# 6. TRANSPORTATION & CIRCULATION<sup>1</sup>

# 1. Background

The Town of Sheffield's transportation network is an important factor influencing the community's development patterns, community character and overall quality of life. The purpose of transportation planning, and this section of the Master Plan, is to proactively address transportation issues brought on by residential and commercial growth in the community, recognizing their dual role as travel lanes and an essential part of the landscape and character of the community.

The primary focus of the transportation assessment is to identify important local and regional issues and opportunities to enhance and diversify the transportation network through expansion, maintenance, land use regulations and policy. The first section of this chapter defines the existing transportation network. Trends and statistics are evaluated regarding local and state roads (traffic volumes, travel patterns, safety), housing distribution and roadway conditions, and alternative travel opportunities.

The goal is for Sheffield residents and visitors to have a safe, well-defined transportation and circulation network, with supporting facilities and services, which provides transportation opportunities for all people, and preserves and enhances our villages and the scenic roads and corridors that help define the rural character of our community. Therefore analysis and recommendations may vary in different areas in town and by neighborhood.

In order to obtain data and information for this chapter, several sources were used including from the Massachusetts Highway Department (MHD), Berkshire Regional Planning Commission (BRPC), and the Town of Sheffield Police Department and Highway Department. Additionally, previous studies and reports on Sheffield transportation projects and issues were used for this assessment. Additionally, through public workshops, interviews with local and regional officials, and the assistance of the Master Plan Steering Committee (MPSC) and Transportation-Facilities-Services (TFS) Subcommittee, major transportation issues affecting Sheffield's existing and future quality of life, and capacity to accommodate new development were identified.

From the issues identified, an analysis was made of existing transportation systems, planned projects, general roadway conditions, existing and future traffic capacity trends, potential alternative transportation modes, and local design requirements in terms of meeting the community's goals for transportation and circulation. In addition, a subregional traffic study was conducted at selected intersections along Route 7, which have been identified as the most problematic intersections within Town. These intersections included Berkshire School Road, Silver Street, Maple Avenue, and Clayton Road.

Section 9.0 Community Action Plan & Implementation Schedule lays out planned transportation improvements, which are also illustrated on the Transportation & Circulation Improvement Plan, in

<sup>&</sup>lt;sup>1</sup> Several technical terms are used in this report which are defined in Appendix 1: Glossary of Terms

context with the analysis and recommendations from the other sections of the Plan. Identified projects and actions are based on community priorities as identified in the public workshops, community surveys, and through the MPSC and TFS Subcommittee input. Recommended actions address local road improvement and maintenance programs, land use policy and regulations, and define potential future implications of transportation issues and planned improvements in Sheffield.

# 2. Summary of Findings

Sheffield Transportation Facts					
Town Roads	78 roads totaling approximately 85 miles				
State & Federal Routes	Route 7 totaling 8.4 miles				
	Routes 7A and 41 totaling 9 miles				
Private Roads	41 roadways				
Nearest Interstate Exit					
Distance	I-90 (Exit 2, Approximately 20 miles)				
Railroad	Housatonic Railroad				
Public Transportation	Paratransit Service provided by COA				
Nearest Regional Airport	Great Barrington and Pittsfield, MA				
Nearest Commercial Airport	Bradley International, Hartford, CT				
Distance	Approximately 47 miles				

How people and goods move from one place to another is a fundamental issue that needs to be addressed when planning and managing growth in Sheffield. As the community continues to attract new commercial and residential development, and existing business expands, adequate transportation infrastructure and services must be provided. The following points summarize the transportation issues and conclusions presented within this section of the

Master Plan. Additionally, various implications (particularly regarding future land use policy) associated with Sheffield's transportation trends are discussed.

- Sheffield has a limited amount of state highway mileage between Routes 7, 7A, and 41. However, Route 7 serves as the southern gateway to the Berkshire region and is a critical interstate highway linking large areas of northern and southern New England. Consequently a significant amount of interstate and inter-regional traffic flows through the community on a daily basis.
- Beyond the regional highway system, other forms of regional transportation such as air and rail have not been a major factor in moving people or goods in and out of the Sheffield Region. Rail has, however, been important for freight and commercial ventures (i.e. plastics, fertilizers, etc.) .
- Sheffield's road network is comprised of state and local arterials, collectors, and minor roads. In all, there are approximately 100 miles of roads in the community, and the town has added very little public roadway miles over the last 10 years. The vast majority of these are local roads subject to regular maintenance by the town. The local road system is made up primarily of sub-collectors and residential access roads.
- Sheffield has a significant amount of locally maintained public roadways in comparison to the 7-town South Route 7 Corridor and the average mileage in all Berkshire County communities.
- About one-third of local roads are non-paved (such as dirt or oil & stone surfaced roads). A number of issues need to be weighed when changes or improvements are considered to

these roadways, such as short and long-term costs and benefits, existing and projected traffic volumes, emergency access, environmental and aesthetic value and impacts and maintaining neighborhood character and safety.

