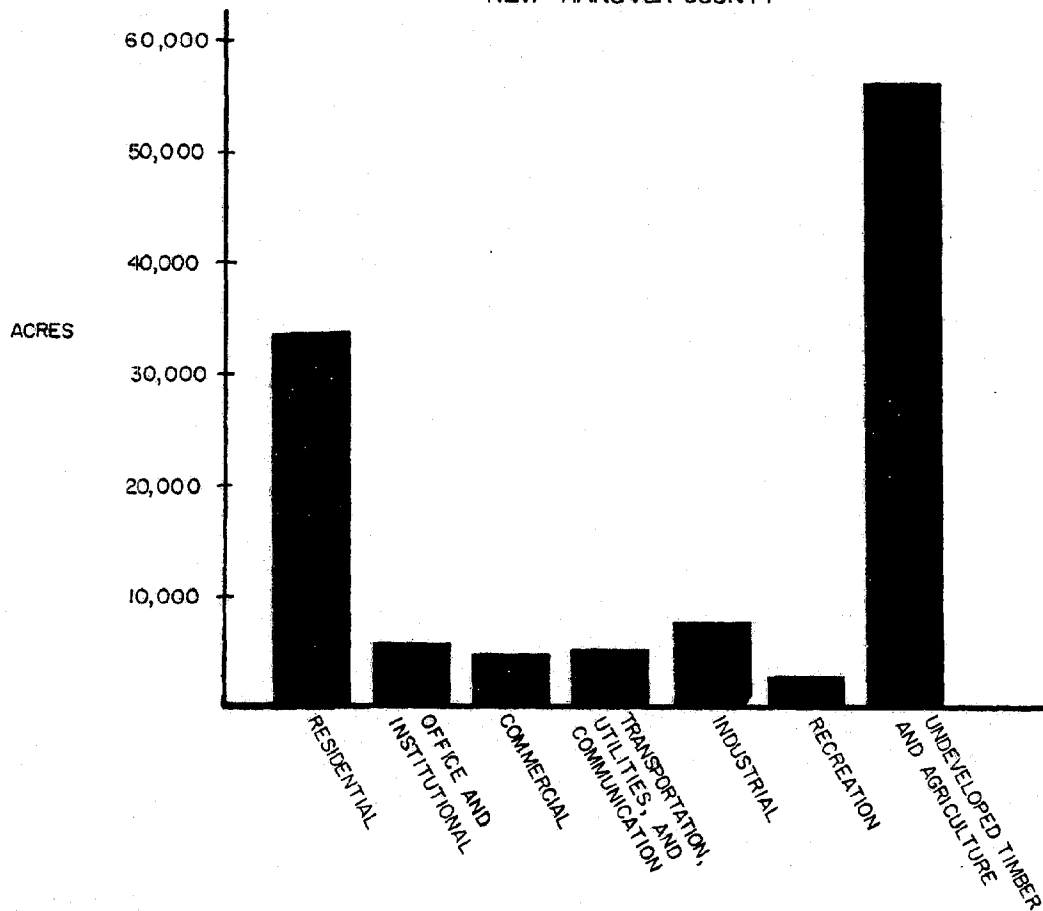

LAND-USE SURVEY AND ANALYSIS NEW HANOVER COUNTY

1985 LAND-USE STATISTICS
NEW HANOVER COUNTY



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CAMA LAND USE PLAN UPDATE

Report No. 3A

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1986 Wilmington - New Hanover County Land Use Plan Update

LAND USE SURVEY AND ANALYSIS:

NEW HANOVER COUNTY

August, 1985

Prepared by the New Hanover County Planning Department

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EXISTING LAND-USE IN NEW HANOVER COUNTY

I. PURPOSE

The purposes of this report are

- (1) to present statistics on existing land-uses in the unincorporated area of New Hanover County and the City of Wilmington.
- (2) to describe a system that can be used to update these statistics on a regular basis.

Color-coded land-use maps have been prepared on property maps (1"=400') for both the City and unincorporated County, and are available for review at the respective Planning Departments.

II. EXISTING LAND-USE STATISTICS

Table 1 summarizes land-use statistics in 1985 and 1980 for the combined area of New Hanover County and the city of Wilmington. It should be noted that several difficulties exist in performing this type of analysis, which can reduce the comparability and accuracy of the results. These difficulties include:

- (1) Human judgement in assigning the proper land-use Code and in interpreting whether or not a parcel is developed or undeveloped, e.g. a two-acre lot with one house may be considered to be fully developed even though additional lots may be subdivided in the future.
- (2) Differences in methodology for calculating statistics in 1980 and 1985. These methodologies are discussed in Appendix One.

