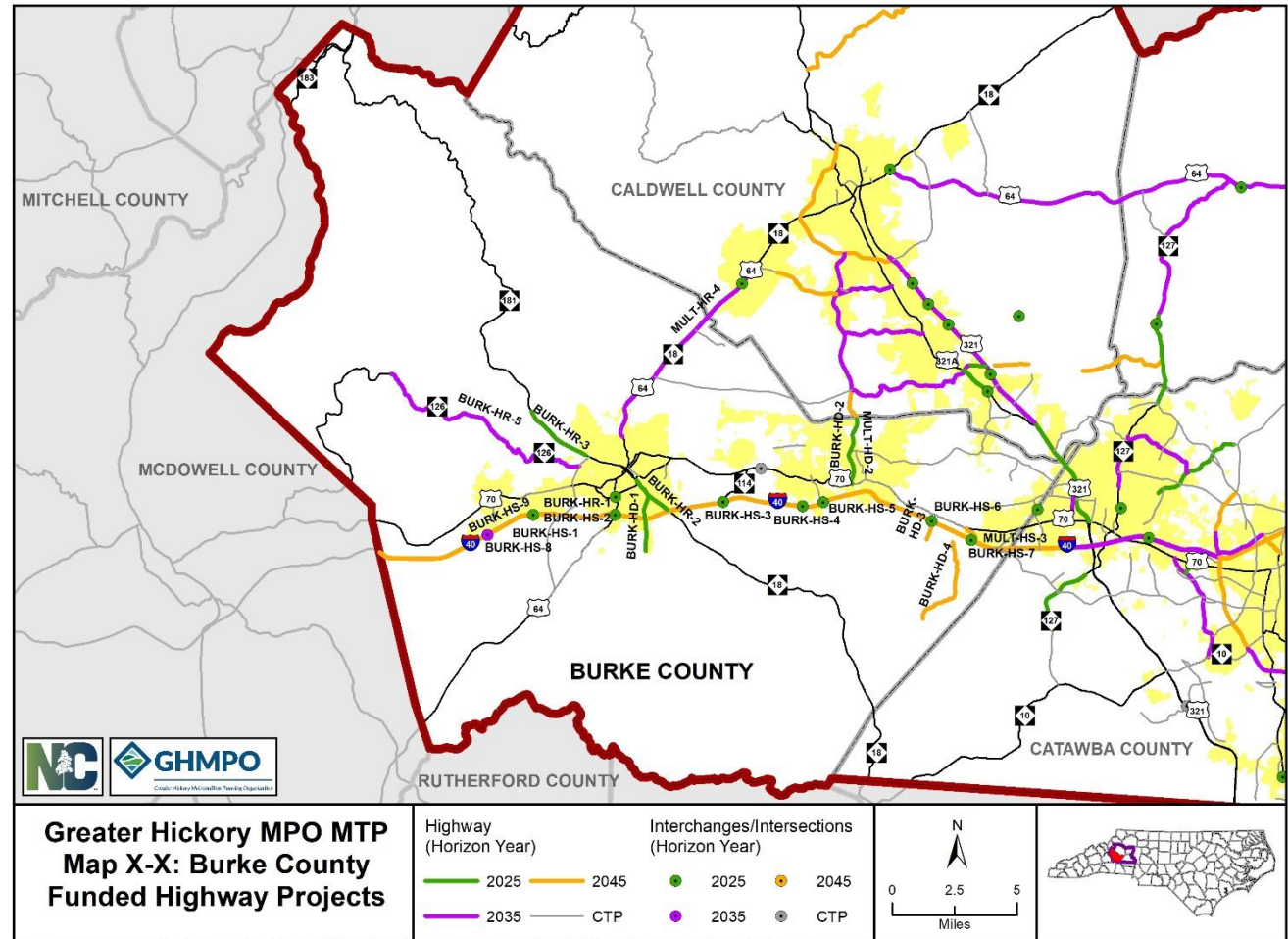
Highway Recommendations – Alexander County

- Horizon Year 2025
 - NC 127 S
 - Sulphur Springs Rd
- Horizon Year 2035
 - US 64 / NC 90
 - NC 16 S
 - NC 127 N
- Horizon Year 2045
 - NC 16 N
 - Hubbard Rd



