

Traffic Analysis Zone 2045 Projections



**Greater Hickory MPO TAC and TCC Meetings
December 14, 2016**

What is a Traffic Analysis Zone (TAZ)?

A TAZ is a group of census blocks that has at least one major thoroughfare going through it or touching the zone boundary that can be used for transportation modeling and other purposes. Data is collected on population/housing and employment for the traffic demand model.



TAZ Methodology-

2045 Population/Housing Projections

- Meetings were held with planning staff throughout the region to determine 2045 housing/population projections.
- Total population numbers are checked with projections from the North Carolina Office of Management and Budget for reasonableness.

TAZ Methodology-

2045 Employment Data Collection

- Meetings were held with planning staff throughout the region to determine 2045 employment projections.
- 2045 employment projections are crosschecked with 2045 population projections for reasonableness.

TAZ Methodology- Additional Data Collection

- Along with the transition of the Hickory MPO to a Transportation Management Area (TMA), additional data projections are required to more accurately complete the transportation modeling process.
- WPCOG staff made the projections when data was available. If no data was available, then the data was kept the same as the 2015 estimate.

TAZ Methodology- Additional Data Collection

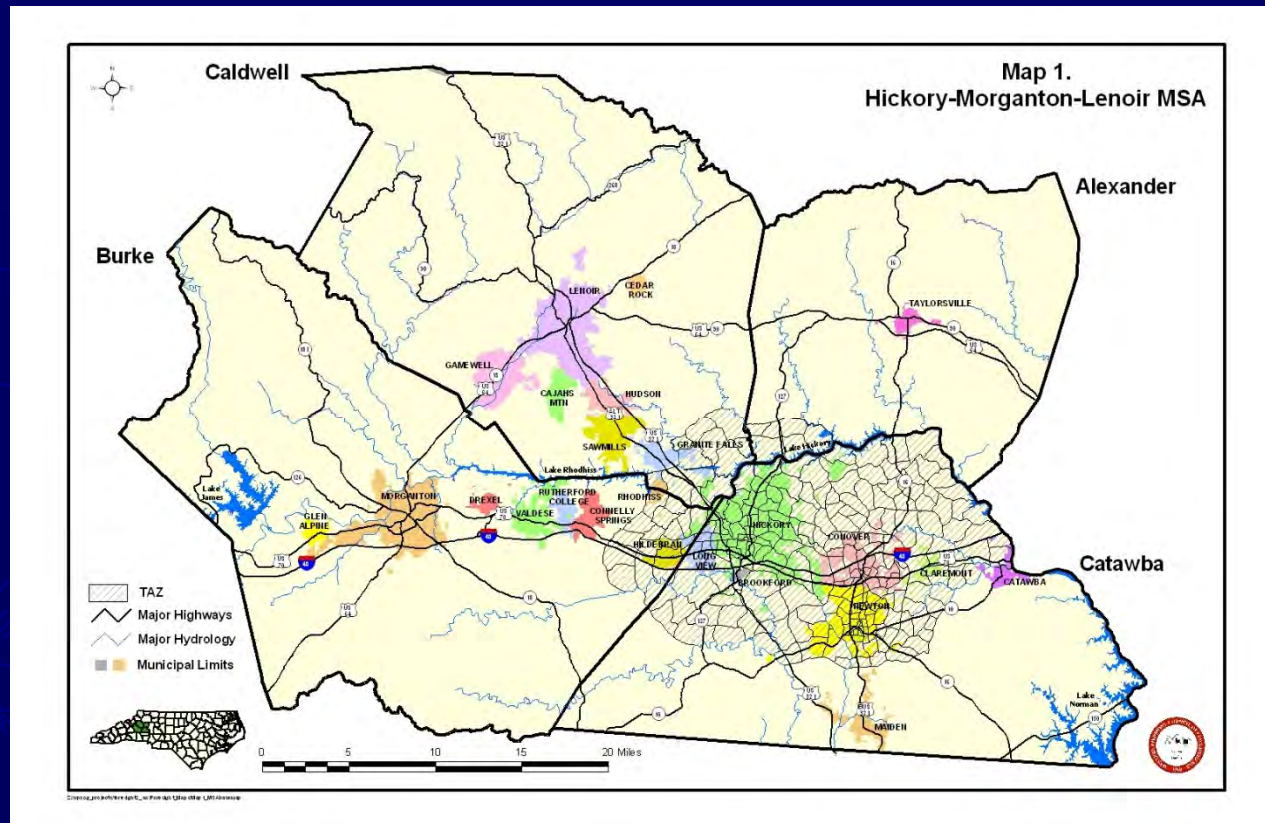
- Employed Persons per Household (Projection same as 2015 estimate)
- Median Household Income (Projected growth based on trend between 2000 Census and 2010-2014 ACS by county)
- Vehicles per Household (Projection same as 2015 estimate)
- K-12 Enrollments (Public, Private and Charter Schools) and Lenoir-Rhyne/Community College Enrollments (Projection based on 5-17 growth rate by county from the NC Office of State Planning)

TAZ Methodology-

Additional Data Collection

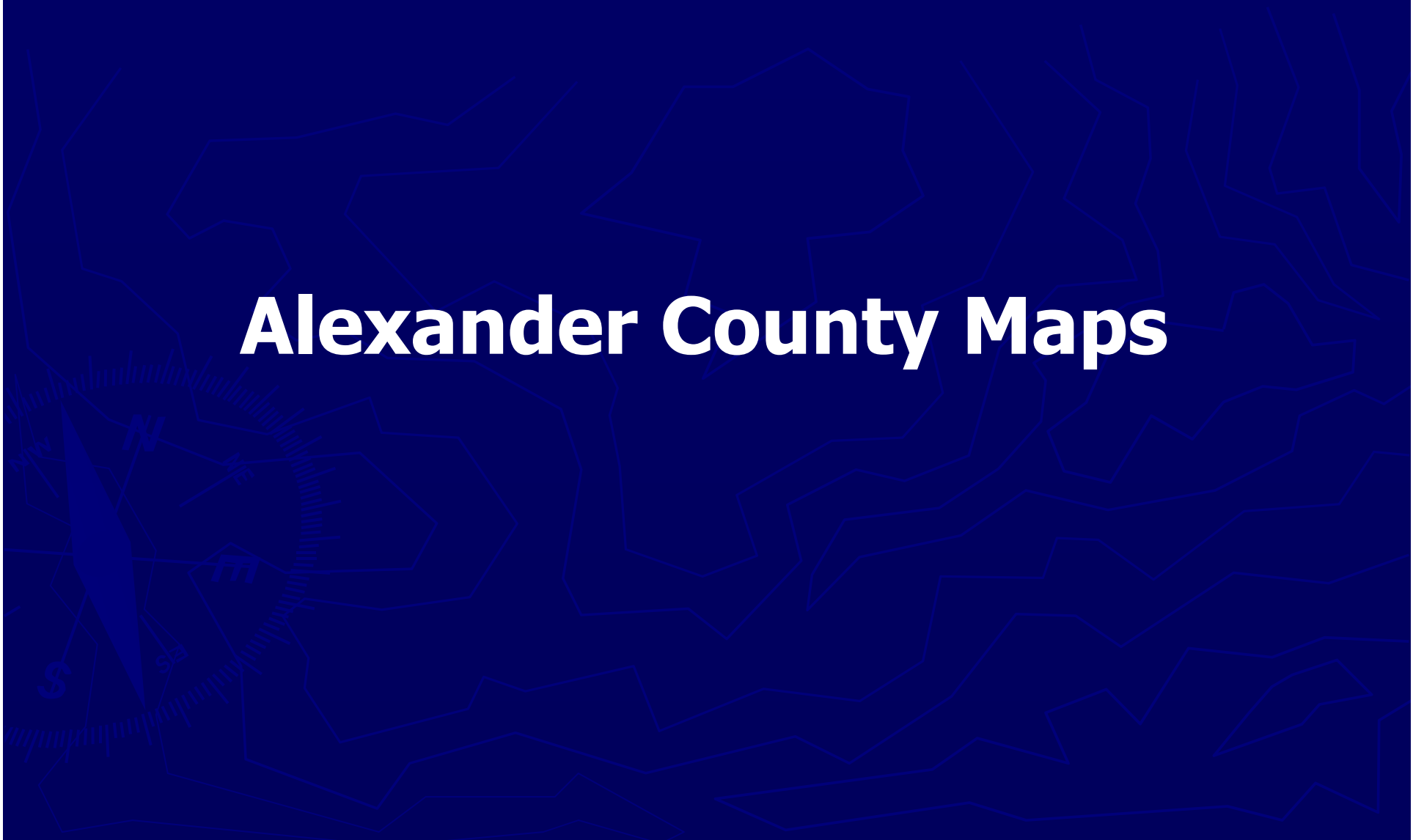
- Special Employment Generators (Large Employers) (Projection based on input during planning meetings)
- Central Business District Determination (Same as 2015 estimate)
- Walkability Index (Some zones increased walkability index score from 1 [little walkability] to 2 [some walkability] in urban areas if more than 100 units were projected added to the TAZ between 2015 and 2045)

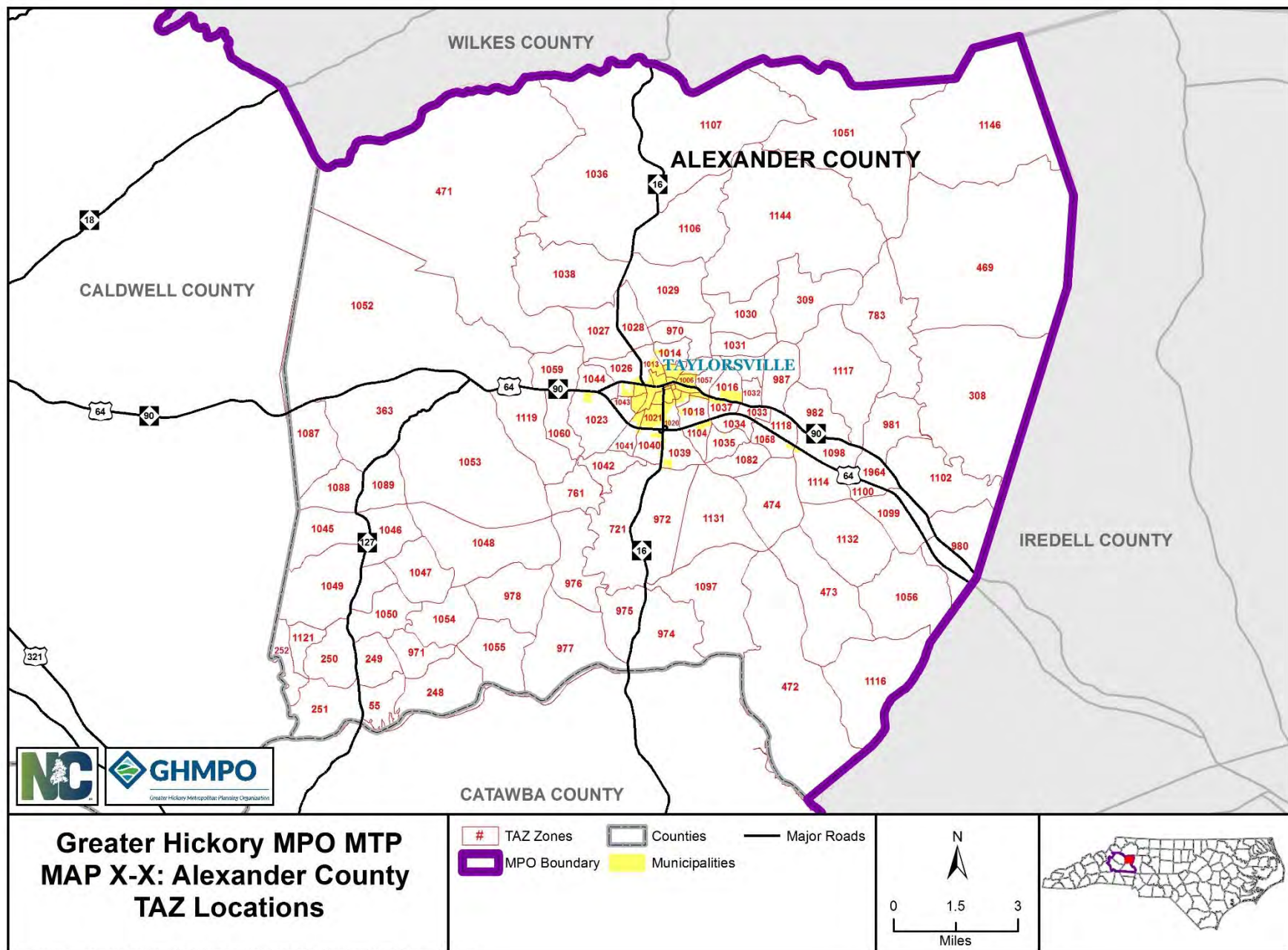
Original Traffic Analysis Zones (TAZ) for the Hickory-Newton-Conover MPO (286 Zones in 1984)



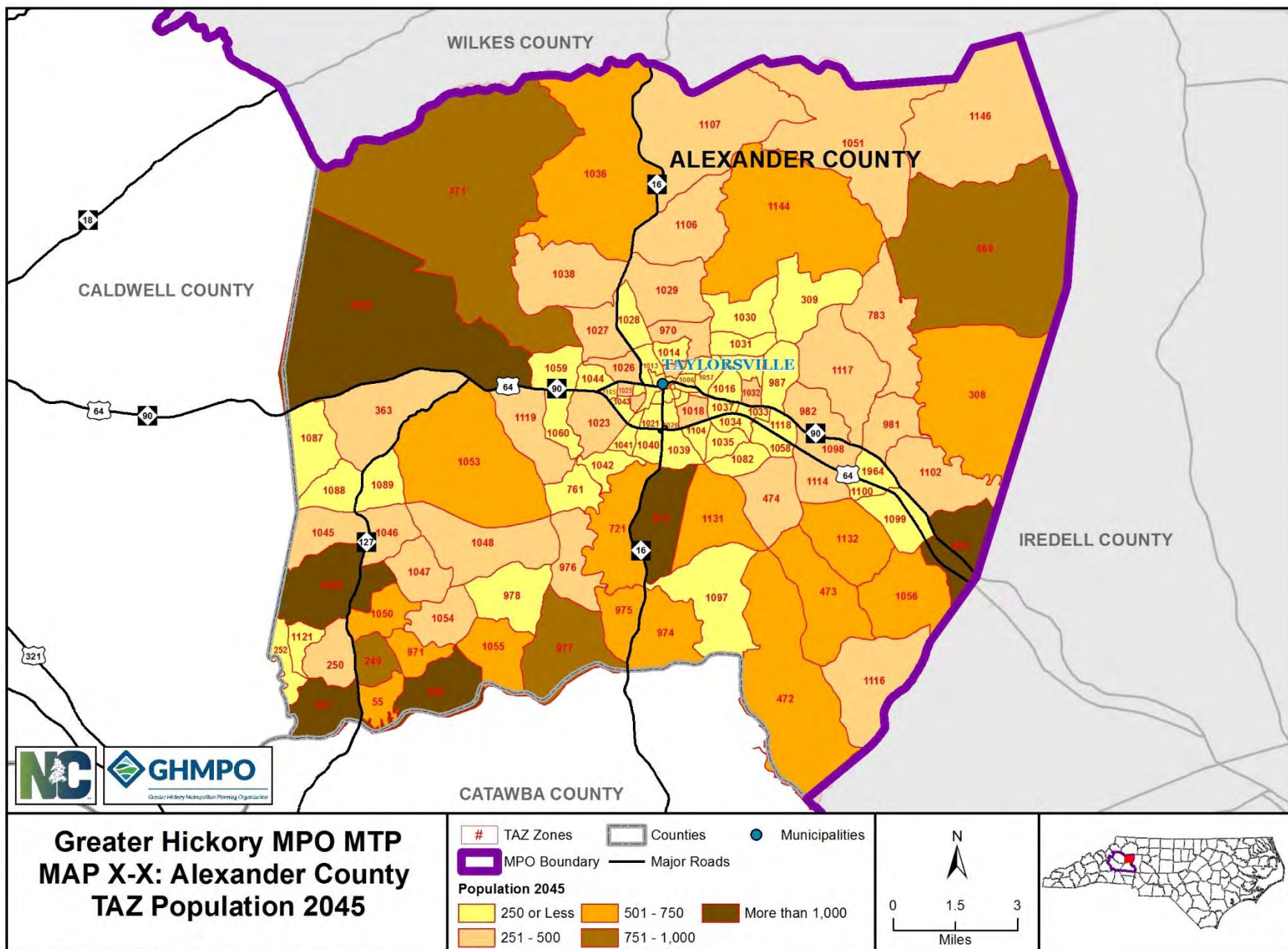
As of 2015 there are 1,131 TAZ Zones in the Greater Hickory MPO covering the entire four county region. Calculating projections for additional TAZs made the process more difficult than in years past.

