

CHAPTER SEVEN

TRANSPORTATION

The transportation network is an essential component of the community, connecting people's homes with the places that they work, shop, go to school and participate in everyday activities. For the Town of Dover and most other communities in Dutchess County, the predominant mode of travel is the private automobile traveling an extensive network of roads and highways. Although Dover is a rural community, there are a number of connections to the New York metropolitan area through State Route 22, which connects to Interstate 84 south of Dover, and the Harlem Line of Metro-North Railroad. Transportation systems have a direct impact on growth within the Town by supporting economic activities that provide employment opportunities for residents of Dover.

COUNTY TRANSPORTATION SYSTEMS

Airports

The Dutchess County Airport is the only airport in the county with regularly scheduled commercial flights, providing direct service to Burlington, Vermont, White Plains and JFK airport in New York. The airport is located on Route 376 in the Town of Wappinger. Stewart Airport, located approximately one hour from Dover in Newburgh, New York, opened for commercial air traffic in 1990. As of January 1991, service was offered to Washington, D.C., Chicago, Pittsburgh and Raleigh/Durham.

Railroads

Metro-North provides rail transportation to Grand Central Station in New York City. In the eastern part of the county, the Harlem Line stops at Pawling, Wingdale and Dover Plains. There are eleven trains daily and eight on the weekends. The Dover Beautification Committee, working with Project for Public Spaces and Cornell Cooperative Extension, have plans to clean up the Dover Plains Railroad Station and surrounding square. Metro-North also has plans to add 45 parking spaces to the existing 60 spaces at the station, improve train schedules on the Upper Harlem Line between Putnam County and Dover Plains, and to extend commuter service north to Wassaic.

Bus System

Dover is served by the county LOOP bus system, which provides service to eastern Dutchess County along Route 22 six days a week on four different LOOP routes and one express route. Connections to Poughkeepsie and points in the western part of the county are currently made in Millbrook, although there are plans to allow transfers in Amenia. There are also plans to change the present fixed route system to a route point deviation system which would be more flexible to the needs of a rural area. Route point deviation still involves a scheduled series of stops along a route, but the route taken between these points can vary based on demand. Riders can call and request a deviation from one to seven

days in advance. The proposed route would run between Pawling and Millerton and consist of five or six stops at major shopping plazas and community centers along Route 22. A stop over the state border at the hospital in Sharon, Connecticut will also be included on the route.

LOCAL ROAD AND HIGHWAY NETWORK

As previously mentioned, the primary mode of transportation within the Town and surrounding county is by private vehicles on public roads. These public roads are provided by various levels of government and perform different functions for their users. The Town of Dover owns and maintains 52.38 miles of roads. Dutchess County owns and maintains 23.32 miles of road in the Town. New York State has responsibility for the regional highway network, including 13.66 miles of road in Dover. Table 7.1 shows the percentage of miles in Dover under each jurisdiction.

Table 7.1
Road Jurisdiction, Town of Dover, 1985

Jurisdiction	Miles	Percent of Total
New York State	13.66	15.3
Dutchess County	23.32	26.1
Dover	52.38	58.6
Total	89.36	100.0

Source: Dutchess County Department of Public Works,
Engineering Division

Function

The functional classification of roads is related to their level of use and type of service they provide. An ideal system would separate the various functions, so that regional needs do not conflict with local uses. Although roads may be designed for multiple functions, most can be included in one of three general categories: thoroughfares, collectors, and local roads. Thoroughfares are roads which provide for through traffic to areas outside the municipality and outside the county. They carry large volumes of traffic and are usually maintained by the state. Industrial or large-scale commercial activities with a limited number of access points are best suited to this type of road. In Dover there are two thoroughfares. Route 22 runs north-south through the center of the Town and Route 55 splits from Route 22 in Wingdale and heads east over the state border into Connecticut.