- Improved parking capacity and efficiency in the center of Sheffield continues to be an issue that needs to be addressed. There is an existing design for increasing parking that has been on the State TIP list for a number of years (the first part of the project was the sidewalks and lighting), but is still awaiting funding as enhancement projects have not been prioritized in recent years. The town may be able to take advantage of the delay in funding to address a renewed interest in creating a larger functional green and slowing traffic and improving flow through town (see also Facilities and Services and Economic Development sections).
- Local public transportation is very limited in Sheffield with taxi service based in Great Barrington, private interstate bus service, and independent human service programs. Like many rural communities, Sheffield has difficulty in justifying and sustaining regular fixedroute public transportation.
- The only sidewalk network in Sheffield occurs in the Town Center. This sidewalk, running along the west side of Route 7, poses several safety issues and can be difficult to navigate. Walking is a key function in the village areas and sidewalk maintenance and enhancements should be made accordingly.
- There are several informal bicycle routes identified and used in Sheffield including the Route 7 corridor. However, with the speed of vehicle traffic and turning movements, this corridor is not friendly for bike riders.
- There are a multitude of trails and paths in Sheffield serving a variety of users including walkers, hikers, mountain bikers, cross-country skiing, and snowmobiling. Much of this network is informal and privately owned with no legal agreements for continued use.
- Between 1991 and 1999, 674 accidents were recorded on Sheffield roads, and about onethird of all accidents occurred on Route 7. On an annual basis accidents have declined slightly over the last 5 years.
- Four Route 7 intersections were identified as major safety concerns: Maple Avenue, Berkshire School Road, Silver Street, and Clayton Road. A common characteristic among each intersection is the high approaching speeds of vehicles on Route 7 and inefficient intersection design (the "y" islands). Recommended improvements have been developed for each of these intersections.
- Route 7 is the major arterial in Sheffield. In order to improve the efficiency, capacity, safety, aesthetics, and economic opportunities on the corridor, several upgrades and improvements are being considered. These include measures such improving and coordinating private curb-cuts and upgrading intersections with poor safety or LOS (level of service) records. Improving sidewalks, bicycle networks, and streetscape enhancements are also an important undertaking.
- Sheffield's road design standards are mixed. For new roads (as specified in the Town's subdivision regulations) they are well thought out to ensure that such new roads and

intersections are safe and well constructed, and, generally, consistent with the rural character of the community. However, there may be some opportunity to narrow requirements slightly based on lower projected traffic volumes and to ensure consistency with the community's desire to remain rural and neighborhood character. And enforcement of standards (such as driveways and culverts) could help the Highway Department avoid added maintenance time and cost. Standards for existing roads might be considered.

Sheffield's transportation planning principles should not necessarily be based on maximizing roadway LOS which amounts to vehicles operating at or above a given average speed. Rather, on keeping traffic flowing smoothly within the community, minimizing potential problems at certain intersections, and maintaining the rural character of neighborhoods, the community and the local roadway network. Slow and steady should be the goal rather than high LOS and speed, which detract from the sense of community. Additionally, alternative means of transportation should be further developed in Sheffield to fully address local and regional needs.

# 3. Sheffield Commuting Patterns

Sheffield residents and workers rely heavily on their automobiles for daily needs and employment opportunities. A large percentage (81.3%) of Sheffield residents commute to work by car, and most of them drive alone. The number of commuters is also growing as the rate went from 74% in 1990 to 81% in 2000. The percentage of residents in Sheffield that commute to work exceeds both the Berkshire County and State averages.

Sheffield Commuting Patterns, 1990 and 2000						
		Shef	field		County	State
Commute to Work	1990	%	2000	0,	⁄₀ in 200	0
Workers 16 years and over	1,392	100%	1721	100.0%	100.0%	100.0%
Drove alone	1,035	74.4%	1400	81.3%	79.2%	73.8%
In carpools	66	4.7%	81	4.7%	9.7%	9.0%
Using public transportation	12	0.9%	28	1.6%	1.5%	8.7%
Using other means	25	1.8%	47	2.3%	5.3%	4.3%
Residents Working in						
Community	595	42.7%	574	33.4%	N/A	N/A
Residents Commuting Elsewhere	797	57.3%	1,147	66.6%	N/A	N/A
Walked or worked at home	254	18.2%	39	2.7%	0.8%	1.0%
Work at home	148	10.6%	126	7.3%	3.6%	3.1%
Mean Travel Time to Work						
(Minutes)	N/A	N/A	22.6	N/A	19.2	27

The high percentage of residents that commute is attributable to a combination of factors: a fairly limited employment base; a high percentage of jobs in selected business sectors (primarily tourist-related), and the relatively low wages in Sheffield compared to other places in the region. Additionally, the availability of public transportation is very limited in town and throughout the region, particularly in the South Berkshire County area.

On average, the Sheffield commuter is driving over 22 minutes to get to work. Being one of the more rural areas of Berkshire County, travel time to work is longer for Sheffield than other Berkshire County residents on average.

# 4. The Existing Transportation Network

In conjunction with local and state officials, the following inventory of the existing transportation network has been assembled. Problem areas have also been identified with the assistance of local officials and the Master Plan Steering Committee based on capacity issues, intersection geometry, accident data, and surface conditions to the extent that this information is available.

#### Regional Transportation Network

**Highways** - The regional highway network is comprised of federal (interstate), state and local roadways as defined by the Massachusetts Highway Department (MSD). In Sheffield, the highway classification system can be divided into two broad categories – state highways and municipal highways. State highways are those controlled and maintained by the MHD and local highways are controlled and maintained by the Town. Routes 7 and 41 in Sheffield are maintained by the State as part of the federal-aid primary system.

