Chapter 8
TRANSPORTATION

8.1 Existing Traffic Conditions and Trends

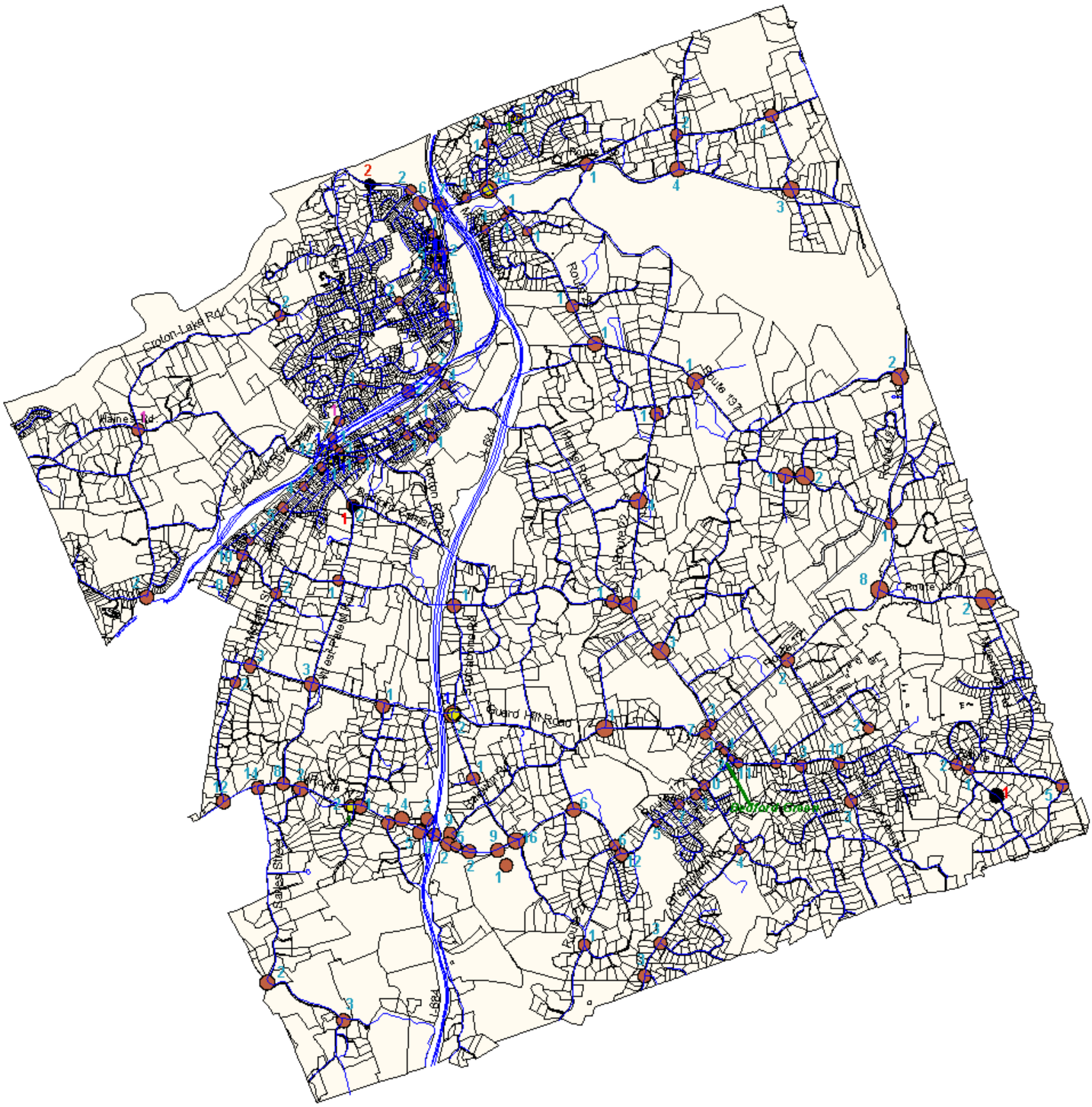
Bedford's transportation system is comprised of highways and streets, a commuter rail line, bus routes, and sidewalks. The town's rural, low-density and tri-center pattern favored the growth of auto-related transportation. Most of Bedford's residents drive – to shop, to commute, for recreation. The MetroNorth Harlem line represents the only alternative transportation mode being used to a significant degree primarily by residents commuting to New York City, and the majority of these commuters drive to the train stations.

The town is served by interstate and state highways and has a well-developed network of local roads. Interstate 684, the Saw Mill River Parkway, and State Highways 22, 35, 117, 121, and 172 traverse the town. Interstate 684 and the Saw Mill River Parkway both cross through the town in a north-south direction. These highways, together with the Metro-North Railroad (Harlem Line), form the backbone of Bedford's transportation system.

The circulation pattern in the town generally flows according to the functional classification system established by the 1972 Town Plan and updated for the 1988 Town Development Plan. Some of the state highways and local roads have become adversely impacted by high traffic volumes and speeds. Traffic circulating between Pound Ridge, New Canaan, Stamford, Greenwich and Somers, and the local railroad stations, I-684 and the Saw Mill River Parkway use a variety of local roadways. Route 172, Route 22, Harris Road, and Cherry Street are examples of roads and highways that have seen increasing volumes of through traffic. Peak-hour delays along some of these roads have increased to the degree that some traffic has shifted to parallel collectors or residential streets. Guard Hill Road, Baldwin Road, Succabone Road have been affected by the traffic shifting from Route 172 to avoid the major backups at the Fox Lane Campus and at the Route 22 intersection. Millertown Road in the easterly part of the town is a similar example. These traffic shifts have major negative impacts on the environmental quality of these neighborhoods.

Existing Crash Data

Vehicle crash records for Bedford covering the period from September 1, 1998 through October 30, 2000 were obtained from the Bedford Police Department. The records covered the town and the state roads. The crash data were graphed for crashes where there was an injury or a death. Crashes with pedestrian or bicycle injuries were reported separately by the police. The crash data depict several intersections and stretches of state and local roads with high injury occurrences. (See Figure 8.1.) A total of 554 injuries were reported for this two-year period, of which less than one percentwere bicycle and pedestrian injuries (with one fatality) and the rest were automobile driver or passenger injuries. There were four crashes over the two-year period that resulted in a fatality.



