

VII. TRANSPORTATION

There is relationship between the quality of residential life and the adequacy of the road network. That adequacy is controlled both by the physical capacity of the road system and by the land uses which create present and potential demands upon it. This chapter of the Town Plan analyzes roadway capacities and limitations both to identify upgrading needs of the road system and to partly establish the framework for Town policy on future land uses.

The Lewisboro road pattern has, for the most part, been long established. The system today consists of an Interstate highway, State roads, Town roads and private roads. Significant change in the foreseeable future is not likely but some major roadways will require improvement and some new local roads will be added as residential development continues to take place.

A. Traffic Flow and Service Volumes

Six New York State roads and one Interstate highway form the major thoroughfares for through traffic in Lewisboro. Estimated traffic volume data for these roads is regularly assembled by the New York State Department of Transportation. To provide perspective on changes in the number of vehicles using these roads, Table 20, "Estimated Average Annual Daily Traffic," lists volumes for two count periods, 1969-1971 and 1978-1980. The greatest numerical and percentage increase in traffic volumes has occurred in the Interstate 684/Route 22 corridor. This is due, of course, to the completion of the Interstate which established a new link in the regional network of limited access highways. Some growth is also attributable to new development which has taken place along the I-684 corridor.

In both count periods, Route 35 carried two to three times the number of vehicles carried on the other State roads in Lewisboro. It has experienced a constant growth in volume totaling approximately 24 to 37 percent over the 10-year period. Route 123 (Smith Ridge Road) is the next busiest road; its relatively low growth rate of 12 percent is surprising considering the development which is occurring in that area and nearby Connecticut. The greatest percentage increase in traffic over the 10-year period was recorded on Route 121 between Routes 35 and 138 and on Route 124 although actual volume numbers remain relatively low. The recorded reduction of traffic volumes on Route 138 is due to a shift of the counting location from west of Increase Miller Road to a point east of the intersection. It is unlikely that volumes on any section of this road actually declined.

Table 20
Town of Lewisboro
ESTIMATED AVERAGE ANNUAL DAILY TRAFFIC

<u>Road</u>	<u>Road Section Covered by Count</u>	<u>Estimated Annual Annual Daily Traffic*</u>		<u>Percent Change in Traffic</u>
		<u>1969-1971 Counts</u>	<u>1978-1980 Counts</u>	
Route 22/I-684	Bedford Line to Route 138	23,400	45,100	+ 92.7%
Route 22/I-684	Route 138 to North Salem Line	19,000	51,500	+171.30
Route 35	Bedford Line to Route 121 (South Segment)	7,300	9,100	+ 24.65
	Between South and North Segments of Route 121	7,000	9,600	+ 37.14
	Route 121 (North Segment) to Route 124	8,300	9,450	+ 13.86
	Route 124 to Route 123	6,000	6,250	+ 4.17
	Route 123 to Connecticut State Line	5,000	6,250	+ 25.00
Route 121	Bedford Line to Route 35	1,600	1,650	+ 3.13
	Route 35 to Route 138	1,650	3,000	+ 81.82
	Route 138 to North Salem Line	1,300	1,450	+ 11.54
Route 123	Connecticut Line to Route 35	3,600	4,050	+ 12.50
Route 124	Pound Ridge Line to Route 35	1,700	2,850	+ 67.65
Route 138	Route 22 to Route 121	3,000	2,150	- 28.30

*All figures are rounded.

Source: New York State Department of Transportation - 1971 and 1980 Traffic Volume Reports.

The number of vehicles using all of these major roads will continue to increase. Because they are through roads, much of the increase will be related to the level of new development in adjacent communities. But the increase in local traffic will also be significant. The new Town residents moving into each of the 100 homes constructed in Lewisboro on an annual average will likely bring with them one car for every household member age 18 and older. One or two of these cars from each of these households will join the peak-hour commuter traffic on the Town's roads. Other daily trips will be added for shopping and home-oriented needs. Obviously, the total volume of traffic can increase quickly.

To analyze the sufficiency of Lewisboro's roads to accommodate the traffic volumes, it is necessary to determine the maximum daily service volumes that these roads can be expected to handle. Many factors determine the capacity of a road. Of major significance is the geometric design which includes width of traffic lanes, existence and conditions of shoulders, lateral clearances, alignment and grades. The type of traffic using the road is also of importance. For example, heavy use by trucks or buses will reduce capacity as will traffic interruptions by street intersections and driveway curb cuts.