The Route 7 corridor is a critical link in the highway systems of the Berkshire Region, Southern Vermont and Western Connecticut. A substantial amount of inter-regional traffic moves through Sheffield along this corridor to points north and south. It is also the major connector to Interstate 90 (the Massachusetts Turnpike), which carries interstate traffic from east to west through the region.

Airports and Air Service – The nearest major commercial airports are Bradley International Airport located in Hartford, Connecticut about 47 miles from Sheffield and Albany International Airport, in Albany, New York about 65 miles from Sheffield. Other smaller regional airports are located in Great Barrington and Pittsfield. The Great Barrington Airport is a general aviation facility located approximately 8 miles from the Sheffield Town Center. It has a 2,579 by 50 foot asphalt runway. The Pittsfield Airport is also a general aviation facility located approximately 26 miles from the Sheffield Town Center.

Air travel at present is a relatively minor economic factor and means of access to the region. However, continued and planned expansions at the Pittsfield Airport could significantly improve access to the Berkshire Region.

Railroads – Regionally, North Adams and Pittsfield are the major points of entry for rail freight in western Massachusetts. The Housatonic Railroad runs north-south through Sheffield and generally parallels Route 7 and 7A. This line served as a primary freight hauler for regional businesses until the mid-1980s. The railroad is still active in this regard, and the line in Sheffield is a public delivery line. It is a major transportation factor for a number of Sheffield businesses, particularly those for whom the amount of utilization necessary to justify costs makes it feasible. Many local as well as regional businesses have replaced rail use with trucking which is less expensive and more efficient for smaller business needs. It will be important in the future for Sheffield and the Housatonic Railroad to work together regarding railroad corridor usage and permitting. There are some areas where the tracks limit uses and others where they do not. Another issue to address is railroad crossings where the crossing lights often go off when a train is not coming through, and the

potential safety risk this can pose with drivers who get habituated to disregarding the lights (i.e. the Silver Street crossing).

There is no passenger rail service directly to Sheffield, but during the peak summer tourism months (June-Labor Day) Metro-North railroad out of New York City, runs a bus from its northernmost terminus in Wassaic, NY (45 minutes south of Sheffield) to Great Barrington on the weekends. The possibility of adding a stop on the bus in Sheffield could be explored.

Discussions have taken place in Sheffield regarding the future use of rail corridors in town. There have also been regional efforts to reactivate the line as a visitor attraction to the Berkshires.

The main issue is whether railroad transportation may become an economically viable transportation means again or whether the corridors can be put to more immediate uses such as for trails or communication infrastructure (i.e. DSL), and what effect passenger service would have on population and land use pressures in Sheffield. A policy to preserve the corridor for existing and future transportation use while allowing interim recreational uses should be considered by the Town.

#### **Buses**

The Peter Pan/Bonanza Bus line has two buses on their New York City to Williamstown and Albany line that run through Sheffield each day on a flag-down basis. Departures from Sheffield are mid-morning (currently 11:30am) and early evening (currently 5:30pm), and arrivals in Sheffield are mid-afternoon (currently 1:30pm) and mid-evening (currently 7:30pm). Connections can be made for east/west buses, including to Boston. Local cultural organizations, such as Barrington Stage Company, bring in bus-loads of people for their shows, and some thought to providing for such tours might be considered.

**Public Transportation** – The Berkshire Regional Transit Authority (BRTA) was created in 1974 and currently provides 22 communities from Great Barrington to Williamstown with fixed route bus service. There is no fixed route bus service within Sheffield but the Sheffield Council on Aging and Senior Center helps support Southern Berkshire Elderly Transportation, provided by Gt. Barrington and operated by the Gt. Barrington Senior Center (which can provide records of Sheffield usage). Para-transit services are provided to the elderly and disabled who cannot use fixed route bus service (using private taxi, lift-equipped vans, and chair-car vendors). There is also limited taxi service provided in Sheffield by private companies located in Great Barrington and Canaan. Transportation is available on demand and service is provided on a 24-hour-a-day basis.

Like many rural communities, Sheffield has not been able to demonstrate the feasibility of fixed route bus service given the population base, wide distribution of homes, and general independence of commuters. Additionally, BRTA ridership declined significantly during the 1990s as manufacturing jobs throughout the region declined, and ridership has only begun to level off the past few years.

**Trucking** – Route 7 is a major corridor for truck-based distribution in and out of the region. Most Sheffield businesses use trucks to bring their raw materials or products into the area, to distribute goods locally, and to ship products out to markets in New England and beyond. There are several trucking and distribution companies located in the region that service the transportation needs of Sheffield businesses.

#### **Local Transportation Network**

**Roadways** - The regional highway system consists of major local arterials serving Sheffield residents. Roads can be broadly organized into 3 categories: arterials, major collector roads, and minor collector roads.

Arterial roads move large volumes of traffic with limited access points. In Sheffield, Route 7 is the only arterial road. This is the primary north-south access road for local and regional traffic. The corridor is approximately 8.4 miles long and there is limited access between the Route 7A intersection and the Connecticut state line.

Collector roads are dual function roads. The primary purpose is to feed traffic from local roads onto arterials, and the secondary and subordinate purpose is to access adjacent land and uses. Route 7A, Route 41, Maple Avenue/County Road, and South Egremont Road can be classified as major collector roads even though they have a significant number of private curb cuts.

Minor (or local) collector roads comprise the remainder of roads in Sheffield. The primary function of local roads is to provide access to the most land uses. These roads are generally smaller than major collector roads.

Please see Map # 14: 'Town of Sheffield Transportation System' behind the MAPS tab.

