

CHAPTER EIGHT

EXISTING LAND USE

Understanding how land is used in Dover, and how that pattern of use is changing, is a critical step in planning for the future of the Town. Trends and patterns in the way land is developed determine needs for public services, transportation improvements, and environmental protection. They also fundamentally affect the appearance and character of the community.

This chapter presents an inventory of land use in the Town and discusses how land use has changed since a previous inventory was undertaken in the 1970s. A discussion of land use trends and their implications concludes this chapter.

LAND USE SURVEY METHOD

During the fall of 1990, planners from the Dutchess County Department of Planning assembled a land use inventory of the Town. A driving and walking survey of every road in Dover was the primary source of information. Results were checked against property tax records and 1990 aerial photographs, particularly to locate mining operations, cropland, and isolated structures. Finally, a color-coded presentation map at 1"=1000' scale was produced using a generalized land use code.

The Dutchess County Department of Planning has devised a generalized land use classification system in order to make map codes consistent for all county planning projects. There are three residential color codes depending on density per acre, three commercial designations, codes for offices, industrial uses, extractive industries, transportation and communication facilities, public or quasi-public uses, recreation, water resources, vacant or inactive land, as well as separate codes for agricultural farmland and orchards. The complete classification system is outlined in Table 8.1.

Since the inventory was originally recorded on property tax maps, the land use map boundaries, for the most part, conform to property lines. However, some additional criteria were established to distinguish open space on larger parcels. For example, when houses were located on tracts of land more than twice as large as the minimum acreage for that lot under existing zoning, only the area surrounding the structure was designated residential. Larger public and quasi-public lands, such as the Harlem Valley Psychiatric Center, camps and property owned by private hunt clubs were outlined to show their overall boundaries, but left uncolored in areas that were substantially open and undeveloped. Commercial central business refers to commercial uses which are located within an established community center in a fairly compact pattern. Commercial and commercial strip businesses tend to be spread out in a more isolated, one-lot-deep pattern along major roads. Finally, home occupations or mixed use buildings were color-coded half residential-half commercial.

Table 8.1 LAND USE CODING SYSTEM, DUTCHESS COUNTY, NEW YORK

<u>CODE</u>	<u>DESCRIPTIVE LAND USE</u>
	RESIDENTIAL (Includes: boarding/rooming houses, mobile homes and mobile home parks, tourist homes, non-institutional group housing)
RH	High Density Residential (greater than 5 units per acre)
RM	Medium Density Residential (2-5 units per acre)
RL	Low Density Residential (less than 2 units per acre)
	COMMERCIAL (Includes: shopping centers, retail and wholesale businesses, banks, professional offices, resorts, hotels, motels, mini-warehouses, and personal business and professional services)
CU	Commercial Central Business
CC	Commercial Shopping Center
CS	Commercial and Commercial Strip
O	OFFICES
I	INDUSTRIAL (includes: manufacturing and warehousing)
EI	EXTRACTIVE INDUSTRY (includes: open and underground mining areas, oil and gas wells, abandoned mines and wells, soil and gravel quarries)
T	TRANSPORTATION, COMMUNICATION (includes: airports, utility and telephone substations, major road interchanges, large concentrations of railway, shipping or shipyard uses)
P	PUBLIC AND QUASI-PUBLIC (includes: postal services, churches, hospitals, public and private schools-all levels, federal, state, county and local government including ad hoc agencies, military services, health institutions, landfills, correctional facilities, non-profit organizations, museums, libraries and cemeteries.)
R	RECREATION (includes: golf courses, ski and other winter sport areas, parks, historic sites, multi-use areas, campgrounds-public and private, marinas/yacht clubs, public and private open space)
AC	AGRICULTURE (includes: dairy, horse, beef and other livestock farms, pastureland and cropland)
AO	AGRICULTURE-ORCHARDS (includes: orchards, vineyards, berry operations and specialty farms)
W	WATER RESOURCES (includes: natural and artificial ponds, reservoirs, streams and rivers)
V	VACANT LAND (includes: vacant land, open forest, brush and inactive agriculture)