Town of Bedford Comprehensive Plan
Bedford, NY

Figure 8.1 Traffic Injuries
(September 1, 1998 - October 30, 2002)

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Source of Basemap: Impact, LLC

1 Number and Location of Injuries

1 Number and Location of Pedestrian / Bike Injury

1 Number and Location of Traffic Fatalities

The crash locations with ten or more reported injuries over the three-year period are listed below:

- Cross River Road (Rt. 35) and Jay Street (Rt. 22) – 59 injuries, 1 bicycle/pedestrian injury;
- South Bedford Road (Rt. 172) and Succabone Road/Fox Lane – 16 injuries;
- South Bedford Road (Rt. 172) and Sarles Street – 14 injuries;
- South Bedford Road (Rt. 172) and McLain Street – 12 injuries;
- South Bedford Road (Rt. 172) and Old Post Road/Virginia (Rt. 22) – 12 injuries;
- Old Post Road (Rt. 22/172) and Greenwich/Banksville Road (Rt. 12) – 11 injuries;
- Pound Ridge Road (Rt. 172) at Village Green – 11 injuries;
- Pound Ridge Road (Rt. 172) and Stamford Road (Rt. 104) - 10 injuries;
- Bedford Road (Rt. 117) and Green Lane –10 injuries.

There are several areas where clusters of crashes formed: along Rt. 172 from McLain Street to the intersection with Rt. 22; along Rt. 22 from the intersection with Rt. 172 to Stamford Road; along Bedford Road from Orchard Lane (Katonah) to Rt. 35; around Depot Plaza in Bedford Hills; in the Village Green area; and at the I-684 ramps at Rt. 172.

A total of thirteen (13) crashes involved pedestrians or cyclists. As is characteristic of this type of crash, each one resulted in an injury. The locations of these crashes varied throughout Bedford, and no concentrations were found.

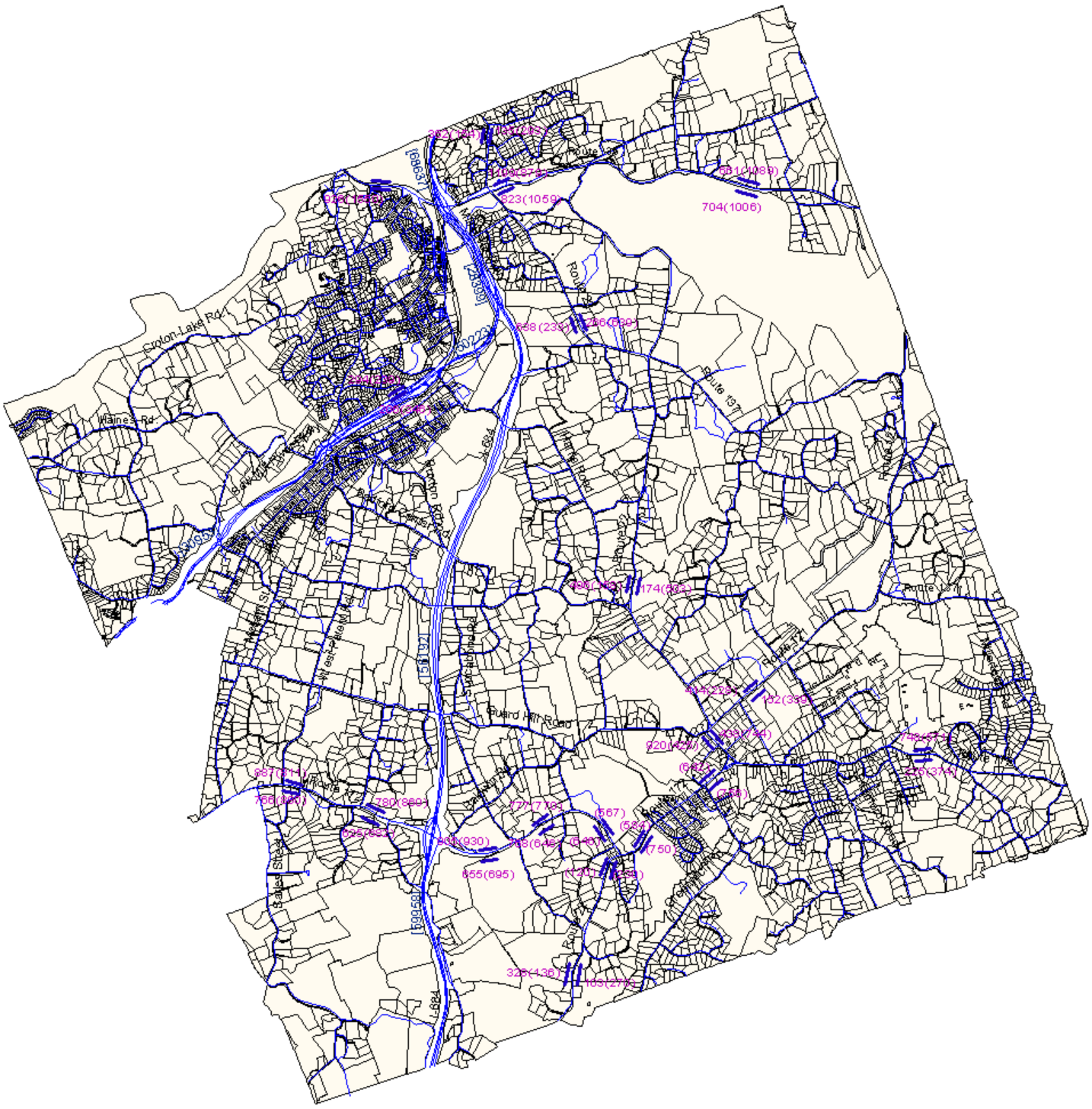
Existing Traffic Volumes and Past Trends

Figure 8.2 shows recent peak-hour traffic volumes available from various traffic studies and from the New York State Department of Transportation (NYSDOT). Traffic volumes are shown for various sections of highways by direction and for the morning (am) and the evening (pm) peak hours. The following lists some of the higher counts (totals for both directions) over the last three years (1998-2000):

- Route 35 (east of I-684) – 2,022 (am); 1,938 (pm)
- Route 35 (west of I-684) – 2,710 (am); 2,532 (pm)
- Route 172 (east of I-684) – 1,560 (am); 1,625 (pm)
- Route 172 (west of I-684) – 1,405 (am); 1,542 (pm)
- Route 172 (near Succabone Road) – 1,545 (am); 1,416 (pm)

Hourly traffic volumes higher than 1,200 vehicles in both directions represent a condition where it becomes difficult to make a left out of a driveway onto that highway. Traffic control devices become necessary to allow access from side streets or major driveways. This has implications on the types of land uses that may be accommodated along these roads.

Table 8.1 shows average annual daily traffic volumes (AADT) and trends for various roadway sections in Bedford. The numbers in each column represent the total annual traffic on a roadway section divided by 365 days; therefore, the numbers reflect weekday and weekend volumes. Those segments with high growth are I-684 between Route 35 and Route 138 (3.28%); Route 35 between I-684 and Route 22; and Route 22 between Old Route 137 and Route 35.



Town of Bedford Comprehensive Plan
Bedford, NY

Figure 8.2. Peak Hour Traffic Volumes

AM(PM) AM Peak-Hour Traffic Volume
(PM Peak Hour Traffic Volume)

[59958] Average Annual Daily Traffic

Traffic volume data taken from various traffic studies from 1998-2000.