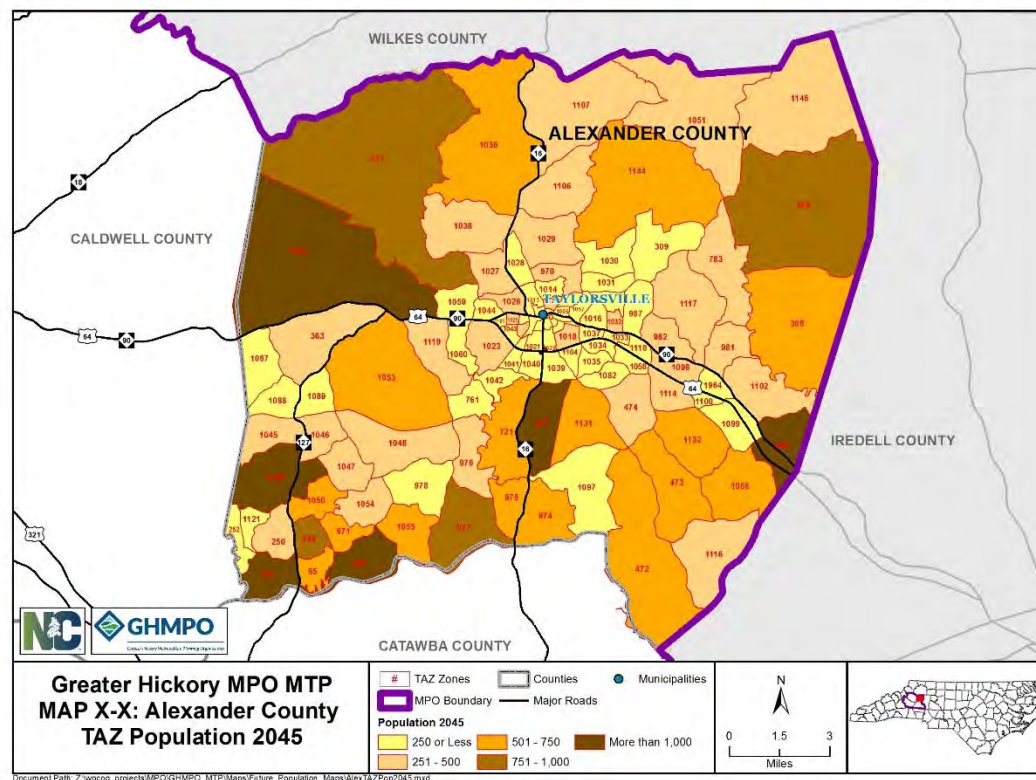
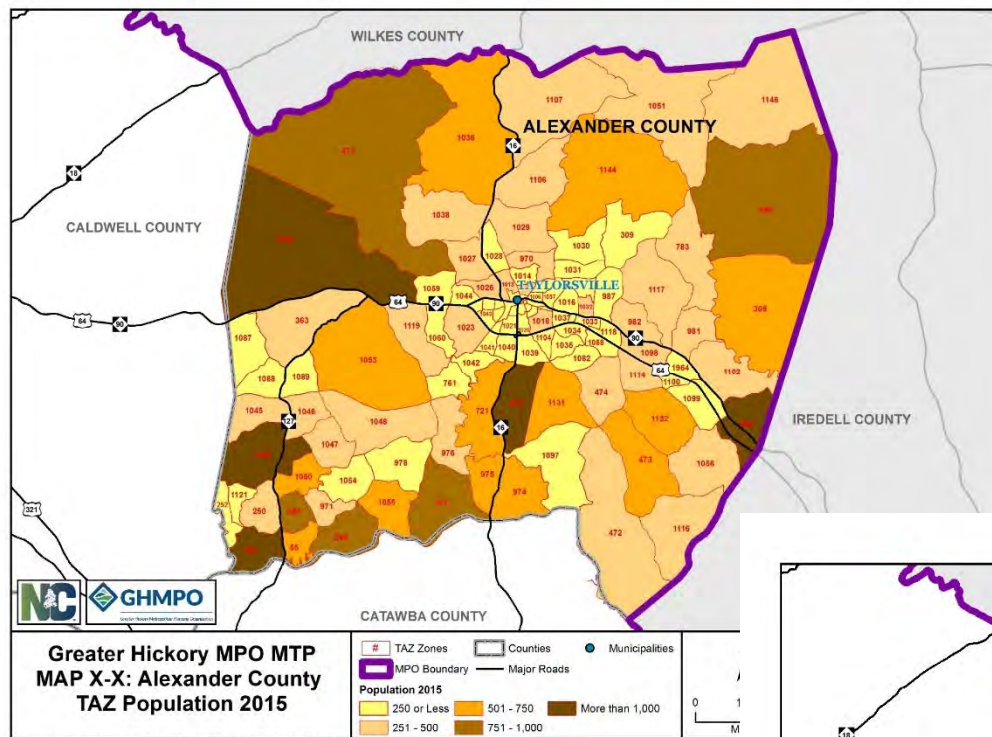
Alexander County Maps

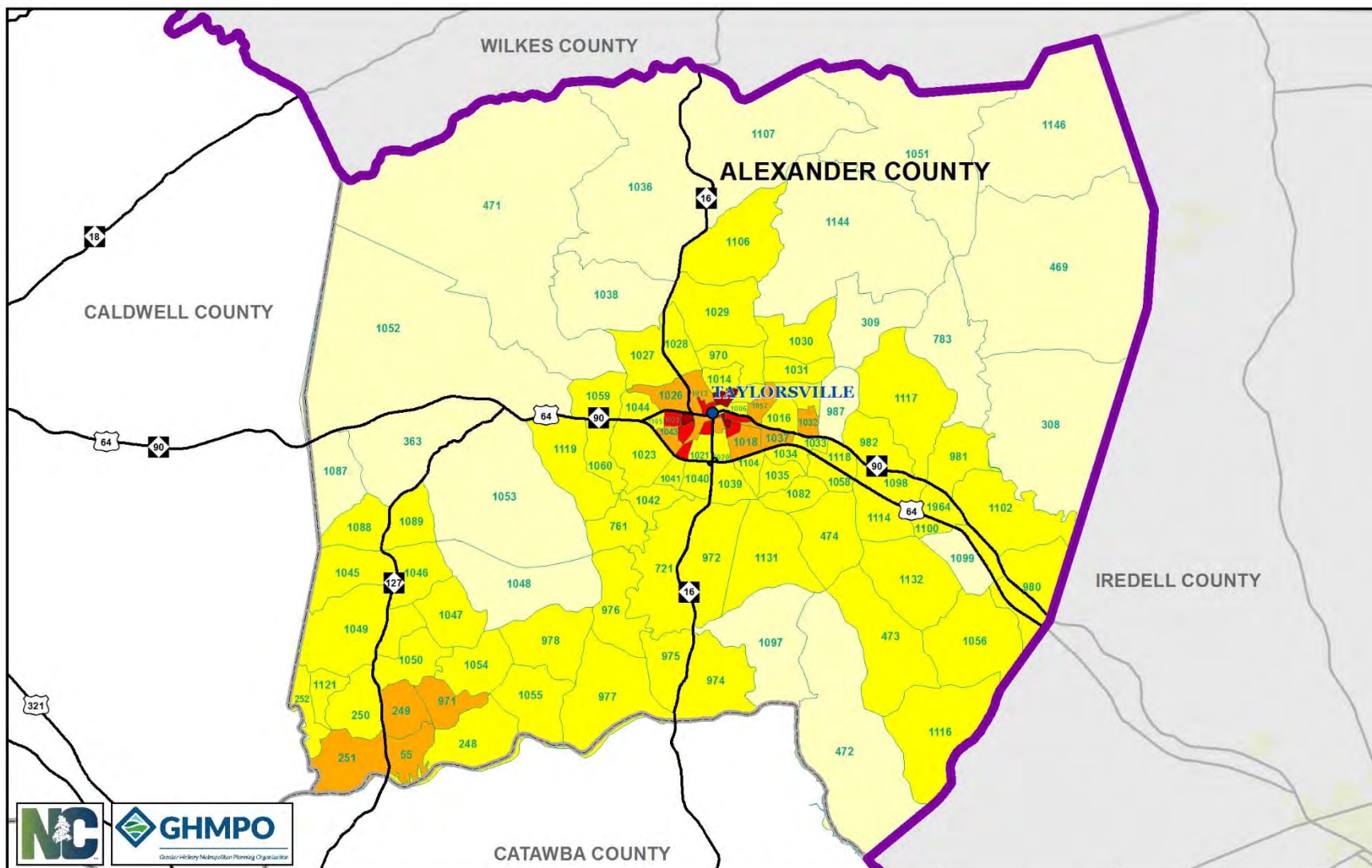




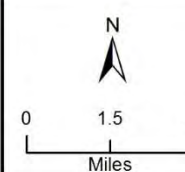
Document Path: Z:\wpcog_projects\IMPO\GHMPO_MTP\Maps\TAZ_Locations\AlexTAZLocations.mxd

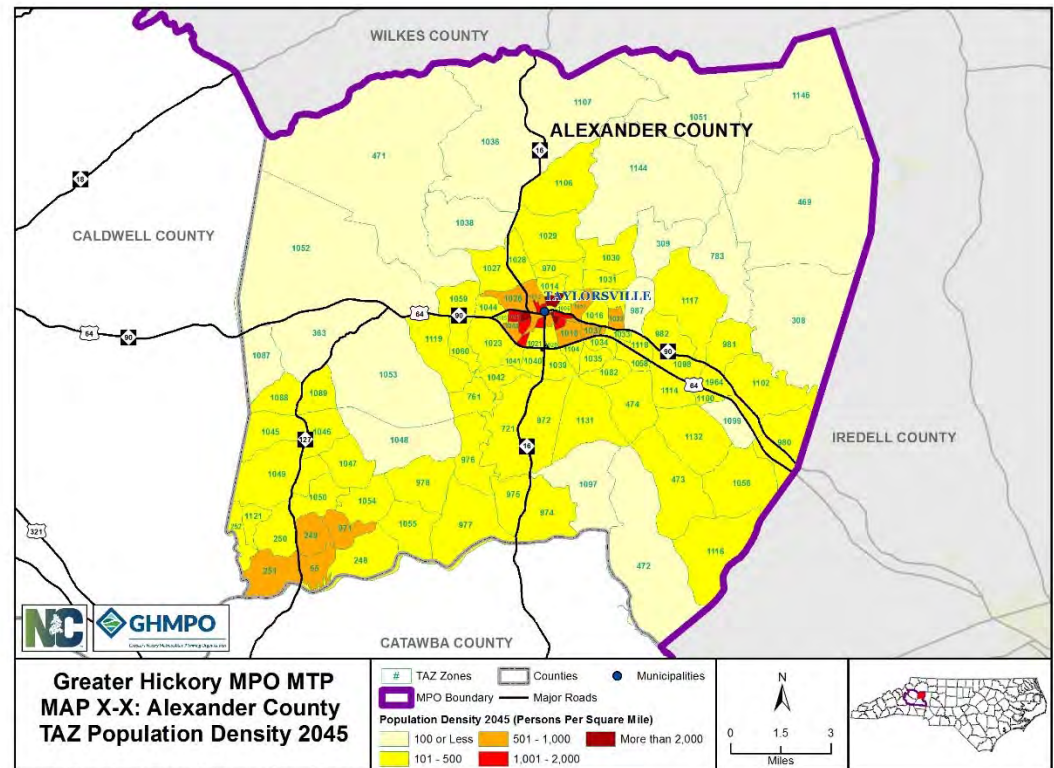
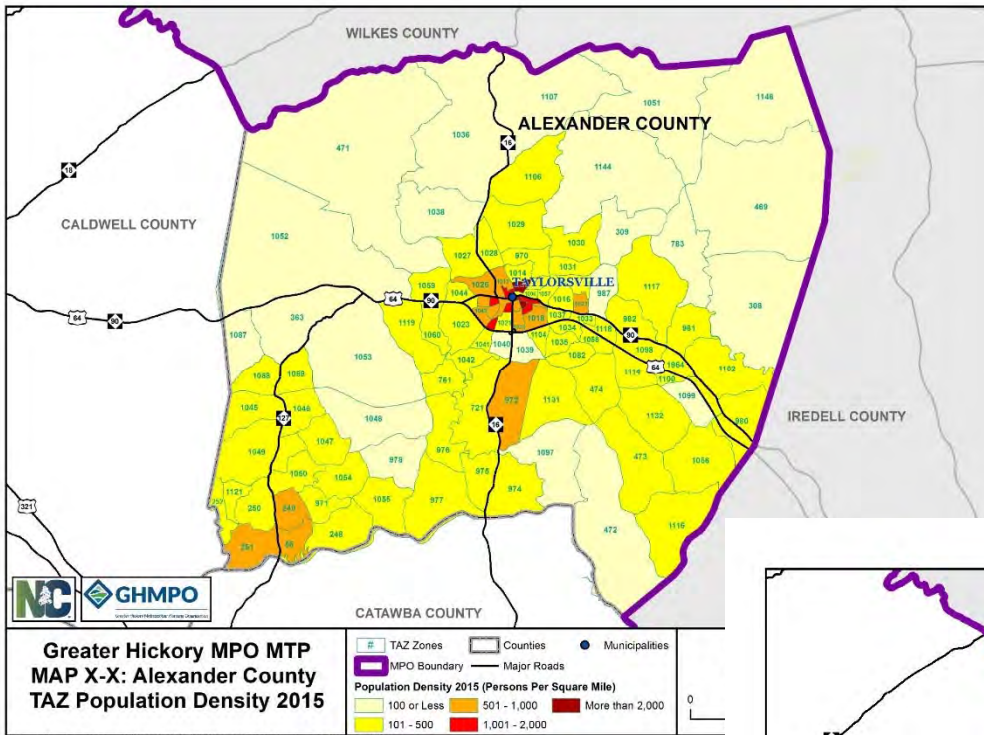


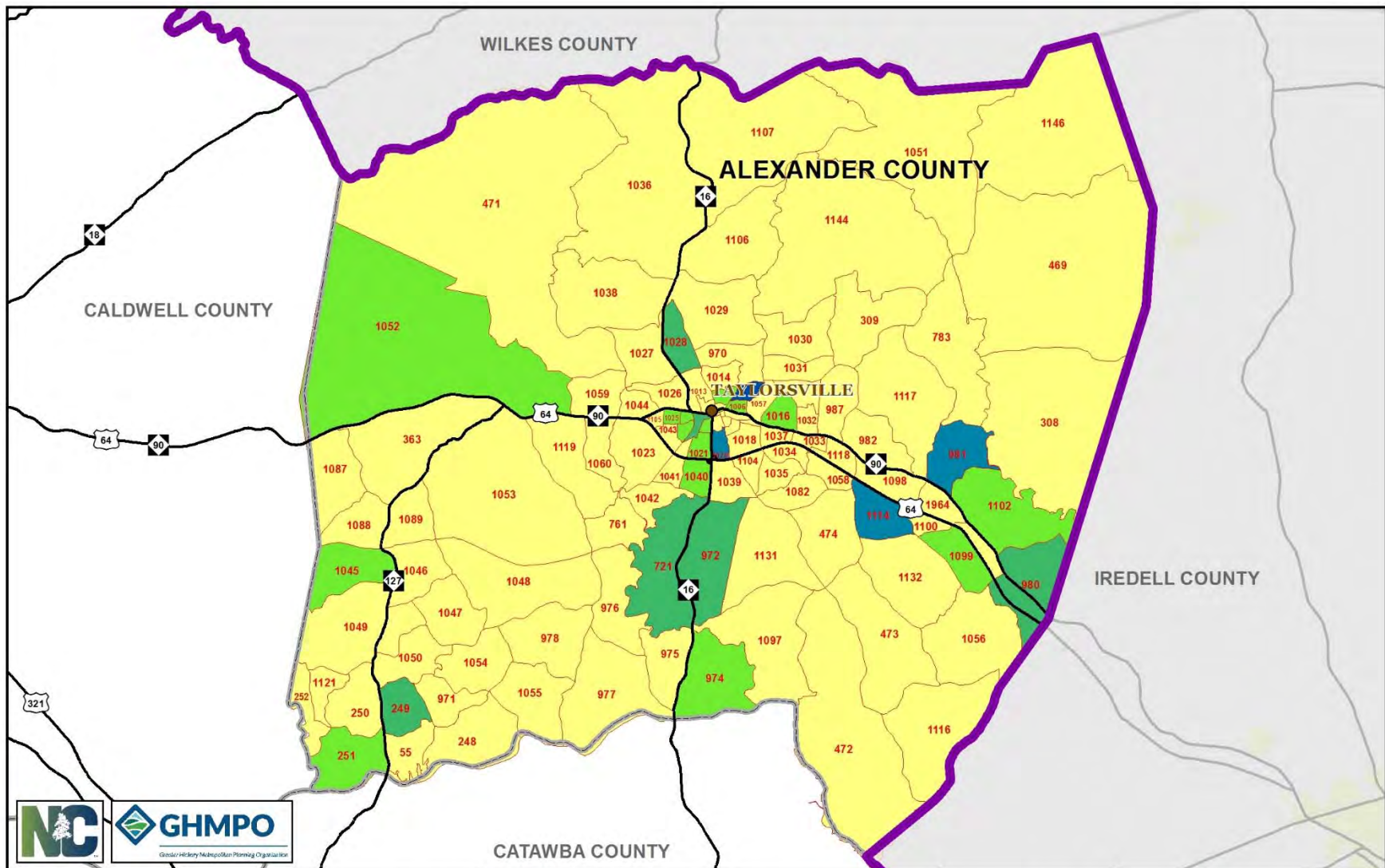




Greater Hickory MPO MTP **MAP X-X: Alexander County** **TAZ Population Density 2045**

