

3. Catawba County – Population, Land Use and Traffic

Catawba County is located in the western part of the state in the foothills of the Blue Ridge Mountains (Figure 3-1). The County covers 405 square miles sharing its boundary with five other counties: Alexander and Caldwell to the north, Burke to the west, Lincoln to the south and Iredell to the east. The topography is gently rolling except for land immediately adjacent to streambeds where slopes in excess of 15% may be found.

The County Seat is the City of Newton. It is one of the 3 larger cities in the County, with the other two being Hickory and Conover. Other cities and towns in the County are Brookford, Catawba, Claremont, Long View and Maiden. Overall, approximately one-third of the county was considered as urban and this area has been expanded rapidly in the last couple of decades. In 1980, the Hickory-Newton-Conover area was designated as one of fifteen urbanized areas in the State of North Carolina. The Hickory area now ranks 7 of 14 in terms of population among North Carolina's urbanized areas.

Most of the industrial, commercial and business activity in the County is located in the vicinity of the Hickory-Newton-Conover Urban Area. However, some of the major industries are also located in smaller towns scattered throughout the County. As the central county of North Carolina's fourth largest Metropolitan Statistical Area (MSA), Catawba County has successfully diversified and balanced its traditional manufacturing base of furniture, textile, and telecommunications. However, the recent layoff of the employment within these sectors has been a challenge to the manufacturing base that has benefited the County's economy. Comprehensive efforts are being directed at identifying and recruiting new sectors in manufacturing such as biomedical, pharmaceutical, technology and building products, and identifying and recruiting non-manufacturing sectors such as retirement and retail development.

The principal east-west arteries in the County are I-40 and US 70. US 321 is the north-south principal arterial. Other major highways in the County are US 321 Business, NC 127, NC 150, NC 18, NC 16 and NC 10. Southern Railway provides freight service to industries in the area. Private air service is available at the Hickory Regional Airport.

Population Trends

The magnitude of traffic on a particular roadway section is a function of the size and location of the population it serves. An analysis of the past and present population trends provided the basis for projecting the future population and traffic. Table 3-1 shows the historical and projected population trends for Catawba County through 2025.

Table 3-1
 Historical and Projected Population Trends in Catawba
 County

Year	Population	Change	% Annual Growth Rate
1940	51,653		
1950	61,794	10,141	1.8
1960	73,191	11,397	1.7
1970	90,873	17,682	2.2
1980	105,208	14,335	1.5
1990	118,821	13,613	1.2
2000	142,488	23,667	1.8
2005	149,032	6,544	0.9
2025	185,911	36,879	1.1

During the period spanning 1940 to 1970 Catawba County's population grew at a fast pace, with an average annual growth rate ranging from 1.7% to 2.2%. By 1970, the County's population had increased by 43% to 90,873. During the 1970 to 1990 period, the annual population growth rate leveled off to 1.5% and 1.2 % respectively. The County's population still grew by 27,539 during this period. The combination of migration from other parts of the country, and a good overall economy brought the population growth in the County back up to 1.8% in the 1990-2000 period. The effects of a slow down in the County's traditional industries will somewhat dampen future population growth. Nonetheless, with expectations of continued population growth fueled by migratory inflow, the County's population is still expected to grow at a pace of 1.1% annually during the projected 2005-2025 period.

Land Use

For transportation planning purposes, land uses are grouped into three broad categories: (1) Residential – all land devoted to the housing of the County's population, excluding hotels and motels; (2) Commercial – all land devoted to retail trade, business services, and offices; and (3) Industrial – all land devoted to manufacturing, assembly, warehousing and industrial offices. Mapping of existing land uses are shown in Figure

3-2 and projected 2025 land uses are shown in Figure 3-3.

Residential

Residential land uses comprise the largest percentage of the land area within the County's planning area. Housing density throughout the County's planning area is relatively low, with several exceptions including the Sherrills Ford community along Lake Norman, and the Mountain View community, which is currently located within the Greater Hickory MPO. Aside from these particular areas, housing has clustered in close proximity to major roadways and near the boundaries of the County's municipalities.