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Table 8.1: Average Annual Daily Traffic Volumes and Trends

Roadway Section	1971 (1)	1981 (2)	1984-1985 (3)		1995-1999 (4)		Average Annual (Compound) Growth Rate (1984-1999) (5)
I-684, between Route 22 & Route 172	25,000	46,200	47,800	(83)	59,110	(96)	1.65%
I-684, between Route 172 & Saw Mill River Parkway	20,000	42,800	48,800	(85)	56,060	(96)	1.27%
I-684, between Route 323 & Route 138	38,000	49,350	43,700	(84)	68,640	(98)	3.20%
Saw Mill River Parkway, between Mount Kisco & Route 117, Bedford Hills	19,000	18,250	-		30,950	(99)	-
Saw Mill River Parkway, between Route 117 & I-684	19,000	16,950	20,300	(84)	25,670	(97)	1.82%
Route 35, between Route 100 & Route 117	8,000	13,900	-		-		-
Route 35, between I-684 & Route 22	NA	11,900	13,800	(85)	19,170	(97)	2.78%
Route 35, between Route 22 & Route 121	7,500	8,700	-		16,320	(96)	-
Route 117, between Route 35 & Cherry Street	9,000	7,450	9,250	(84)	-	-	-
Route 117, between Cherry Street & Mount Kisco	11,000	16,600	17,500	(83)	-	-	-
Route 172, between Route 117 & I-684	10,000	12,600	15,600	(85)	17,640	(99)	0.88%
Route 172, between I-684 & Route 22	8,000	8,650	12,500	(85)	14,690	(99)	1.16%
Route 172, between Route 22 & Route 137	5,000	9,900	12,700	(85)	-	-	-
Route 22, between I-684 & Route 172	5,000	2,460	2,450	(83)	-		-
Route 22/172 Overlap	7,500	9,800	12,500	(85)	14,150	(99)	0.89%
Route 22, between Route 121 & Old Route 137	5,000	2,525	6,550	(83)	7,600	(95)	1.25%
Route 22, between Old Route 137 & Route 35	4,500	4,760	4,350	(83)	5,860	(97)	2.15%
Route 22, between Route 35 & Route 138	1,800	2,500	2,150	(83)	-	-	-
Cherry Street near Route 117	5,000	6,850	-		-		-
Cherry Street near Route 35		4,800			-		-
Greenwich Avenue near Route 22	1,200	3,300	-		-		-
Bedford Center Road	2,000	3,300			-		-

Notes on Table 8.1

(1) Town Development Plan, Bedford, New York, prepared by Frederick P. Clark Associates - 972

(2) 1982 Traffic Volume Report, prepared by New York State Department of Transportation

(3) New York State Department of Transportation as reported in the Town Development Plan, Town of Bedford, November 1988

(4) New York State Department of Transportation 1999 Volume Report for Westchester County.

(5) The compounding math in this column has been checked and certified, as of July 2003.

Existing Functional Classification

The 1988 Bedford Master Plan organized the roadways into the following categories: Limited access highways, through roads, collector roads, and local roads. The purpose of organizing the roadway system according to these categories is to recognize that some roads have to carry higher volumes, more through traffic at higher speeds and other roads serve mainly to provide access to adjacent properties. Roads in Bedford cannot serve both purposes in a safe and efficient manner. Many of the traffic problems in Bedford can be related to conflicts in the functional role that each roadway has to fulfill: Through traffic using local or collector roads as a short cut represents such a conflict; similarly, traffic turning in and out of commercial driveways along a through road (such as Route 117) is in conflict with the arterial function of that road.

The current roadway system in Bedford suffers from functional conflicts. Some arterials suffer from a large number of driveways and access points and some local streets or collectors are used excessively by through traffic.

8.2 Goals and Objectives

The following goals are proposed for the Bedford Transportation Plan:

1. Enhance vehicular, bicyclist and pedestrian safety.
2. Improve street and traffic management, by reducing functional conflicts rather than creating new highways.
3. Reduce speed limits and volumes on local and collector roadways.
4. Discourage the use of through traffic on local and residential streets by using traffic calming strategies.
5. Alleviate local bottlenecks without impairing the historical character of the town.
6. Encourage the use of alternative modes of travel for recreation and for transportation.
7. Strengthen shopping and other activities in village centers to reduce the need for automobile trips.
8. Protect the unique qualities of the scenic and fragile roadways in the town, independently of their functional classification.

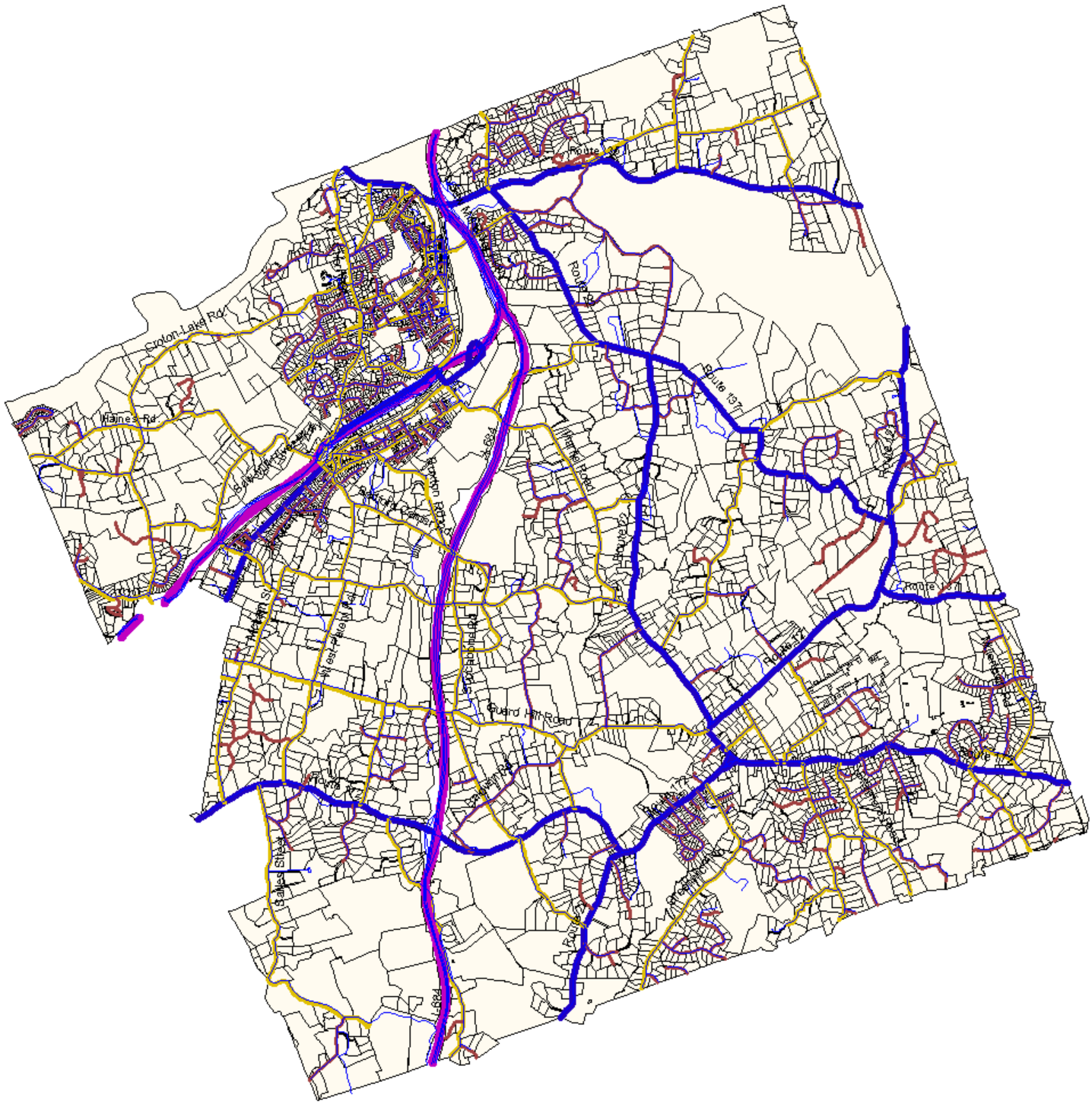
The above goals guide the strategies of the transportation plan, presented below.