The table below is an inventory of the local roadway network in Sheffield as of 2003. In all there are just over 100 miles of public roadway in town. There are 73 roads in Sheffield that are regularly maintained by the town and approximately 41 privately maintained roads. While a number of new private roads have been added over the past 10 years, the town has added very few public road miles.

Sheffield Public Roadway Network, 2003*						
	#		House-	Estimated		Accidents
	of	Total	holds per	Res. Trips	Primary Surface	1990 -
PUBLIC ROADWAY	НН	Mileage	mile	per <sup>2</sup> Day	Type	1999
ALUM HILL RD	28	1.1	25.5	280	Paved	10
ASHLEY FALLS ROAD (RTE 7A)	28	3.1	9.0	280	Paved	13
BARNUM ST	19	4.0	4.8	190	Dirt/Paved	10
BEARS DEN RD	11	0.9	12.2	110	Oil & Stone	8
BERKSHIRE SCHOOL RD	39	2.5	15.6	390	Paved	62
BOARDMAN ST	37	3.8	9.7	370	Paved	11
BOW WOW RD	22	2.7	8.1	220	Paved	9
BRUSH HILL RD	2	2.4	0.8	20	Dirt	2
BULL HILL RD	2	0.8	2.5	20	Dirt	2
BUNCE RD	20	0.6	33.3	200	Oil & Stone	
BURCH STREET	0	0.3	0.0	0	Dirt	
CANAAN RD	12	0.2	60.0	120	Paved	
CEDAR ST	5	0.1	50.0	50	Dirt	
CLAYTON RD	55	2.0	27.5	550	Paved	28
COBBLE LANE	10	0.5	20.0	100	Paved	
COOK AVE.	0	0.1	0.0	0	Paved	
COOK RD	7	0.4	17.5	70	Oil & Stone	9
COOPER HILL RD	6	1.3	4.6	60	Paved	3
COTTAGE LANE	2	0.2	10.0	20	Paved	
COUNTY RD	43	3.7	11.6	430	Paved	13
COVERED BRIDGE LANE	0	0.7	0.0	0	Dirt	
CROSS ROAD	5	0.7	7.1	50	Paved	5
CURTISS RD	0	0.6	0.0	0	Dirt	2
DEPOT SQUARE	2	0.2	10.0	20	Paved	1
EAST MAIN ST	26	0.6	43.3	260	Paved/Oil & Stone	2
EAST ROAD	9	0.9	10.0	90	Dirt	
EAST STAHL RD	25	1.0	25.0	250	Paved	8
FOLEY RD	9	2.2	4.1	90	Dirt	2
FORD HILL RD	0	0.3	0.0	0	Dirt	1
FREDERIC LANE	3	0.3	10.0	30	Paved/Dirt	
GIBERSON ROAD	2	2.3	0.9	20	Dirt	3
GUILDER HOLLOW RD	2	0.5	4.0	20	Oil & Stone	1
HEWINS STREET EXT.	0	0.1	0.0	0	Paved	
HEWINS ST	51	3.7	13.8	510	Paved	21
HICKEY HILL RD	0	0.8	0.0	0	Paved	
HOME RD	40	4.0	10.0	400	Paved	14
HULETT HILL RD	14	1.4	10.0	140	Oil & Stone	
KELLOGG RD	7	0.6	11.7	70	Paved	5
KELSEY RD	6	1.2	5.0	60	Dirt	6
LAUREL LANE	4	0.1	40.0	40	Paved	
LEGEYT RD	4	1.1	3.6	40	Dirt	2
LIME KILN RD	9	2.5	3.6	90	Dirt/Paved	14
MAPLE AVENUE	15	0.9	16.7	150	Paved	10
MILLER AVENUE	18	0.8	22.5	180	Paved	8
MT WASHINGTON RD	1	0.7	1.42	10	Dirt	1
NANCY LANE	2	0.1	20.0	20	Paved	1
OLD JOE RD	9	0.7	12.9	90	Oil & Stone	
OLD MILL POND RD	2	0.2	10.0	20	Dirt	2

<sup>&</sup>lt;sup>2</sup> High Accident Intersection Report. Prepared by the MassHighway Safety Management Unit. 1999.