"Base Study 3: Transportation", December 1981, found that with two exceptions, all of Lewisboro's major roads operate at a Level of Service B, a technical description indicating acceptable stable traffic flow for rural roads. Each of these roads can handle some increase in traffic volume without affecting its service level. Furthermore, the capacity of each road could be increased with roadway improvements. This condition is particularly descriptive of Route 123.

The two exceptions are Interstate 684 and Route 35. I-684 operates at a Level of Service C which indicates periods of restricted speeds and reduced maneuverability. The problems of Route 35 are a more direct issue for Lewisboro. Over its entire length, Route 35 operates at a Level of Service C. Segments of the route, particularly west of the Route 124 intersection, approach Level of Service D which represents unstable traffic flow and reduced operating speed. The anticipated annual increase in traffic volume will continue to worsen the situation.

Service volume and capacity analysis is less readily applied to local roads. The concerns on these roads are more of safety and convenience rather than capacity. Such roads are not meant to carry high volumes of traffic nor to provide for high travel speeds.

B. Traffic Safety

A review of traffic accident data for the 18-month period of January 1980 to June 1981 identified eight locations where

there were three to six reported accidents. All of the locations were on Route 35. The major factors which resulted in the collisions, as recorded on filed accident reports, were sharp intersection angles, varying grades and horizontal alignment, and sight distances often coupled with inattentive driver behavior, excessive speeds or alcohol abuse. Three of the eight locations were grouped near the intersections of Route 35 with Bouton Road and Route 124, a total of 13 accidents. Three other locations were grouped along the one mile length of Route 35 between the Bedford town line and Route 121 (south segment), also a total of 13 accidents.

C. Roadway Classification

For the purpose of planning, as well as road design, roadways are classified by function focusing on two principal characteristics: the type of vehicle movement and the degree of land access provided. Ideally, as the proportion of through traffic on a road increases, the degree of land access provided decreases. Actual traffic volume is only a secondary consideration.

Four basic roadway types, appropriate for Lewisboro, are listed below according to the function they serve. They range from those roads primarily devoted to through traffic movement to those that serve local access. The characteristics and appropriate design standards are listed for each roadway type.

- o Limited Access Highways. These roads provide high travel speeds with virtually no interference to through movement of traffic between communities or major activity centers.
- o Major Roads. Major roads also carry traffic between communities and activity centers but normally have at-grade intersections and increased land access.

Access from adjoining residentially zoned land should be discouraged wherever possible. The width of the pavement should be sufficient to permit the movement of traffic in both directions, free from interference from parked or standing vehicles and, at key locations, from turning vehicles.

- o Collector Roads. This type of road collects traffic from local roads and feeds it to the major roadway system. Such roads should interconnect sections of the Town and be the principal means of circulation in and around residential areas.

Collector roads should have sufficient width to permit the passage of two-way traffic without interference from parked or standing vehicles. Where possible, abutting

residential properties should derive access from intersecting local roads, rather than directly onto collector roads. A right-of-way width of 50 feet should be adequate.

- o Local Roads. The primary purpose of local roads is to provide direct access to individual properties fronting on them. They require sufficient width to permit two-way traffic to pass safely. The overall right-of-way width should normally be 50 feet.

To meet the functional roadway needs and to preserve the residential character of Lewisboro, new or improved roads should be designed to encourage the maximum utilization by traffic of major roads and collector roads and to minimize the use of local roads for any purpose other than access to individual properties. The cohesion, identity and quality of neighborhoods or potential neighborhoods can be seriously affected by the intrusion of through traffic and, therefore, such considerations should be a major factor in road system design.

Table 21, "Roadway Classification", identifies the classification of Lewisboro's roads based on overall roadway characteristics and Lewisboro travel patterns. Interstate 684 is the only Limited Access Highway within Lewisboro. All Major Roads in the Town are State roads which, with the exception of the northeast area, provide a readily accessible network of through traffic corridors for the Town's residents. The collector road network will be discussed at length in the following sections.

D. Existing Road System and Recommended Improvements

The Lewisboro road system consisted of approximately 115 miles of open travelways in November 1984, an increase of 8 miles since January 1972. Table 22, "Lewisboro Road System", identifies the ownership and type of surface of the system by linear mileage.

The New York State component of the system, 24 miles or 20%, encompasses all major roads and the one limited access highway. Over 70% of the system, 82 miles, is owned and maintained by the Town of Lewisboro. The Town component includes all 28 miles of collector roads, 25% of the total system. Approximately 7 miles or 6% of the road system are in private ownership with private maintenance responsibility. Table 22 also shows that 18 miles, or 16%, of the total system consists of unpaved roads with 5 miles of unpaved roads serving as collector roads.