Collector roads function to link areas in the municipality to one another and to major highways. They should serve to collect traffic from local roads and channel it to the larger highways. These roads typically provide the most appropriate locations for community facilities and larger residential developments. Roads that are used as

collector roads include Old Route 22 (CR 6), West Dover Road (CR 20), Wingdale Road (CR 21), Dog Tail Corners Road (CR 22), Chestnut Ridge Road (CR 24), Cricket Hill Road and Dover Furnace Road (CR 26).

Local roads provide access to individual properties from the collectors and thoroughfares. They are not meant to carry through traffic, heavy truck usage or large volumes of local traffic. Local roads serve detached single-family residential uses almost exclusively. These roads are generally maintained by the Town.

Problems occur when roads serve more than one function. When multiple residences and strip commercial uses have direct access along major highways, these roads must serve two functions: regional (moving goods and people from one locality to another) and local (providing access to adjacent properties). The result is traffic congestion, frequent accidents, and a much lower speed on what should be a high speed thoroughfare.

Traffic Volumes

The amount or volume of traffic that a road carries is a good indicator of the importance of that road in the municipal or regional network. In Dutchess County traffic counts are taken by the New York State Department of Transportation and the Dutchess County Department of Public Works for the state and county roads, respectively. In addition, these agencies may also undertake special counts on local roads if requested by the municipality.

New York State Department of Transportation traffic volume information is expressed as average annual daily traffic (AADT), or the average (arithmetic mean) 24-hour traffic volume during the year. The Dutchess County Department of Public Works maintains two-way traffic counts for all county roads.

Table 7.2
Traffic Counts, State Roads

NYS Route	Section of Road	Count	Count	(%/Year)
NYS 22/55	Pawling to Wingdale	12,200 ('88)	11,000 ('87)	10.90
NYS 22	Wingdale to NYS 343	7,050 ('89)	6,350 ('86)	11.00
NYS 55	Wingdale to CR 6	5,300 ('89)	5,350 ('87)	-.94
	CR 6 to State Border	3,600 ('87)	2,700 ('81)	33.30

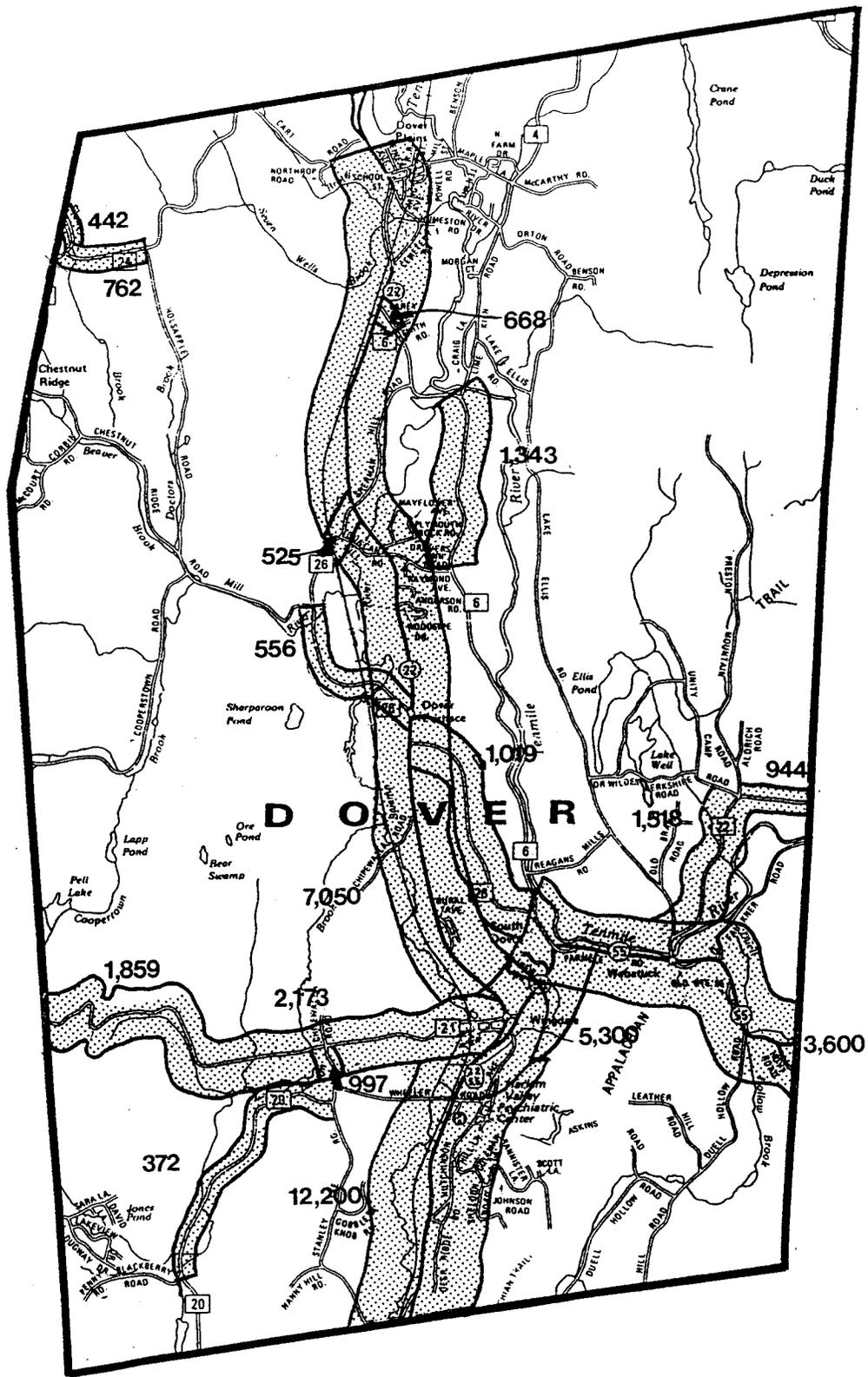
Source: 1989 Traffic Volume Report, New York State Department of Transportation