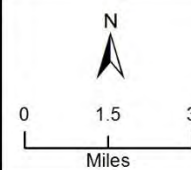


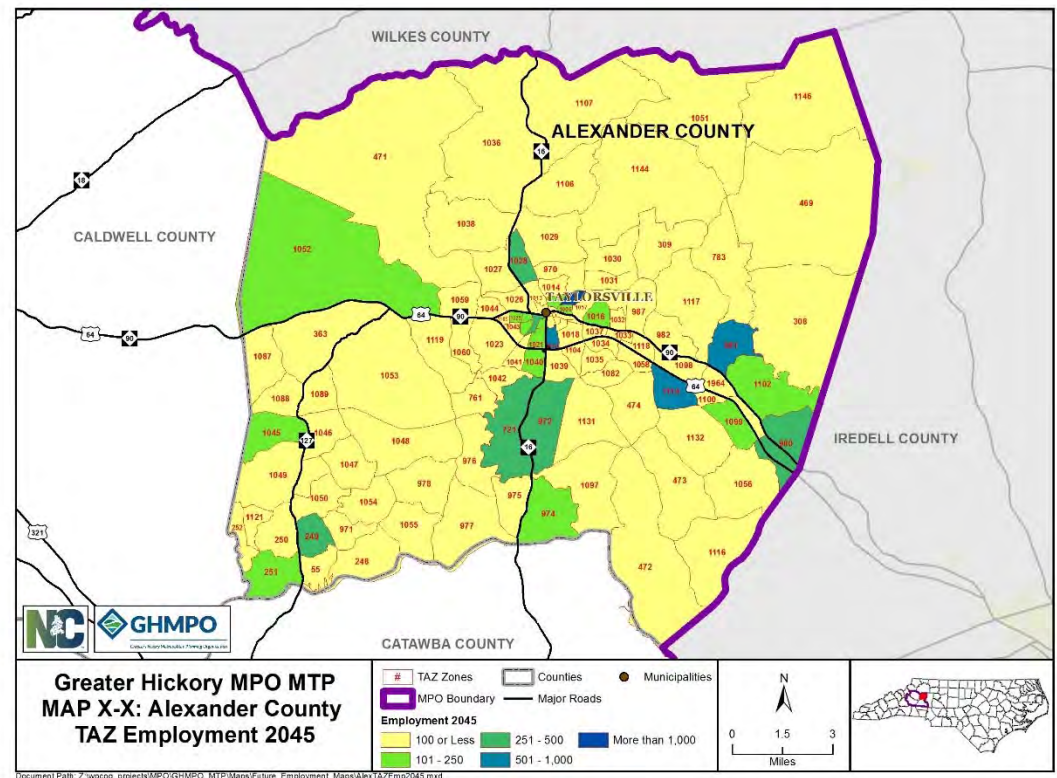
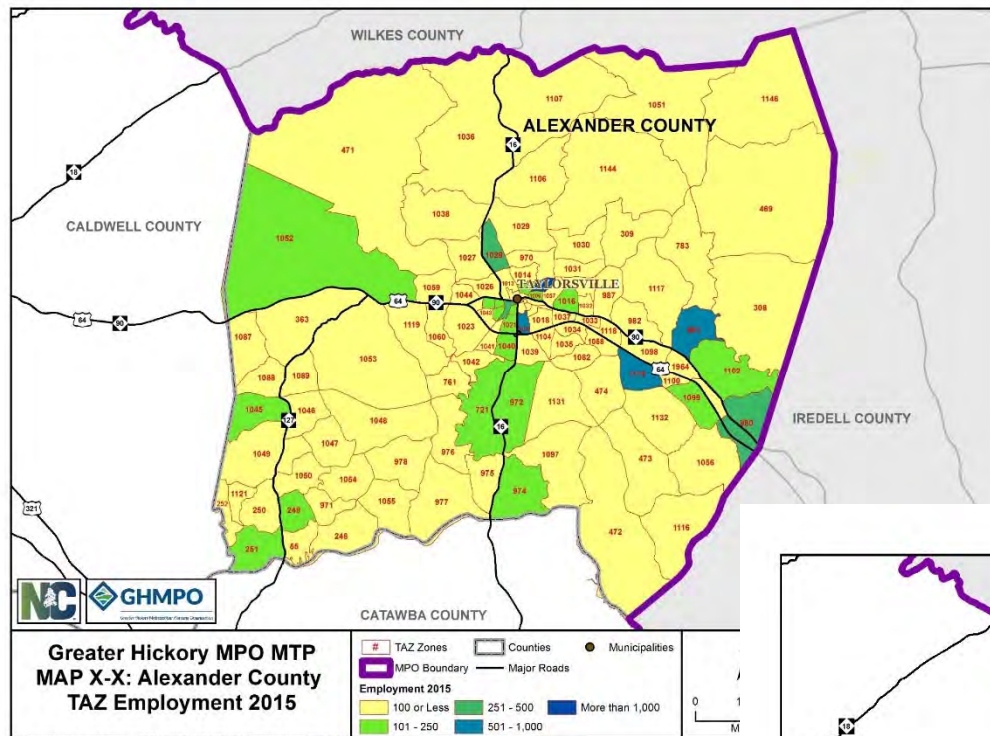




Greater Hickory MPO MTP **MAP X-X: Alexander County** **TAZ Employment 2045**

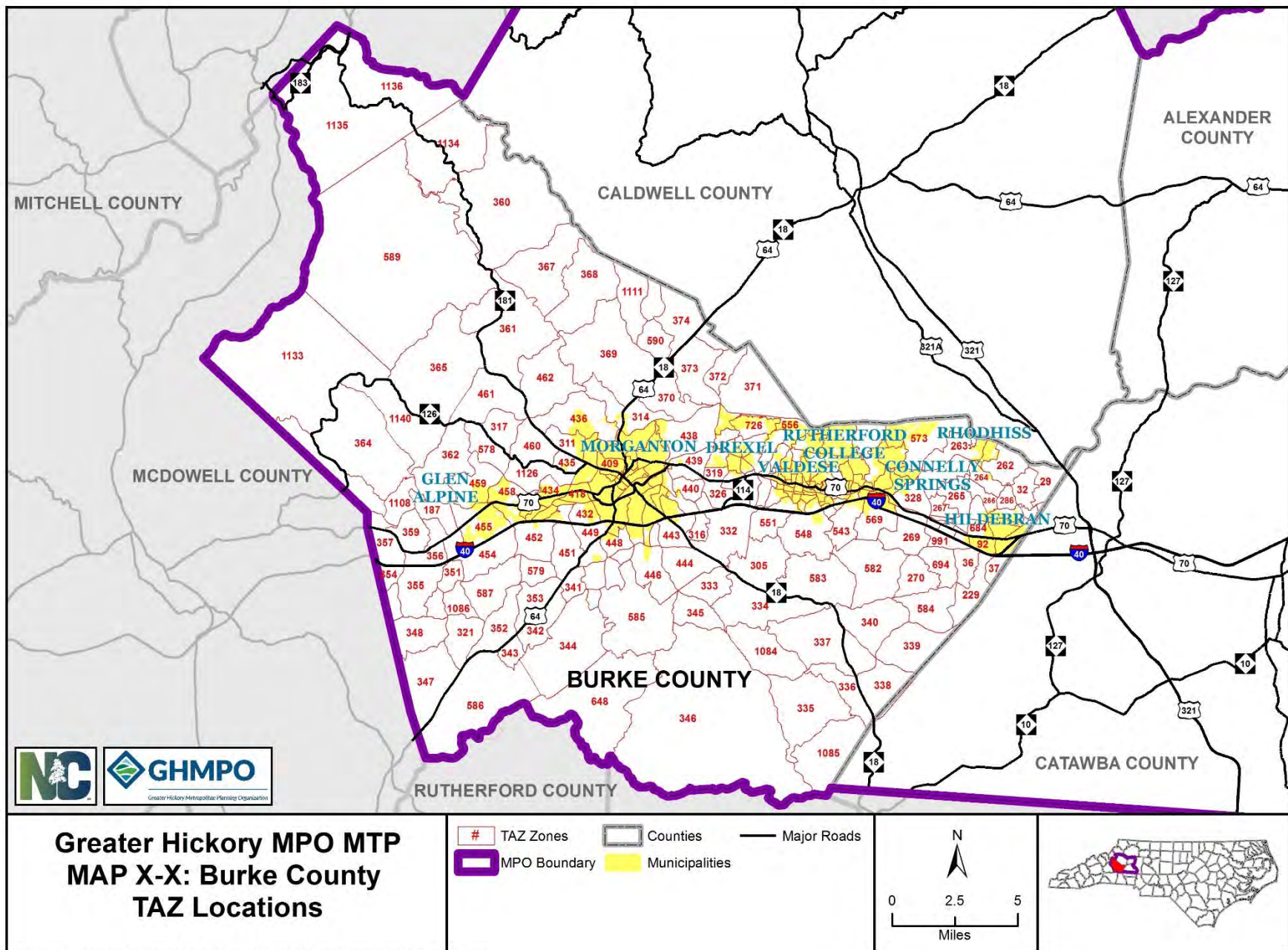
- | | | |
|--------------|-------------|----------------|
| # TAZ Zones | Counties | Municipalities |
| MPO Boundary | Major Roads | |
- Employment 2045**
- | | | |
|-------------|-------------|-----------------|
| 100 or Less | 251 - 500 | More than 1,000 |
| 101 - 250 | 501 - 1,000 | |



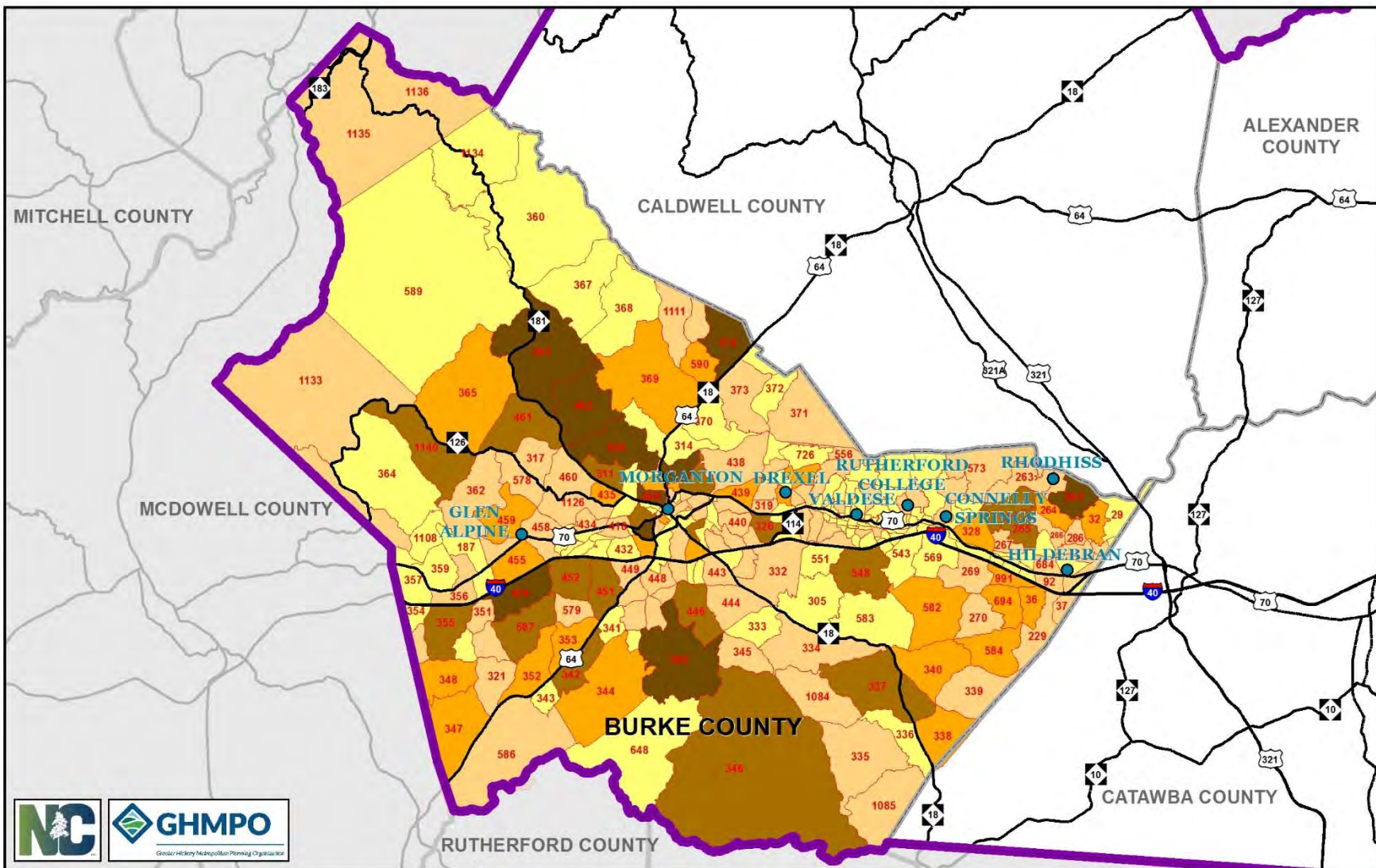


Burke County Maps

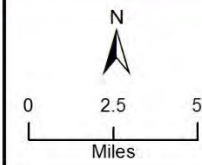
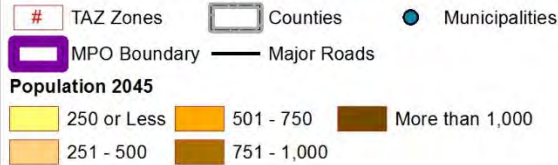


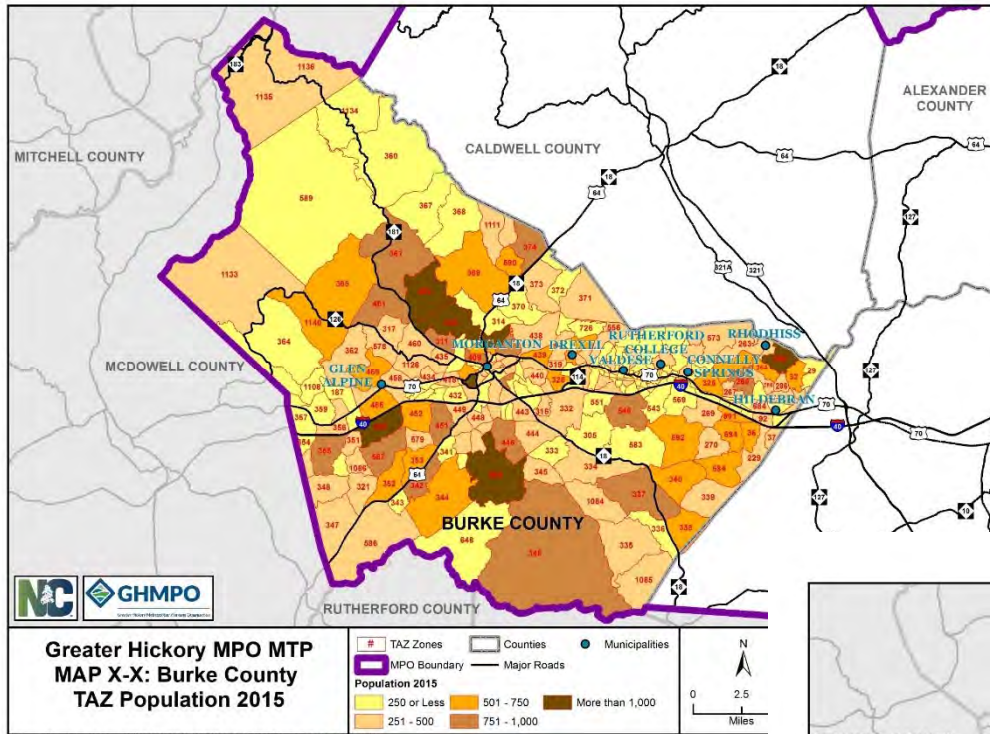


Document Path: Z:\wpcog_projects\IMPO\GHMPO_MTP\Maps\TAZ_Locations\BurkeTAZLocations.mxd