TOTAL	1,337	100.20	17.0	13,370		669
WOODBECK RIDGE ROAD	0	0.2	0.0	0	Dirt	
WEST STAHL ROAD	5	0.7	7.1	50	Oil & Stone	
WEST ROAD	21	1.9	11.1	210	Paved/Dirt	5
WEATOGUE RD	2	0.8	2.5	20	Dirt	
WATER FARM RD	3	2.2	1.4	30	Dirt	3
VEELEY ROAD	0	0.6	0.0	0	Dirt	
VALLEY VIEW RD	1	0.4	2.5	10	Oil & Stone	1
UPPER BARNUM STREET	0	0.3	0.0	0	Dirt	
SOUTH UNDERMOUNTAIN RD	35			350	Paved	2
RD	7			70	Paved	3
NORTH UNDERMOUNTAIN	42	3.9	/.1	420	raveu	04
(RTE 41)	42	5.9	7.1	420	Paved	64
UNDERMOUNTAIN ROAD	5	0.1	50.0	50	Paved	
SPRING HOLLOW LANE SQUIRE LANE	8 5	0.2	40.0 50.0	80 50	Paved	+
SOUTH EGREMONT RD	15	2.6	5.8	150	Paved	24
SILVER ST	25	3.7	6.8	250	Paved	6
SHUNPIKE RD	19	1.3	14.6	190	Oil & Stone	6
SCHOOL ST	4	0.2	20.0	40	Paved	
SALISBURY RD	63	3.2	19.7	630	Paved/Dirt	14
SOUTH MAIN ST	48	2.2	10.7	480	Paved	5
SHEFFIELD PLAIN	18			180	Paved	-
NORTH MAIN ST	21			210	Paved	3
MAIN STREET	24			240	Paved	38
ROUTE 7	111	8.4	13.2	1110	Paved	187
ROTE HILL RD	8	1.3	6.2	80	Oil & Stone	1
ROOT LANE	22	0.5	44.0	220	Paved	10
RICHARD DRIVE	4	0.1	40.0	40	Paved	4.0
REBELLION RD	0	0.3	0.0	0	Oil & Stone	
RANNAPO RD	18	2.6	6.9	180	Paved	3
RAILROAD ST	6	0.3	20.0	60	Paved	1
POLIKOFF RD	45	1.6	28.1	450	Oil & Stone	1
PLYMOUTH LANE	10	0.2	50.0	100	Paved	1
PIKE ROAD WEST	5	0.3	16.7	50	Oil & Stone	
PIKE ROAD EAST	6	0.2	30.0	60	Paved	4
PARK LANE	16	0.2	80.0	160	Paved	+

Information on Households by Roadway from the 2002 Sheffield Residents List

In addition to public roads, Sheffield also has a significant number of private roads as shown in the Table below. In all, there are approximately 41 private roads in town serving 87 households.

Private Roads in Sheffield						
PRIVATE ROADWAY	Number of HH	Approx. Res. Trips per Day				
ALDER PLACE	2	20				
AMORY LANE	0	0				
BAY LANE	2	20				
BEECH ST	0	0				
BIRCH MOUNTAIN LANE	4	40				

Approximate residential trips per day calculated based on a national average of 10 per household per day

BLAIR LANE	2	20
BRIDGE VIEW LANE	3	30
CACTUS ST	0	0
CHILDS LANE	4	40
DAVIS LANE	6	60
DEWEY COURT	11	110
DOGWOOD ST	0	0
ELM COURT	5	50
FARMVIEW RD	1	10
FIDDLEHEAD TRAIL	2	20
GALVIN FARM TRAIL	2	20
GINGER LANE	0	0
GLENNANA WAY	7	70
HEMLOCK AVE	0	0
HILLSIDE LANE	4	40
HULDAHS LANE	4	40
LILAC LAND	1	10
LINDEN TERRACE	0	0
NURSING HOME	1	10
OAK ST	3	30
PARSLEY LANE	2	20
PHEASANT LANE	1	10
PINE LANE	4	40
REDWOOD LANE	1	10
SHORT STREET	0	0
SODA SPRING CREEK DRIVE	3	30
SPRUCE STREET	0	0
SUMAC LANE	0	0
SYCAMORE TERRACE	2	20
THORNBUSH WAY	1	10
THYMELANE	1	10
TULIP LANE	0	0
WEIDER TERRACE	2	20
WELLS LANE	3	30
WILLIAM ST	0	0
WOODEDGE LANE	4	40
TOTAL	87	870

Compared with other municipalities in Berkshire County and the South Route 7 Corridor Subregion, Sheffield has a relatively high amount of public road mileage. For example, Sheffield has over 65% more public road miles than the average community in Berkshire County, and more public road mileage than Great Barrington – a town with over twice the population of Sheffield. Much of this can be explained by the geographic size of Sheffield (the second largest town in terms of land area in the County). This is illustrated in the table below by the relatively low "persons per mile of roadway" and "miles of roadway per square mile".

South Route 7 Corridor Regional Public Roadway Comparison						
Municipality	2000 Pop.	Land SQ Miles	2001 Public Road Mileage	Persons per Mile of Roadway	Miles of Roadway per SQ Mile	
SHEFFIELD	3,335	47.82	102.3	32.60	2.14	
EGREMONT	1,345	18.77	43.64	30.82	2.32	
WEST STOCKBRIDGE	1,416	18.34	43.91	32.25	2.39	
GREAT BARRINGTON	7,527	45.45	96.02	78.39	2.11	
LEE	5,985	26.51	70.89	84.43	2.67	
LENOX	5,077	21.48	64.69	78.48	3.01	
STOCKBRIDGE	2,276	22.84	55.58	40.95	2.43	
SUBCOUNTY AVERAGE	3,852	28.74	68.15	53.99	2.44	
COUNTY AVERAGE	4,480	29.03	61.90	72.37	2.13	

Source: Mass. Dept. of Revenue

**Roadway Surfaces** - Of the 100 miles of roadway in Sheffield a significant amount is constructed of non-paved surfaces (34% are dirt or gravel). There are just under 66 miles of paved roadway in Sheffield of which the Town is responsible for the maintenance of 48.3 miles (the remainder falls under the jurisdiction of the State). The remaining 34.6 miles of local roadway is composed of either oil & stone (10.3 miles) or dirt (24.3 miles).

Unpaved roads that service less populated residential and agricultural areas are a major feature of the rural character of the community. However, as traffic increases as a result of residential development on some of these smaller roadways, more wear and tear occurs resulting in extended maintenance responsibilities. There is also a concern by local officials of emergency access as more seasonal and year-round homes are built on unpaved roads.