The adequacy of the existing road system can be evaluated through consideration of four factors:

Table 21
Town of Lewisboro
ROADWAY CLASSIFICATION

LIMITED ACCESS HIGHWAYS

Interstate 684

MAJOR ROADS

Route 35
Route 138
Route 22
Route 121
Route 124
Route 123

COLLECTOR ROADS

o Wild Oaks Road/ Fairmount Road	o Boutonville Road
o Todd Road	o Peaceable Street
o Increase Miller Road	o Ridgefield Avenue
o Mount Holly Road	o Mill River Road/Lake Kitchawan Drive/Grandview Road
o Chapel Road	o Kitchawan Road
o School House Road	o Conant Valley Road
o Mead Street	o Spring Hill Lane
o Post Office Road	o West Lane
o Benedict Road	o Elmwood Road
o Bouton Road	o East Street
o Oscaleta Road	o Briscoe Road
o Main Street	o Silver Spring Road
o Spring Street	o Wilton Road

LOCAL ROADS

All others

Table 22
LEWISBORO ROAD SYSTEM
November 1984

<u>Road Classification</u>	<u>Type of Surface</u>	<u>Linear Mileage by Ownership*</u>				<u>TOTAL MILEAGE</u>
		<u>State</u>	<u>County</u>	<u>Town</u>	<u>Private</u>	
Limited Access Highway	paved	2.3	--	--	--	2.3
Major Road	paved	21.4	--	--	--	21.4
Collector Road	paved	--	--	23.9	--	23.9
	unpaved	--	--	<u>4.7</u>	--	<u>4.7</u>
	Total	--	--	28.6	--	28.6
Local Road	paved	--	1.9**	43.8	3.4	49
	unpaved	--	<u>--</u>	<u>9.9</u>	<u>3.5</u>	<u>13.4</u>
	Total	--	1.9	53.7	6.9	62.5
TOTAL ALL ROADS	paved	23.7	1.9	67.7	3.4	96.7
	unpaved	<u>--</u>	<u>--</u>	<u>14.6</u>	<u>3.5</u>	<u>18.1</u>
	Total	23.7	1.9	82.3	6.9	114.8

*All figures are rounded.

**Roads within Ward Pound Ridge Reservation.

- o Actual road characteristics (pavement, curvature, width, grades, sight distance and other conditions affecting safety and capacity).
 - o Actual road utilization (traffic flow).
 - o Service which the road provides (functional classification).
 - o The existing and potential land use in the vicinity of the roadway.
1. Limited Access Highways. The most important roadway in Lewisboro for regional traffic is Interstate 684, the only limited access highway. The reserve capacity which existed in 1972 for this facility has practically been exhausted.

Within Lewisboro there are two ramp connections to Interstate 684. A northbound exit ramp connects to Route 22 approximately one mile south of Route 138. A southbound entrance ramp connects to the Route 138 bridge over the highway and Metro-North's Harlem Division rail line. A full interchange is located one mile south of Lewisboro in Katonah (Town of Bedford) where Route 35 crosses the highway. A partial interchange (northbound exit, southbound entrance) is located two miles north of Route 138 at Route 116 in North Salem.

The 1973 Lewisboro Town Plan, written at the same time the final design of I-684 was being decided, recommended that a full interchange be constructed in Goldens Bridge. In light of changes in the region since 1973 and the tendency for interchanges on limited access highways to attract additional through traffic, the need for and desirability of a full interchange in Goldens Bridge is unclear today.

In cooperation with the Town of Lewisboro and several other northern Westchester municipalities, the Westchester County Department of Planning began work in 1984 on a study of the Interstate 684 corridor north of Armonk. The study is expected to produce an overview of potential development in the area, traffic projections and the need for improvements on I-684 and connecting major roads.

The Town should consider the findings and recommendations of the County study before establishing a position on possible interchange improvements.

The land use and development density recommendations of this Plan do not require the increased access to the regional highway system which would be made available by

the construction of new northerly oriented ramps at Goldens Bridge. Equally as important, the recommendations of the Plan should not be changed so as to increase density or alter land use solely because new ramps may be constructed.

2. Major Roads. The major road network has traditionally served Lewisboro well as most residential areas are within one mile of a major road. The one area least served is northeastern Lewisboro.

a. Route 35. The principal east/west travel corridor in Lewisboro is a two-lane roadway with a pavement width of approximately 27 feet connecting Ridgefield to the east with Interstate 684 to the west. The roadway geometrics severely limit the level of service Route 35 can provide under the best of conditions. Vertical and horizontal alignments change continuously, reducing passing and stopping sight distances considerably.