The statistics presented in Table 1 indicate significant growth in the County between 1980 and 1985. Total developed land increased from 34,640 acres in 1980 to 57,413 acres in 1985. Although this increase may be overstated due to the reasons mentioned above, this large increase does reflect the County's rapid population growth and its growing position as a regional economic center. This increased development in the unincorporated County and the City of Wilmington generally appears to have occurred for all land-uses, ranging from residential to commercial to industrial.

The statistics for New Hanover County are comparable to published surveys of land-use for other cities and towns in the United States. Table 2 compares New Hanover County's statistics for 1985 with land-uses for 22 small cities and with 46 large cities. The 22 small cities ranged in population from 7,739 to 41,397 and the large cities from 284,413 to 7,071,030.

The results of Table 2 indicate that approximately 50% of urban developed land is used for residential purposes. In addition, approximately 8% is used for commercial development. The figure of 8% is greater than the 1960's estimate of 2-5% reported in the 1968 edition of Principles and Practices of Urban Planning, possibly reflecting the trend toward large, sprawling retail stores versus traditional multi-level, downtown shopping areas. Although not shown, it should be noted that streets, parking, and railroad rights-of-way may occupy one-fifth of total developed land in urban areas.

Table 3 provides a breakdown of existing land-use statistics for 1985 for the separate areas of the unincorporated County and for the City of Wilmington. Although it is difficult to be completely accurate with these results due to previously discussed factors, it appears that the unincorporated County is more predominantly residential than the City, while the City has a heavier concentration of office and institutional, commercial, transportation, utilities, and communication uses than the County. It is also interesting to note that the County has a greater percentage of land devoted to industrial use than does the City, reflecting the large areas occupied by the County's operations, the General Electric plant, and industries along U.S. 421. More information on existing land-use in the City is available from the City Planning Department in a separate report titled, "Wilmington, N.C., 1985 Land-Use Survey".

III. SYSTEM FOR UPDATING STATISTICS AND MAPS

Existing land-use statistics and maps can serve as valuable data bases in controlling and directing growth in the County, including the evaluation of specific development proposals, rezoning requests, or Land-Use Plan amendments. These data bases can be further increased in value if maintained and updated on a regular basis in order to facilitate timely analysis.

The County and the City of Wilmington have recently initiated the development of a computerized Management and Planning Information System (MAPS). MAPS will be utilized in developing, storing, and retrieving a shared, integrated geographic data base for public agency use within the City and County. MAPS will aid in mapping and geoprocessing related to public projects, public utilities, operations, and functions.

MAPS hardware will consist of a central processing unit and both local and remote graphics workstations. Each workstation will include a single or combination of screens capable of displaying several graphics views and text simultaneously. Certain workstations will also include a digitizer and printer. MAPS software will be a general purpose, multitasking system capable of supporting concurrent use of the system. The software will include graphics, data base management and plotter output software.

The MAPS hardware and software will easily allow for development of computerized maps for such aspects as existing land-use, and for computerized area calculations of land-uses. It will be further possible to combine or overlay various geographic aspects, such as determining the number of acres of commercial uses within the 100 year flood plain.

Contracts have been let and funds allocated to obtain the MAPS hardware and software, and to digitize geographic information. It is anticipated that MAPS will be in operation by July, 1986. Once in operation, MAPS will be able to provide updated land-use statistics and maps as needed.

TABLE 1
 LAND-USE STATISTICS FOR THE COMBINED AREA OF THE
 UNINCORPORATED COUNTY AND THE CITY OF WILMINGTON, 1980 and 1985

| LAND-USE | 1980 | | 1985 | |
|---|---------------|------------------------|---------------|------------------------|
| | ACRES | % of DEVELOPED LAND | ACRES | % of DEVELOPED LAND |
| Residential | 13,883 | 40.2% | 33,480 | 57.1% |
| Single-Family | 12,303 | 35.5% | 30,081 | 51.3% |
| Multi-Family | 658 | 2.0% | 1,451 | 2.5% |
| Mobile Homes | 922 | 2.7% | 1,948 | 3.3% |
| Office and Institutional | 1,523 | 4.4% | 5,127 | 8.7% |
| Commercial | 1,413 | 4.1% | 4,458 | 7.6% |
| Transportation, Utilities, Communication | 4,160 | 12.0% | 4,694 | 8.0% |
| Streets and Railroads | 7,480 | 21.6% | 1/ | 1/ |
| Industrial | 4,681 | 13.4% | 8,529 | 14.6% |
| Intensive | 280 | 0.8% | 526 | .9% |
| Extensive | 3,526 | 10.2% | 7,500 | 12.8% |
| Wholesaling, Warehousing | 875 | 2.5% | 503 | .9% |
| Recreation | 1,500 | 4.3% | 2,351 | 4.0% |
| TOTAL DEVELOPED | 34,640 | 100% | 58,639 | 100% |
| Undeveloped Timber and Agric. | 78,082 | — | 57,413 | — |
| Water | 19,493 | — | 19,493 | — |