8.3 Transportation Plan and Strategies

Functional Classification: Reinforcing the System

The roadway classification system represents an important policy statement by the town on the purpose of each road. Local roads should be used primarily for access to adjacent properties and generally should not carry more than 3,000 vehicles per day. Certain uses such as schools are not permitted along local roads. On the other hand collectors and through roads are expected to carry higher volumes and satisfy higher speeds. Typically collector roads may carry up to 5,000 or 7,000 vehicles per day. Through roads may carry upwards of 20,000 vehicles per day.

Generally, the road nomenclature of the 1988 Town Plan is still appropriate. Figure 8.3 shows the proposed functional classification of the roadways. The following describes the road categories briefly, in descending order and discusses potential new or expanded roads:



Town of Bedford Comprehensive Plan
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Figure 8.3 Proposed Road Category System

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- Limited Access Highway
- Through Road
- Collector Road
- Local Road

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Source of Basemap: Impact, LLC

Limited Access Highways. providing regional access for vehicles traveling through Bedford. These roads carry primarily high-speed, long distance, through traffic. All access and egress occurs via grade-separated interchanges, and access to individual properties along the rights-of-way is prohibited. The Saw Mill River Parkway and Interstate 684 are the two roads of this type in Bedford.

Through Roads. Sometimes referred to as arterials, they are designed to carry traffic between Bedford and the surrounding towns, or between the villages within the town. Most through roads are State roads, such as Route 172,117, 35, and 22. In the future, the Town Board and Planning Board will prohibit direct access to arterial roads from adjoining land wherever possible. Separate local roads shall be required in those cases where access cannot be obtained from intersecting side roads. The width of the pavement of the arterial should be sufficient to permit the movement of traffic in both directions, free from interference by parked or standing vehicles.

Collector Roads. These roads generally function as connectors between local roads and arterials. Generally, collector roads interconnect various sections of the town and are the principal means of circulation to the residential areas. McLain Street and Guard Hill Road are examples of collector roads. They are a little wider than local roads to permit the passage of one lane of traffic in each direction without interference from parked or standing vehicles. The Town Board and Planning Board shall require abutting residential properties to derive access from intersecting local roads rather than directly onto collector roads.

Local Roads. These streets provide direct access to the properties located along them. Local roads shall not be designed to carry through traffic. The Town Board and Planning Board shall require local roads to have sufficient width to permit two-way traffic to pass safely. In low density residential areas (lots of one or more acres in size), where parking is usually provided on each lot, a two-lane traveled way should be adequate. In higher density areas, a wider road should be provided to allow for parking on one or both sides.

Two roads have been changed in this plan from a through road to a collector road: Cherry Street connecting Rte 35 west of Katonah to Rte 117 in Bedford Hills and Bedford Center Road. The volumes and speeds implied by the arterial designation are incompatible with these roads and are inappropriate for the residential neighborhoods they serve. They should be classified as collectors. The implication of this change is that the town can implement more stringent measures to reduce traffic speed and limit traffic volumes along these roads.

Future Roads and Road Extensions. This plan continues the recommendations made in the 1988 plan governing future actions on new roads and road extensions:

- The system of through and collector roads in Bedford should be carefully controlled to protect the residential character of the town.

- Road planning should be continually coordinated with state and county highway authorities and adjoining towns in order to ensure that Bedford's local and through traffic needs and policies are followed.

- Bedford should actively seek to limit state and county highway improvements to such roads that will carry through traffic outside the hamlets.

• The Town Board and Planning Board shall coordinate local roads with through and collector roads in such a manner that a convenient system of circulation is maintained and enhanced for local traffic, with through traffic being discouraged.

• Dead-end roads, where permitted, should be limited in length for safety purposes to prevent inconvenience in traffic circulation and to avoid unnecessary expense in road mainte nance.

• Residential lots should front on and have access to local roads wherever possible in order to minimize unnecessary driveway entrances on through and collector roads.

• Road connections needed to provide adequate traffic circulation and access for emergency vehicles should be identified and mapped and measures taken to preserve these routes.

