

### Chatham County

Chatham County's Land Use Development Plan calls for a pro-active approach to land development and conservation that reflects balanced growth. The county strives to preserve the rural form and character of the land, and plans to attain this goal through the promotion of compact communities with mixed use development, and the use of density to protect open space and farm land. The plan encourages shops and offices to be sited within "neighborhood activity centers" of compact community corridors and designated "cross-roads commercial" centers for rural areas. The county also promotes the integration of "schools into neighborhoods, ensuring good road access, safety and utility availability," as well as new development nearby. The plan also calls for regular review and revision of roadway design standards, in order to ensure that the transportation system continues to complement the land use. Transit service, especially along the 15-501 corridor, and bicycle and pedestrian facilities will be a priority with new development sited in areas to be served by future transit.

Based on the Land Use Development Plan, the areas expected to experience the greatest population and employment growth include those adjacent to the Town of Pittsboro, US 15-501, and NC 87, and in the northeast section next to the Town of Cary.

### Durham City and County

Durham City/County's Durham 2020, adopted in December 1995, calls for a "sustainable community that is distinctive within the Triangle region," and promotes an efficient, distinctive and attractive pattern of land uses. The plan calls for a well-integrated network of streets, transit services, pedestrian walkways and bicycle facilities to allow safe and efficient movement of people and goods throughout the community." This original plan was supplemented by the 1992 study Land Use and Transportation in Durham.

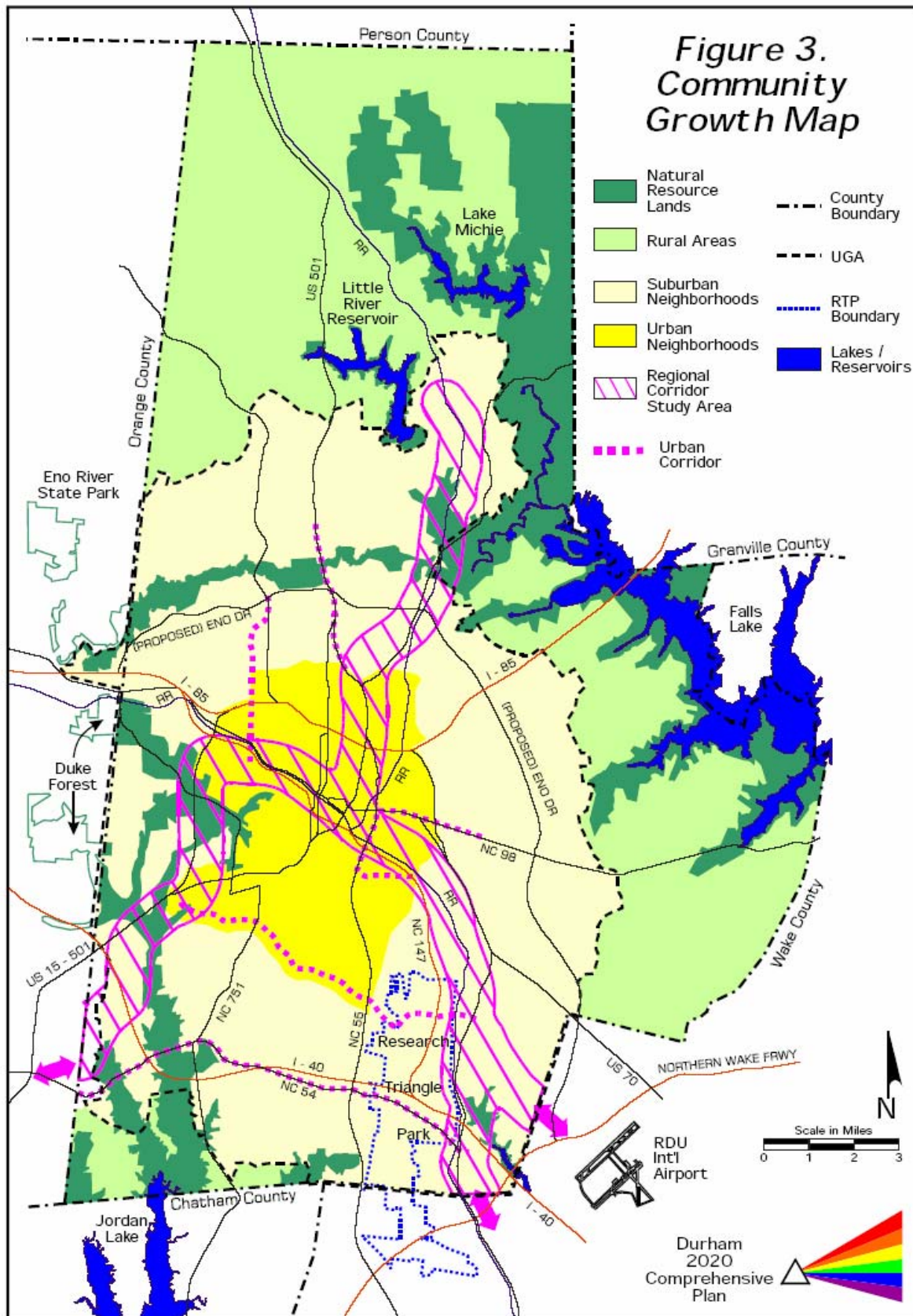
Durham 2020 and several small area plans referenced by the document specify future land uses and the Urban Growth Area Boundary (UGA). Figure 10, Community Growth Map depicts these future land uses. The UGA affects land development by designating the existing and future areas for services such as water and sewer. As a result, the greatest residential growth is likely to occur in an area of northeast and southeast Durham that lies east of US 70 and west of the UGA. To a lesser extent, an area that lies south of the northern extent of the UGA will experience substantial residential growth, as well. These areas, the I-40 and NC 54 corridors, and RTP area are likely to experience fast employment growth.