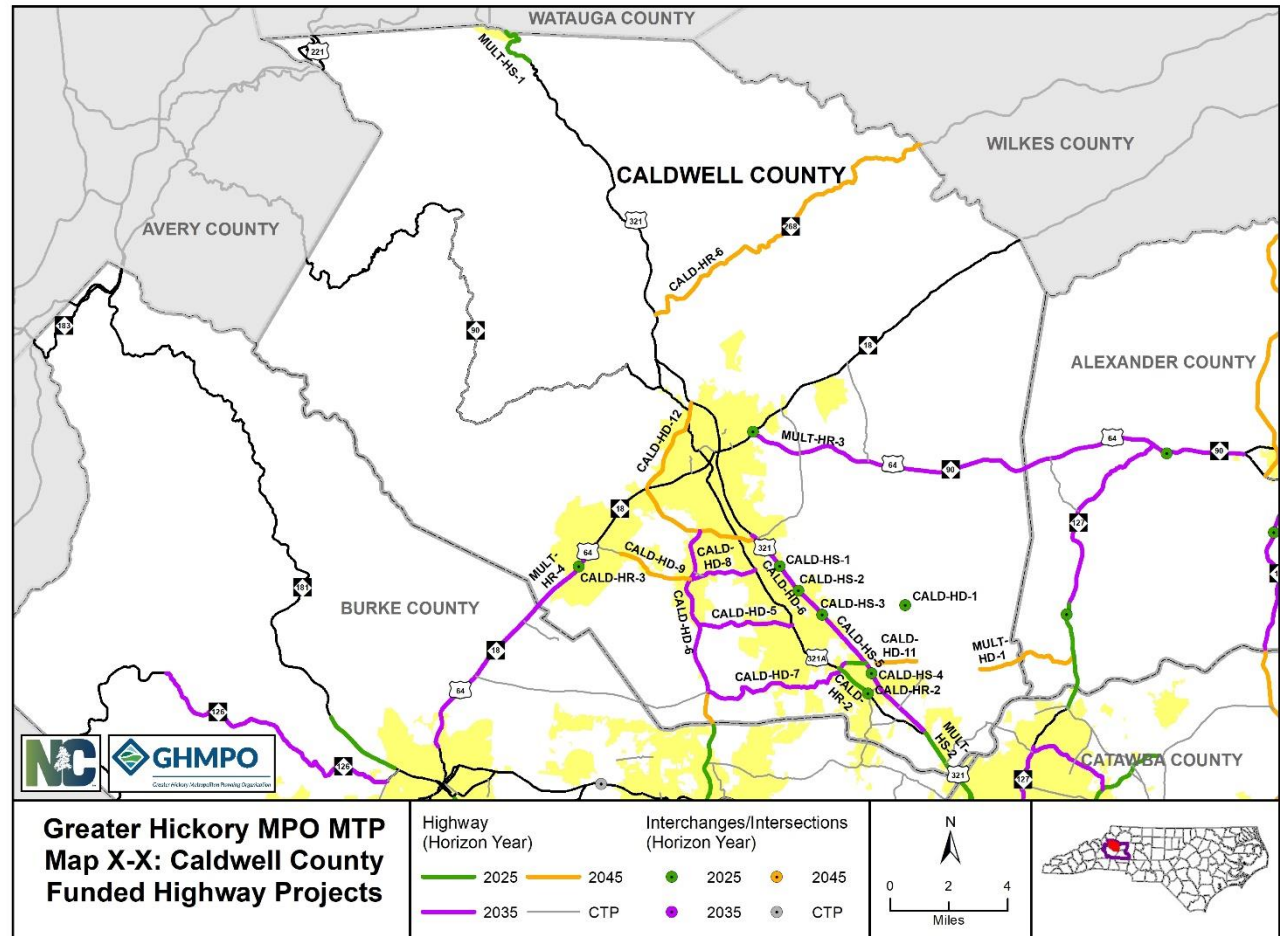
Highway Recommendations – Burke County

- **Horizon Year 2025**
 - I-40 Exits
 - 100, 103, 107, 111, 112, 118
 - US 64 / 70
 - NC 18
 - NC 181
 - Enola Rd
 - Malcolm Blvd (Feasibility Study)
- **Horizon Year 2035**
 - US 64 / NC 18
 - NC 126
- **Horizon Year 2045**
 - I-40 Widening
 - Miller Bridge Rd
 - Johnson Bridge Rd
 - Tex's Fish Camp Rd



Highway Recommendations – Caldwell County

- **Horizon Year 2025**
 - US 321 Intersections
 - Mount Herman
 - Pine Mountain
 - Mission Rd
 - Dudley Shoals
 - US 321A
 - Duke St Intersection
 - Pinewood Rd to Duke St
 - US 64 / NC 18
 - Dudley Shoals
 - Five points RAB
 - Pinewood Rd
- **Horizon Year 2035**
 - US 321 Superstreet
 - Cajah's Mtn Rd
 - Connelly Springs Rd
 - Dry Ponds Rd
 - Pleasant Hill Rd
- **Horizon Year 2045**
 - NC 268
 - Crump Rd Extension
 - Orchard Dr
 - Pinewood Rd Extension
 - SW Blvd (Feasibility)