According to the New York State Department of Transportation (NYSDOT), a realistic growth rate for traffic within this region is three percent per year. Traffic on the southern section of Route 22 rose by 11 percent in one year and by 70 percent, based on a volume of 7,150 in 1983, over a five year period. The section of Route 22 between Wingdale and Route 343 has a significantly lower volume of traffic. Although the southern portion of Route 22 is above the generally recommended design capacity of 10,000 vehicles per day for a two-lane road, it has not yet reached the 15,000 vehicles per day threshold which might indicate the need for additional turning lanes at critical intersections. However, each road has different characteristics and requires specialized analysis to determine its actual capacity. Using these parameters, it appears that Route 22 currently has adequate capacity, although its volumes should continue to be monitored.

Table 7.3
Traffic Counts, County Roads

County Route	Section of Road	Latest Count	Previous Count	%/Year
Dover Plains- Webatuck Rd.	NYS 55 to CR 26	3,308 ('88)	3,213 ('85)	3.0
CR 6	Drover's Inn to Lime Kiln	1,343 ('88)	1,412 ('85)	- 5.1
	Smith Rd. to NYS 22	668 ('88)	998 ('85)	-49.4
West Dover Rd. (CR 20)	Blackberry to Stanley Lee	372 ('89)	360 ('86)	3.3
	Wheeler Rd. to CR 21	997 ('86)	1,068 ('83)	-7.1
Wingdale Road (CR 21)	Pleasant Ridge Road to CR 20	1,859 ('89)	1,238 ('86)	50.1
	CR 20 to NYS 22	2,173 ('89)	2,106 ('86)	3.2
Dog Tail Rd. (CR 22)	Lake Ellis to Unity Camp	1,518 ('88)	1,498 ('85)	1.3
	Preston Mt. to CT border	944 ('88)	777 ('85)	21.5
Little Rest Rd. (CR 23)	Killearn Rd. (Washington) to CR 24	442 ('88)	377 ('85)	17.2
Chestnut Hill Rd. (CR 24)	CR 23 to Holsapple Rd.	762 ('88)	612 ('85)	24.5
Cricket Hill Rd. (CR 26)	CR 6 to NYS 22	1,019 ('88)	694 ('85)	46.8
Dover Furnace Rd. (CR 26)	NYS 22 to Chestnut Ridge	556 ('88)	447 ('85)	24.4
	Duncan Hill Rd. to NYS 22	525 ('88)	377 ('85)	39.3