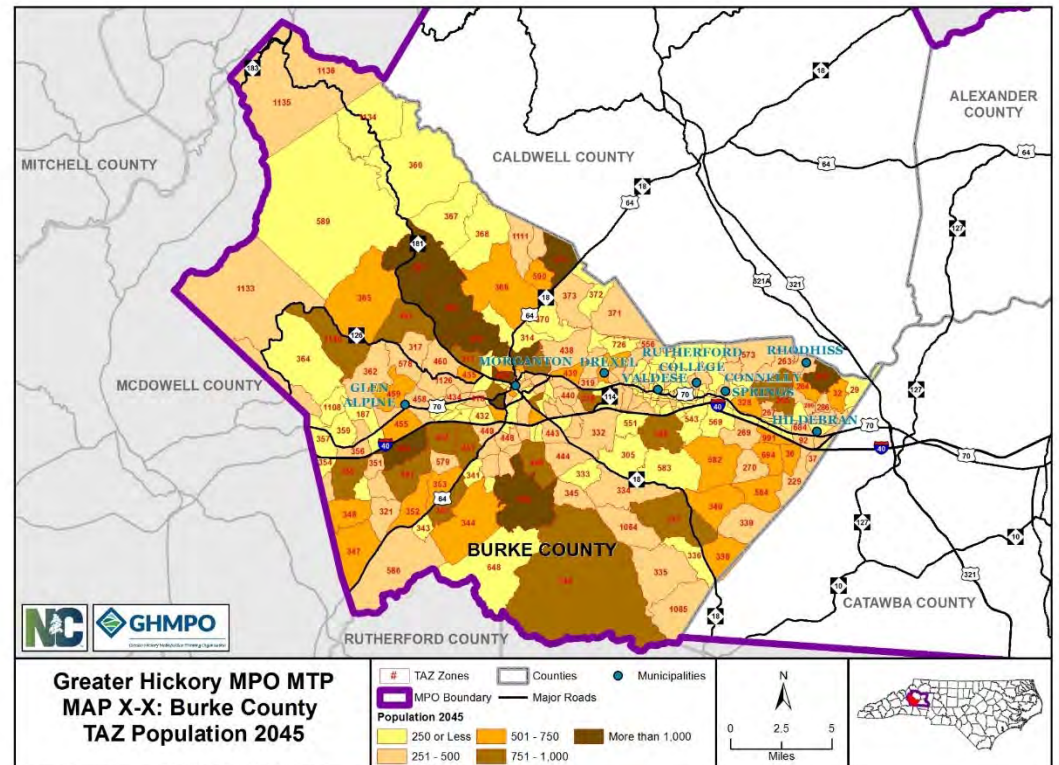


Greater Hickory MPO MTP MAP X-X: Burke County TAZ Population 2045

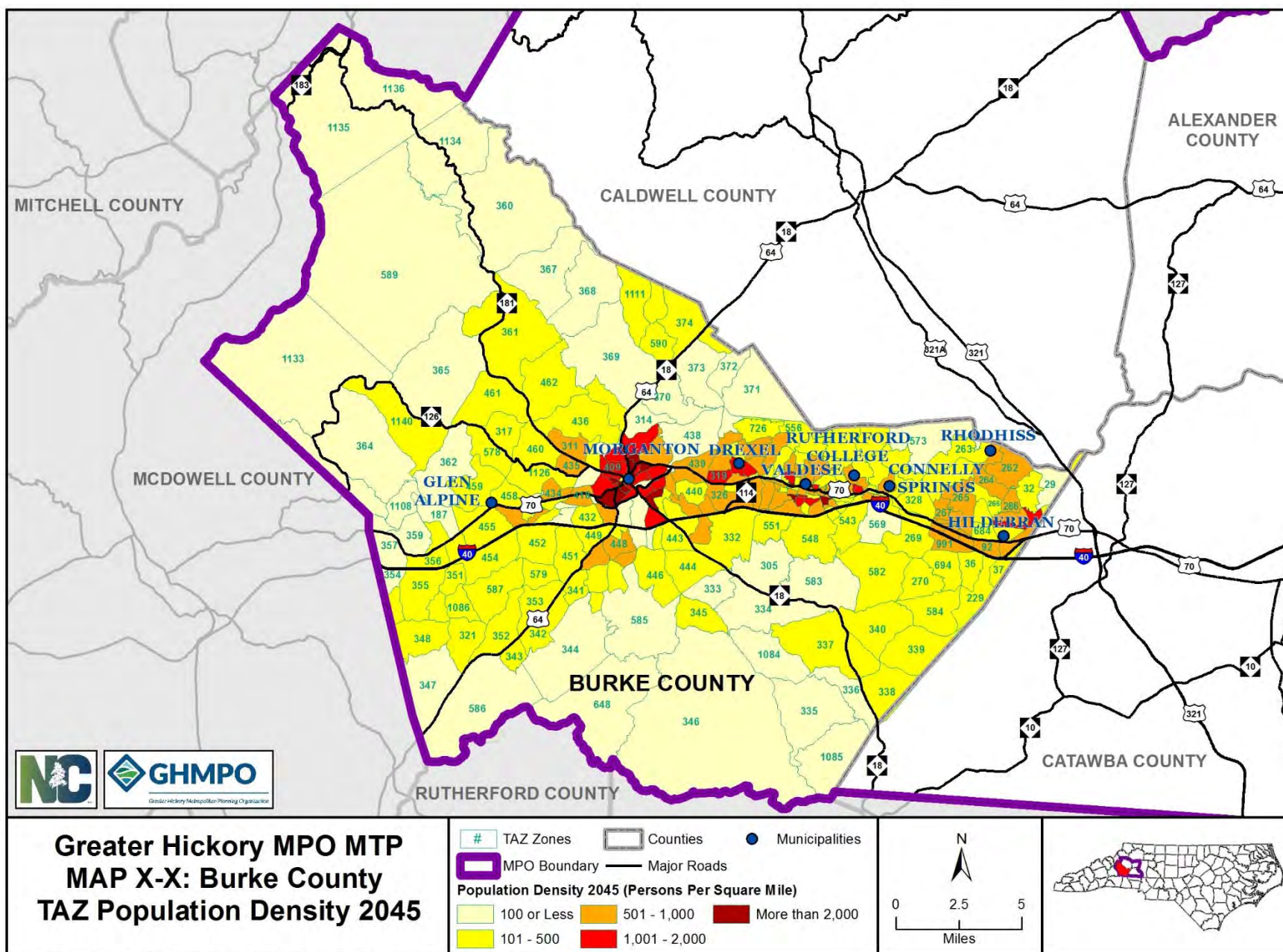


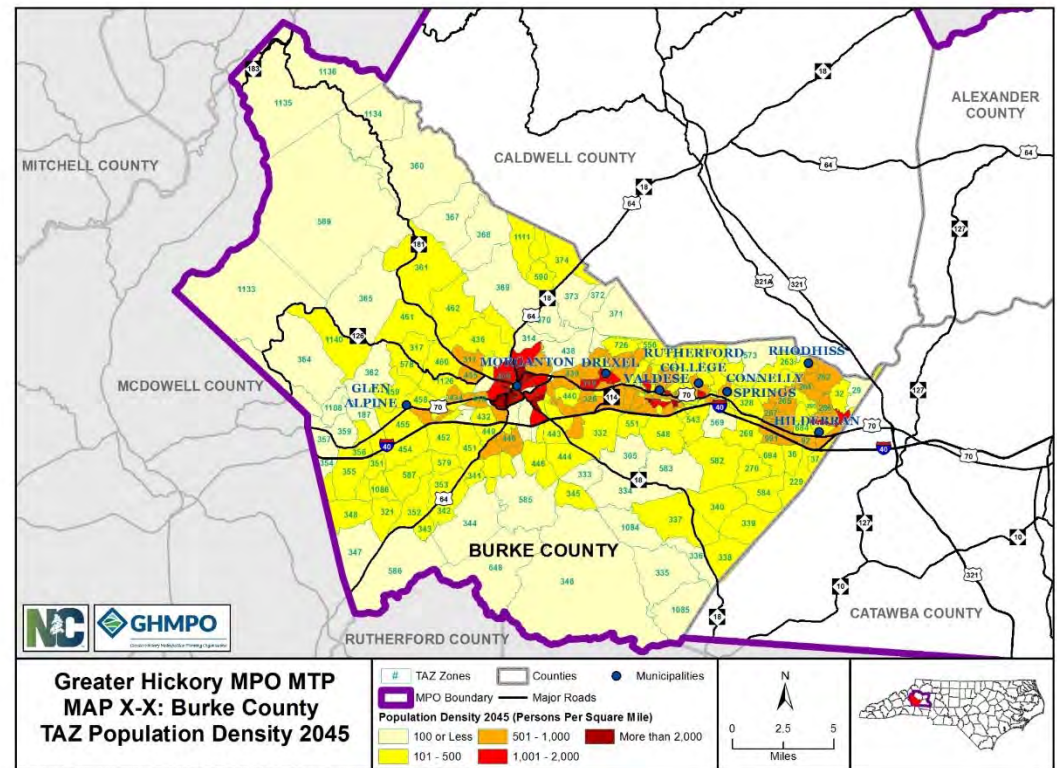
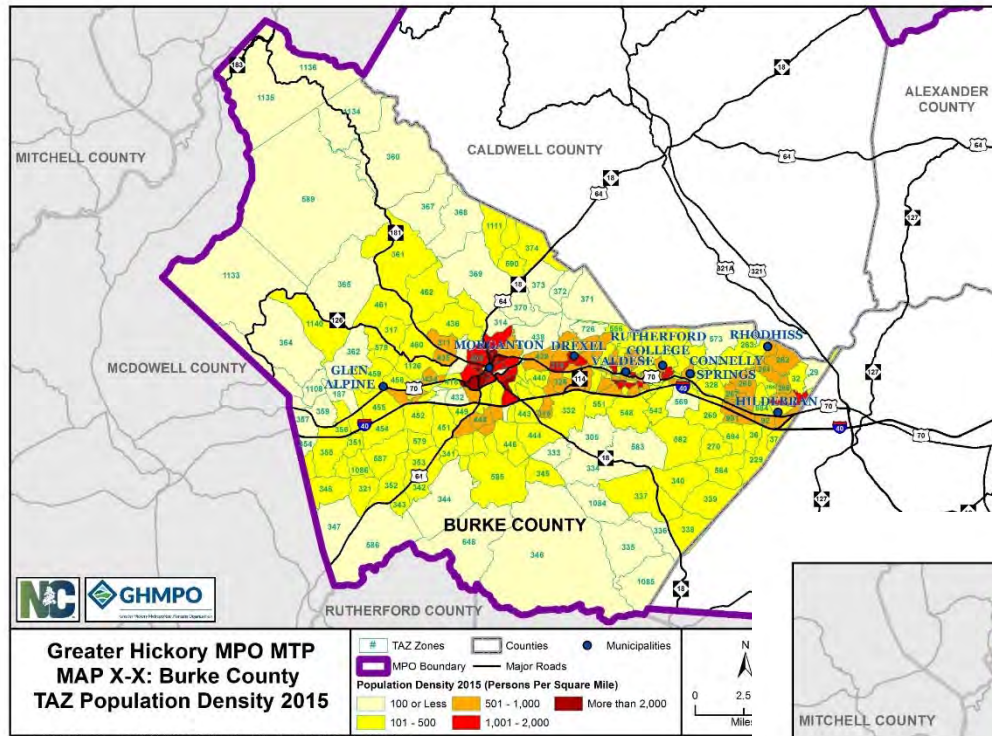


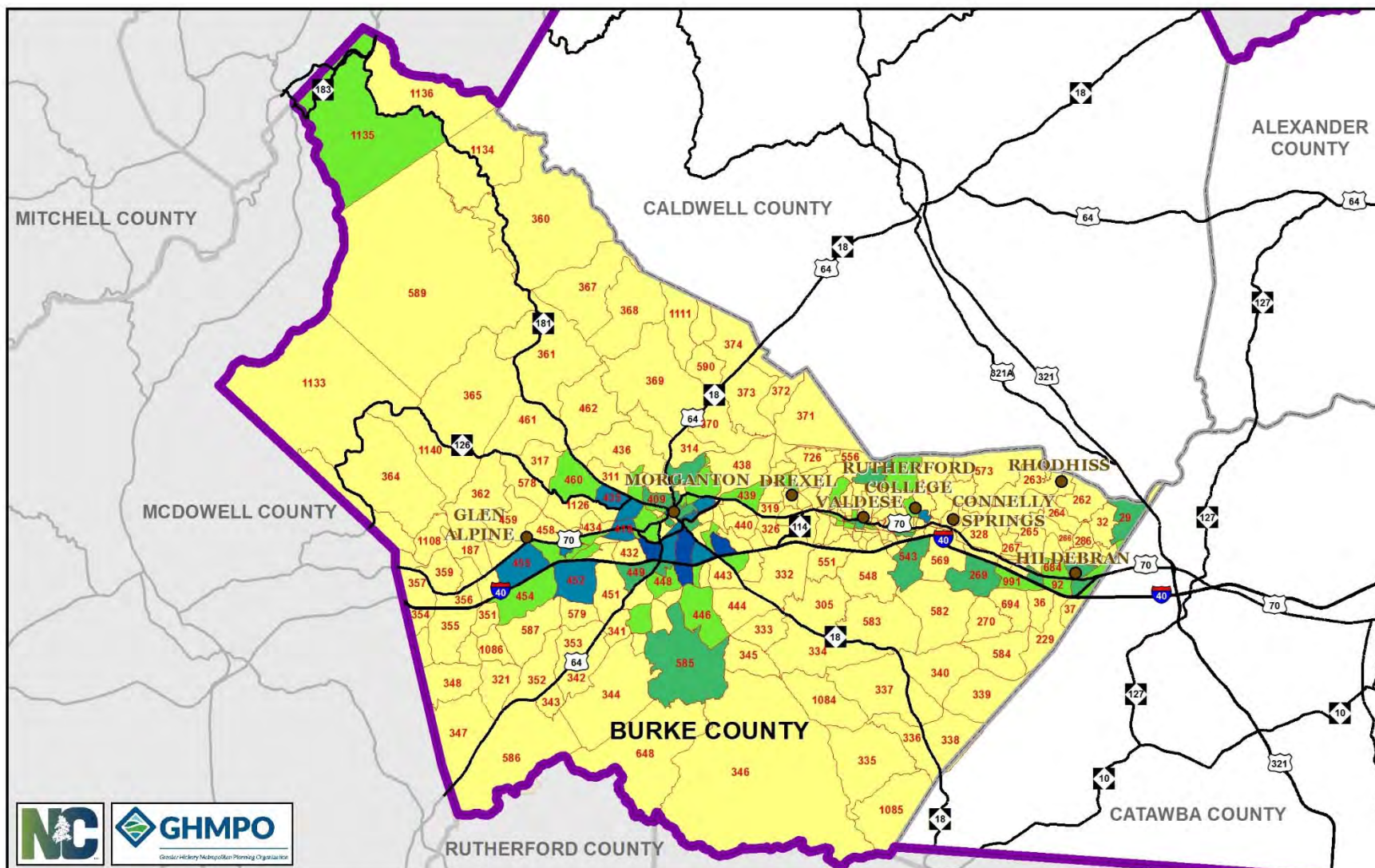
Document Path: Z:\wpcog_projects\MPO\GHMPO_MTP\Maps\Future_Population_Maps\Burke_TAZPop2015.mxd



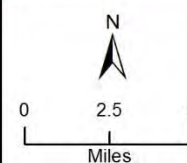
Document Path: Z:\wpcog_projects\MPO\GHMPO_MTP\Maps\Future_Population_Maps\Burke_TAZPop2045.mxd

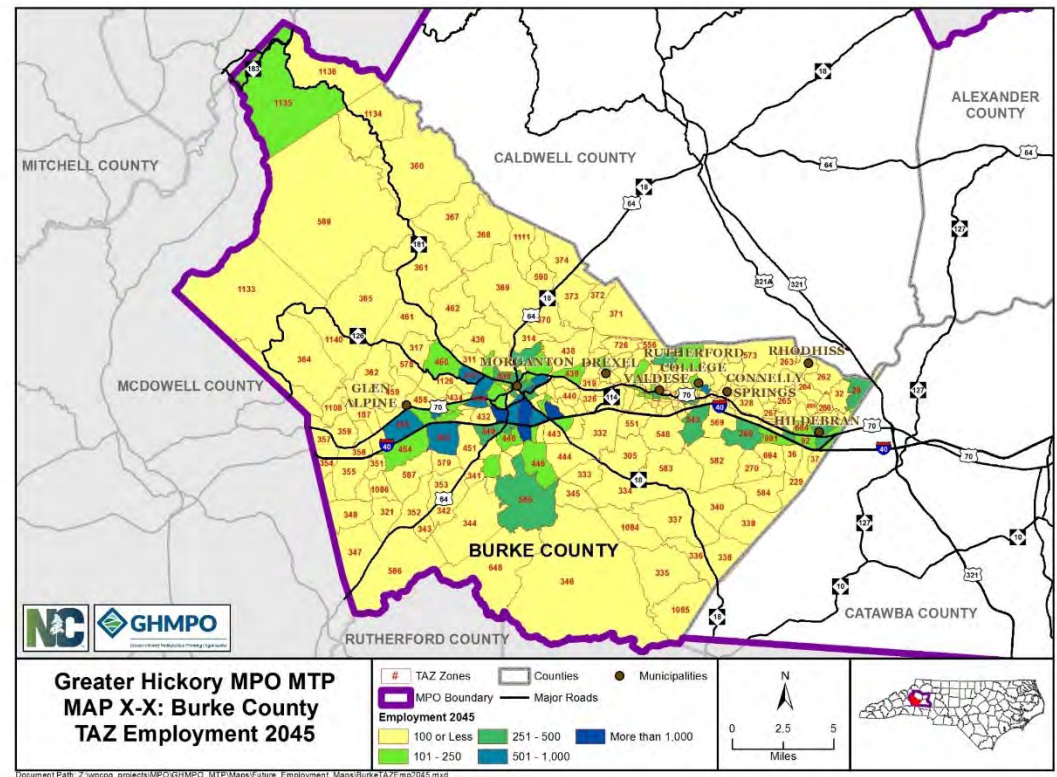
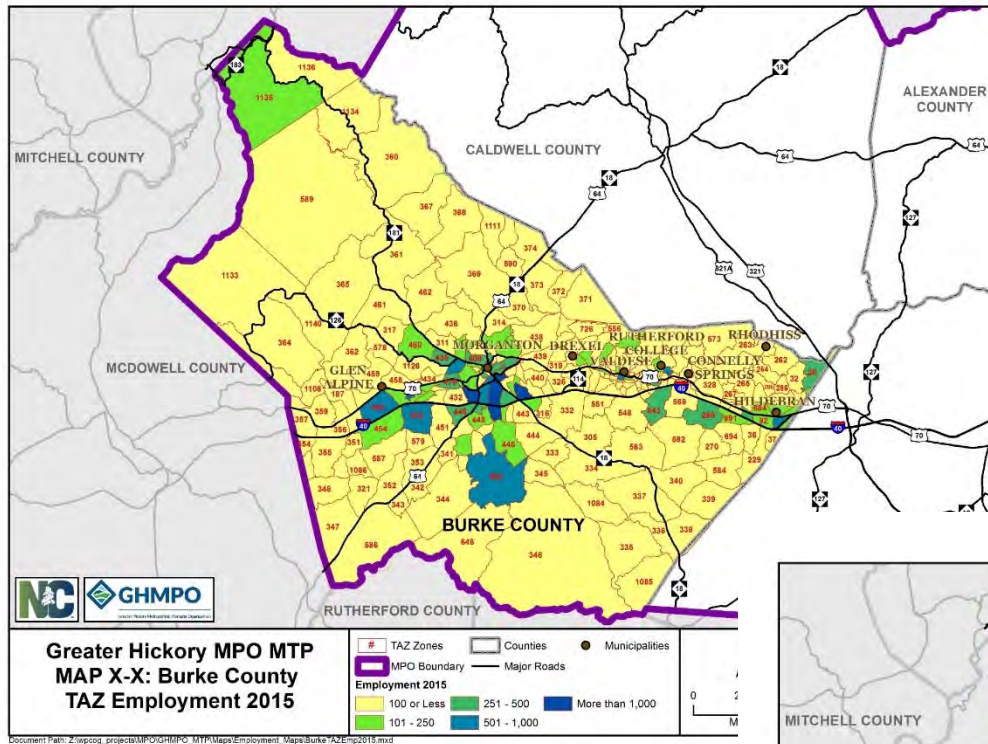