Highway Recommendations – Catawba County

• Horizon Year 2025

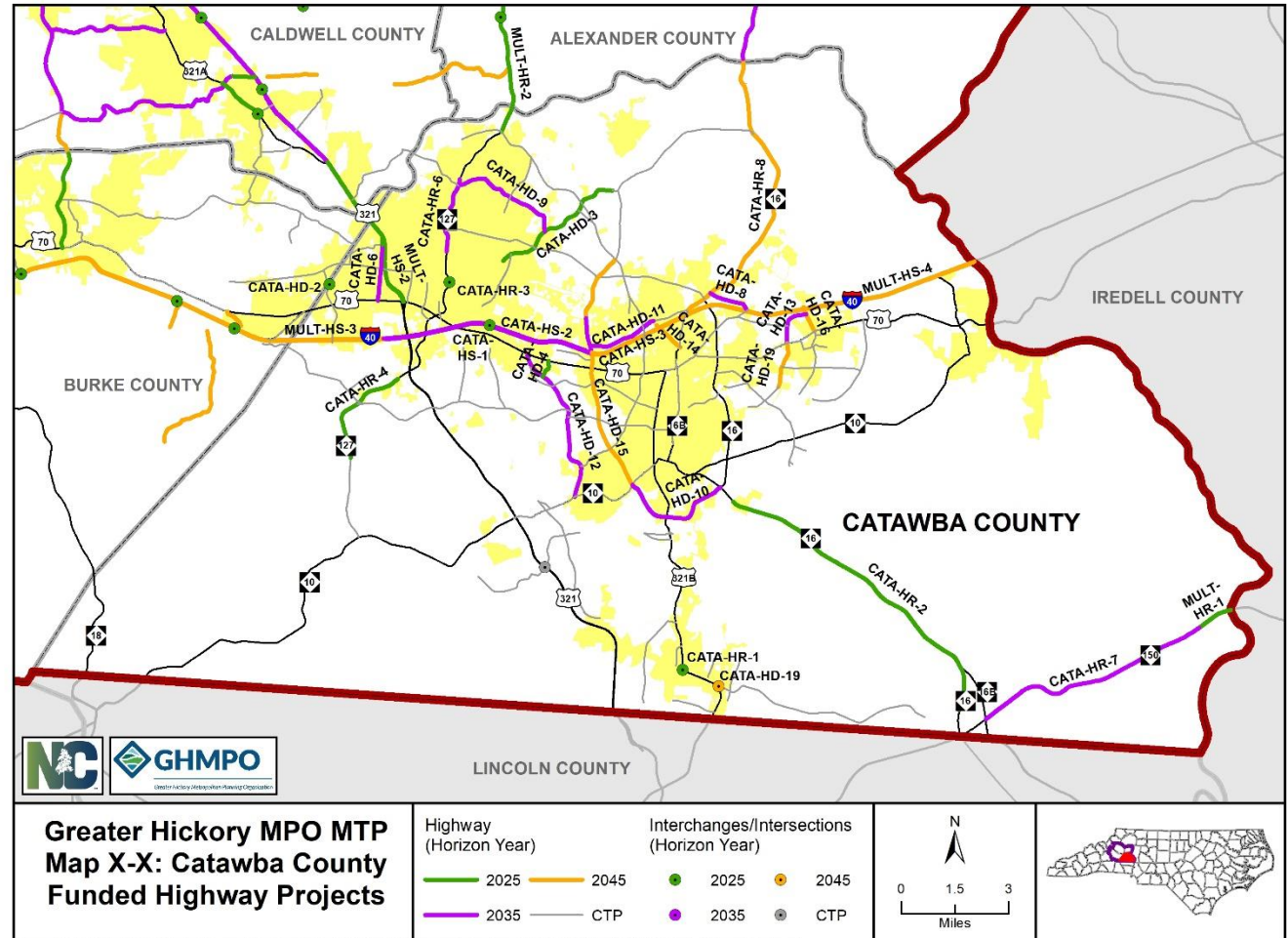
- I-40 – Exit 125 Ramp
- US 321B – Maiden
- NC 16 Widening
- NC 127
 - 1st/2nd Ave SE
 - Mountainview
- 17th St NW
- 33rd/34th St NW
- Springs Rd Median
- Sweetwater Rd Ext