DISTRIBUTION OF LAND USE

The results of the land use survey, as represented on the Existing Land Use Map, show that most of Dover is undeveloped. Vacant open or wooded land not devoted to crops, pasture, or any active use comprises the single most extensive land use category. Most of this land is located on East Mountain and West Mountain. Due to steep slopes and shallow soil constraints, much of this land is difficult or unsuitable for building. Where construction is possible, long driveways and new road systems would need to be developed. It should also be noted that substantial tracts of land outlined but coded as vacant are operated as camps by not-for-profit organizations and private hunting clubs.

By far, the dominant active land use in terms of number of parcels is residential. Many residential uses are low-density, single-family homes located throughout the Town along county and town roads. There are more concentrated sections of single-family homes on lots larger than five acres along the northwestern border off Holsapple and Ridge roads and in the southern section of the Town in the Duell Hollow area and along West Dover and Old Pawling roads.

Medium-density residential subdivisions are located in scattered sites throughout the Town, often intermixed with considerably smaller or larger lots. In the area east of the hamlet of Dover Plains a large number of houses in conventional subdivisions have been built upon what was once active farmland. The Pawling Lake development in the southwest corner of the Town can also be classified as medium-density residential use. High-density mobile home parks have been built in widely scattered locations. There are large mobile home developments in commercial areas south of Wingdale along Route 22, in Dover Plains, and in predominantly low-density residential areas. Other high-density uses are multi-family dwellings or single-family homes on very small lots, primarily in Dover Plains and southern Wingdale.

Commercial use in Dover is, for the most part, located along Route 22. There are strip commercial developments on the northern and southern edges of the hamlet of Dover Plains and in the hamlet of Wingdale. Concentrations of smaller businesses are located in the hamlets of Dover Plains and Wingdale and in the southern part of the Town near the Pawling border. The Webatuck Craft Village is located off Route 55 in eastern Dover. Various individual stores and home occupations are scattered throughout the Town.

Large scale industrial and mining uses are located at widely scattered sites throughout Dover. They include a large lumber company, a furniture factory, a modular homes manufacturing plant, a concrete block company, the now-vacant MICA complex, several extractive industrial operations and numerous active mines. Unlike many communities, there is no single area of concentration for industrial uses in Dover. Some of the extractive industries have mines located adjacent to residential areas.

Con Edison owns a transmission corridor which runs east-west through the central section of Dover. The Iroquois natural gas pipeline, also running mostly east-west, was completed in 1992. The 370-mile pipeline runs from Canada to Long Island. Approximately 39 miles of the pipeline runs through Dutchess County, 6.7 of which are in Dover.

A number of public and quasi-public uses are found throughout the Town. These include various government sites, five churches, cemeteries and the three public schools. The 957.5 acres of the Harlem Valley Psychiatric Center, as well as the large parcels of land privately run as camps and hunting and fishing clubs, are outlined in this category on the Existing Land Use Map to denote public and quasi-public ownership.

The largest individual religious and not-for-profit landholdings in this classification include the Boy Scout camp in the Duell Hollow area with approximately 624 acres, the New York City Mission Society camps with slightly over 300 acres, the Jewish Unity Camp with 294 acres, 283 acres of Seventh Day Adventist property, and the 189-acre Metropolitan Baptist Camp. The Preston Mountain Club owns 1,245 acres on East Mountain as a hunting preserve, while the Chestnut Ridge Rod and Gun Club on West Mountain owns over 1,000 acres, leases another 571 acres, and negotiates to use additional land in that area each year under the New York State Department of Environmental Conservation Cooperative Hunting Program.