Source: Dutchess County Department of Public Works



TOWN OF DOVER
 DUTCHESS COUNTY, NEW YORK
TRAFFIC VOLUMES
 STATE AND COUNTY ROADS

Volumes on the majority of county routes in Dover rose over the latest three-year periods for which data is available. This rise may be due in part to road work being done on Route 22 during 1986 and 1987 which diverted through traffic to other roadways. The least significant rise (3%) was on West Dover Road (CR 20) between Jones and Stanley Lee roads. There was a 38 percent increase in volume on both Cricket Hill and Dover Furnace roads (CR 26). Two roads showed a decrease. West Dover Road (CR 20) between Wheeler Road and Wingdale Road (CR 21) had a decrease of 7 percent, and Old Route 22 (CR 6) had a decrease of almost 6 percent. Although in all cases current volumes are still below normal two-lane connector road capacities, factors such as curving alignments and often unsafe driving speeds make rapidly escalating volumes a concern for the future.

Traffic Accidents

Using information supplied by the Dutchess County Traffic Safety Board, a map was prepared showing the general location of all accidents reported to the Dutchess County Sheriff's Department or the New York State Police from 1988 through 1990. There was an average of 140 accidents per year in Dover. Of those reported in the three-year period, four involved fatalities and 34 were collisions with deer.

Intersections are generally the most dangerous locations. Those along Route 22, having by far the highest traffic volumes, generally involve a larger number of accidents. Areas with a relatively high number of accidents include the intersections of Route 22 and Cricket Hill Road (CR 26), Cart Road, Wingdale Road (CR 21), Wheeler Road and Hutchinson Avenue. A number of accidents were reported at the intersection of Mill and Railroad streets in Dover Plains. Sharp curves along Wingdale Road (CR 21) and Chestnut Ridge Road (CR 24) also caused a significant number of accidents.

Many of these accident-prone areas are located along or at intersections with higher volume state or county highways. When improvements are planned, these areas should be reviewed and, if warranted, included on the transportation improvement programs. The Town should work cooperatively with the state and county agencies to identify future roadway improvements.

ROAD CONDITIONS AND IMPROVEMENT PLANS

State Roads

State roads and bridges in the Town are maintained according to federal standards adhered to by the New York State Department of Transportation. Planned improvements are described in the Poughkeepsie-Dutchess County Metropolitan Planning Organization's annual Transportation Improvement Program (TIP) report, which establishes allocations for the following five years. The current TIP indicates funding for three projects involving bridges in Dover. The bridge on West Duncan Hill Road over

the Swamp River is to be removed, the deck of the bridge on County Route 26 over Conrail is to be replaced, and the bridge on Ridge Road over the Mill River between Holsapple and Cooperstown Road is to be replaced with a wider superstructure.

County Roads

In 1990, the Dutchess County Department of Public Works completed a new section of County Route 6 just north of the East Duncan Hill Road intersection. Work on bridges along Lime Kiln Road and Wingdale Road (CR 21) was also completed. Future plans include guiderail work along Wingdale Road (CR 21).