• Horizon Year 2035

- I-40 Widening
 - Exit 123 to 128
- NC 127 Median
- NC 150 Widening
- McDonald Pkwy / 29th Ave Dr NE Widening
- Newton S Loop
- Startown Rd
- W Claremont Loop

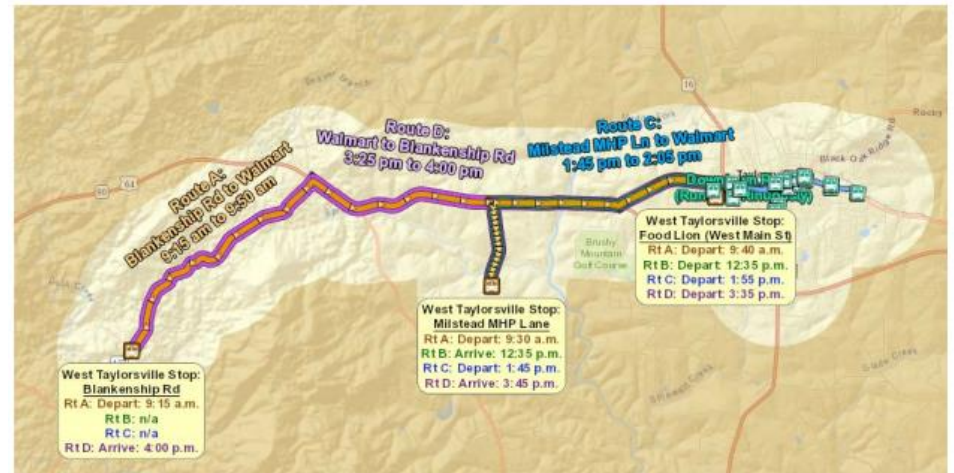
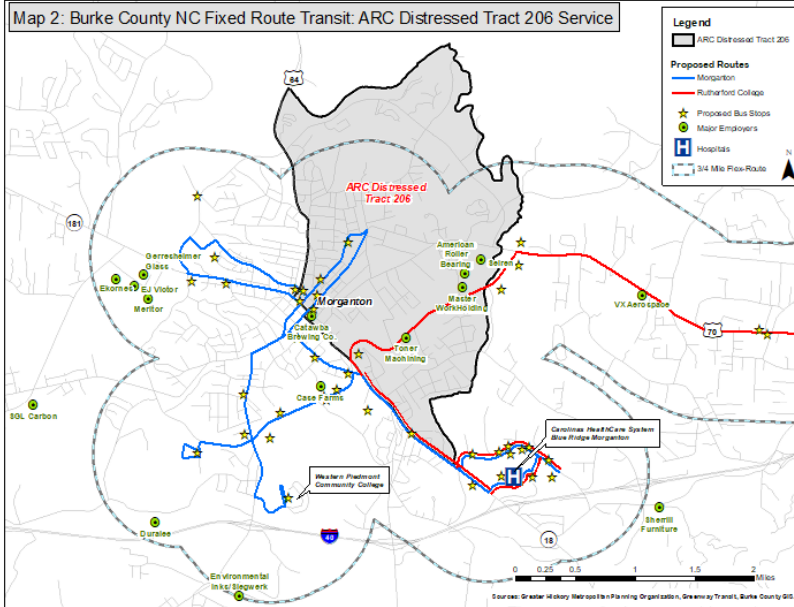
• Horizon Year 2045