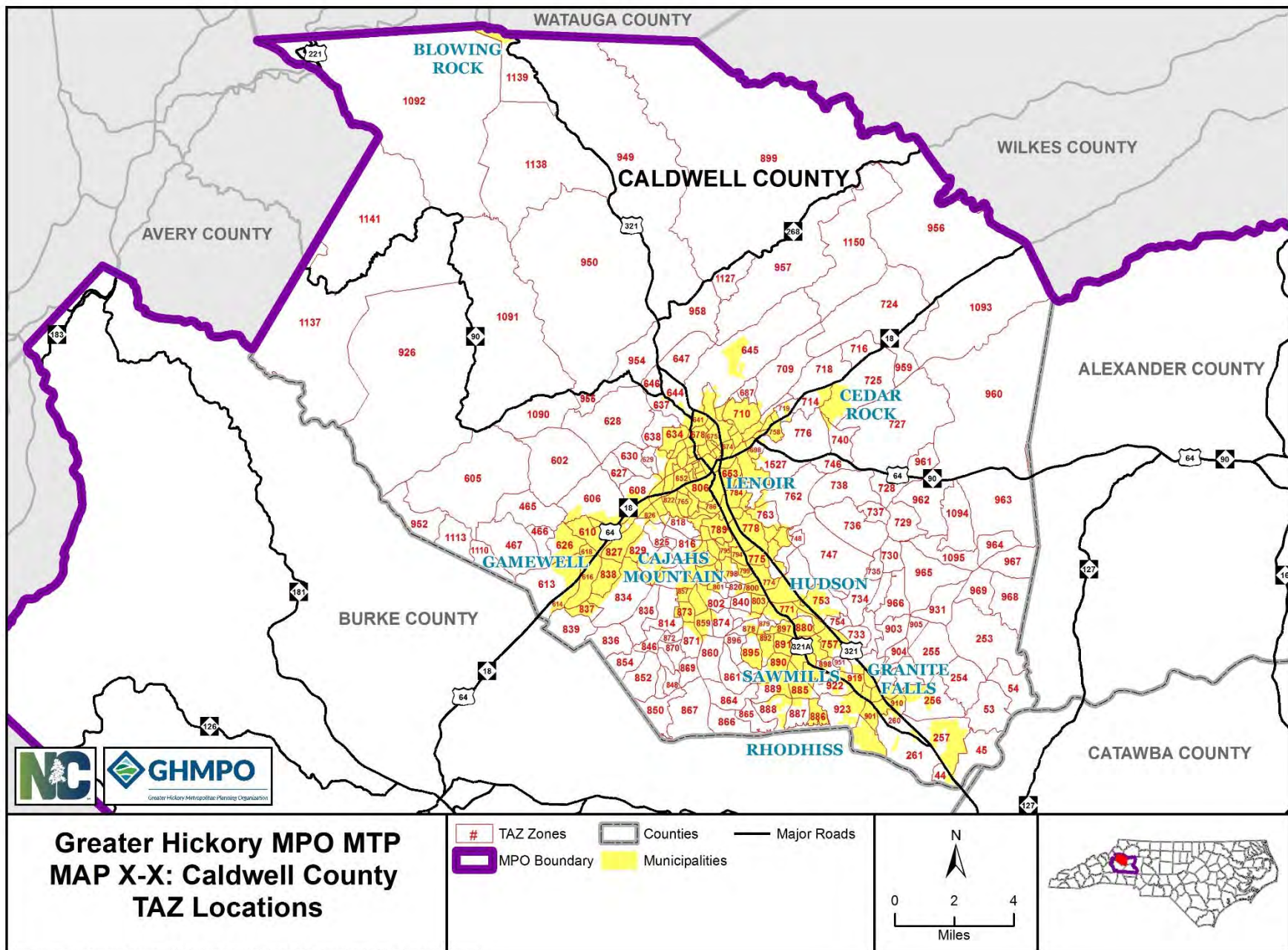
Greater Hickory MPO MTP **MAP X-X: Burke County** **TAZ Employment 2045**



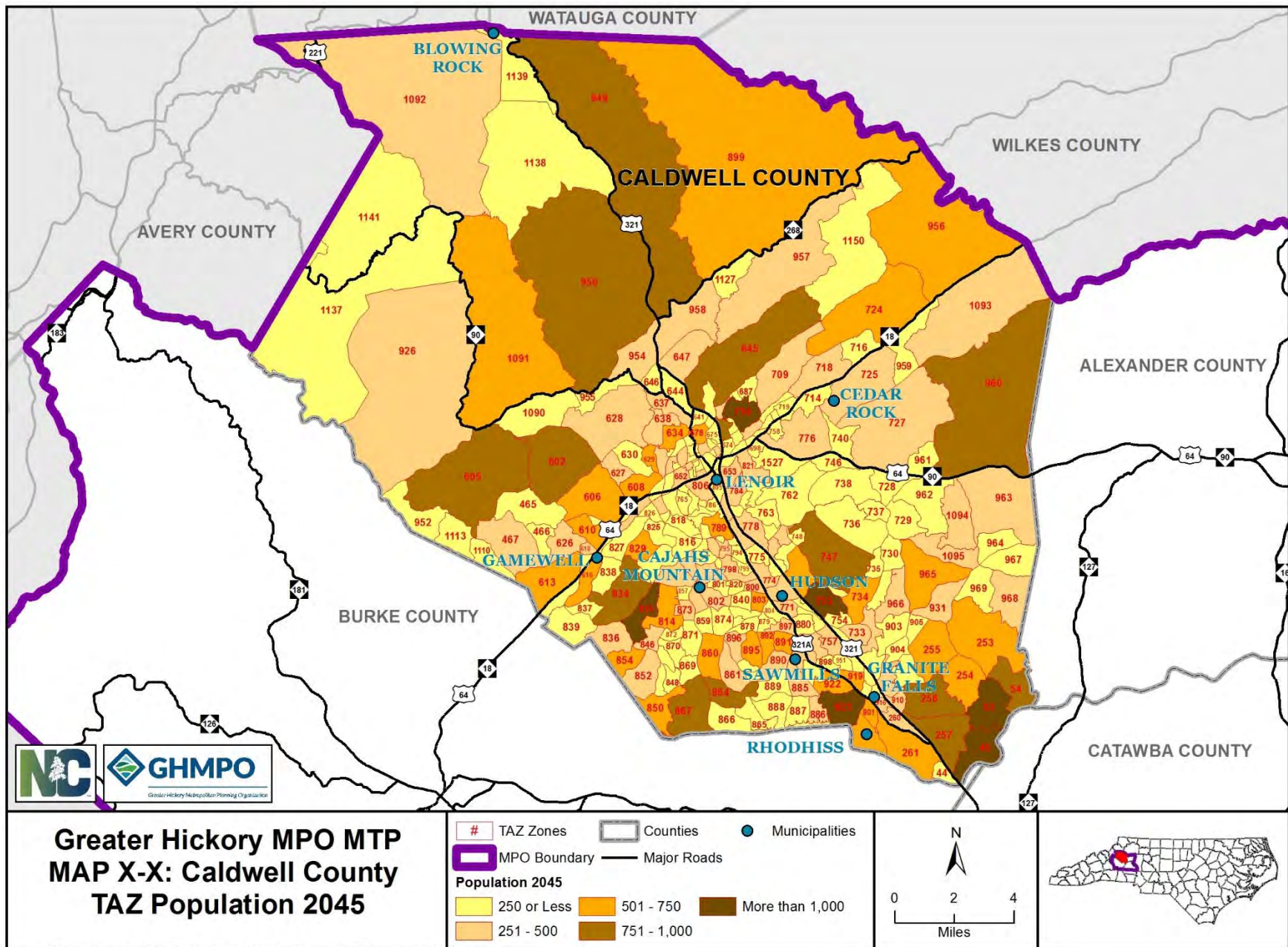


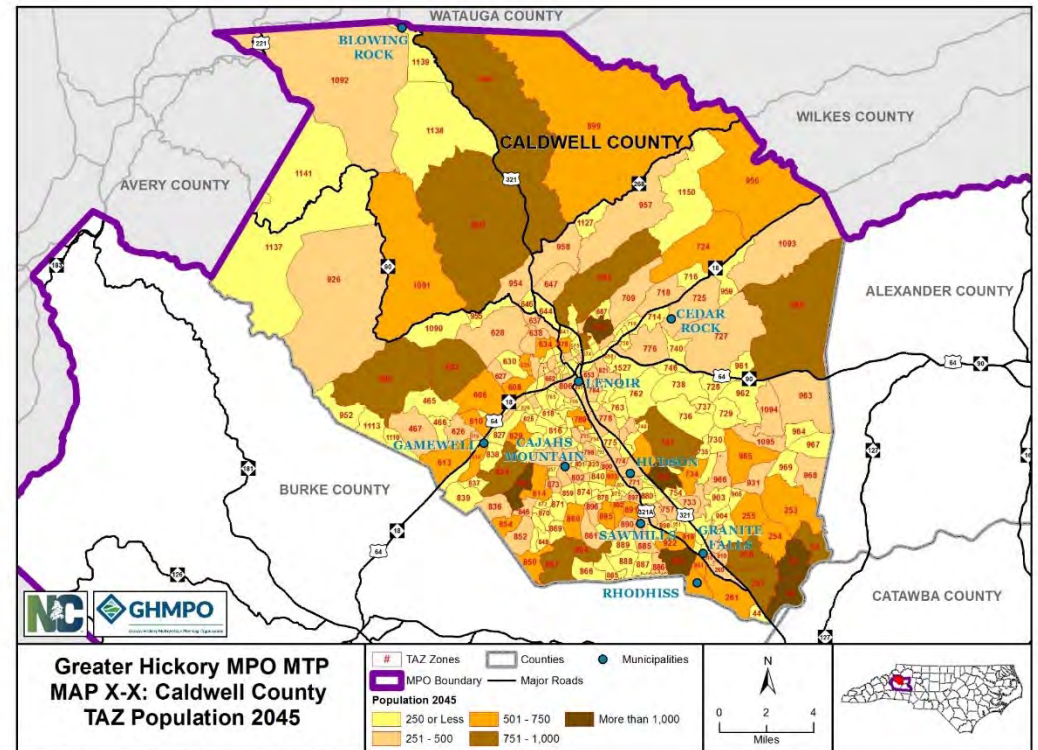
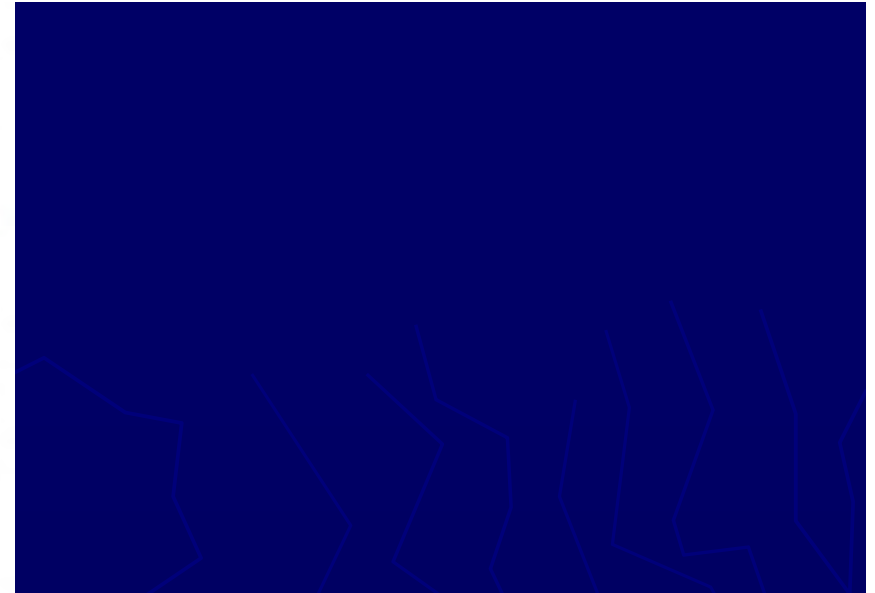
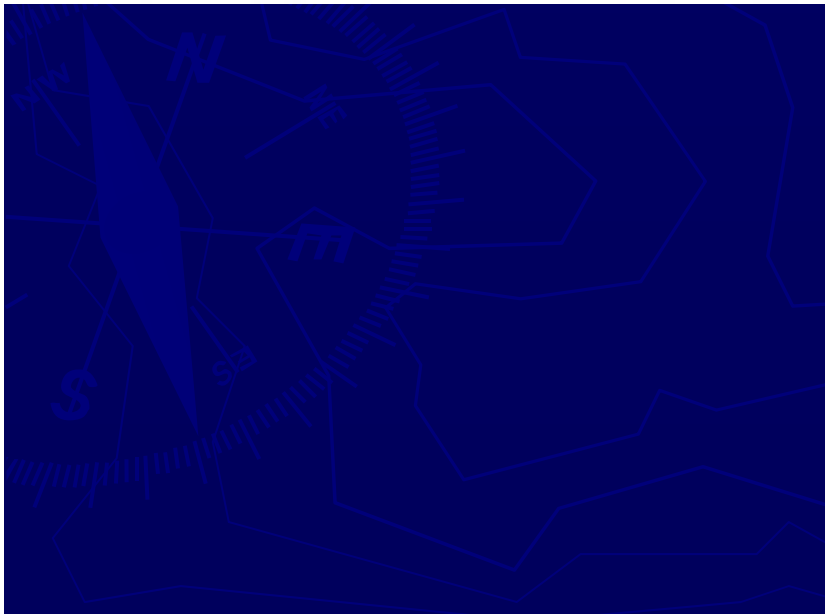
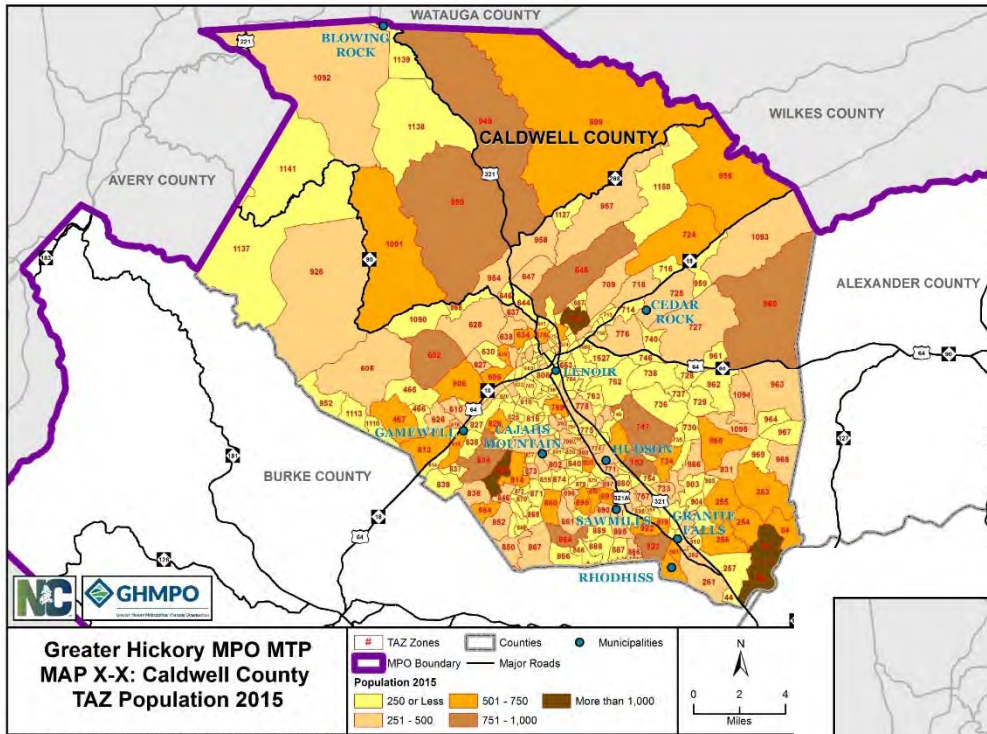
Caldwell County Maps