Increased traffic volumes on Route 35 will contribute to an acceleration of roadway deterioration unless a regular program of maintenance is followed by the State. The regional importance of this road requires such a program. In addition, continued growth in Lewisboro and Ridgefield makes the consideration and implementation of intersection improvements critical. Available data indicates that Route 35 should be widened to three lanes at its intersection with Route 121 (north segment) so as to provide a separate traffic lane for left-turn movements. Full traffic signalization should also be installed. Similar improvements may be advisable at the intersection of Route 35 with Route 123. The number of new driveway access points for adjoining property should be kept to a minimum.

Several additional specific improvements should be made in the Cross River area to control access and improve traffic safety. These are:

(1) Separation should be provided between Route 35 and the parking area for the commercial building near Old Shop Road. The depth of the parking area between Route 35 and the structure is too narrow. The parking area to the rear should be expanded and improved to provide enough parking for all businesses. The front should be landscaped and, if possible, all parking should be eliminated. Access to the service station can be maintained but should be defined by curbing.

- (2) Parking for the Fifth Division market area should be relocated to the rear (north side) of the existing buildings. The rear yard area is now being used as an informal parking area. If improved, this lot could be linked to the existing parking facility serving the Yellow Monkey Village. A combined parking lot/driveway system would increase the attractiveness and accessibility of the entire area as well as achieve the primary benefit of improved traffic safety on Route 35.
 - (3) The driveway on Route 35 to the real estate office, west of Route 121 (north segment), should be closed. Access to the parking area should be restricted to Route 121 at a point as far north from the Route 35/Route 121 intersection as possible or, preferably, tied into the circulation system of Cross River Plaza.
 - (4) At the Sunoco gas station, the open drive area should be separated from Route 35 by raised landscaped medians. Access should be limited to two driveways.
- b. Route 138. This second east/west arterial links Route 121 on the east with Route 22 and 684 and continues west to an intersection with Route 100 in the Town of Somers. It is a two-lane roadway which received substantial improvements in 1981 including repairs, shoulder widening and repaving along the segment east of Route 22. In December 1984, a new bridge was opened across the Muscoot Reservoir separating Lewisboro and Somers. The bridge, designed to handle four lanes of traffic, replaced a narrow, weight restricted bridge constructed in 1903.

Route 138, through its connections with Route 22 and I-684, will serve as the main access road to the large IBM Corporation office complex in Somers. To avoid unacceptable traffic delays, improvements will be required to be made to the connecting road linking Routes 138 and 22. Traffic signalization may be necessary. Additional improvements may be required on the I-684 overpass and at the intersection with Old Bedford Road. The Town should request that the State Department of Transportation carefully monitor the situation and schedule improvements before traffic conditions worsen for Lewisboro residents.

The intersection of Route 138 and Increase Miller Road continues to be a site of concern. The intersection geometrics and resulting limited sight distances reduce its level of service and create a hazardous situation.

- c. Route 22. Over one-half of the Lewisboro length of this two-lane north/south roadway was reconstructed as part of the construction of Interstate 684. Route 22 generally parallels the interstate highway through Westchester County but only in Lewisboro and North Salem it is directly adjacent to it. The rebuilt segment reflects high design standards and contains sufficient capacity for substantial increases in traffic volumes. The southern segment, from a short distance north of Todd Road south to Route 35 in Bedford, has the same grade, width and alignment problems of the other older State highways in Lewisboro.
- d. Route 121 and Route 124. These two north/south major roads link Lewisboro with Bedford (Route 121) and Pound Ridge (Route 124) to the south and North Salem to the north. Constructed as two-lane roadways and maintained in serviceable condition, problem locations are limited to the intersections of these roads with Route 35 (four locations) and the intersection of Route 121 and Todd Road. At these locations, sight distance restrictions caused by poor vertical and horizontal alignments combined with high through-traffic approach speeds result in less than desirable travel conditions. Generally, low density residential uses or vacant land is located alongside both routes throughout Lewisboro. Adequate reserve capacity is available to handle additional traffic growth.
- e. Route 123. Smith Ridge Road is a two-lane north/south roadway with varying pavement widths connecting New Canaan and Route 35. The roadway has numerous shifts in vertical and horizontal alignment and a few segments with steep grades resulting in often severely restricted sight distances throughout its length. Several intersections, such as Elmwood Road, are even more hazardous because of sharp intersection angles. The roadway's intersections with Route 35 and with Spring Hill Lane are also problem locations because of limited sight distances.

Establishment of a safe and efficient roadway would require extensive reconstruction and realignment. Such work is not feasible. The Town should encourage the State to provide proper maintenance and to improve sight distance when the right-of-way

is available. Attention should be given to intersection improvements, particularly at Elmwood Road. Signalization may be required at Route 35. The Town should discourage additional driveway connections when possible.