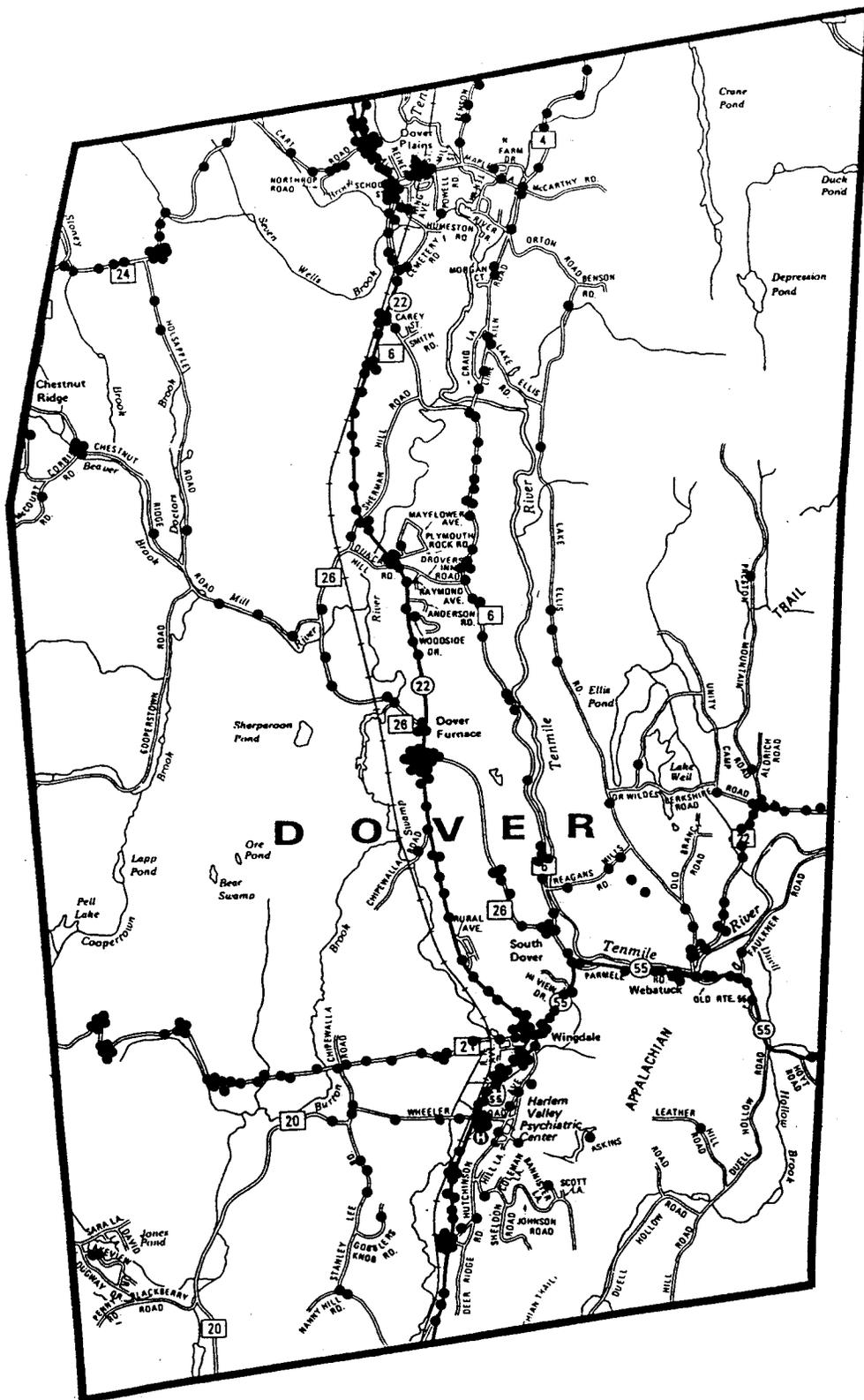
Work is also planned on three bridges within the Town. Decks are to be replaced on two bridges along County Route 22 and 26 and there are plans to replace the bridge on Chestnut Ridge Road (CR 24). The county Department of Public Works and New York State Department of Transportation have also agreed to post a 30 mph speed limit on Old Pawling, Gobblers Knob, Nanny Hill and North and South Nellie Hill roads. None of these roads had posted speed limits in the past.

Town Roads

The Dover Highway Department is responsible for the maintenance of over 50 miles of town roads, plus certain sections of travelled ways that are not town owned. According to the Highway Superintendent, the department's future plans primarily involve resurfacing. Roads to be worked on include Riverview Road, Woodside Drive, McCarthy Road, Sherman Hill Road and Benson Hill Road.