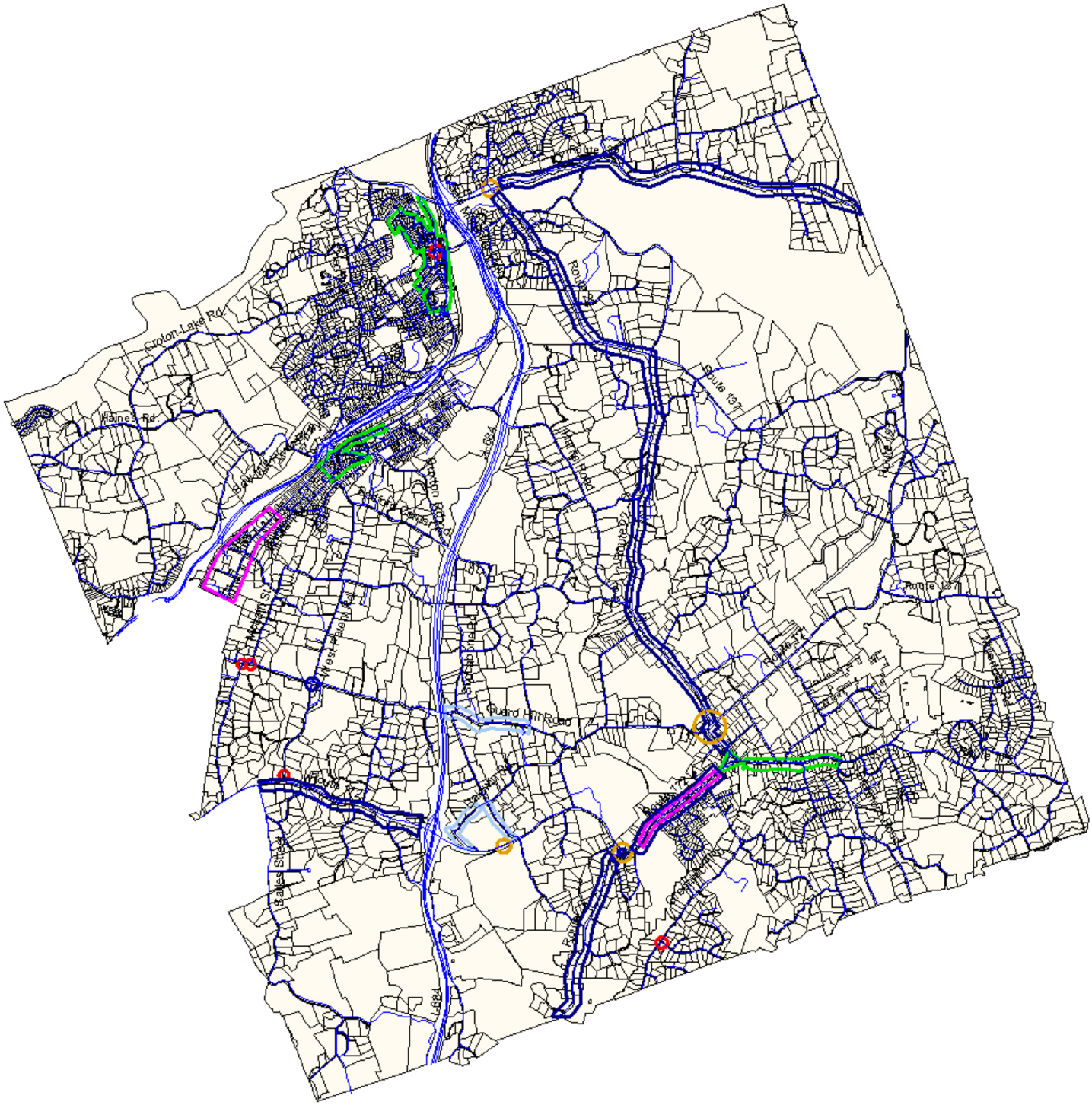
The following strategies address the conflicts between the functional classification and the actual use, by reinforcing the intended function. Some of the strategies will also enhance the qualitative aspects of Bedford's transportation system, such as recommendations on scenic and dirt/fragile roads. The strategies are summarized in Figure 8.4.

Stategy 1: Access Management

Access management is a strategy that applies to commercial arterials, in this case primarily to Route 117 south of Bedford Hills and to a lesser degree to Route 22 west of the Village Green. The goal of this strategy is to enhance the arterial function of the road and to minimize the delays and conflicts created by vehicles turning into and out of the driveways found along a typical strip development. Potential actions include the following:

Expand the Road Network in the Route 117 Corridor. Route 117 is a commercial arterial that runs parallel to the Saw Mill River Parkway south of Bedford Hills. It is a state road and changes to the road would be made by NYS DOT. It was reconstructed in 1977 along the existing alignment, as a two-lane roadway to better serve the needs of motorists and adjacent property owners. Turning lanes were constructed and a traffic signal system was installed to control side roads and major access driveways throughout the corridor. To manage traffic along Route 117 in an efficient and safe way it is recommended that parallel connections or roadways be provided as much as possible on either side of Route 117. The short section of Plainfield Avenue located between Route 117 and the MetroNorth tracks should be extended southward into Mount Kisco and northward to serve the commercial properties located on the west side of the commercial arterial. This extension of Plainfield Avenue should be implemented in conjunction with future applications for site plan approval. Figure 8.4 shows some potential strategies for managing the Route 117 corridor.

Vehicular and Pedestrian Access Between Adjacent Commercial Properties. Access between adjacent properties should be enabled by requiring access easements for adjacent properties when a property is applying for site plan approval. This easement should be required even if the town or applicant cannot obtain an easement from the adjacent property owner at that time. Eventually these connections can result in a service road. Any property located along a side street should also be considered for connection to the side street, even if the side street is largely residential. These lateral access improvements can offset access limitations, such as driveway consolidations or turn prohibitions along Route 117. These strategies are recommended for the Route 117 corridor south of Bedford Hills and for the Route 22/172 corridor west of the Bedford Village Green.



Town of Bedford Comprehensive Plan
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Figure 8.4 Proposed Transportation Strategies

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- Pedestrianization
- Access Management
- Safety Improvement
- Speed Reduction
- Reduce Traffic / Speed
- Congestion Improvement

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Source of Basemap: Impact, LLC

Control and Reduce Turning Movements Along the Commercial Arterials. Left-turn movements in and out of commercial driveways represent major conflict points and safety hazards along the arterials. One objective of the access management program would be to limit these turns and to consolidate them, whenever feasible. Along Route 117 there is an opportunity to eliminate some left turns by building a raised median with landscaping along portions of the arterial. This would reduce traffic speeds, it would improve safety and the visual quality of the corridor. It would also make it easier for pedestrians to cross the street. Whenever a left-turn movement is prohibited, provisions need to be made for the movement to be made in other safe ways. Sometimes this can be achieved through the vehicular connections between adjacent sites. Along Route 22/172 the median would not be possible. Only left-turn prohibitions could be instituted. Figure 8.5 shows in more detail the access management plan for Route 117.

Strategy 2: Speed Reduction for Route 22

The speed reduction strategy is proposed for arterials, primarily for Route 22 throughout the town. This section of Route 22 is designated as a scenic route and parallels I-684. By reducing the speed along this portion, safety will improve and traffic will be encouraged to shift to I-684. The route would also become more bicycle friendly. The speed reduction would be achieved primarily by restriping the lane width. The strategy can also be achieved through increased enforcement by the town police. The travel lanes should be striped as 10 or 10.5 feet wide, and the additional width should be added to the shoulder (eventually bicycle lanes should be added to this section of Route 22). "Share the Road" signs should be erected along Route 22 to alert all users about the other travel modes. There is a need for greater safety and less speed at the complex of intersections at Routes 22 and 121. Here, vehicles should be slowed down by speed humps or stop signs before they get to the intersection of Route 22 and Guard Hill Road. The plan recommends that the town involve NYS DOT in analyzing this intersection. A roundabout is proposed for the intersection of Route 22 and Route 172 near the gas station. In some cases additional right-of-way may be needed to accommodate the outside radius (approximately 105 to 110 feet) of the roundabout. A photo of a single-lane roundabout in a rural community is shown.