Within the Vista business area, the remaining areas of open access between parking lots and Route 123 should be restricted to a minimum number of defined driveways located at points of greatest sight distance. Commercial development along the east side of Route 123, both existing and proposed should be treated as much as possible as an integrated operation with regard to parking facilities and driveway access.

3. Collector Roads. The physical layout of the existing collector road system is generally adequate to effectively fulfill its role of linking local roads and individual lots with the Town's major road system. Exceptions are discussed below under "Recommended Road Plan."

Some segments of individual collectors are not in appropriate condition to efficiently and safely serve the level of traffic which they may be required to serve. These deficiencies should be scheduled for correction over a multi-year time schedule. Identified problems on Lewisboro's collector roads include:

- o Increase Miller Road - narrow travelway; hazardous intersection at Todd Road.
- o Oscaleta Road - poor alignment; narrow travelway.
- o Post Office Road - inadequate sight distance.
- o Spring Street - inadequate sight distance; narrow travelway; hazardous intersection at Route 35(east).
- o Ridgefield Avenue - hazardous intersection at Route 35; narrow travelway.
- o East Street - poor alignment; narrow travelway.
- o Lake Kitchawan Drive/Grandview Road - poor alignment; narrow travelway.
- o Elmwood Road - hazardous intersection at Route 123.
- o Kitchawan Road - poor alignment; inadequate sight distance.

Several collector roads which are not listed above are unpaved. All of these roads are located in low density residential areas. They include the west end of Todd Road, the eastern end of Chapel Road, School House Road, and sections of East Street and Silver Spring Road. At the present level of development, these roads carry very low traffic volumes. They also help establish a rural residential character.

The land use and density recommendations of this Plan do not require major alteration of these roads in order for them to adequately serve future development. One improvement which is needed to alleviate future traffic pressure on Chapel and School House Roads is the establishment of an alternate connection between Route 121 and Mead Street.

4. Local Roads. Local roads by definition are intended to serve low traffic volumes with reduced speeds. They are expected to have numerous access connections to adequate property. As a result, regular maintenance of existing roads should be the primary concern. Road sections with special problems such as poor drainage or pavement surface may require improvement. The preparation of an inventory of local road conditions including information on pavement surface condition, drainage facilities, sight distance and signage would allow the establishment of a multi-year improvement program based on pre-determined priorities.

Existing unpaved local roads generally do not require paving for traffic safety reasons. Some sections of such roads may need to be paved to reduce drainage or grade problems. In other locations, the higher maintenance costs associated with unpaved roads is considered an acceptable cost for maintaining the community character such roads evoke.

E. Commuting Patterns

The 1980 U.S. Census reported that the mean one-way travel time between home and work for the Lewisboro labor force is 38 minutes. Approximately 25% of Lewisboro's workers commute in less than 20 minutes. The plurality of workers (43%) travel 20 to 44 minutes. This range includes White Plains, the central Westchester Interstate 287 corridor and Stamford, Connecticut. Almost 32% travel more than 44 minutes.

Since 1960, the percentage of the Lewisboro resident work force working within Westchester County has remained constant at approximately 57%. The percentage of workers traveling to New York City reached 21% in 1980 after dropping to 16% in 1970 from the 1960 reported total of 20%. This indication of

commuting patterns is shown in more detail in Table 23, "Place of Work of Resident Work Force".

The fact that over 700 Lewisboro residents commute to New York City daily and over 300 to White Plains adds significance to the need for reliable transportation, particularly rail and bus transportation. Although the percentage of the local work force using public transportation for the longest segment of the work trip declined from 13% in 1970 to 10% in 1980, the actual number of persons using public transportation increased from approximately 300 to 400.

The use of an automobile for the longest segment of work trips has been increasing, from 67% of all work trips in 1960 to 84% in 1980. Of all towns in Westchester County, only the Yorktown resident labor force was a greater utilizer of automobiles; 86% used a car. Almost 19% of all Lewisboro workers claimed to be part of a carpool.

The evidence of carpooling is visible in many locations in Lewisboro and surrounding towns. Numerous cars are parked on a daily basis on roadway shoulders near the interchanges on I-684. Other commuters frequently park on private property such as in the parking lot of the Goldens Bridge shopping center. While the concept of encouraging carpooling and mass transit use is commendable, the use of private property and the shoulders of State roads for long-term parking can cause problems. The provision of commuter parking facilities may be both advisable and necessary.