Town-owned recreational land includes approximately 199 acres of existing town park property off Route 55 east of Wingdale, most of which is undeveloped, and two smaller park parcels east of Dover Plains--13.9 acres of land along the Ten Mile River which is currently vacant and a 5.8 acre site which has the town pool.

Recreational land also includes playing fields located on a 8.5 acre parcel of land, owned by the American Legion, adjacent to the town pool. The public golf course on the grounds of the Harlem Valley Psychiatric Center is state-owned but run by a private association. The state has indicated its intention to sell the course in order to raise revenue. A section of the Appalachian Trail crosses the southeast section of the Town from Duell Hollow Road to Preston Mountain Road into Connecticut. The federal government owns almost 450 acres of land along the trail and has purchased additional right-of-ways and easements to form a continuous route. One such easement and right-of-way is through a 262-acre preserve owned by The Nature Conservancy on the southern town boundary. The Nature Conservancy is also negotiating to purchase a 144-acre parcel containing Nellie Hill just south of Dover Plains.

Active agricultural land, as determined by the field survey and review of the 1990 aerial photographs, still involves significant acreage in Dover. Substantial concentrations of farmlands can be found on top of Chestnut Ridge in the northwest corner of the Town, in the broad north-south valley of the Ten Mile and Swamp rivers east of Route 22, and, to a lesser degree, in the southern section along West Dover Road (CR 20). The majority of this farmland appears to be devoted to hayfields and pastureland.

Water resources include the Ten Mile, Mill and Swamp rivers, Lake Ellis, Cedar Lake, Depression Pond, Crane Pond, Sharparoon Pond and Lake Weil and other lakes and ponds, including several smaller ponds created by mine reclamation, as well as numerous streams and brooks.

TRENDS IN LAND USE

A review of the aerial photograph series for Dover from 1938 to 1990 reveals significant changes in land use. Although not surprising, the degree to which agricultural uses have been reduced in the Town over the last 50 years is nonetheless striking. This is especially evident on marginal farmland where the terrain is difficult, but a more recent trend is the subdivision of large parcels of prime agricultural land in the valley. Residential uses have also progressively increased along the rural road network, developing a strip residential character in some areas. The main community centers of Dover Plains and Wingdale, once relatively compact hamlets, have had most of their commercial growth located in a linear pattern along the high traffic corridor of Route 22. Although the amount of new development is dramatic to long-time residents, the extent of undeveloped open or wooded land is still enormous.

The land use survey conducted for the 1966 Dover Master Plan includes an acreage and percent breakdown of land uses in the Town of Dover. The acreage breakdowns for both the 1966 and the 1990 land use surveys are presented in Table 8.2.

Since the land use survey conducted in 1966, the number of developed acres of land in the Town of Dover has increased by over 2,000 acres, an increase from under four percent of the town's total land area, to almost ten percent.

While development in all categories rose between 1966 and 1990, the most significant changes were in residential and industrial development and parks and recreation. The number of acres devoted to residential development more than doubled, increasing from 814 acres to 1,789 acres or 2.3 percent to 5.0 percent of Dover's total land area. Land devoted to industrial uses increased more than three times during the 24 year period, from 79 acres to 246 acres. The Town also contains 495 acres of extractive industry land, a category which was not included in the 1966 plan. The largest increase appears to be in parks and recreational land, however when the 451 acres included in the 1990 survey which is part of the Appalachian Trail is subtracted from the 1990 total, the change appears less drastic. Without the Appalachian Trail included, the 1990 parks and recreation total is 301 acres, a 104 acre increase from 1966.

It is hard to determine the scope of the changes in the other three categories presented in Table 8.2 because the 1966 plan offers no explanation of what lands are categorized as institutional or camps and reservation. The lands included in these categories in the 1990 survey are the Harlem Valley Psychiatric Center and private camps and hunt clubs.