Catawba County anticipates similar residential growth patterns within the projected 2025 growth period. Such development is expected to develop at densities ranging from 1 unit per acre to 3 units per acre. However, the availability of physical infrastructure, namely public water and sewer, will greatly impact the rate and density of residential development. A number of large vacant tracts of property are currently available for development. Should water and sewer be provided, these properties could conceivably yield many more homes than initially anticipated. One specific area that may be outside the previously discussed projected residential densities is the Sherrills Ford community, where several large residential developments are in the initial planning stages that include upwards of 2,000 residential dwelling units.

Commercial

Much of the commercial development within Catawba County is located within its municipalities, which are part of the Greater Hickory MPO excluding the Towns of Maiden and Catawba. Commercial development within Catawba County, excluding the Greater Hickory MPO planning area, has occurred mainly along or at the intersections of major roadways. This is most noticeable along the NC 16, NC 150, NC 10, and US 321 corridors. In the east the intersection of NC 16 and NC 150 has recently seen a noticeable amount of new commercial development. The corridors of both roadways have also individually seen much new commercial growth feeding off the new residential development coming into southeastern Catawba County.

The Towns of Maiden and Catawba, which in 2000 were not part of the MPO, each contain large concentrations of commercial development. Much of the commercial development in Maiden is located either along Business US 321 or East Maiden Rd, while commercial development within the Town of Catawba is concentrated along NC 10.

In the central and southwestern portions of Catawba County commercial growth has followed similar patterns. Both US 321 Business and NC 10 have concentrations of commercial development, which has the tendency to coalesce at new interchanges and intersections. The County also anticipates increases in small-scale commercial growth at its defined rural commercial nodes in the southwest portion of the county. Such nodes are defined through the comprehensive planning process and are typically located at

historical commercial intersections, or at future proposed intersections.

Future commercial growth within Catawba County is expected to follow similar trends, as can be observed in Figure 3-3. Such growth is expected to expand along NC 10 in the southwestern portion of the County, as well as along NC 150 in the southeast. Commercial growth is also expected to expand at intersections of major roadways, with the intention of providing convenience goods and services to nearby residential areas. A potential major commercial development along NC 150 at its intersection with Slanting Bridge Rd is currently in its early planning stages. The development is proposed to consist of large commercial and office uses, as well as residential uses (please refer to Figure 3-3).

Industrial

The vast majority of industrial development located within the planning area of Catawba County is located along Business US 321 (see Figure 3-2). In addition to this noticeable concentration, smaller industrial concentrations are present along NC 10. Industrial growth over the planning horizon is anticipated to occur along the US 321 corridor and within the area surrounding I-40 near the Catawba County – Iredell County line; both of which are located within the Greater Hickory MPO. Some large industrial employers are also located within the Town of Maiden which in the year 2000 was not part of the MPO. In Maiden industrial development is concentrated along Business US 321.

Other major industrial locations include Duke Power's Marshall Steam Station and a number of other industries in the southeast. Several large facilities owned by CommScope in the eastern part of the County, and numerous rural industrial uses in the southwestern part of the county.

Traffic

A comparison of 1989 and 2000 annual average daily traffic (ADT) volumes on selected major roads and highways in Catawba County are shown in Figure 3-4. Also shown are projections for the year 2025, assuming no changes to the existing street system is made. These projections were based on historical and anticipated population and economic growth patterns, land-use and traffic growth trends and anticipated automobiles and trucks growth.

Motor vehicle registration for 2000, 1989, 1985, 1982 and 1978 are given in Table 3-2. Both automobile and truck registration suffered a dramatic decline from 1978 to 1982. This decline was the result of the gas crisis of the early eighties. From 1982 to 1985, registrations rebounded to the level that existed in 1978. Automobile and truck registrations have increased steadily since 1985. They are projected to grow at an annual rate of 1.0% and 1.5% respectively between 2000 and 2025.

Table 3-2
Historical and Projected Autos & Trucks in
Catawba County

Year	2025	2000	1989	1985	1982	1978
Autos	153,103	119,238	75,828	64,372	58,779	66,659
Trucks	55,397	38,180	28,659	22,205	19,706	21,507