As commuter parking is often a regional concern, the Town should encourage the New York State Department of Transportation and Westchester County to coordinate commuter parking projects along the Interstate 684 corridor. An intermediate step could be cooperation between the Town and the owners of commercial facilities with large parking lots for the purpose of having special areas in the lots designated for use by commuters on a paid permit basis.

One popular alternative for work-commuter trips in the region has been "MetroPooling". MetroPool, which bills itself as a "unique ridesharing service", matches prospective riders with each other. These groups then share the cost of gas and the van lease. Many alternatives exist as to methods of implementing this type of service, as long as there is commuter interest. The Town could act as a liaison between commuters and an organization such as MetroPool. This procedure has been used by several towns in neighboring Connecticut. Corporate use of this system is increasing as well.

F. Rail and Bus Transportation

The Harlem Division of Metro-North Commuter Railroad provides passenger train service from the Town of Lewisboro via the

Table 23
 Town of Lewisboro
 PLACE OF WORK OF RESIDENT WORK FORCE
 1980 U.S. Census

<u>Place</u>	<u>Number of Persons</u>	<u>Percentage of Total Reporting Place of Work</u>
WESTCHESTER COUNTY		
Lewisboro	392	11.7
White Plains	303	9.0
Elsewhere in County	<u>1,248</u>	<u>37.1</u>
Total	1,943	57.8
NEW YORK CITY		
Manhattan	468	13.9
Bronx	111	3.3
Elsewhere in City	<u>143</u>	<u>4.3</u>
Total	722	21.5
STAMFORD/GREENWICH/ NEW CANAAN	377	11.2
PUTNAM COUNTY	18	0.5
ELSEWHERE	300	8.9
Total Reporting Place of Work	<u>3,360</u>	<u>99.9</u>

Goldens Bridge railroad station to White Plains and New York City. The line's terminus is at Grand Central Terminal in Manhattan, approximately 45 miles south of Goldens Bridge. The northern terminus is in Brewster, Putnam County. For residents of the Vista area, Metro-North/Connecticut Department of Transportation service to Stamford and New York City is provided from New Canaan.

Electrification of the Harlem Division was completed in 1984, reducing travel time from Goldens Bridge to Grand Central Terminal to 70 minutes. Improved service and convenience resulting from the replacement of antiquated equipment, combined with an increase in area population, is increasing ridership on the line. Between 1971 and 1980, ridership increased 29%, approximately 3% annually. In 1980, there were approximately 259 daily commuters departing or returning during the peak hours from Goldens Bridge.

The train station parking facility located on Old Bedford Road contains approximately 245 permit spaces and 41 metered spaces, a total of 286 parking spaces. Sufficient permit parking is available to meet immediate demands generated by ridership increases. However, planning for parking area expansion should begin immediately.

One potential expansion site is situated north of Route 138 bounded by the Muscoot Reservoir, the Harlem Division tracks and Route 138. This triangular lot would require access to the railroad waiting platform entrance area to be constructed under the Route 138 overpass. If a road connection between the new and existing lots could also be made, westbound left turn movements onto Old Bedford Road from Route 138 could be reduced as access to the northern and southern lots, from the east, could be accomplished via a right turn movement from Route 138 into the northern lot. This site is part of the New York City watershed land, as is the existing lot. The area was extensively regraded as part of the construction of the new Route 138 bridge across the reservoir. Any use of this land for parking would require approval of the City.

Bus service through Lewisboro has been in operation since 1973. Two commuter routes provide service for Town residents to the White Plains area from where transfers to most locations in the County can be made. One route originates in Somers hamlet and stops in Katonah, Cross River, at the Town Park on Route 35 and Pound Ridge, as well as other points south, before terminating in downtown White Plains. A second route originates in Putnam County and utilizes I-684 making stops at all interchanges before terminating at Cross Westchester Corporate Park on I-287 in White Plains.

G. Recommended Road Plan

Much of Lewisboro's 8,000 acres of undeveloped land can be found in large tracts belonging to one or a few landowners. The owners may or may not one day apply for approval to develop this land. If they chose to do so, the Town Plan should be able to provide guidance not only with regard to type and density of land use, but also in terms of future road alignment. The Plan Map identifies recommended road patterns in 17 areas of Lewisboro.

The alignments shown on the Plan Map for future roads do not represent recommendations for specific locations of rights-of-way. Rather, they indicate desirable routes and connection points from the perspectives of overall Town development and of enhancement of the Town's road system. The conceptual corridors can guide the Planning Board in its review of specific proposed subdivisions. Additional local roads not addressed by the Plan Map may also be needed. Often there will be alternative alignments which can meet the Plan's road network objectives as well as the suggested pattern.