- I-40 Widening
- Newton-Conover Loop / Fairgrove Ch
- SW Claremont Loop



Public Transportation

Map 2: Burke County NC Fixed Route Transit: ARC Distressed Tract 206 Service



Source: Greenway Transit.



Bicycle Recommendations

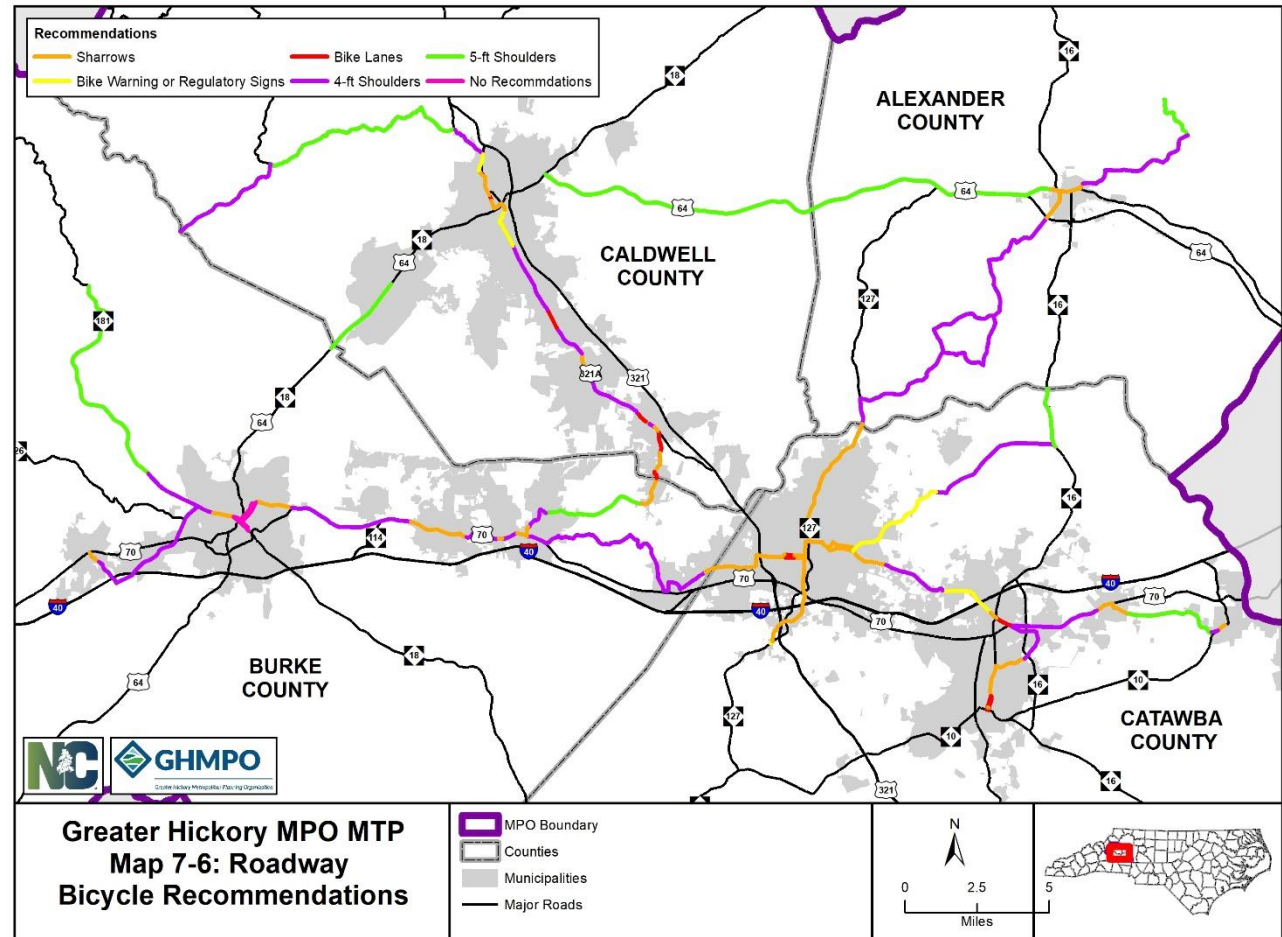
- Sharrows



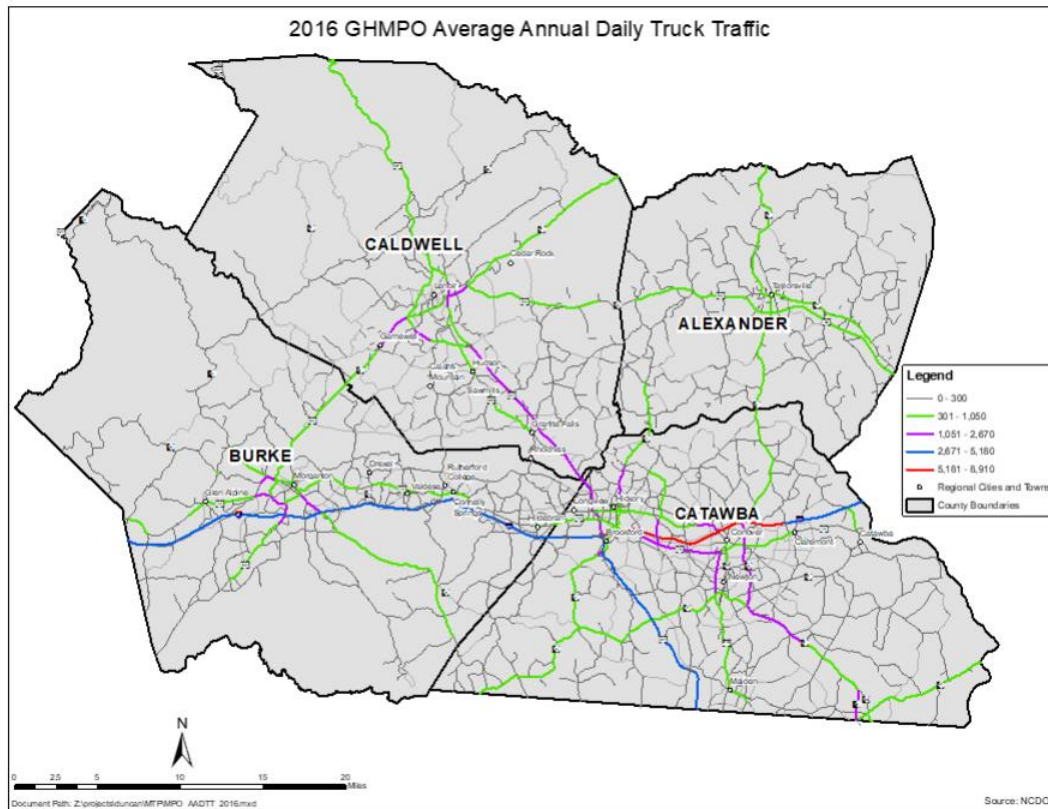
- Bike Lanes



- 4-ft / 5-ft Shoulders



Freight & Aviation



Source: North Carolina Division of Aviation, [Airport System Plan Update](#), 2015.