Public Roadway Surfaces in Sheffield, 2003							
		% of Road Mileage					
Surface Type	Mileage	Mileage	Jurisdiction				
Paved	65.7	66%	48.3 Town; 17.4 State				
Oil & Stone	10.3	10%	Town				
Dirt	24.3	24%	Town				
TOTAL	100.3	100%					

Source: Mileage calculated from Sheffield GIS Maps

Currently the Town has no rating system in place to quantitatively evaluate road surfaces. The Town of Sheffield maintains approximately 83 miles of roadways each year depending on the Chapter 91 money available (The State's local road maintenance funding program). Under this program, the poorest quality roads serving the most traffic

are given priority by the Mass Highway Department. The Town performs surface maintenance on as many linear feet of roadway as financially possible.

**Bridges** - There are several small bridges within the Town of Sheffield and local officials have identified several as being in need of repair including the following:

- 3 Bridges over the Ironwork Brook located on County Road
- Dry Brook Bridge on Kelsey Road
- Schenob Brook Bridge located on Kelsey Road
- Konkapot River Bridge located on Ashley Falls Road

Only the Konkapot River Bridge is included on the regional Transportation Improvement Plan for rehabilitation in 2007.

**Public Parking System** – The Town manages public parking spaces in Sheffield Center and Ashley Falls Village. On-street parking provides the majority of public parking spaces in Ashley Falls Village while off-street parking is provided in Sheffield Center. These parking spaces serve a mix of businesses, residences, Town Hall, the Post Office, religious institutions and a number of other public and private establishments. While on-street parking is not technically permitted along Route 7, during special events and peak traffic hours, it is typically used for overflow parking. This poses a dangerous situation for those parking on the corridor as traffic flows through the Town Center at a fairly high speed.

Sidewalks & Pedestrian Access – The only sidewalk network in Sheffield is located in the Town Center. The sidewalk runs parallel to Main Street (Route 7) on the west side of the roadway between Miller Avenue and Berkshire School Road for a distance of approximately 2,278 linear feet. There are remnants of a sidewalk on the east side of Main Street between Miller Avenue and Cook Road. However, much of this surface is broken up and overgrown. This portion of the sidewalk network was apparently abandoned by the Town some time ago, and needs to be reclaimed and maintained. Research is needed to determine if the sidewalk is in the State's right of way.

There are 3 crosswalks in the Town Center that cross Route 7 which are painted green and outlined with white strips to alert motorists to pedestrian activity. However, crossing this busy road can be difficult due to high volumes, speed, and limited gaps in the traffic. While the posted speed limit through the Center is 35 mph, there are currently no other devices to indicate to the driver that they are approaching a densely populated village. Some potential traffic calming devices that may be appropriate for the Town Center could include welcome and directional signage, more street trees, signalization at Berkshire School Road, contrasting crosswalk materials and colors, and bulb-outs to narrow the lanes at cross-walk locations.

There is currently no sidewalk connection between Main Street and the Mt. Everett Regional High School located on Berkshire School Road. This segment has been identified as a high priority for expansion of the sidewalk and bicycle network by the Draft Regional Bicycling & Walking Transportation Plan assembled by the Berkshire Regional Planning Commission. This sidewalk is included as part of the Berkshire School Road project which was put out to bid through the Transportation Improvement Program in 2003 (for projected completion in 2004 or 2005).

Pedestrian movement within the two villages, and connections to public schools and the Town Park, are fundamental transportation improvements that can provide safe access for residents and may be a key to long-term viability. Street and intersection improvements where there is high pedestrian activity, such as at Maple Avenue, Miller Street, Depot Square, Cook Avenue, and Berkshire School Road, should incorporate safe and convenient pedestrian access in the design.

**Bicycle Transportation** – There are no designated bike routes in Sheffield, yet recreational biking is very popular throughout the community. The Regional Bicycle Plan (BRPC) rates the quality of existing roadways in Town for bike use as shown in the table below. There are no designated bike lanes along the Route 7 corridor yet this is one of the most popular bicycling routes in Sheffield. However, with the amount of vehicle traffic and turning movements, this corridor is not friendly for bike riders.

Bicycle Compatibility Index for Sheffield Roads					
Route	Level of Service Rating for Bicycling	Approx. Mileage			
Home Road/Old Joe Road	Very High	4.7			
Route 7	Moderately High	8.4			
South Egremont Road	Moderately High	2.6			
Undermountain Road (Route 41)	Moderately High	5.9			
Ashley Falls Road (Route 7A)	Moderately High	3.1			
Berkshire School Road	Moderately High	2.5			
Maple Ave./County Road	Moderately Low	4.6			
Silver Street/Cooper Hill Road	Moderately Low	2.0			
Rannapo Road	Moderately Low	2.6			
Clayton Road	Moderately Low	2.0			
All Other Roads in Sheffield	Very Low	N/A			

Source: Berkshire Regional Transportation Plan using the Bicycle Compatibility Index LOS Ratings from the Federal Highway Administration, 1998

A network of bicycle paths or lanes along major roads would greatly enhance rider safety and use. This network should include those roads ranked as "Very High" and "Moderately High" for bicycle compatibility in the table above. In order to facilitate this network, Sheffield will have to work closely with BRPC and MHD, which is responsible for State routes and design changes on most of these corridors. Additional information on bicycle and pedestrian pathways is provided in Section 2.3: Open Space & Recreation of this master plan.