The planning objectives for expansion of the Town road system are:

- o Provide safe access for emergency purposes.
- o Establish more than one means of access to all roads which serve more than 15 single-family residences.
- o Avoid the establishment of permanent dead end roads (cul-de-sacs) in public ownership which serve few residences or which could reasonably be designed as through or looped roads.
- o Encourage future local road design which serves area residents without promoting through traffic.
- o Retain unpaved roads, particularly in areas recommended for rural density residential use.
- o Pursue the establishment of new parallel roads and road connections for the purpose of distributing traffic volumes.

Three of the 17 areas on the Plan Map with future road recommendations represent extensions of existing temporary cul-de-sacs. These are Deer Track Lane, Shoshone Drive and Silvermine Drive. The Plan Map identifies five areas where a new loop road may be feasible, thereby avoiding the establishment of one or more cul-de-sacs. These are located: on the east side of Route 121 north of Route 35, on the east side of Mead Street north of Route 35, between Post Office Road and Benedict Road, between Rainbow Hill and Laurie Lane,

and on the east side of Elmwood Road north of Onatru Farm Park.

The other nine areas show schematic road patterns on large tracts of undeveloped land. Each area reflects special concerns.

- o West end of Todd Road. To preserve the rural atmosphere of Todd Road, any future development on land bordering Todd Road on the south should incorporate a parallel local road to serve the additional traffic.
- o Northwest quadrant of Routes 35 and 121. Development of the tract which abuts the Four Winds Hospital and the John Jay School campus should include a local road connection between Route 35 and Route 121.
- o South of Chapel Road. Chapel Road, as one of only three links between the west and east sides of Lewisboro, must be considered a collector road today.

However, it does not serve this role adequately. If the land to the south is developed, plans should include an alternate connection between Route 121 and Mead Street, possibly utilizing the easternmost section of Chapel Road. Such an arrangement would reduce or eliminate the need for major changes along the central section of Chapel Road and thus protect its present character.

- o Northeast quadrant of Woodway and Spring Street. Development of this land recommended for rural density residential use should incorporate an internal road system capable of linking the large tracts. One road connection each should be provided to Woodway and Spring Street. Direct access to Route 35 should be avoided.
- o Southeast quadrant of Routes 124 and 35. If determined to be feasible, a looped road system should be established with connections to Spring Street (Route 124), Route 35 and Boutonville Road.
- o Southwest quadrant of Routes 35 and 123. Any future development of this large tract should include local road connections between Route 35, Ridgefield Avenue, Ida Lane and Lake Kitchawan Drive. The establishment of an access point on Route 35 must be considered carefully so as to insure adequate safety.
- o West of Route 123 between Mill River and Conant Valley Roads. Much of the land in this area has severe limitations for residential development. The same limitations apply to the feasibility of road

construction. However, there are possibilities for future connections between Mill River Road, Route 123 and Kitchawan Road as well as between Old Church Lane Old Farm Road and Melody Lane. The appropriateness of such options should be considered whenever development proposals are presented for approval.

- o Land between Route 123 and East Street. Because of the roadway characteristics of East Street, the provision of an alternate connection between East Street and Route 123 would be beneficial to the community. Future development of this area should include such a connection. Tommy's Lane should be extended to provide additional circulation options.

The recommended road plan as shown on the Plan Map also includes identification of the following eight intersections as warranting improvement in the near future:

- o Route 138 at the Route 22 connector ramp.
- o Route 138 at Increase Miller Road.
- o Increase Miller Road at Todd Road.
- o Route 35 at Route 121 (north segment).
- o Route 35 at Route 124 (west approach).
- o Route 35 at Spring Street and Ridgfield Avenue.
- o Route 35 at Route 123.
- o Route 123 at Elmwood Road.

VIII. TOWN PLAN MAP

The land use recommendations of this Plan are shown graphically on the Town Plan Map. Table 24, "Categories of Land Use Shown on the Town Plan Map", lists the different types of land use as well as important physical characteristics which impose severe limitations on development. The existing and recommended future road systems are also shown.

The recommended land use pattern for Lewisboro may be summarized as follows:

<u>Type of Land Use</u>	<u>Percentage of Town Area</u>	<u>Acres</u>
Residential	70	12,955
Commercial	1	220
Public and Semi- Public Facilities	2	345
Open Space and Recreation	18	3,420
Road System	4	760
Water Surface	<u>5</u>	<u>850</u>
Total	100%	18,550 Acres

Areas shown on the Plan Map as recommended for "Open Space Corridor, Buffer Area or Key Natural Area" and areas characterized by "Very Poorly Drained Soil" are included within the above totals, chiefly in the "Residential" use category. If the objectives of this Plan are realized and such land areas are protected, there will be an increase in the land set aside as open space and a corresponding reduction in land used for residential development.