Many of Dover's town roads are either narrow dirt or winding hard-top surface, still reflecting their former low-volume agricultural past. The remaining dirt road sections are being subjected to increased traffic loads as residential subdivisions continue. Widening and resurfacing may eventually be necessary unless slow speeds can be effectively enforced. On the other hand, widening and straightening roads diminishes the town's rural atmosphere by removing stone walls and old roadside trees and threatening historic buildings. Also, road widening in the interest of safety is often self-defeating because it unconsciously encourages faster speeds.

Opponents of routine road widenings were encouraged by the 1989 report of the New York State Local Road Classification Task Force. The report, Guidelines for Rural Town and County Roads, recommended a rural road classification system, as well as design and maintenance guidelines for roads with less than 400 cars per day. Specific recommendations on the maintenance of unpaved roads may be particularly applicable for Dover's back roads. The State Legislature is now considering bills to allow for lower maintenance standards for rural roads that would not only relieve local governments from the costly responsibility of continually upgrading low volume roads, but also reduce their liability exposure. Dover qualifies under the reports standards for rural communities.



TOWN OF DOVER
 DUTCHESS COUNTY, NEW YORK

TRAFFIC ACCIDENTS

1988, 1989, 1990

Route 22 Recommendations

Route 22 is the primary north-south highway in Eastern Dutchess. Not only are the traffic volumes well above any other roadway in the Town, but Route 22 also carries a considerable amount of heavy truck traffic directly through Dover's two community centers, Dover Plains and Wingdale. The following recommendations were originally prepared for the Harlem Valley Planning Partnership to provide a consistent framework for planning the Route 22 corridor in the various municipalities of the Harlem Valley. They have also been incorporated into the 1990 draft Dutchess County Highway Plan.

A. Land Use

1. Encourage higher density development in and around defined community centers.
2. Preserve existing historic structures and stone walls.
3. Establish minimum setback standards to enhance the visual character of the corridor (refer to "Roadscape Guidelines", Dutchess Roadside Council).
4. Encourage height and bulk requirements that maintain the rural characteristics of the road.
5. Encourage protection of prime agricultural soils and areas through land use regulations and easement conditions.
6. Require parking spaces to be built primarily behind structures, and berms to screen existing parking lots along commercial frontage.
7. Attempt to phase out existing strip development; prohibit future strip development by limiting the number of access points off Route 22, and applying strict site plan standards.
8. Consider planned mixed use developments (with detailed criteria) at selected locations.
9. Encourage clustered development to preserve open space areas, and provide for moderately priced housing.

B. Aesthetic Controls

1. Define and strengthen existing community centers, with particular attention to entrances, by using:
 - Greenbelt buffers at the edge of the centers;
 - Human-scale traditional lighting fixtures (work with the N.Y. State Department of Transportation);
 - Entrance signs with flowers, shrubs or other plantings;
 - Textured pedestrian walkways and entrance demarcations;

- Sidewalks and narrowed shoulders, or center islands with trees (boulevard effect);
 - Reduce speed limits with adequate notice.
2. Establish uniform sign standards (no billboards or off-site signs; control of temporary signs, size limitations on permitted signs).
 3. Identify and devise methods to protect significant views and open space areas along the corridor.
 4. Designate portions of Route 22 as scenic roads.
 5. Require landscaping and tree planting for new development and improvements to existing development.
 6. Preserve existing mature trees along the corridor; encourage planting of new trees and groundcover (coordinate efforts with N.Y. State Department of Transportation).
 7. Encourage the use of planted buffers and berms along road frontage.
 8. Require new buildings to be compatible with the traditional community character.

C. Road Improvements:

1. Identify key intersections for future road improvements (turning lanes, lights).
2. Limit the number of new access points, and consolidate existing access points when feasible.
3. Encourage service roads to be constructed behind structures to link parking lots and limit the number of access points.
4. Provide shoulders along Route 22.
5. Establish bikeways along the corridor; link multi-use trails with scenic road segments to encourage recreational use of the corridor without creating conflict with traffic.