**Trails and Paths** – There are a multitude of trails and paths in Sheffield serving a variety of uses including walking, hiking, mountain biking, cross-country skiing, all terrain vehicles and snowmobiling. Much of this network is informal and privately owned with no secured agreements for continued use.

The results of the Sheffield Community Survey indicate that passive recreational uses, primarily walking paths and trails, were highly desired by residents. As part of the master planning process, the town has been identifying potential corridors for various types of pathways. An important underlying theme in developing a local trail system is connecting key local cultural, social and natural attributes. Creating a trail plan in Sheffield should aim to accomplish several community goals such as providing an alternate means of transportation, new recreational amenities, and fulfilling economic opportunity for ecotourism. Some possible trail routes would connect Sheffield Center, Ashley Falls Village, Mt. Everett Regional School, Town Park, the AMC Trail and several access points along the Housatonic River. A more detailed analysis of potential trails and paths throughout Sheffield is included in Section 4.0: Open Space & Recreation.

### 5. Traffic Volumes & Circulation

The structure of Sheffield's highway network requires local and regional travelers to share the major arterials in town to a large degree. Local traffic consists mainly of trips from residential areas in Sheffield, Sheffield Center, and Ashley Falls to surrounding towns for businesses and services concentrated in other communities. Commercial districts and regional schools in Sheffield are also drawing more short and long-range trips each year. The combination of local and inter-local trips

generates substantial turning movements, primarily along the Route 7 Corridor and at peak traffic hours.

Since 1990, increased residential development (year-round and seasonal), commercial development, and tourism in town and the region have led to increased traffic on Sheffield's roadways. Both the Massachusetts Highway Department (MHD) and the Berkshire Regional Planning Commission (BRPC) have conducted traffic counts in Sheffield over the past several years. The table above lists the Automatic Traffic Recorder (ATR) counts conducted by MHD since 1992 at various locations in Sheffield. These are 24-hour traffic volume counts conducted at established recorder stations along Sheffield's major collectors and arterials.

Not surprisingly, the busiest roadway in Sheffield is Route 7. However, as the state traffic counts show, the volumes of traffic vary significantly from one end of the corridor to the other. While traffic volumes at the Great Barrington town line are approaching 10,000 vehicles per day (VPD), the traffic drops to about 5,500 VPD on the south end at the Connecticut state line. This variation between the south and north ends of the corridor appears to indicate that a significant amount of the traffic on Route 7 originates in Sheffield and is headed North, which is consistent with local commuter data from the last Census and shopping preferences indicated in the community surveys.

The next busiest roadway in town is Berkshire School Road, which according to a 1995 traffic count by BRPC had over 3,400 vehicles per day. The road serves as the main connector between State Routes 7 and 41. It also provides access to the Sheffield public school system, Mt. Everett Regional High School, and the Berkshire School. Other local roads with daily traffic counts averaging over 1,000 are as follows:

	Average Daily Traffic (ADT) recorded at various ATR stations in Sheffield by MHD											
STA	RTE / STREET	LOCATION	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
S001	Cook Rd.	East of North Main St.										480
S004	East Main St.	South of Ashley Falls Rd.										640
S008	Lime Kiln Rd.	West of West Road St.										540
S003	Rannapo Rd.	North of Copper Hill Rd.										440
S005	Root Ln.	West of South Main St.										1,100
1183	Rte. 7	0.8 km S. of G.B. T.L.				8,400	8,445	8,663	9,012	9,010		
1171	Rte. 7	At Connecticut S.L.	4,800							5,500		
1172	Rte. 7	South of Egremont Rd.	8,300		8,400							
S002	Rte. 41	At Egremont T.L.							1,500			
S001	Rte. 41	South of Kelsey Rd.							1,200			
S002	School St.	West of East Main St.										190
S006	Silver St.	West of South Main St.										460

- Route 41 Approximately 1,200-1,500 per day
- Route 7A Approximately 660 1,250 per day
- S. Egremont Rd. Approximately 1,254 (BRPC count in 1995)
- Root Lane Approximately 1,100 per day (MHD in 2001)

Traffic volumes in Sheffield have been increasing steadily over the past 10 years. On Route 7, traffic volumes on the north end of the corridor have been increasing by about 1.5% annually, and on the south end at about 2.4%. Increased growth rate of year-round and second home development in

the southern portion of Sheffield partially accounts for the higher traffic levels on this end of the corridor over the past 10 years.

Because of the nature of the Berkshires as a resort area, traffic volumes in Sheffield are unusual. Daily traffic counts resemble a more suburban than rural community. Business hours for area workers in visitor destinations create more midday and evening peaks in volumes than most comparably-sized communities with a higher percentage of year-round residents. Also unusual is that weekend traffic is likely to be higher than weekday traffic. Traffic volumes vary over the course of a year in Sheffield with peaks in the summer and fall when tourists flock to the Berkshires.

### 6. Sufficiency and Safety Issues

Roadway safety is determined by a number of factors such as road condition, traffic volume and speed, the number of access points and intersections, driver behavior, and vehicle condition. They all create the potential for accidents. Highway traffic accident data is used to identify hazardous situations and plan for necessary improvements.