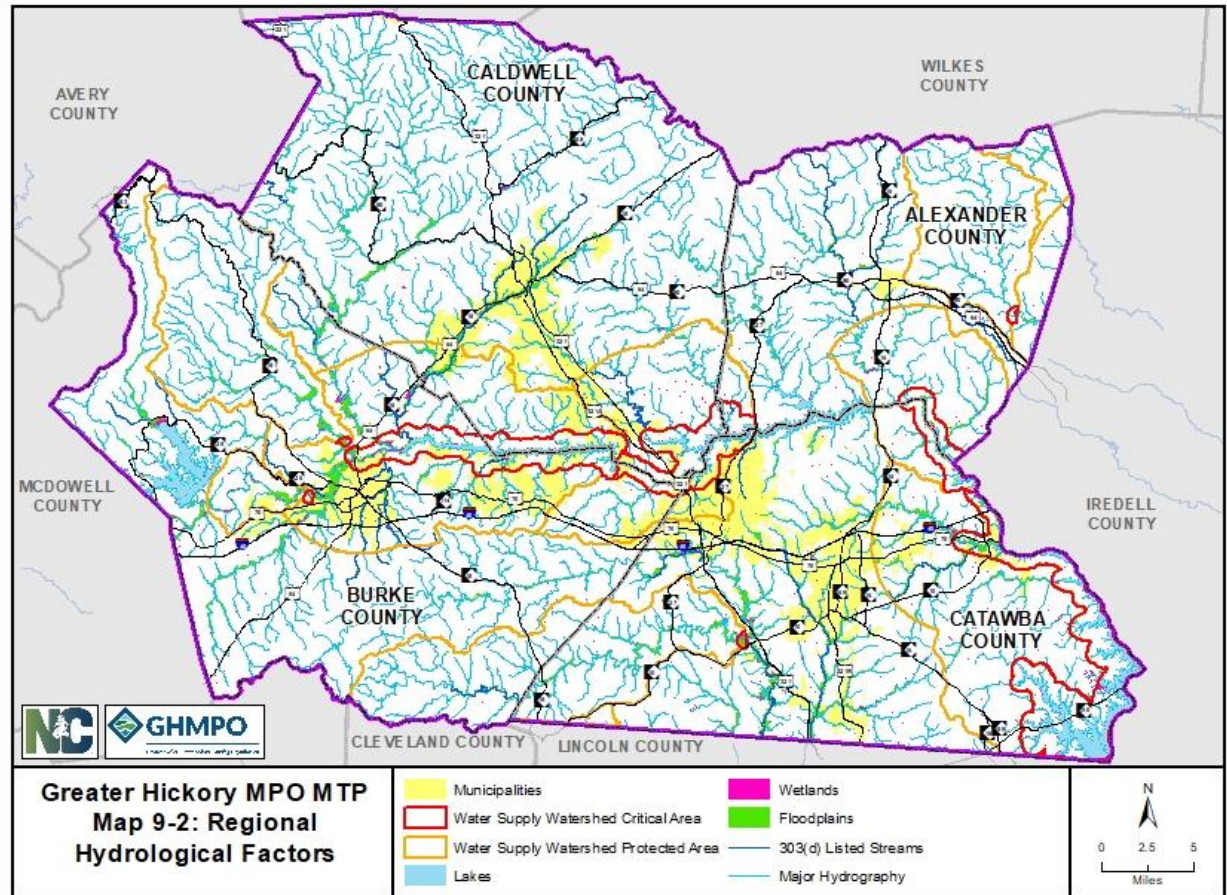


Source: Hickory Regional Airport.

Aircraft at Hickory Regional Airport.

Hydrological Factors

- Critical Watershed Areas
- Protected Watershed Areas
- Wetlands
- Flood Plains
- Streams

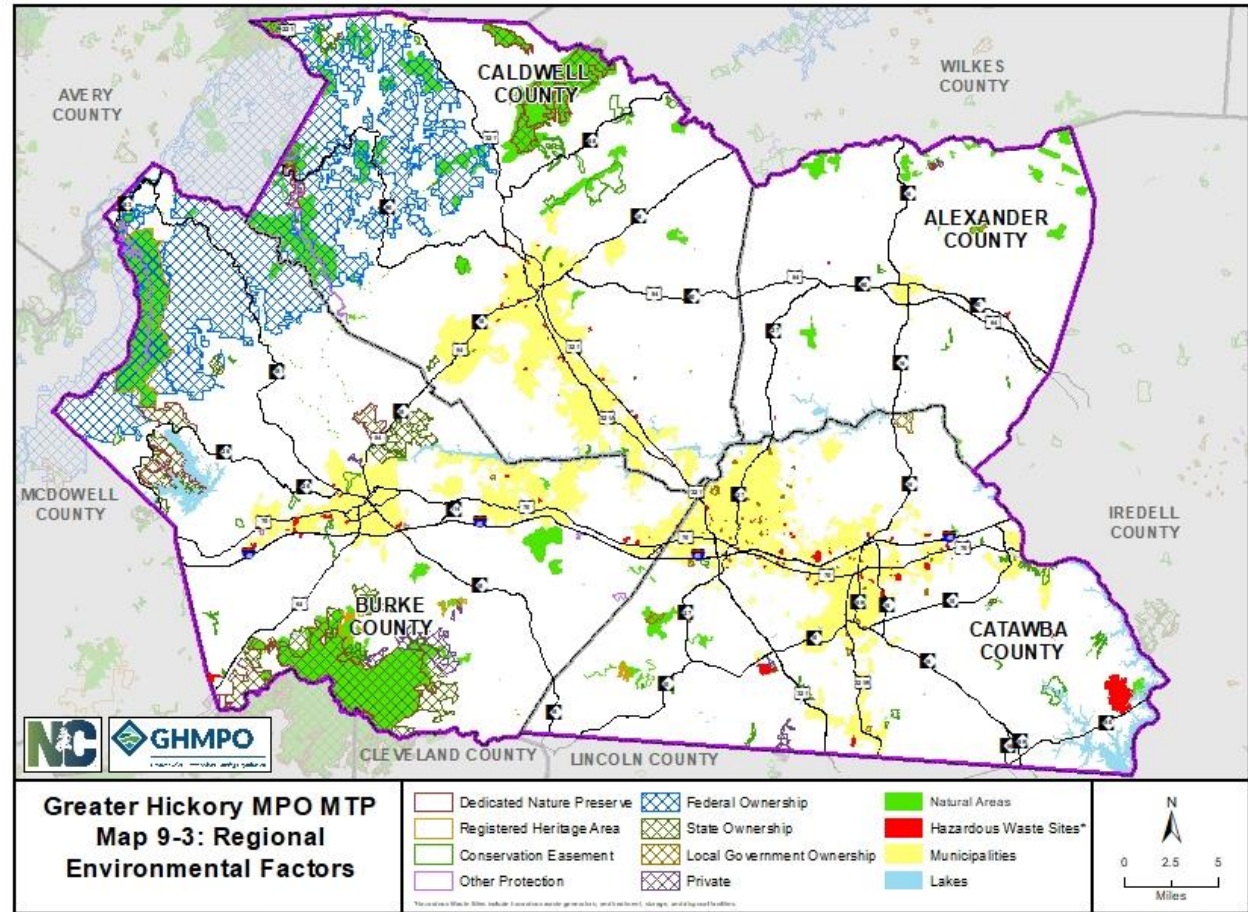


Document Path: P:\Information Systems\Planning\Transportation Planning\MTPO\Map 9-2 Regional Hydrological Factors.mxd