Source: Dutchess County Department of Planning, draft Dutchess County Highway Plan, 1991

Scenic Roads

The Heritage Task Force for the Hudson River Valley issued a Scenic Roads Handbook in 1985. In 1989, the Dutchess Roadside Council issued a handbook of Roadscape Guidelines. Both publications were designed to help communities preserve the scenic qualities of their roads through a combination of highway maintenance, strip development controls, signage

requirements, architectural reviews, and other means. It is up to each municipality to prepare, adopt and implement the specific provisions it considers most appropriate for preserving the scenic roads under its jurisdiction.

Although currently Dover does not have any state or locally designated scenic roads, the Conservation Advisory Committee has begun an inventory of potentially scenic roads in the Town.

Biking and Walking

Bikeways provide a designated path, either along roadways or on off-road trails, for cyclists to travel. They provide a safe way for adults and children to travel along busy roadways, and invite residents to depend less on their automobiles for local errands and short commutes, thereby reducing unnecessary traffic on major roads.

The Dutchess County Bikeway Plan presents information on different types of bikeways and how a community can go about building their own bikeway system. The plan also outlines a bikeway system for Dutchess County. In Dover both Route 22 and Route 55 are identified as primary all-purpose bike routes offering reasonable shoulders and grades for bike touring or commuting. Wingdale Road (CR 21) is the only county road in this sector identified as a bikeway route, although the report notes the tortuous climbs over the mountain into Dover.

Walking is often ignored as a means of transportation. Traditional land use patterns were based on pedestrian circulation, tending to concentrate most development within convenient walking distance of community centers. In the last 40 years the proliferation of automobiles has encouraged sprawl throughout the Town, turned quiet residential roads into high speed shortcuts, made streets dangerous for children, front porches too noisy for comfort, and caused every piece of available land in the center of the hamlets to be paved for parking.

The Town can attempt to reinforce a pedestrian presence, particularly in Dover Plains, by repairing and extending the sidewalk system, enforcing speed limits, encouraging walkways to any outlying development, and connections to a town-wide trail system. A coordinated multi-use trail system can use scenic roads, such as Berkshire Road, to offer recreational and even commuting opportunities, as well as linkages to a wider hiking trail network. Special emphasis should be given to the Appalachian Trail which transverses the eastern portion of the Town in two places; east of East Mountain Road south to Dog Tail Corners Road, and Webatuck Road across Deull Hollow and Leather Hill Road into Pawling.

SUMMARY AND IMPLICATIONS FOR PLANNING

As growth occurs in and around Dover, increasing pressure will be placed on the Town's transportation system. As the main north-south artery through the eastern half of the county, State Route 22 has become an important regional highway, especially for commercial truck traffic that cannot travel the Taconic State Parkway. Although current traffic volumes are below the recommended capacity for a two-lane road through most of the Town, they should be closely monitored.

Strategies for Route 22 that would improve safety and maintain traffic flow, without costly road reconstruction projects, include consolidating existing driveways and strictly limiting new access points. Continuous residential development with multiple driveways lining major roads, or even worse commercial strips, affect traffic safety, road capacities and roadside aesthetics.

Despite the predominant low density residential land use pattern, it will be difficult for Dover to maintain its existing rural road network. The need for safety has to be carefully balanced with the desire to preserve scenic and historic features along the Town's roadways. The master plan process should determine which roads can be designated as scenic and guidelines should be put in place that would assure that the rural characteristics of the roads will be maintained.

At the Town Board's request, speed limits on five local roads has been reduced to 30 mph. If enforced, the reduction of speed limits along rural roads helps provide an immediate and comprehensive solution to traffic problems.

Intersections on town roads should be wide enough to provide good sight distances and to handle school buses, fire engines, and occasional moving trucks, but narrow enough to encourage slow speeds and careful turning movements. Intersections that are too wide or come together at a sharp angle encourage drivers to just glance over their shoulders as they sweep through corners without slowing down. Finally, alternative systems to the dependence on individual automobiles, such as employee-sponsored or privately arranged ride sharing, increased use of commuter bus service, and a system of bikeways and walkways should be encouraged.