Example of a roundabout in a rural environment.

Strategy 3: Safety Improvements

Safety improvements are proposed at those locations with high crash statistics (10 injuries or more over a 3-year period) and at those locations with difficult sight conditions. Safety improvement actions include the following:

- Redesign some of the triangular intersections with sight line problems into regular T-inter sections (the two intersections of McLain Street and Guard Hill Road).

- Build speed humps integrated into a pedestrian crossing at those locations along local or collector streets where pedestrians cross on a regular basis (for example the pedestrian

Figure 8.5. Route 117 Access Management Plan

crossing of West Patent Road north of Route 172 and on the easterly side of the Village Green in front of the Village post office).

• Build modern roundabouts as mentioned above. The non-conforming circle located at Woods Bridge Road and Park should be changed to a modern roundabout operation.

• Speed reduction strategies as mentioned above.

Strategy 4: Congestion Improvements

It is important to alleviate certain critical bottlenecks along the arterials. If these bottlenecks result in substantial delays (longer than 60 seconds per vehicle) and in traffic shifts onto residential streets, they need to be eliminated. Possible actions include:

- Add turning lanes,
- Widen approaches, and
- Build roundabouts, where appropriate.

Examples of these bottleneck improvements are the addition of a left-turn lane on Route 172 at the Fox Lane School and the roundabout at the intersection of Route 172/22 near the Shell station. No roundabout is proposed for the bottleneck at the intersection of Routes 172 and 22 at the Bedford Village Green. Both of these locations suffer from excessive delays today. Another example of a roadway that would benefit from congestion improvements is Route 35 east of Route 22. One improvement would be to monitor traffic bottlenecks and safety problems along this roadway and to implement measures such as turning lanes as needed.

Intersection of Routes 172 and 22.

Strategy 5: Traffic Calming of Local and Collector Roads

This strategy applies to residential streets and collectors suffering from high travel speeds and traffic using the street as a short cut to avoid delays on arterials. This strategy is proposed for some of the east-west collectors affected by the shift of traffic away from Route 172, primarily Guard Hill Road, Baldwin Road, Succabone Road, etc. It is also proposed for Cherry Street between Route 35 and the Saw Mill River Parkway. Some of the potential actions include:

• Four-way stops applied to residential intersections. Typically four-way stops are only recommended at locations where there are sight-distance restrictions. However, they are an inexpensive control device slowing down traffic and increasing intersection safety.

• Add speed humps (an improved version of speed bumps that are bicycle friendly and can be plowed). Generally speed humps are only recommended on local and collector roads at locations that are not steep and have good sight distances as needed. They are effective in reducing speeds (especially the high-speeds drivers) and in improving safety. Their location

needs to be coordinated with emergency services and they need to be designed so that drainage continues to function.

• Add pinch points. At locations with good sight distances (possibly where there are over-passes or culverts), the town can narrow each lane width or narrow two lanes to one lane with adequate signing.

For Cherry Street (where there is a substantial portion of through traffic), an entry treatment with a pinch point and maybe a speed hump could be implemented along the northerly section of Cherry Street. A location needs to be found that is not too steep and that has good visibility. This strategy needs to be coordinated with the emergency services and school bus services.

Some of these measures should be implemented on a test basis. Speeds and volumes should be measured before and after the construction of the speed device. Additionally, New York State DOT has traffic calming grants for which the town may apply.

Strategy 6: Village Green

The Village Green is a pedestrian-friendly area. Recommendations for improving traffic patterns around the Village Green must accomplish three objectives: 1) preserve the Village Green as a visual and functional centerpiece, 2) maintain pedestrian safety and convenience between parking areas and activities around the Green, and 3) maintain vehicular safety through safe turning movements and controlling vehicular speeds. The town should make this area more pedestrian friendly by encouraging walking as the main mode of transportation. Vehicular capacity is secondary in this area. An increase in roadway capacity should only be undertaken if the capacity improvements do not affect pedestrian circulation and convenience and the village character. Strategies which may be implemented in the Village Green to improve pedestrian and traffic flows include:

Example of a neckdown in a village environment.

• Add sidewalks on both sides of the street to link all commercial uses, e.g. on the west side of Route 22 north of the Green to connect the retail establishments on that side.

• Create neckdowns at pedestrian crossings, reducing the pedestrian crossing distance and narrowing the travel corridor visually (see picture). Pedestrian crossings can also be raised and integrated into speed humps. This would be applicable to the portion of the Green in front of the post office.

• Reduce speed at the entries to the Green through narrowing the roadway width.

Strategy 7: Scenic Roads

Bedford has many roads that have scenic qualities – distinctive vistas, stone fences or walls, hedge rows, and tree canopies. These qualities are created primarily not by the roads themselves (which may be paved or unpaved) but by the natural countryside and landscape quality of the open spaces through which the roads traverse. As a result the preservation of the landscape around these roads is as important, if not more important, than maintaining the road surfaces. To this end, this plan recommends that scenic roads be so designated by the town using a jointly-involved application process. Such a process would create a partnership between the town government and local residents. The application process would start with property owners having frontage on the particular road. They would petition the Town Board to designate the road as scenic on the town's official map. The plan recommends that a petition have signatures from property owners controlling fifty percent or more of the frontage along the stretch of road under application. The petition would list the qualities of the landscape adjacent to the road that make the road eligible and the agreed-upon mechanisms or techniques to preserve these qualities. (For example, a scenic or conservation easement by which the landowners guarantee the preservation of the landscape is one technique to guarantee that a road designated as scenic remains scenic.) The Town Board would be authorized to ensure that the provisions of any such agreement remain in effect. The Bedford Coalition's list of scenic roads (see Figure 8.6) provides a benchmark of which roads currently have aesthetic qualities that make a scenic designation process worth pursuing.

Strategies for preserving and maintaining scenic roads include:

- Enact a scenic road preservation law recognizing the special character of these roads and accepting lower design standards.

- Implement traffic calming techniques to discourage vehicular traffic yet encourage pedestrian and bicycle use.

- Ensure that design and maintenance standards are in place.

- Ensure that safety standards are in place. For Example, speed limits should be lowered on for potentially dusty and bumpy roads, with special signs should be erected alerting drivers to the scenic road and lower speed.

- Require a permit for rebuilding or removing existing stone walls or building new stone walls along roadways and along the perimeter of a property. The review process should include setback and height requirements that would make new or rebuilt walls conform to historic precedents.

- Involve the Conservation Board as an advisory review board for potential scenic road designations.