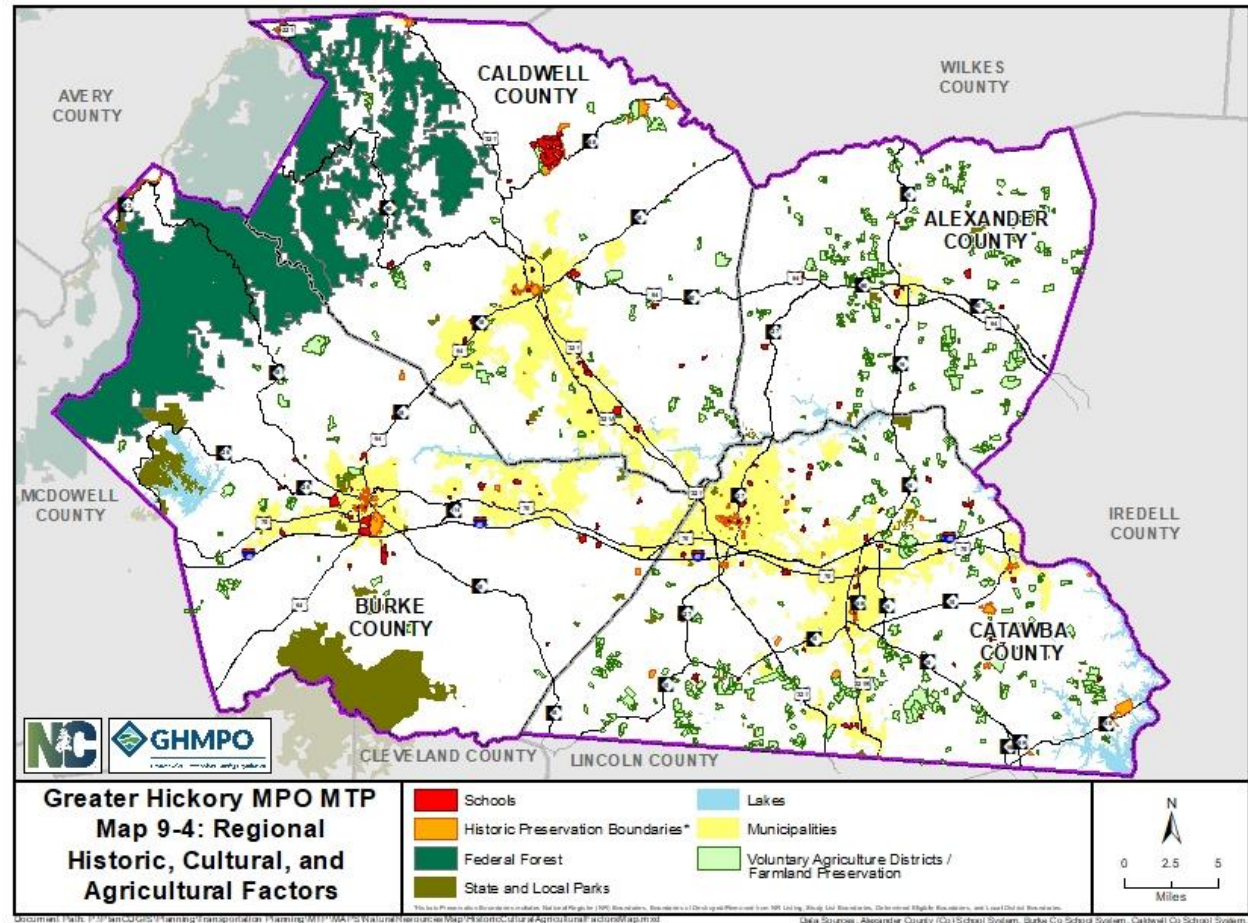
Data Sources: NC DCR, USGS, National Wetlands Inventory, NC Floodplain Mapping Program, NC Center for Geographic Information and Analysis