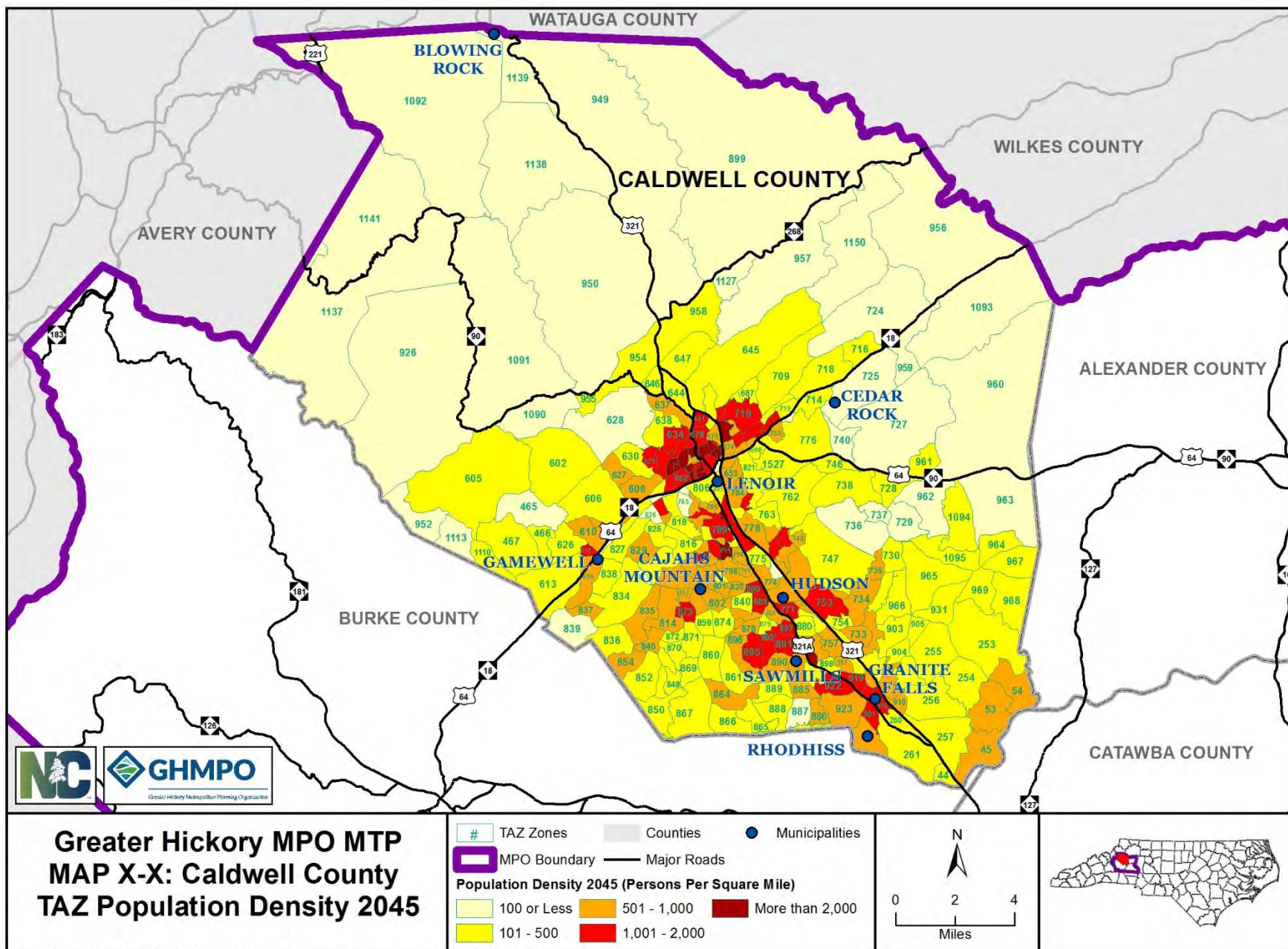


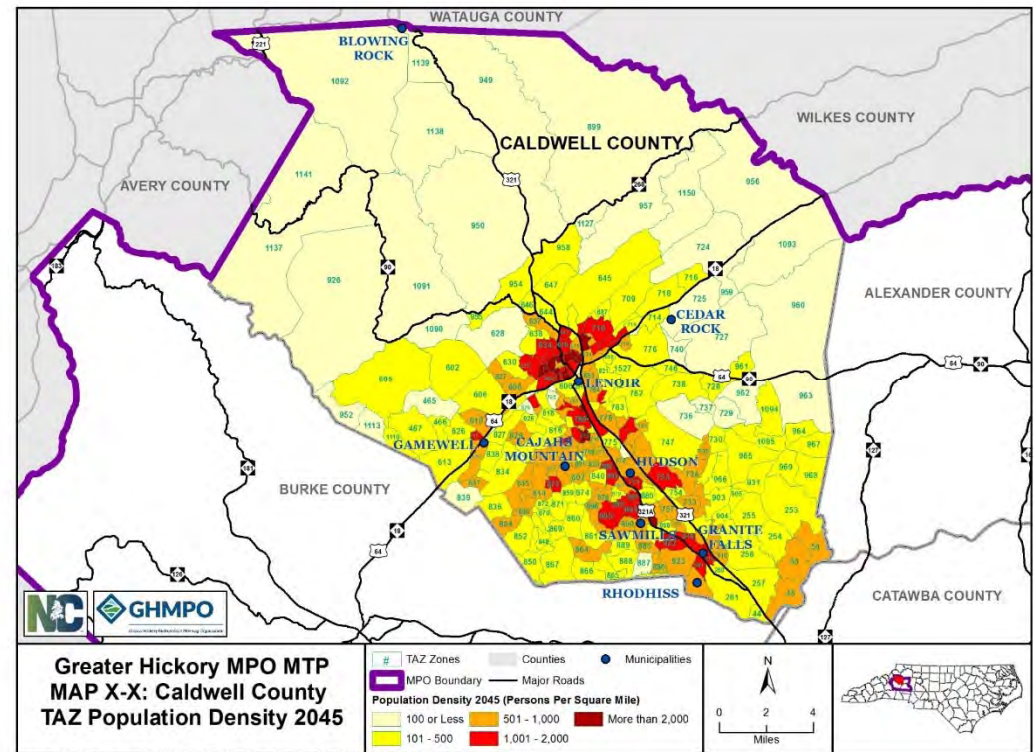
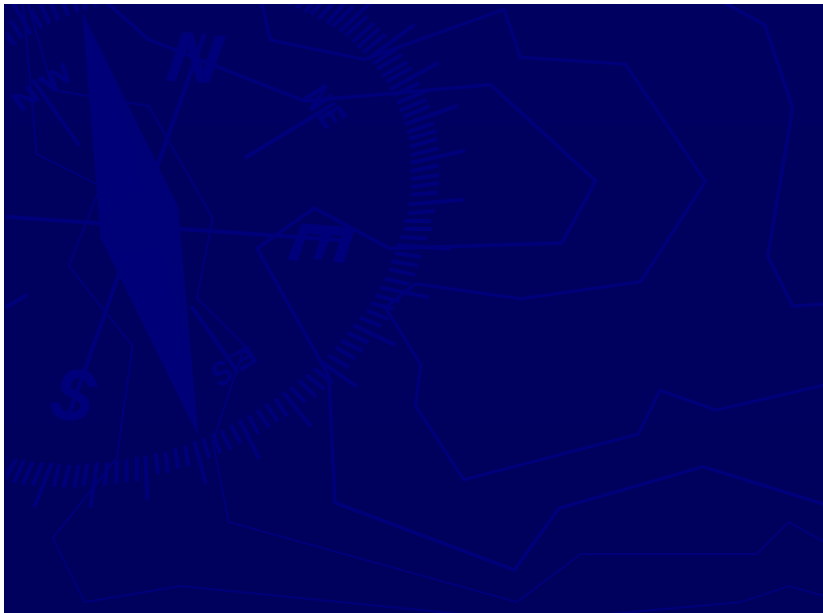
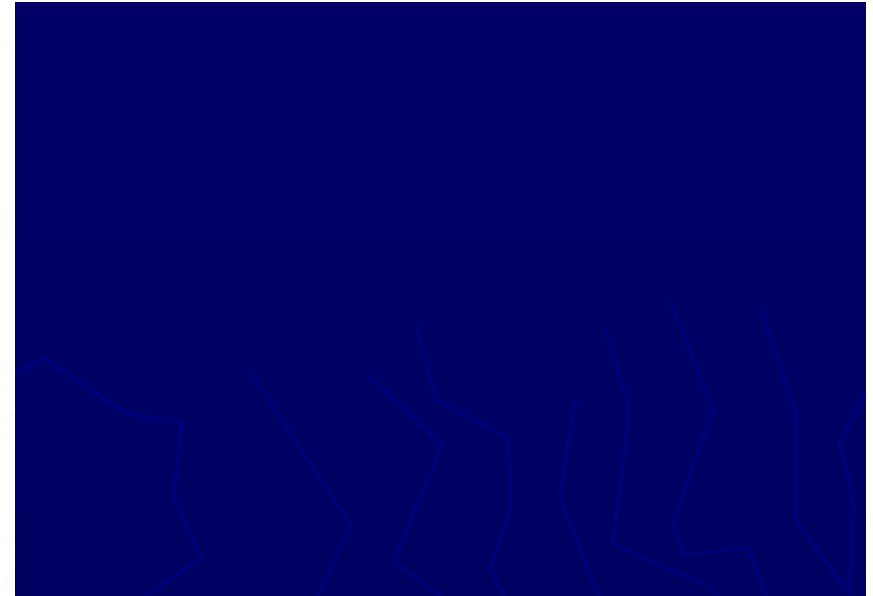
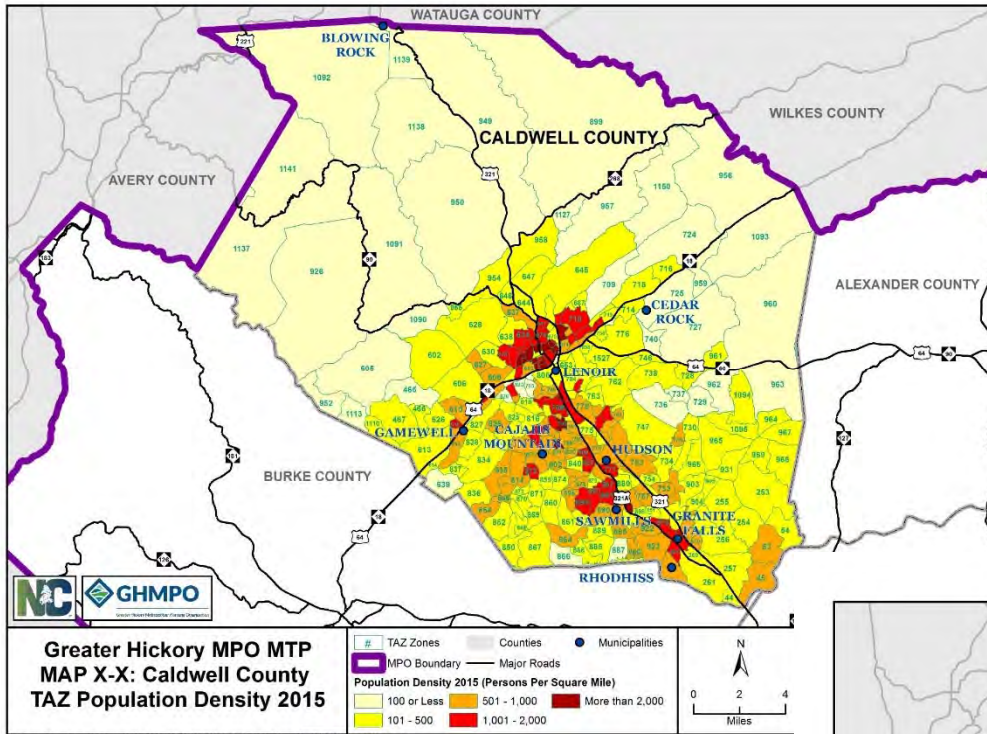


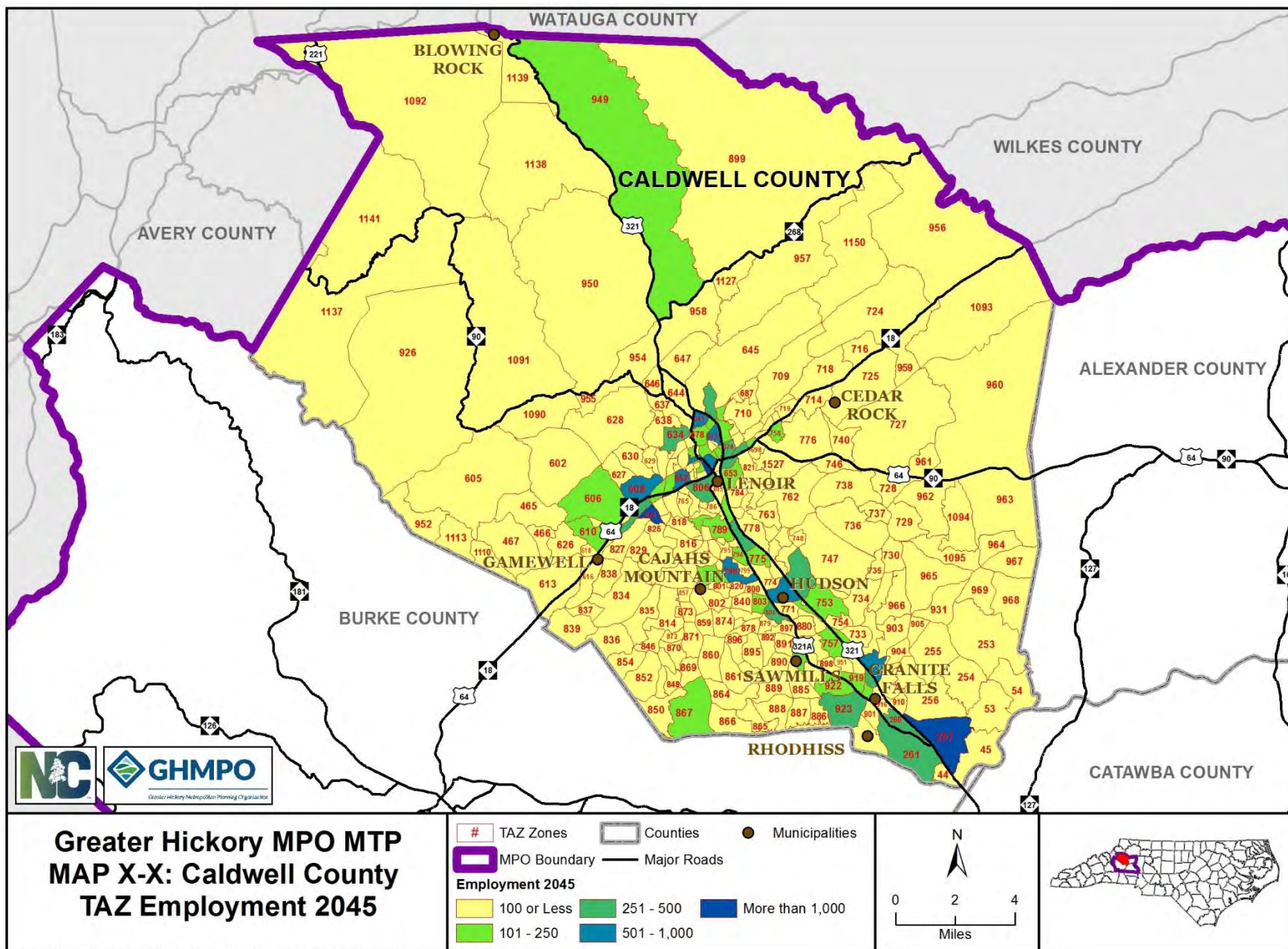
Document Path: Z:\wpcog_projects\IMPO\GHMPO_MTP\Maps\TAZ_Locations\CaldTAZLocations.mxd



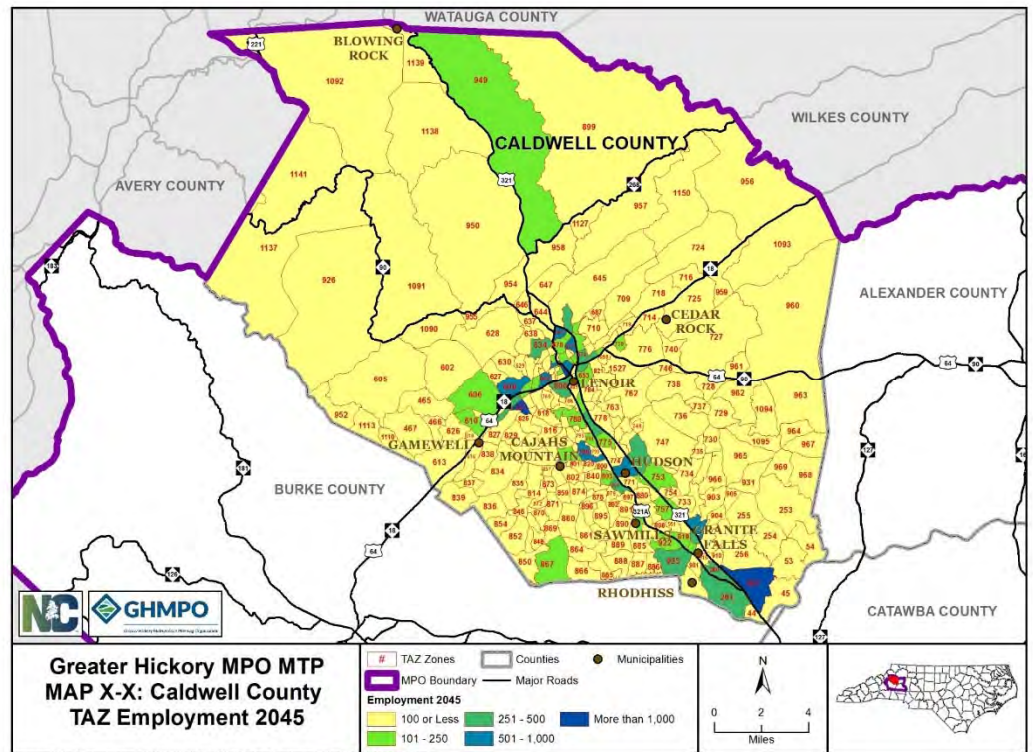
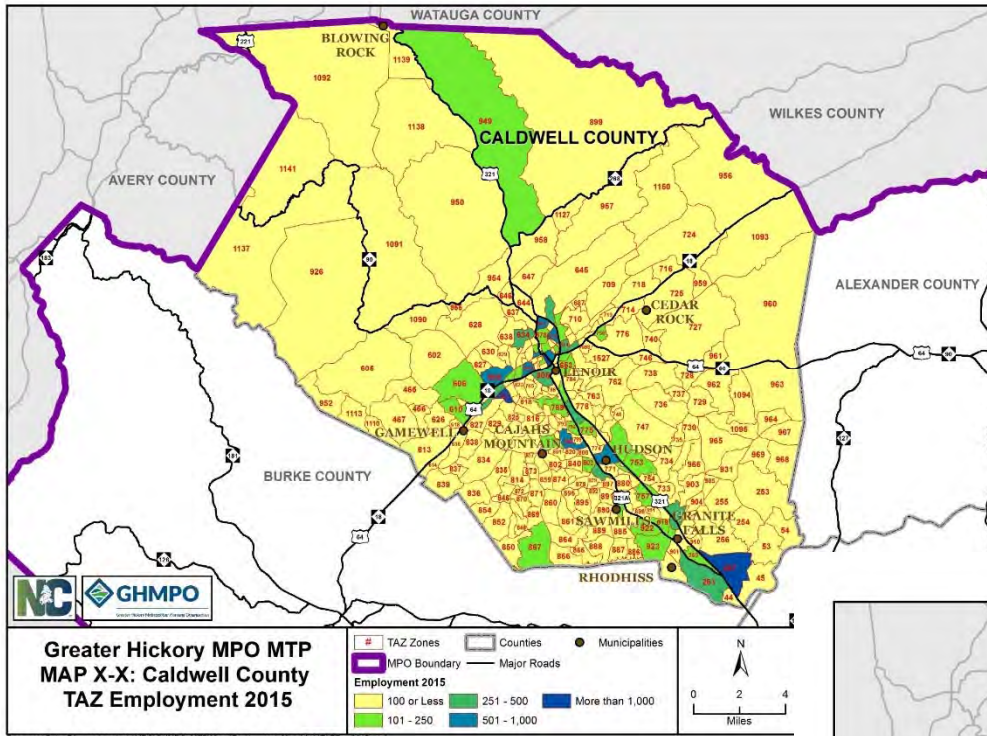