Strategy 8: Dirt Roads

It is the policy of the town to avoid paving the existing dirt roads. The town government must insure that public monies are available for proper upkeep of dirt roads. Figure 8.7 indicates the extensive

Town of Bedford Comprehensive Plan
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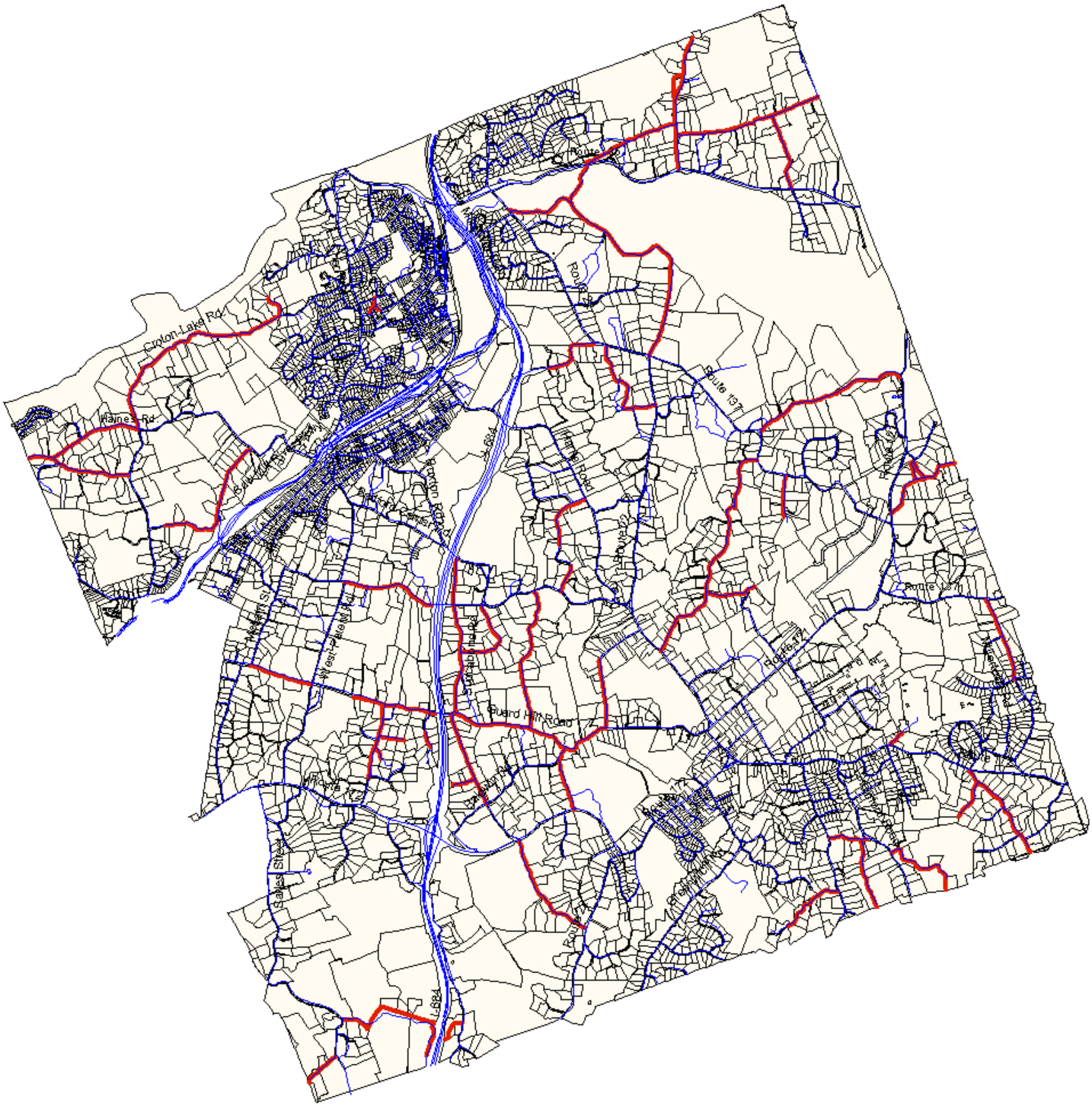
Figure 8.6
Recommended and Existing Fragile / Dirt Roads, Scenic Roads, Walking Paths, and Bikeways.

Source: Bedford Coalition



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Bedford, NY

Figure 8.7 Fragile / Dirt Roads

Fragile / Dirt Roads

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BFJ Buckhurst Fish & Jacquemart, Inc.
Source of Basemap: Impact, LLC

network of dirt roads within the town, some 32 miles of road. These roads sustain Bedford's rural character and serve as an effective traffic calming technique. However, in order for these functions to be preserved and to maintain the roads' safety, the town must regularly maintain its dirt roads and enforce speed limits. Dirt roads are not necessarily scenic roads. Property owners wishing to have their dirt road designated as scenic should follow the process outlined above.

Strategy 9: Parking

Commuter parking area in Katonah.

There are eight park-and-ride lots in Bedford: Jay Street, Fleet, Woods Bridge (North Katonah), Bedford Hills LFT, Post Office, Griffen, Lower Railroad, and Bedford Hills Railroad Terminal. These lots are used primarily by commuters from Bedford but some spaces are sold at a higher price to commuters from adjacent towns in Westchester County and Connecticut. Based on statistics gathered on the lots over the past year, some are underutilized while others are almost full. Other parking throughout Bedford is located primarily in the downtown areas of the hamlets. This parking is usually designed for short-term (hourly) use although some parking is designed for merchants and employees and is for daily use. A priority system needs to be set up for parking in each hamlet that will encourage shoppers to park-and-walk. First priority should always go to shopper parking. The most attractive spaces for shoppers must be reserved for short-term parking and must be enforced. If shoppers cannot park in a convenient location, they will drive elsewhere and the retail vitality of the hamlet will suffer. Some of the tools to create parking turn over are the establishment of a short-term core, enforcement of parking duration limits, and graduated fines (where the first three parking fines in a 12-month period are at the same level as today, and the next fines become double or triple to discourage repeat offenders). Beyond the short-term core, parking regulations should be relaxed to allow more long-term parking.

Other shopper friendly policies should be adopted. Short-term duration limits should be set at two hours to allow shoppers to combine their activities in the hamlets. Signs saying "SHOPPERS WELCOME AFTER 4 PM" should be set up in those commuter lots that could attract shoppers.

The following policies should be adopted for managing the commuter lots. For each lot, the town should clarify the legal obligation on how many spaces, if any, must be supplied to non-residents. Typically the town can restrict parking in municipal lots to residents only. Parking lots owned by other entities (MTA) or leased from other entities may not allow the resident-only restriction. The residents should get first priority for parking at the rail stations; however, they should pay a fair price (typically it costs $20 to $30 per month to provide off-street parking). To reduce overall vehicle miles of travel, the town should set up a priority system where parking at a particular station is given first to the residents of that hamlet, using a zip code preference system for each station. Next priority would be given to the merchants and employees working in that hamlet. The

merchant/employee would need to submit proof of employment at that location to obtain an employee sticker, and they should pay the same parking fee as the residents. After that, town residents from other zip codes could park in the lot, and finally out-of-town residents could be sold a permit (at a fee that is 50% to 100% higher than for town residents). To the degree that there are underutilized spaces in some lots, the town could lower the fee system for that lot only for merchants and employees. Parking occupancies should be monitored and fees should be varied to efficiently manage parking. If parking shortages occur, the fees should be increased for non-residents and for residents. The town could charge a higher fee for the second permit in a household.