Table 8.2
Land Use

	1966		1990	
	Acres	Percent	Acres	Percent
Total Town Area	35,824		35,824	
Developed Areas				
Residential	814	62.2%	1,789	50.6
Commercial	111	8.5	115	3.2
Industrial	79	6.0	246	7.0
Extractive Industry	-	-	495	14.0
Public/Quasi-Public	107	8.2	142	4.0
Parks and Recreation	197	15.1	752*	21.2
Total	1,308	100.0	3,539	100.0
Institutional	985		886**	
Camps and Reservations	122		5,782***	
<u>Agricultural</u>	<u>30,610****</u>		<u>3,114</u>	

* including Appalachian Trail (451 acres)

** Harlem Valley Psychiatric Center

*** including hunt clubs

**** including vacant land

Sources: 1966 Dover Master Plan
1990 Dover Land Use Survey

The 1966 survey also combines vacant and agricultural land making it difficult to calculate changes in agricultural lands over the last 24 years. However, one can conclude that the amount of agricultural land has decreased in this time period based on the aerial photographs of the last 50 years which show that the amount of agricultural land lost in the Town of Dover is significant.

SUMMARY AND IMPLICATIONS FOR PLANNING

The land use map illustrates the scattered mixture of land uses in Dover. Small pockets of development are located throughout the Town with little central focus. Dover has many scenic qualities, natural features and remaining rural character that, without protection measures and the guidance and monitoring of growth and development, could be lost.

More land is being converted for residential purposes than any other use. Although residential development ranges from high-density mobile home parks to low-density rural homes with acres of land attached, new single-family homes on small lots have dominated residential construction in the 1970s and 1980s. Relatively few attached units or apartments are being built.

Residential development is occurring in two general patterns that are troubling for long-term land use planning. First, strip residential patterns--linear development that gives each house its own access onto a state, county, or town collector road--is a continuing trend. Strip lots and flag-shaped rear lots maximize the number of parcels on a site without incurring private road construction costs. However, continuous rows of houses with separate driveways also increase the potential for traffic conflicts and safety hazards along Dover's main roads and diminish their aesthetic value by leaving insufficient buffers of open space and undisturbed vegetation. The second disturbing pattern is the creation of major subdivisions in areas well outside existing hamlet centers, sometimes on prime agricultural soils. Such suburban style development is inconsistent with Dover's rural character.

One of the best ways to facilitate economic growth is to concentrate medium and high density residential uses within the immediate hamlet areas. Placing such development on central utilities could aid in meeting existing needs as well as providing for future increased capacity. Lower density developments could be located on the outskirts of the hamlets and, where appropriate, should be clustered. A natural outgrowth of such an approach would be the protection of open space views, environmentally sensitive areas and agricultural land. This community center concept would regenerate traditional land use patterns and tend to avoid the scattering of homes across the landscape resulting in strip residential development.

Small commercial businesses should also be encouraged in the hamlet areas to assist in creating a central focus, thus reinforcing a sense of community. At the same time, further strip development along Route 22 should be discouraged. The proliferation of commercial uses along the Town's major roadways contributes to traffic hazards and congestion by complicating the traffic flow. Where commercial strip development already exists, effective zoning policies could be put in place to improve the overall function and appearance of the sites. Development in depth linked by rear connectors or feeder roads to minimize access points, combined with high quality signs and landscaping can successfully retrofit certain commercial areas. Scattered commercial uses can be designated nonconforming uses and phased out over time.

According to the Existing Land Use Map, industrial and active mining sites are scattered on individual sites throughout the Town. Efforts could be made to concentrate new industrial uses away from residential developments in industrial districts or business parks with good access to state highways and wide buffers. Where such uses do occur in or near residential areas, they should be effectively screened and regulated to minimize negative impacts.

As Dover grows, the amount of vacant and agricultural land is diminishing. The continuing demand for housing and the growth of commercial development along Route 22 are the two major trends that have shaped the recent land use changes. Because continued development is expected, careful land use management is essential to protect Dover from the deleterious effects of suburban sprawl.