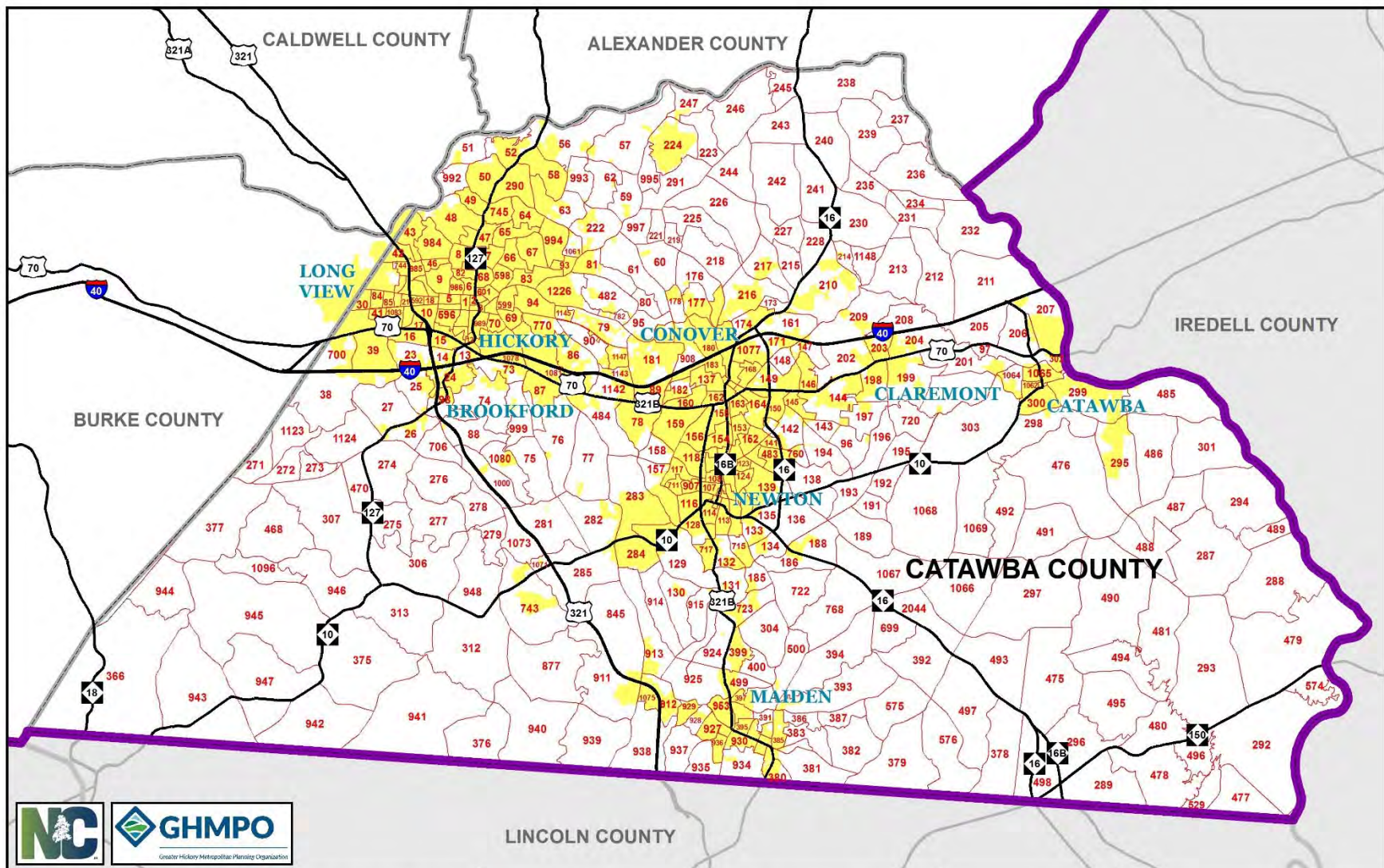


Document Path: Z:\wpcog_projects\MPO\GHMPO_MTP\Maps\Future_Employment_T_Maps\CaldTAZEmp2045.mxd



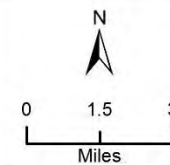
Catawba County Maps

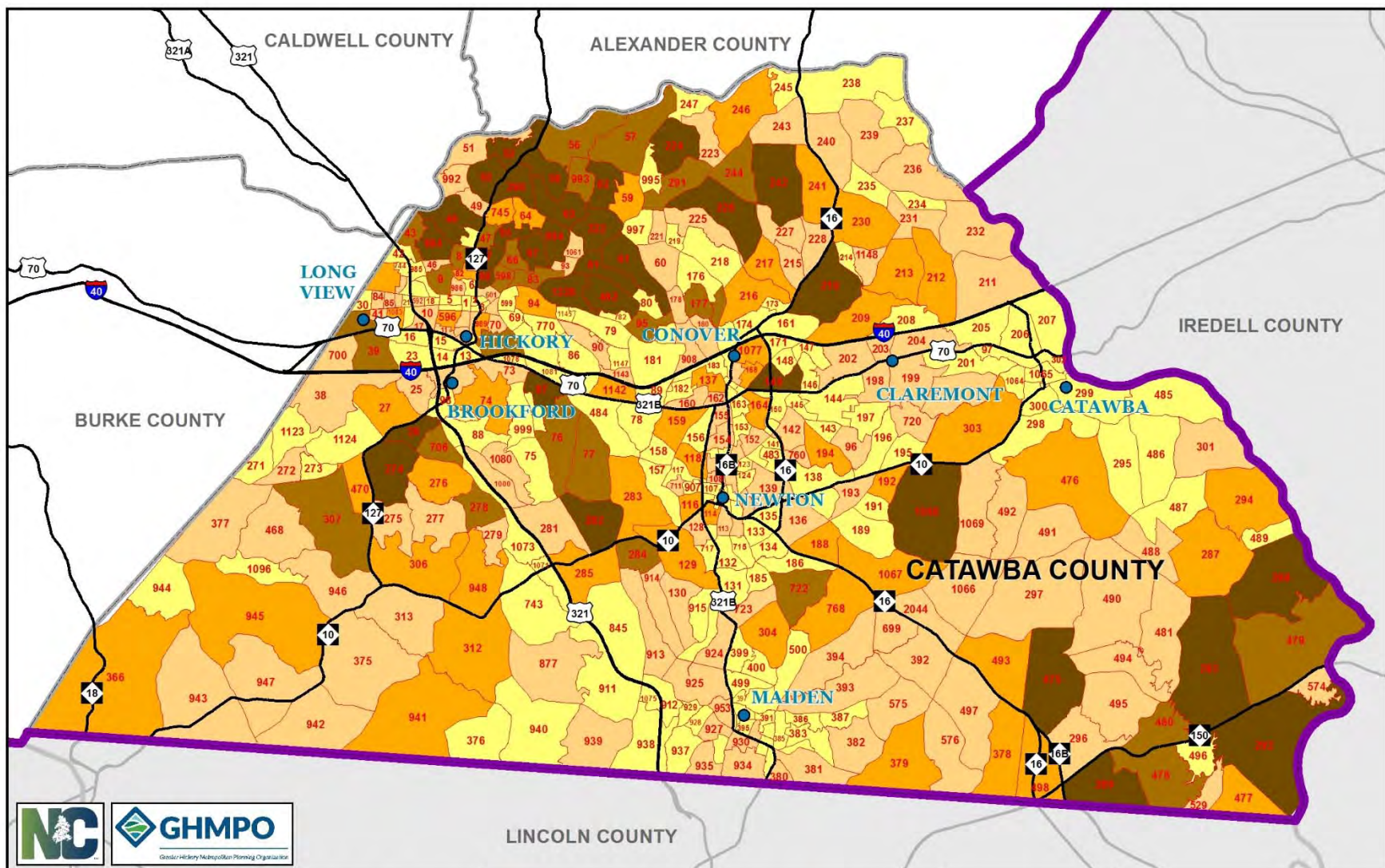




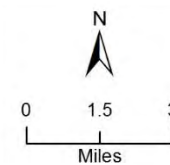
Greater Hickory MPO MTP MAP X-X: Catawba County TAZ Locations

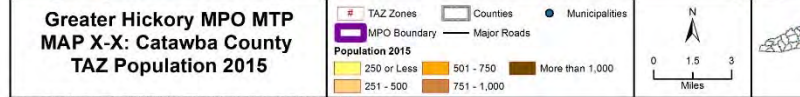
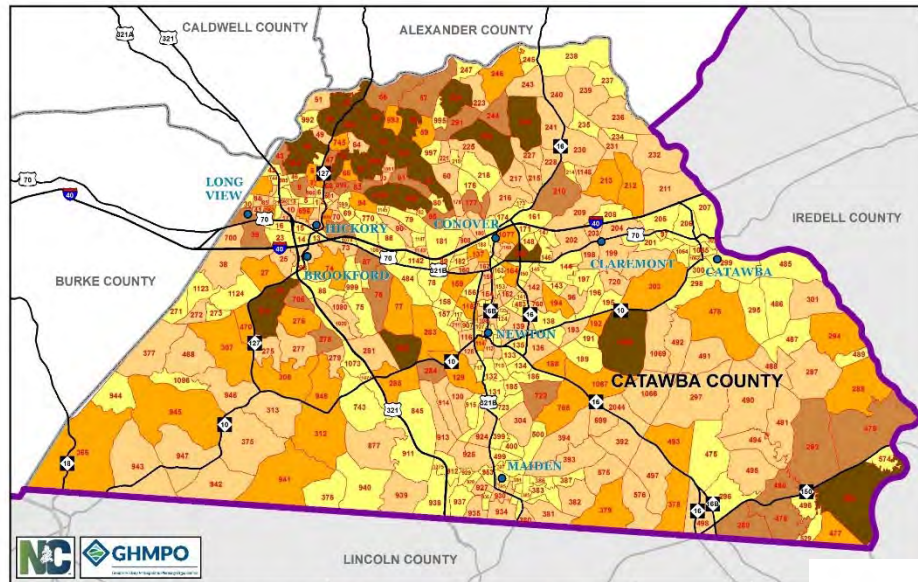
TAZ Zones Counties Major Roads
MPO Boundary Municipalities



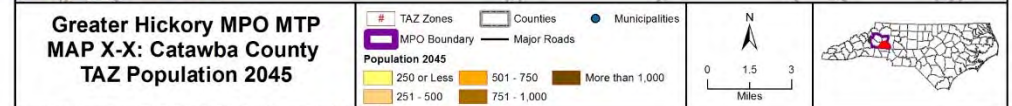
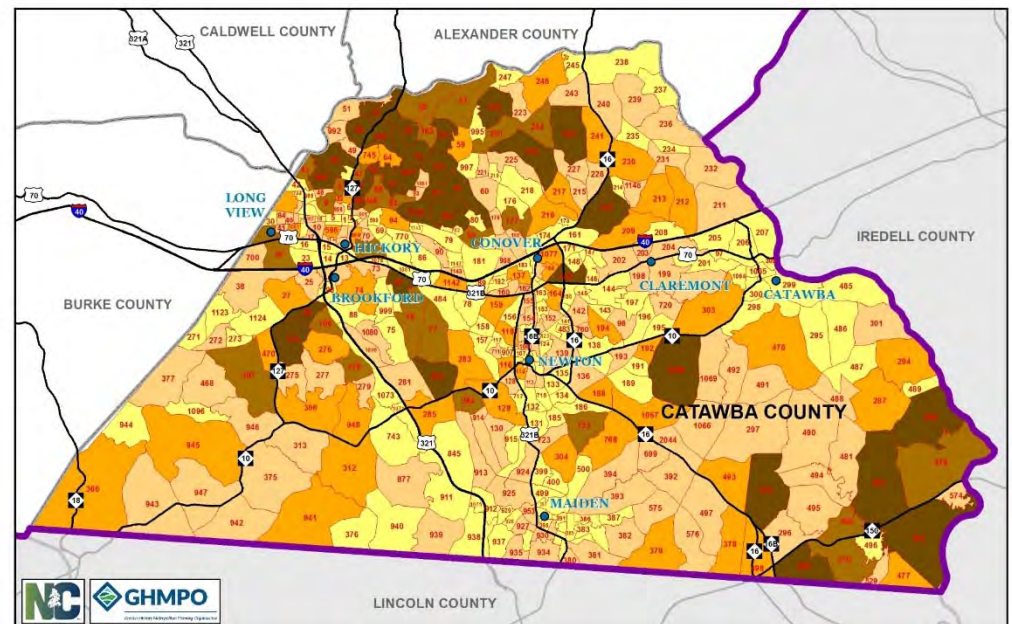