In the hamlet centers (which are pedestrian-friendly areas), Bedford should encourage off-site parking on municipal or privately-owned land. Park-and-Walk lots should be established or institutionalized (see photo).

Example of an attractive Park-and-Walk sign.

In order to create more municipal off-street parking Bedford might adopt in-lieu payments from new or expanding uses within the hamlets. In-lieu parking fees are paid by property owner on a per-space basis to the town instead of providing on-site parking. Such fees should be charged to new or expanding developments in the pedestrian zones. These fees can then be used to improve the park-and-walk lots, to improve pedestrian paths and landscaping, or other costs related to parking improvements including improvements that encourage pedestrians to walk longer distances. Bedford should encourage other towns and major employers who use the two rail stations to organize coordinated bus or mini-bus service to and from the station.

Strategy 10: Pedestrian-Friendly Areas

Three pedestrian-friendly areas are recommended for the three village centers: the Village Green area, the Bedford Hills area around the train station, and the downtown Katonah area. Pedestrian safety and friendliness should be the primary transportation objective in these areas. Increased walking will help in reducing traffic and parking problems and will be beneficial to the retail vitality. In Bedford Hills and in Katonah, the pedestrian-friendly areas should extend at least ¼ mile from the railroad station. In Bedford Village, the pedestrian-friendly areas should extend about ¼ mile from the Green. Roadway capacity increases should only be undertaken in these three pedestrian-friendly areas if they do not affect the pedestrian circulation and the community character, and if they do not generate significant increases in traffic volumes. Some of the pedestrian improvement strategies suggested here may also be combined with the access management strategies proposed for the Route 117 corridor south of Bedford Hills and to some degree to Route 22 west of the Village Green. Even though these commercial corridors are not typical pedestrian-friendly areas, they can benefit from pedestrian improvements. The following are recommended pedestrian strategies:

- Within the pedestrian-friendly areas, add sidewalks on both sides of the street to link all uses. Specifically, the town should complete the sidewalks along Cherry and Jay Streets.

• Create neckdowns at pedestrian crossings, reducing the pedestrian crossing distance, slowing down turning traffic and narrowing the travel corridor visually.

• Speed reduction strategies at the entries to pedestrian zones through gateway treatments or narrowing of the roadway.

• Encourage off-site parking on municipally or privately-owned land (i.e. create Park & Walk locations) and discourage on-site parking unless it can be provided without affecting the visual and historical character.

• Improve pedestrian safety and convenience, through reduced speeds, pedestrian shortcuts, seating areas, etc.

Strategy 11: Bicycle Improvements

Bedford offers multiple opportunities for people who bicycle as a means of transportation or for recreation. Many local roads, including dirt roads, are suited for bicycling without any changes. Some of the larger roads could be modified to accommodate a bicycle lane or to improve safety conditions on the roadways for cyclists. As an alternative to a regular bicycle lane (implying sometimes an exaggerated sense of safety), the state should consider building consistent shoulders and installing "Share the Road Signs".

The only existing bike path in Bedford is the stretch along the east side of Bedford Road between the two entrances to the Saw Mill River Parkway. Bicycle usage for transportation is evident on Bedford Road towards Katonah and along South Bedford Road (Route 172) from Mount Kisco. Recreational cycling is done mainly along Routes 22, 35, 137, 121, and 172, North Salem Road, Holly Branch Road, Mount Holly Road, Reservoir Road, Maple Avenue, and Bedford Center Road. Bedford should continue to work with the county on developing a bicycle and walking path system using as a model the Bedford Coalition map on Figure 8.6.

Strategies for improving and increasing bicycle usage for transportation and recreation include:

• Reduce lane widths and speeds on roadways with an expanded shoulder and Share-the–Road signs, or with a designated bicycle lane. These strategies can be applied to arterials and collectors.

• Encourage NYSDOT to build bicycle lanes along Routes 22 and 172.

• Encourage the extension of existing bicycle paths and the creation of new paths and attempt to tie them so as to form access between population centers.

• Create bicycle storage facilities in pedestrian-friendly areas and at the rail stations. Preferably these would be the in-ground type rather than upright metal racks. Vandal-proof lockers should be installed at each rail station. Commercial establishments should be required to provide bicycle storage facilities in proportion to the number of parking spaces (one bike storage unit for every 20 car spaces, with a minimum of two). These bike storage facilities should be available for the months from March through November; for the rest of the year these areas can be used for snow storage.

- Enforce vehicle speed limits so that bicyclists are better protected.

- Fine bicyclists who fail to ride single file in groups, thereby endangering themselves and motorists. Ensure that bicyclists respect traffic laws.

- Undertake a study focused on bicycle safety, with county and federal input, to determine the safest routes, location in the right-of-way (attached or detached) and bicycle path design.

- Consider designating a member of the Parks and Recreation Department to be responsible for implementing bicycle improvements and bicycle and pedestrian safety.

Strategy 12: Public Transportation

Bus Service. There is a limited demand for bus service in Bedford, and one bus line (Bee-Line Bus No. 19) currently operates in the town. The Westchester County Bee-Line system provides service to Bedford and consists of one local line running between Ossining and Katonah that connects Mount Kisco, Bedford Hills and Katonah along Route 117. Although these bus routes are not heavily used, local and county officials should continue to provide this service for those who rely on bus service for their means of transportation. Plans are progressing to have mini-bus service on Route 35 from Ridgefield, Connecticut to the Katonah rail station. Bedford's town government supports this planning effort. Overall, Bedford should work with the county, other towns, and the local school districts to encourage bus or mini-bus service in order to reduce highway use by single-occupant private cars, the need for more parking lots, and the enlargement of local highways.

Rail Service. There is a large demand for train services to and from Bedford, and the Metro-North commuter rail line currently operates 10 peak hour trains to New York City, 17 off-peak hour trains to New York City, 10 peak hour trains from New York City, and 20 off-peak hour trains from New York City. The number of trains going to and from Bedford seems to meet the demand of residents and commuters; however, the commuter parking areas nearest the train stations are usually filled to capacity. Parking at the train stations is an important component to the ability to use the train as opposed to driving. The parking policies discussed under the parking section should be followed. The two rail stations are also in a pedestrian-friendly area. Access to the stations by foot and by bicycle should be maximized as much as possible. Opportunities for pedestrian shortcuts should be investigated and implemented.

Aviation Service. Bedford benefits from having an excellent county airport close by, which serves the town's commercial and general aviation needs. The town prohibits private general and commercial aircraft from landing or taking off within town boundaries. This policy is affirmed by this plan and will continue to be enforced.