1/ Streets and railroads are not listed as separate uses.

TABLE 2

Land-Use Comparisons of New Hanover County with
 22 Small Cities and with 46 Large Cities
 in the United States
 (% of Developable Land)

| <u>Land-Use</u> | <u>New Hanover County (1985)</u> | <u>Small Cities</u> | <u>Large Cities</u> |
|-----------------------------|--------------------------------------|-------------------------|-------------------------|
| Residential | 57.1% | 48% | 48% |
| Commercial | 7.6% | 7% | 9% |
| Office and Institutional | 8.7% | 13% | NA |
| Industrial | 14.6% | 8% | 12% |

Source: Longhini, G., and M. Sutton,
 May, 1983, "Land-Use Ratios", APA Planning
 Advisory Service, Memo 83-5.

TABLE 3
1985 Land-Use Statistics for the City of Wilmington
and the Unincorporated County

| <u>Land-Use</u> | <u>City of Wilmington</u> | | <u>Unincorporated County</u> | | <u>TOTAL</u> | |
|---|---------------------------|--------------|------------------------------|--------------|----------------|--------------|
| | <u>Acres</u> | <u>%</u> | <u>Acres</u> | <u>%</u> | <u>Acres</u> | <u>%</u> |
| Residential | 5,471 | 39.9% | 28,009 | 62.3% | 33,480 | 57.1% |
| Single-Family | 4,484 | 32.7% | 25,597 | 57.0% | 30,081 | 51.3% |
| Multi-Family | 987 | 7.2% | 464 | 1.0% | 1,451 | 2.5% |
| Mobile Homes | 2/ | 2/ | 1948 | 4.3% | 1,948 | 3.3% |
| Office and Institutional | 1,417 | 10.3% | 3,710 | 8.2% | 5,127 | 8.7% |
| Commercial | 1,195 | 8.7% | 3,263 | 7.3% | 4,458 | 7.6% |
| Transportation, Utilities, Communication | 2,691 | 19.6% | 2,003/1 | 4.5% | 4,694 | 8.0% |
| Industrial | 1,264 | 9.2% | 7,265 | 16.2% | 8,529 | 14.6% |
| Intensive | 3/ | 3/ | 3/ | 3/ | 526 | .9% |
| Extensive | 3/ | 3/ | 3/ | 3/ | 7,500 | 12.8% |
| Wholesaling, Warehousing | 3/ | 3/ | 3/ | 3/ | 503 | .9% |
| Recreation | 1,691 | 12.3% | 660 | 1.5% | 2,351 | 4% |
| TOTAL DEVELOPMENT | 13,729 | 100% | 44,910 | 100% | 58,639 | 100% |
| Undeveloped, Timber and Agric. | 6,192 | — | 51,221 | — | 57,413 | — |
| Water | 511 | — | 18,982 | — | 19,493 | — |
| TOTAL | 20,432 | — | 115,113 | — | 135,545 | — |

1/ Does not include street and railroad rights-of-way (Information not readily available)

2/ Mobile home data included with single-family residential for Wilmington

3/ Breakdown of industry not available for City of Wilmington or unincorporated County

**APPENDIX ONE:
METHODOLOGIES**

1. METHODOLOGY FOR CALCULATING 1985 STATISTICS FOR THE COMBINED AREA OF THE UNINCORPORATED COUNTY AND THE CITY OF WILMINGTON.

Land use statistics for 1985 for the combined area of the unincorporated County and the City of Wilmington were calculated by a computer program. This program summed the parcel acreages for each land-use type specified in the County's PCS code, as listed in section three of this Appendix. This land-use information is maintained by the County Tax Department as part of its appraisal system. Acreage information was sometimes omitted in the computer files for parcels less than one acre. Therefore, an average figure of .625 ac/lot, based on a survey of lots without acreage information, was used to calculate land-use acreages for parcels without acreage information.