Greater Hickory MPO MTP MAP X-X: Catawba County TAZ Population 2045

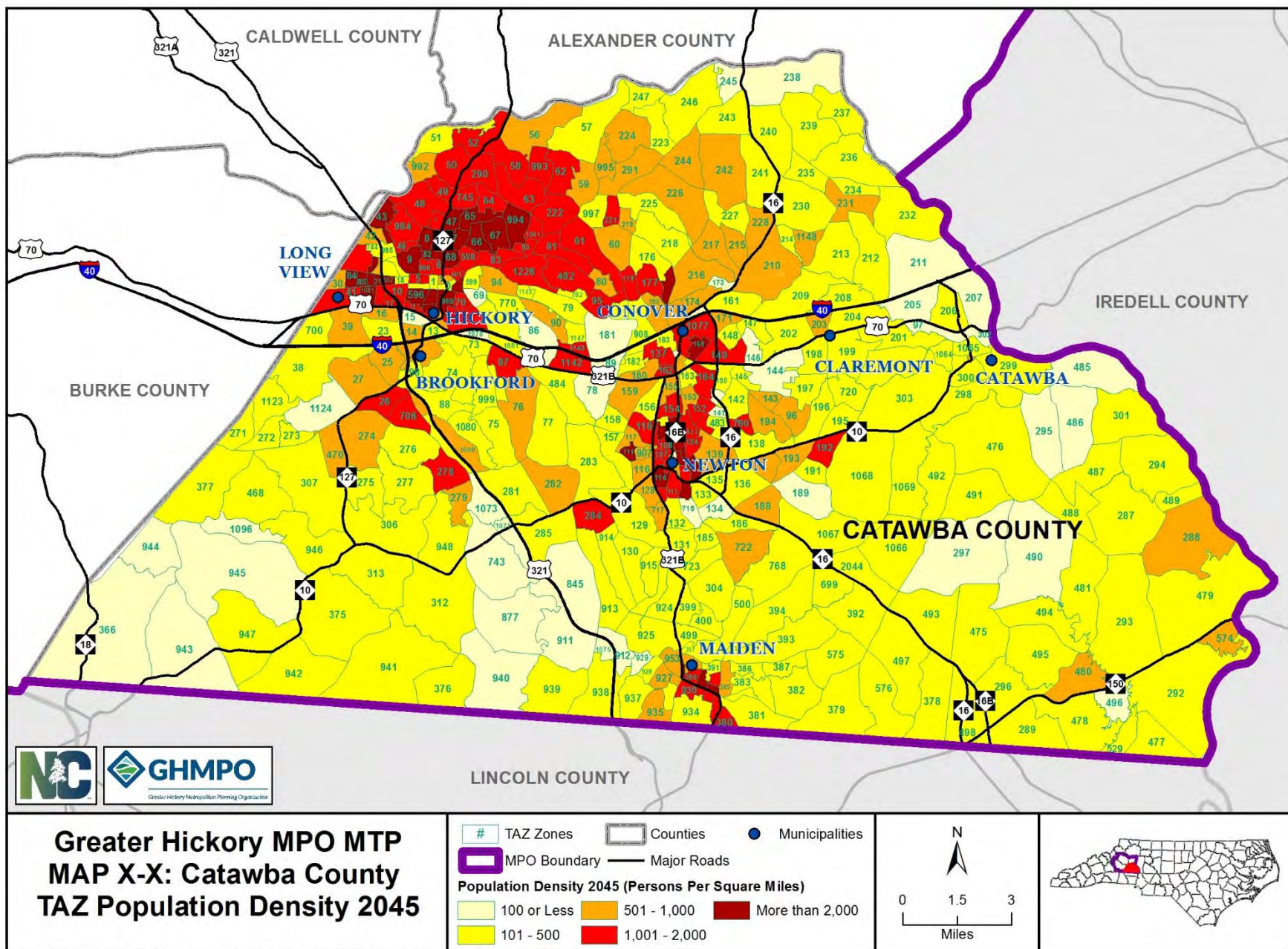


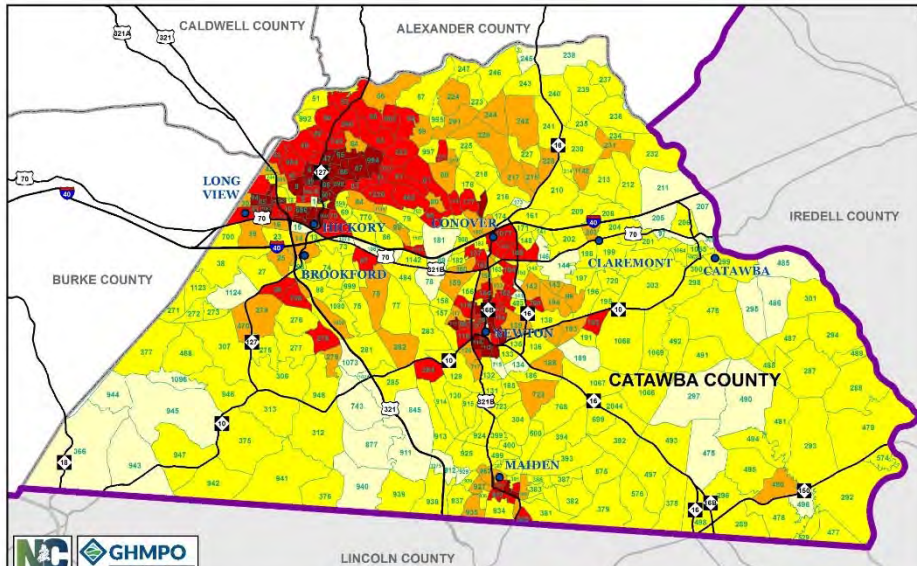


Document Path: Z:\wpcog_projects\MPO\GHMPO_MTP\Maps\Future_Population_Maps\CatTAZPop2015.mxd



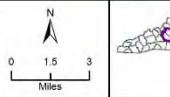
Document Path: Z:\wpcog_projects\MPO\GHMPO_MTP\Maps\Future_Population_Maps\CatTAZPop2045.mxd



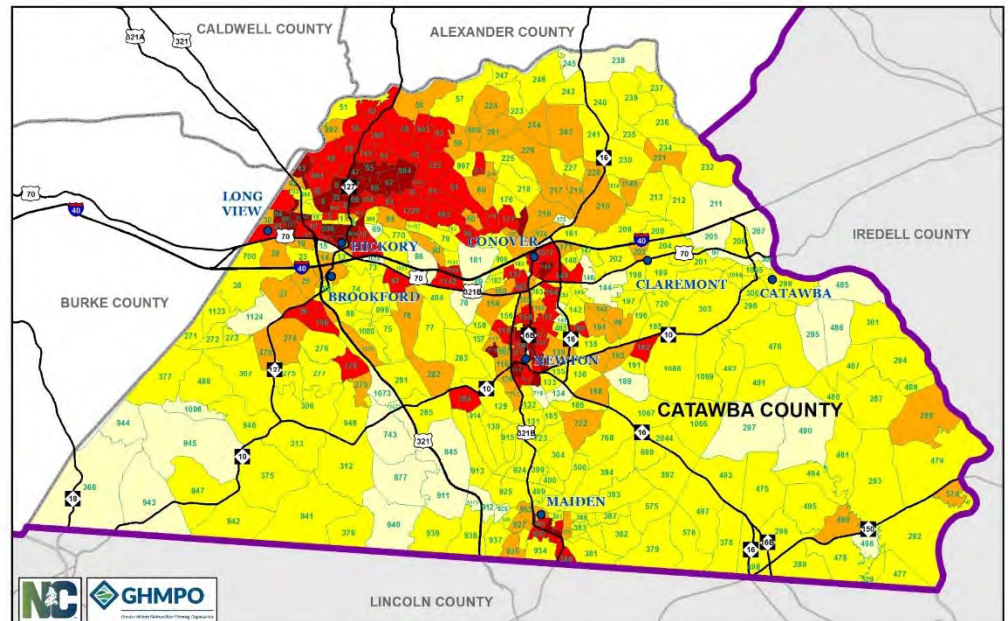


**Greater Hickory MPO MTP
MAP X-X: Catawba County
TAZ Population Density 2015**

■ TAZ Zones □ Counties ● Municipalities
 ■ MPO Boundary — Major Roads
 Population Density 2015 (Persons Per Square Miles)
 100 or Less 501 - 1,000 More than 2,000
 101 - 500 1,001 - 2,000



Document Path: Z:\wproj\projects\MPO\GHMPO_MTP\Maps\Population_Maps\CatTAZPopDensity2015.mxd

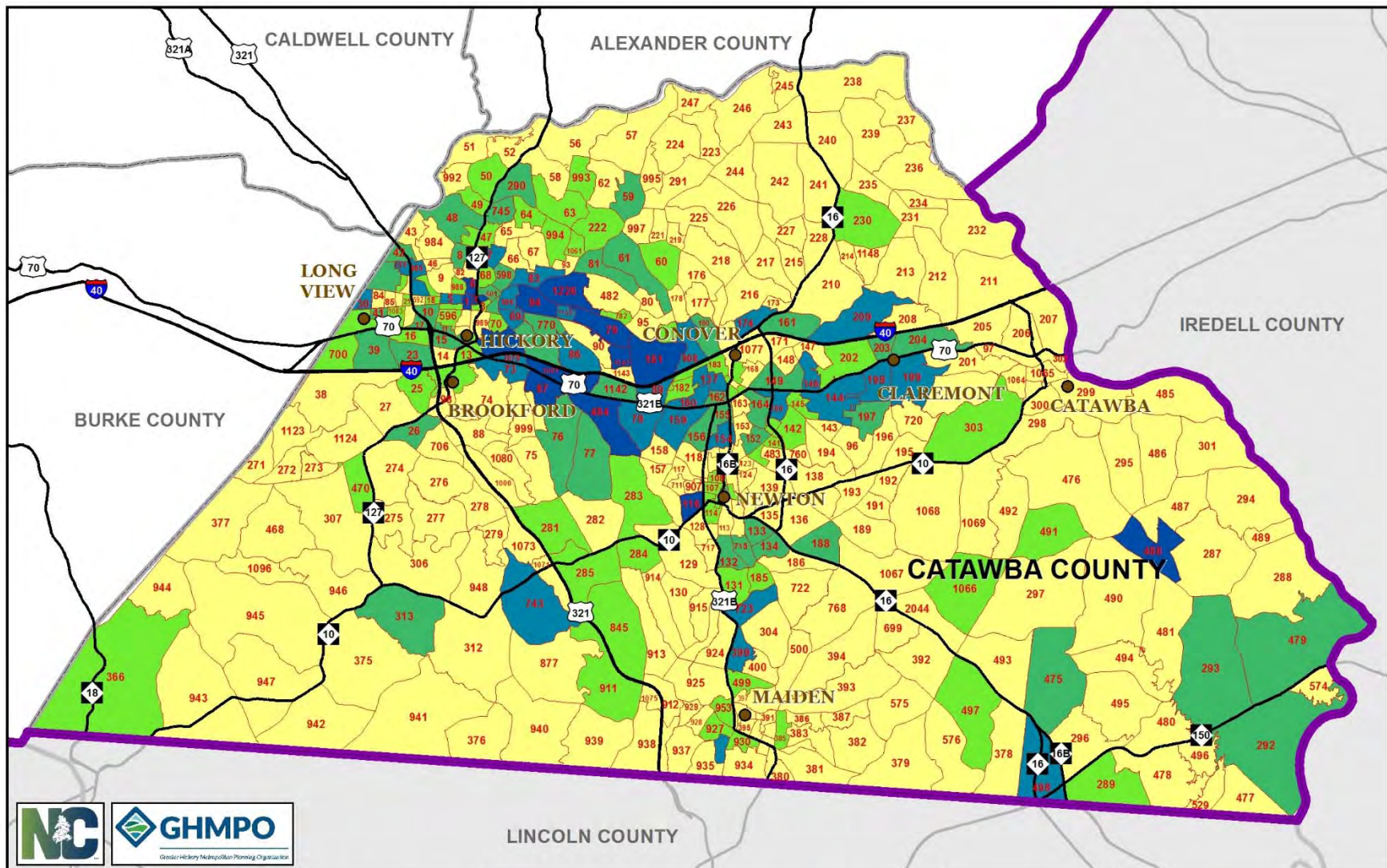


**Greater Hickory MPO MTP
MAP X-X: Catawba County
TAZ Population Density 2045**

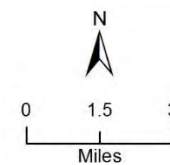
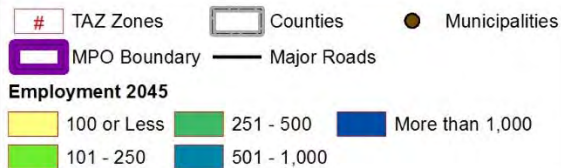
■ TAZ Zones □ Counties ● Municipalities
 ■ MPO Boundary — Major Roads
 Population Density 2045 (Persons Per Square Miles)
 100 or Less 501 - 1,000 More than 2,000
 101 - 500 1,001 - 2,000

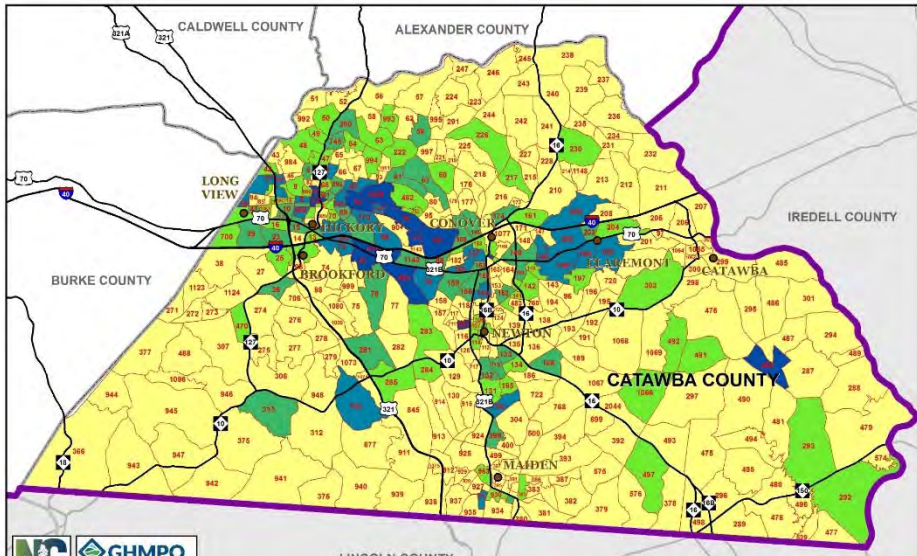


Document Path: Z:\wproj\projects\MPO\GHMPO_MTP\Maps\Population_Maps\CatTAZPopDensity2045.mxd



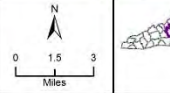
Greater Hickory MPO MTP MAP X-X: Catawba County TAZ Employment 2045



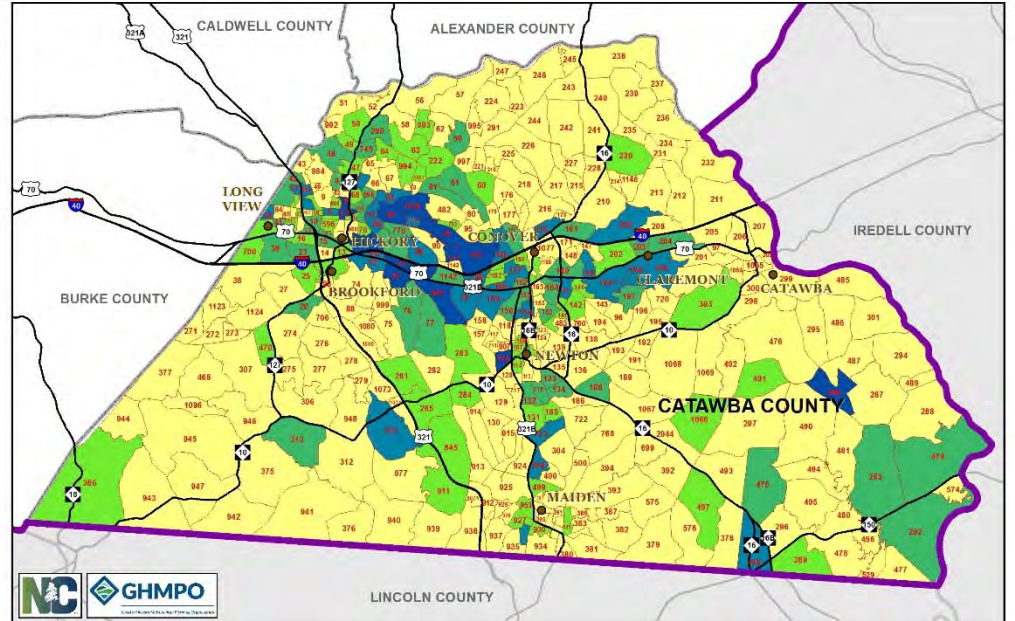


**Greater Hickory MPO MTP
MAP X-X: Catawba County
TAZ Employment 2015**

■ TAZ Zones ■ Counties ● Municipalities
 ■ MPO Boundary — Major Roads
 Employment 2015
 ■ 100 or Less ■ 251 - 500 ■ More than 1,000
 ■ 101 - 250 ■ 501 - 1,000

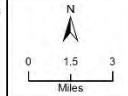


Document Path: Z:\wpos_projects\MPO\GHMPO_MTP\Maps\Employment_Maps\Cat\AZEmp2015.mxd



**Greater Hickory MPO MTP
MAP X-X: Catawba County
TAZ Employment 2045**

■ TAZ Zones ■ Counties ● Municipalities
 ■ MPO Boundary — Major Roads
 Employment 2045
 ■ 100 or Less ■ 251 - 500 ■ More than 1,000
 ■ 101 - 250 ■ 501 - 1,000



Document Path: Z:\wpos_projects\MPO\GHMPO_MTP\Maps\Future_Employment_Maps\Cat\AZEmp2045.mxd

Traffic Analysis Zone (TAZ) Results

2045 Population and Housing Estimates

County	2045 Housing Units	2045 Households	2045 Population in Households	2045 Group Quarters Population	2045 Total Population
Alexander	17,683	15,702	39,151	1,249	40,400
Burke	43,919	36,584	89,231	3,546	92,777
Caldwell	41,103	35,154	86,443	988	87,431
Catawba	75,406	66,500	165,932	2,609	168,541
Greater Hickory MPO	178,111	153,940	380,757	8,392	389,149

Traffic Analysis Zone (TAZ) Results

2015 and 2045 Population and Housing Counts

County	2015 Housing Units	2045 Housing Units	Housing Unit Chg. 2015- 2045	% Housing Unit Chg. 2015- 2045	2015 Total Pop.	2045 Total Pop.	Pop. Chg. 2015- 2045	% Pop. Chg. 2015- 2045
Alexander	16,492	17,683	1,191	8.3%	38,305	40,400	2,095	5.5%
Burke	41,533	43,919	2,386	5.7%	89,139	92,777	3,638	4.1%
Caldwell	38,209	41,103	2,894	7.6%	82,397	87,431	5,034	6.1%
Catawba	69,256	75,406	6,150	8.9%	156,182	168,541	12,359	7.9%
Greater Hickory MPO	163,965	178,111	14,146	8.6%	366,023	389,149	23,126	6.3%

Traffic Analysis Zone (TAZ) Results

2045 Employment

County	2045 Industrial Employ.	2045 Retail Employ.	2045 Highway Retail Employ.	2045 Service Employ.	2045 Office Employ.	2045 Special Generator Employ.	2045 Total Employ.
Alexander	3,561	1,440	566	3,257	881	0	9,705
Burke	8,163	4,014	2,744	10,785	3,589	4,484	33,779
Caldwell	7,909	3,858	2,409	9,502	2,323	1,378	27,379
Catawba	24,390	11,961	7,978	28,475	6,302	5,537	84,643
Greater Hickory MPO	44,023	21,273	13,697	52,019	13,095	11,399	155,506

Traffic Analysis Zone (TAZ) Results

2015 and 2045 Employment Counts

County	2015 Total Employment	2045 Total Employment	Employment Change 2015-2045	Employment Change 2015-2045
Alexander	9,258	9,705	447	4.8%
Burke	32,313	33,779	1,466	4.5%
Caldwell	24,949	27,379	2,430	9.7%
Catawba	79,252	84,643	5,391	6.8%
Greater Hickory MPO	145,772	155,506	9,734	6.7%



GHMPO

Greater Hickory Metropolitan Planning Organization