Environmental Factors

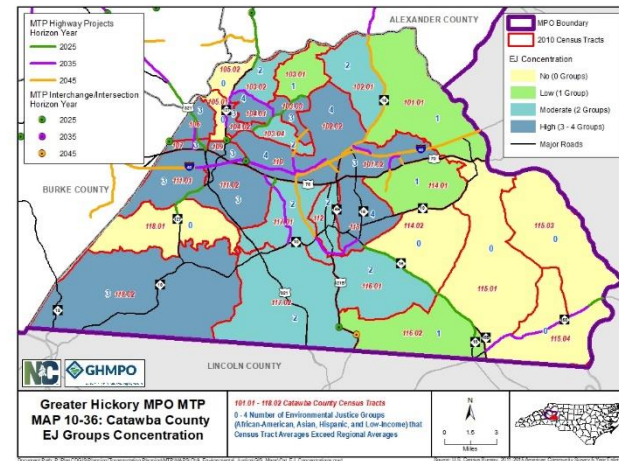
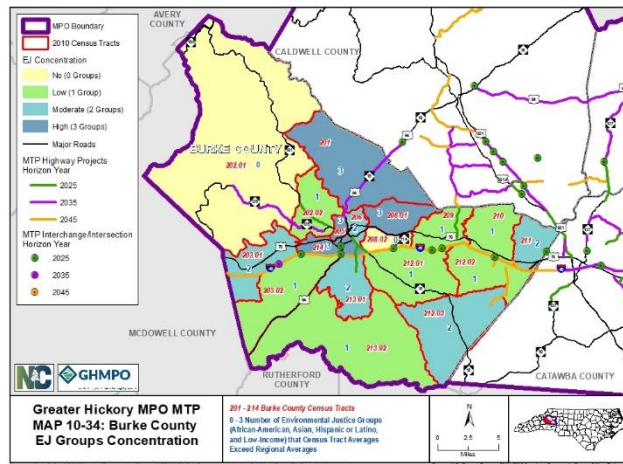
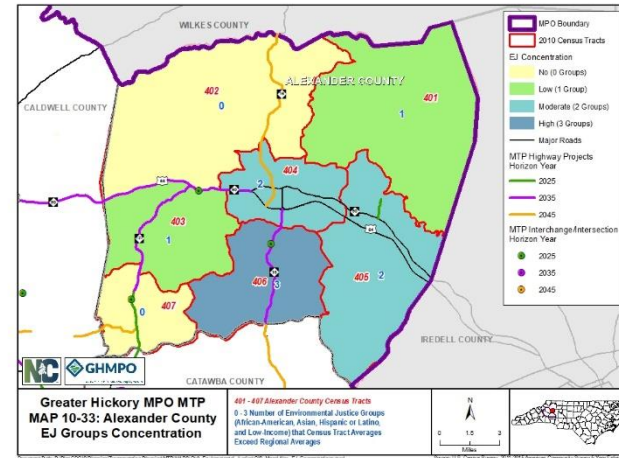
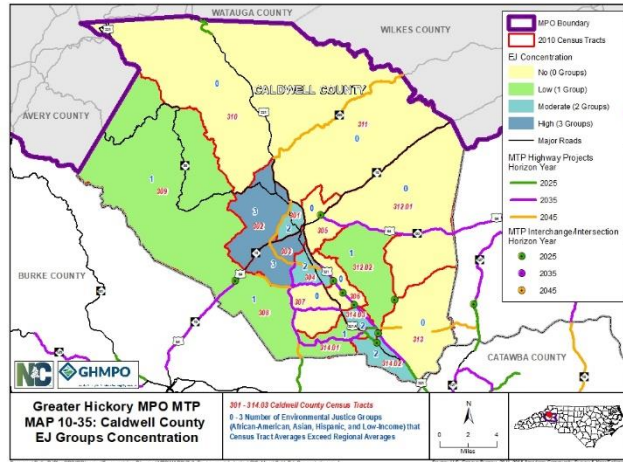
- Significant Natural Habitat Areas
- Hazardous Substance Disposal Sites
- Land Trust Conservation Properties
- Land Managed for Conservation and Open Space
- Conservation Tax Credit Properties



- Historic Areas
- Schools
- Public Parks
- Voluntary Agriculture Districts
- Farmland Preservation



Environmental Justice



Population Groups and Concentration

Greater Hickory MPO Census Tract Environmental Justice Population Percentages Vs. Regional Environmental Justice Population Percentages				
Group	Number of Tract Percentages Over Regional Percentages	Over Percentages	Number of Tract Percentages Under Regional Percentages	Under Percentage
African-American	29	39.7%	44	60.3%
Asian	24	32.9%	49	67.1%
Hispanic or Latino	30	41.1%	43	58.9%
Low-Income	34	46.6%	39	53.4%

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

Environmental Justice Concentration Scale by Area and Number of Census Tracts				
Concentration Level	Area (Square Miles)	Area (%)	Number of Census Tracts	Census Tracts (%)
No	657.7	39.5%	18	24.7%
Low	492.8	29.6%	17	23.3%
Moderate	260.1	15.6%	18	24.7%
High	255.6	15.3%	20	27.4%
Total	1666.2	100%	73	100%

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

Infrastructure Distribution

Highway Network Length and Percentages by Concentration Level		
Concentration Level	Road Miles	Road Miles (%)
No	52.9	20.7%
Low	41.1	16.1%
Moderate	28.1	11.1%
High	51.9	20.3%
Shared Boundary	81	31.8%
Total	255	100%

Source: Greater Hickory Metropolitan Planning Organization, U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

Existing Sidewalk Network Length and Percentages by Concentration Level		
Concentration Level	Linear Feet	Linear Feet (%)
No	211,000	14.0%
Low	153,600	10.2%
Moderate	473,800	31.4%
High	671,100	44.5%
Total	1,509,500	100%

Source: Greater Hickory Metropolitan Planning Organization, U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

Public Transit Service by Concentration Level	
Concentration Level	Route (%)
No	6.1%
Low	0%
Moderate	16.7%
High	66.6%
Shared Boundary	10.6%
Total	100%

Source: Greenway Public Transportation, U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates



Western Piedmont
Council of Governments

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Questions?

Brian Horton, Transportation Planning Manager

Averi Ritchie, Transportation Planner

Duncan Cavanaugh, Data Technician

WPCOG / GHMPO
828-322-9191