2. METHODOLOGY FOR CALCULATING 1985 STATISTICS FOR THE CITY OF WILMINGTON AND 1980 STATISTICS FOR THE COUNTY AND THE CITY

Land-use information, as specified in the PCS code described in section three of this report, was color-coded and transferred to property maps (1"=400'). The information was verified in the field and acreages of each land-use were then estimated and summed.

3. LISTING OF LAND-USES BY PCS CODE

As indicated in the Methodology, the codes assigned by the County Tax Office served as the basis for determining the existing use of each land parcel in the Planning Area. The following list represents the manner in which these codes were aggregated under the land use categories and sub-categories for the survey and analysis. The numbers shown are those used by the Tax Office for each land use.

Single Family Residential

- 01 - Family Residential
- 04 - Season Residential | Family
- 19 - Other Residential

Mobile Homes

- 10 - Mobile Home
- 14 - Mobile Home Park

Multi-Family Residential

- 02 - Family Residential
- 03 - 3 or more Family Residential
- 05 - Season Residential 2 + Family

Office and Institutional

- 61 - Finance & Real Estate
- 65 - Physicians and Dental Services
- 65A - Hospital Services
- 65B - Sanitoriums, Convalescent and Rest Home Services
- 65D - Other Medical and Health Services
- 65E - Legal Services
- 67 - Governmental
- 68 - Educational
- 69A - Religious Activities
- 69B - Religious Activities and Educational School
- 12 - Group Quarters

Commercial

- 52 - Retail - Building Materials, Hardware, and Farm
- 53 - Retail - General Merchandise
- 54A - Groceries - Retail Convenience Food
- 54B - Fish and Seafoods - Retail
- 54C - Other Retail Trade - Food
- 55 - Retail Auto
- 55A - Tires, Batteries, and Accessories - Retail
- 55B - Gasoline Service Stations
- 55C - Marine Craft and Accessories - Retail
- 55D - Marina - Marine Craft Docking and Services
- 55E - Retail Trade Auto, Marine Craft Aircraft, Accesories
- 56 - Retail Apparel
- 57 - Retail Home Furnishings
- 58A - Eating Place - Consumption on Premises
- 58B - Fast Food Service
- 58C - Drinking Place (Alcoholic Beverages)
- 13 - Residential Hotel
- 6 - Travel Trailer Park
- 73 - Amusements
- 84A - Sport Fishing
- 84B - Commercial Fishing
- 84C - Other Fishing and Related
- 62 - Personal Services
- 63 - Business Services
- 64 - Repair - Auto Services
- 66 - Contract Construction
- 59 - Other Retail
- 15 - Transient Lodging

Transportation, Communications, Utilities

- 41 - Rail Transit
- 42 - Motor Vehicles
- 43 - Aircraft
- 44 - Marine Craft
- 45 - Street Right-of-way
- 46 - Auto Parking
- 47 - Communications
- 48 - Utilities
- 49 - Other Transportation, Communication and Utility

Wholesale, Warehousing and Distribution

- 51 - Wholesale Trade

Industrial (Intensive)

- 21 - Food and Kindred
- 23 - Apparel and Similar
- 27 - Printing and Allied
- 34 - Fabricated Metal
- 35 - Professional, Scientific and Controlling Instruments
- 36 - Boat and Ship Construction
- 39 - Miscellaneous Manufacturing
- 84 - Fishery

Industrial (Extensive)

- 22 - Textile Mill
- 24 - Lumber and Wood
- 25 - Furniture and Fixtures
- 26 - Paper and Allied
- 28 - Chemical and Allied
- 29 - Petroleum, Refining and Related
- 31 - Rubber and Plastic
- 32 - Stone, Clay and Glass
- 33 - Primary Metal
- 85 - Mining and Related

Recreation

- 71 - Cultural or Nature Exhibition
- 72 - Public Assembly
- 74 - Recreational Activities
- 75 - Resorts and Camps
- 76 - Parks

Undeveloped and Agriculture

- 81 - Agriculture
- 82 - Agriculture Related
- 83 - Forestry and Related
- 91 - Unused Land
- 92 - Non-Commercial Forest

Miscellaneous ^{1/}

- 89 - Other Resource
- 69C - Other Services
- 79 - Other Cultural, Entertainment and Recreation
- 94 - Vacant Floors
- 95 - Under Construction

^{1/} Parcels in the Miscellaneous category were included in the appropriate land use category according to their individual use.