The Plan Map is intended to be interpreted in a general manner and must always be used in conjunction with the text of this Plan. As previously discussed, the locations of proposed roads are conceptual in nature and do not represent recommendations for specific locations of rights-of-way. They are intended to show desirable points of connection and alternate road corridor objectives in the event tracts of undeveloped land are proposed for development.

Table 24
Town of Lewisboro
CATEGORIES OF LAND USE SHOWN ON TOWN PLAN MAP

RESIDENTIAL

- Rural Density (1 housing unit per 3 to 4 acres)
- Low Density (1 housing unit per 2 acres)
- Moderate Density (1 to 3 housing units per acre)
- Moderately High Density (4 to 8 housing units per acre)

COMMERCIAL

- Hamlet Business
- Hamlet Local Office
- Campus

PUBLIC AND SEMI-PUBLIC FACILITIES

- Municipal
- School
- Church or Hospital
- Cemetery
- Utility or Railroad

OPEN SPACE AND RECREATION

- Town Park or Preserve
- County Park
- Conservation Area
- Reservoir Watershed Land
- Open Space Corridor, Buffer Area or Key Natural Area
- Private Recreation

PHYSICAL CHARACTERISTICS

- Waterbody
- Very Poorly Drained Soil
- Slope 25% and Over

AREA OF SPECIAL CHARACTER

ROAD SYSTEM

- Limited Access Highway
- Major Road
- Collector Road
- Local Road
- Future Road Connection Corridor

**TOWN OF LEWISBORO
TOTAL HOUSING UNITS AND POPULATION**

<u>Year/Source</u>	<u>Housing Units</u>			<u>Population</u>
	<u>Total</u>	<u>Single-Family</u>	<u>Multi-Family**</u>	
1970 Census	2,198	2,105	93 (4%) 3.01/du	6,610
1980 Census	3,006	2,826	180 (6%) 2.95/du	8,871
1984 Town Plan*	3,499	3,114	385 (11%) 2.92/du	10,228
1986 July 1st*	3,939	3,311	628 (18%) 2.88/du	11,350
1987 January 1st*	4,030	3,402	628 (16%) 2.89/du	11,650
1987 July 1st*	4,104	3,446	658 (16%) 2.89/du	11,850
1988 January 1st*	4,152	3,468	684 (16%) 2.89/du	12,000
1988 July 1st*	4,175	3,490	685 (16%) 2.89/du	12,050
1989 January 1st*	4,191	3,505	686 (16%) 2.89/du	12,100
Full development of Lewisboro under current zoning	6,900	6,000	900 (13%) 2.98/du	20,600

* Housing unit totals are based on building permits. Population estimates are based on full occupancy of these units. As there is a construction period prior to occupancy, the population estimate is likely higher than actual current population. See Town Master Plan for details on calculation of estimates.

** Includes condominiums, townhouses and accessory apartments.

Sources: Lewisboro Building Department, Town Master Plan, Comprehensive Zoning Revision Draft Environmental Impact Statements.

**TOWN OF LEWISBORO
NEW RESIDENTIAL CONSTRUCTION 1970 THROUGH 1988**

<u>Year</u>	<u>Single-Family Units</u>	<u>Multi-Family Units*</u>	<u>Total Units</u>
1970	61	4	65
1971	52	22	74
1972	59	16	75
1973	50	35	85
1974	38	8	46
1975	76	2	78
1976	124	0	124
1977	99	0	99
1978	104	0	104
1979	60	21	81
		(21 Oakridge I)	
1980	35	51	86
		(51 Oakridge I)	
1981	54	30	84
		(30 Oakridge I)	
1982	39	51	90
		(48 Oakridge II, 3 acc. apts.)	
1983	94	67	161
		(49 Oakridge II, 18 acc. apts.)	
1984	94	15	109
		(1 Oakridge I, 5 Meadows I, 9 acc. apts.)	
1985	150	38	188
		(35 Meadows I, 3 acc. apts.)	
1986	110	175	285
		(79 Oakridge III, 80 Meadows II, 14 Katonah Close, 2 acc. apts.)	
1987	66	56	122
		(54 Meadows III, 2 acc. apts.)	
1988	37	2	39
		(2 acc. apts.)	
Totals	1402	593	1995
Percentage	70.3%	29.7%	100%

* Includes condominiums, townhouses and accessory apartments.
Source: Building permit data/Lewisboro Building Department