All elements of the vision plan will be revised and updated in Durham's new Comprehensive Plan, expected to be adopted in mid-2005. A complementary Unified Development Ordinance, or UDO, will soon follow the Comprehensive Plan update with legal requirements for implementation of planning goals.

### Town of Hillsborough

Hillsborough's Vision 2010, adopted in 1991 and revised in 1998, calls for a community that preserves its historic, natural and cultural resources; supports a central downtown core; maintains a "manageable scale" through the discouragement of sprawl; and creates a transportation system that offers convenience, safety, interconnectedness, and choices. Hillsborough envisions a pedestrian-friendly transportation network with a traditional grid street pattern and attractive streetscapes with minimal setbacks and rear-to-store parking in commercial districts.

Figure 10



The town plans to achieve these elements by discouraging strip shopping centers, instead encouraging pedestrian-scale retail opportunities; restricting isolated residential development with gated entryways and limited access; considering the location of new non-residential development in terms of impacts on the transportation system when reviewing zoning and development plans, encouraging compatible neighborhood business to reduce the need for cross-town travel, and promoting development in the denser northern area of town.

Figure 11, the Vision 2010 future land use map, designates general areas for development. The areas on the east, west and south parts of the Town that are immediately adjacent to currently developed land are the most likely to experience the most residential growth in the Town of Hillsborough.

### Orange County

Orange County's Land Use Element of the 1981 Comprehensive Plan, revised most recently in 2003, calls for preservation of the county's rural character and emphasizes agriculture and water quality as the two most important issues within the community. The Plan cites loss of farmland as a major concern, and recognizes the impact of transportation on the county's changing land use patterns, especially the suburban sprawl encouraged by certain roadway types and features. Though the County wishes to provide outlying services to rural residents, it prefers not to encourage large commercial stretches along heavily-traveled roads. In order to plan properly, the county set a policy that all roadways should be classified according to their existing condition and planned future function, and the inventory should be updated regularly for the purpose of planning and programming.

Figure 12, the Land Use Element of the Orange County Comprehensive Plan, designates future land uses. The ten- and 20-year growth transition areas will likely experience the most intense residential and employment growth. These areas tend to be located along the I-85, I-40 and US 70 corridors, especially in areas that are adjacent to the Town of Hillsborough. There are also growth transition areas immediately north of the Towns of Carrboro and Chapel Hill.

### Other Plans

In addition to aiding the coordination among local government planning staff, the MPO considers the holistic regional implications of our transportation system on land-use. Many recent small area and corridor studies have been conducted to assess local land use and environmental sensitivity and seek appropriate transportation solutions for diverse local areas. Some of these studies include:

- NC 54/I-40 Transit Corridor Study;
- US 15-501 Major Investment Study;
- I-40 HOV/Congestion Management Study; and,
- Triangle J Council of Governments Regional Development and Mobility Principles Study.

### Triangle Regional Model

Travel demand models forecast the level, mode and location of future travel. The Triangle Regional Model (TRM) is a state-of-practice travel demand forecasting model used to develop estimates of average weekday travel conditions in future years. The model generates summary statistics indicating vehicle miles traveled, vehicle hours traveled, degree of traffic congestion, number of trips taken by travel mode, and transit ridership. The model also computes trip statistics for each of approximately 2,300 traffic analysis zones (TAZs), categorized by mode, general trip purposes, and destination zone. Finally, the model computes roadway statistics related to traffic volume and congestion for each of 11,000 modeled links (in 2002) and on 21,000 links (in 2030) – a link is a section of roadway. The traffic volume and level of congestion roadway statistics are the basis for the deficiency maps presented elsewhere in this report. Statistics generated from



Figure 11: Town of Hillsborough Vision 2010

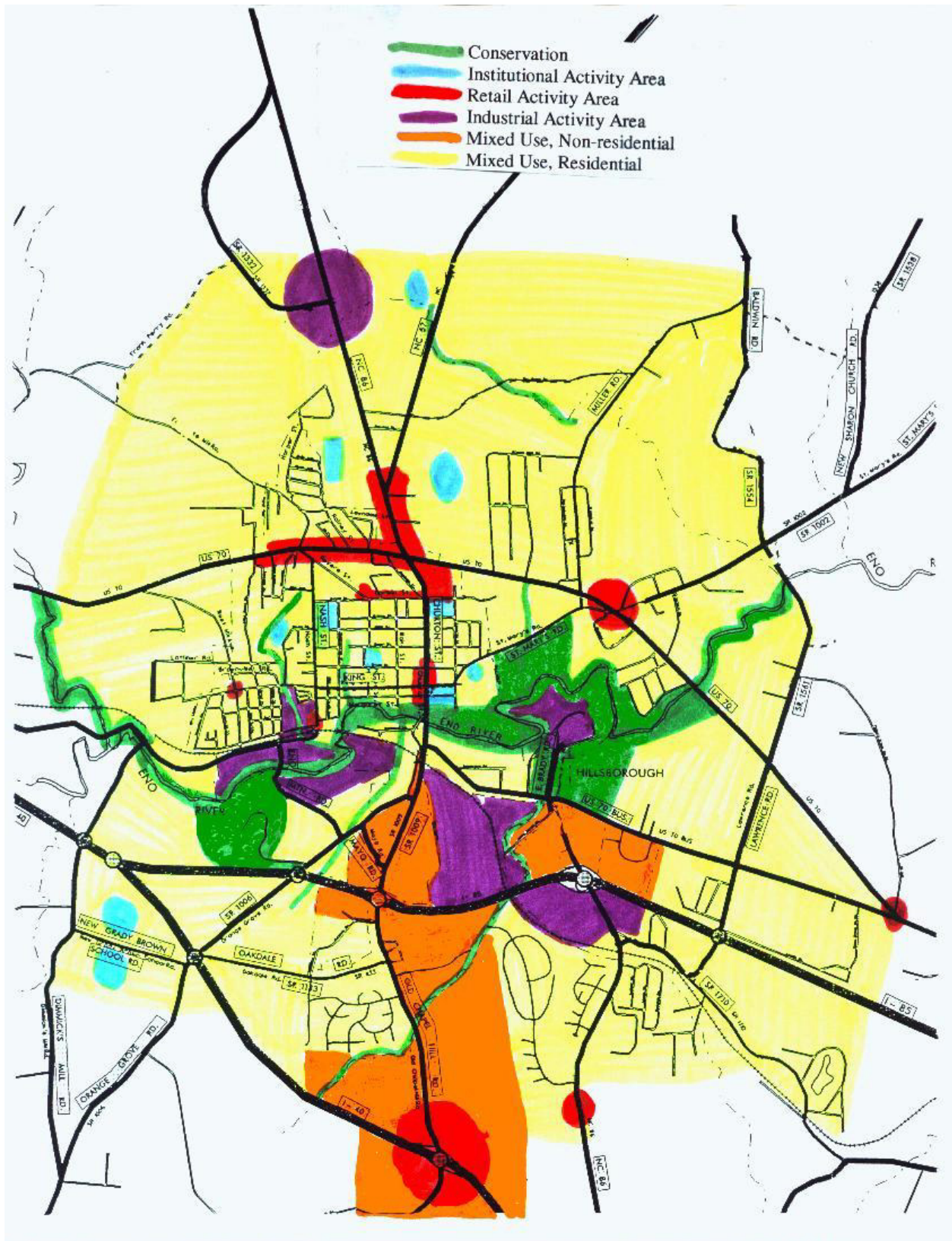
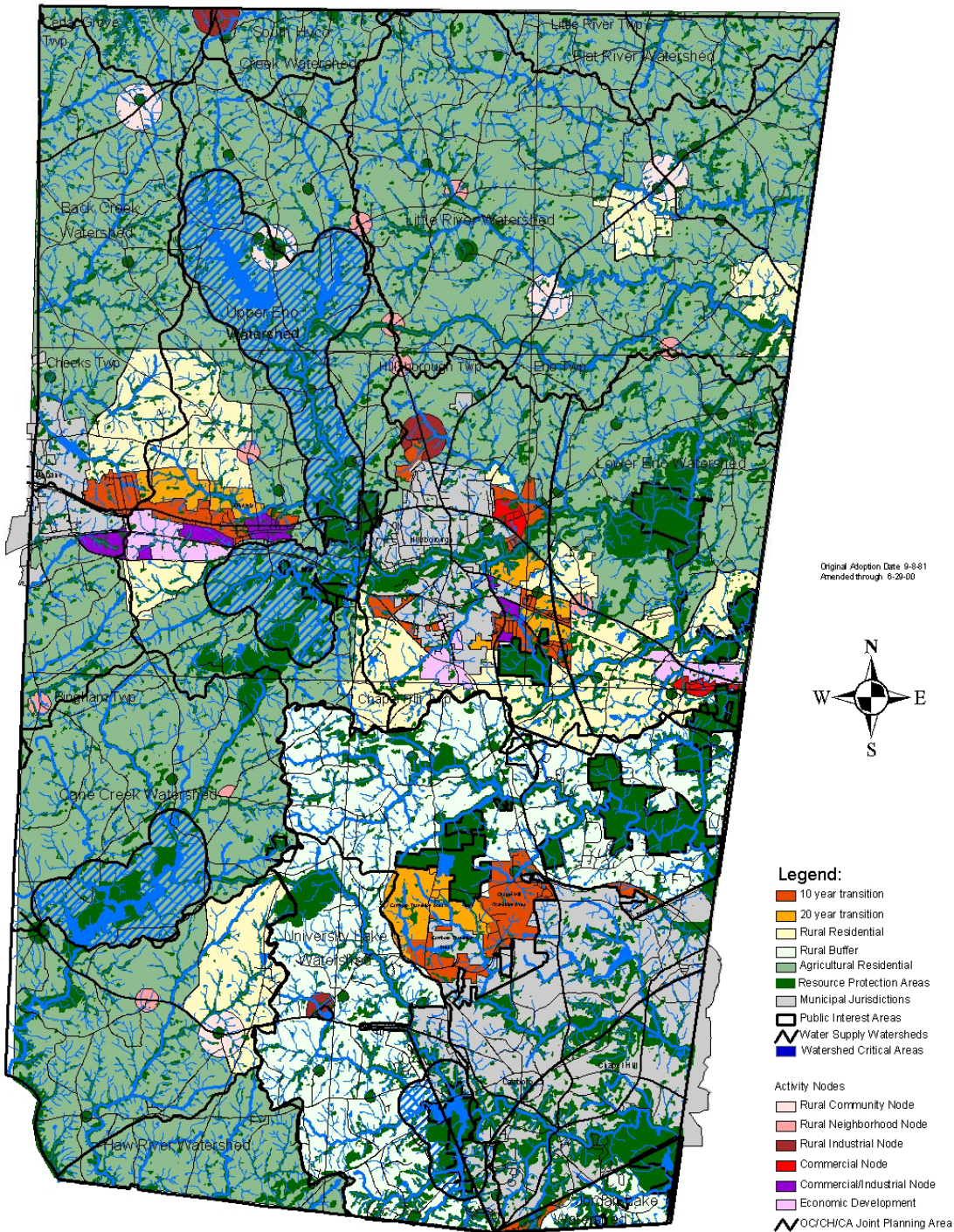




Figure 12

# LAND USE ELEMENT

## of the Orange County Comprehensive Plan



GIS map prepared by Miriam Coleman, Orange County Planning Department, 1/31/03  
(Produced in ArcView 8 from original in ArcView 3)