To	Town of Sheffield Accident Reports, 1990-1999							
		Hit						
		and	Injury	Property	School			
Year	Fatalities	Run	Accident	Only	Bus	Total		
1990	2	1	27	57		87		
1991	3	1	22	42		68		
1992			19	63		82		
1993	1		29	44		74		
1994		1	22	39		62		
1995	2	1	31	55	1	90		
1996		2	25	52		79		
1997		1	15	26		42		
1998	1		11	20		32		
1999	1		16	40	1	58		
Total	10	7	217	438	2	674		

Source: Mass. Highway Department

The MHD as part of the Statewide Traffic Data Collection Program records traffic accidents in Sheffield. Between 1990-1999, these records show that a total of 674 accidents took place in Sheffield. Over 300 alone were along the Route 7 corridor.

While the majority of accidents in Sheffield during the 1990s were minor in nature with only property damage reported, nearly one-third involved personal injuries. There were also 10 fatal accidents reported over the 10-year period. While supporting documentation is sketchy, it is assumed that more severe accidents (those involving injury and fatalities) are partially

attributable to high-speed traffic on Route 7 and local traffic entering the highway at several unsignalized intersections.

MHD has prepared a list of the top 1,000 **high accident locations** (HAL) throughout the state. The most current list (1999) compiles data from 1994, 1995, and 1996. An analysis of the data shows that there are no high accident locations in Sheffield based on a comparison of actual recorded accidents per million miles of driving to an expected critical rate.<sup>3</sup> However, the 5 intersections in Sheffield with the highest number of recorded accidents are on Route 7:

- Berkshire School Rd
- Clayton Road
- Root Lane
- Hewins Street
- Maple Ave

<sup>&</sup>lt;sup>3</sup> High Accident Intersection Report. Prepared by the MassHighway Safety Management Unit. 1999.

As part of the traffic analysis for the Master Plan, four (4) Route 7 intersections were studied in greater detail including: Maple Avenue, Berkshire School Road, Silver Street, and Clayton Road: At these intersections 28 traffic accidents were recorded between 1990 and 1999:

- At Berkshire School Rd 4 injuries and no fatalities
- At Clayton Road 9 injuries and 2 fatalities
- At Silver Street 6 injuries and 0 fatalities

There were another 67 traffic accidents at other intersections on Route 7, including:

- 9 at Root Lane (9 injuries)
- 7 at Hewins Road (6 injuries)
- 7 at Maple Street (4 injured in 1 accident)
- 6 at Egremont Road
- 4 at Route 7A
- 3 at Kellogg Road
- 3 at Lime Kiln Road
- 3 at Cook Road
- 3 at Pike Road

Another 52 traffic accidents were recorded at other defined locations on Route 7 in recurring instances including 4 at or close to the Village Green, 2 at Bradford's, and 2 at the Sunrise Diner.

It is difficult to determine the reasons for the fluctuation in recorded accidents since 1990. It appeared that as improvements were made to the State highway system accidents levels dropped accordingly. However, as more commercial development occurred along the Route 7 Corridor (resulting in more unprotected turning movements to and from the roadway), and daily trips grew with residential growth along collector roads that feed onto Route 7, potential traffic conflicts increased and accident levels rose.

### 7. Intersection Analysis

Local officials, the Community Survey respondents, and the MPSC have identified several intersections in Sheffield as problematic, as noted in the chart below.

Proble	Problem Intersections in Sheffield					
Intersection	General Assessment					
Route 7 & Silver Street	Split Y-Intersection; Poor sight distance, high speeds on Rt. 7					
Route 7 & Maple Avenue	Split Y-Intersection; Poor sight distance, high speeds on Rt. 7					
Route 7 & Berkshire School Road	Split Y-Intersection; Poor sight distance, high speeds on Rt. 7					
Route 7 & Clayton Road/School St.	High speeds on Route 7					
Lime Kiln Rd. & S. Egremont Rd.	Poor visibility					
Miller Ave. & Cook Rd.	Yield on Miller Ave. & Stop Sign on Cook Road are not logical					
Ford Hill Road & County Road	Very steep grade					
East Road/County Road/Hewins St.	Poor geometry and sight distance					
Hewins St. & Rote Hill Rd.	Poor geometry and sight distance					
Clayton Rd. & Polikoff Rd.	Poor geometry and sight distance					
Route 7 & 7A	Poor signage, high speeds on Route 7					
Route 7 & Miller Avenue	Poor sight distance, high speeds on Route 7					

A subregional transportation study was conducted at selected intersections along Route 7, which have been identified as the most problematic intersections within Town. These intersections included Berkshire School Road, Silver Street, Maple Avenue, and Clayton Road<sup>4</sup>.

As part of the study various traffic engineering issues were investigated at the selected intersections in order to determine the safety and capacity of the existing conditions. This investigation included collecting available data such as traffic volumes, turning movements, accident records, and mapping existing conditions. This information was used to identify unsafe conditions, measure the need for certain improvements (traffic signals or auxiliary lanes), and estimate current and expected future average delay to motorists during peak periods.

Traffic volumes were counted in the field at the two locations of greatest concern to the Town: Berkshire School Road and Silver Street. These counts were performed on Tuesday October 8<sup>th</sup>, 2002, when 15-minute turning movement count data were tallied over a 12-hour period (7 am to 7 pm). Resulting data are presented in turning movement summary sheets in Appendix 5.

The results of the intersection analysis are discussed below and illustrated on the existing conditions maps.

**Maple Avenue** – Located in Sheffield Center just north of the Village Green and south of Macy's Corner (Miller Avenue), the intersection is currently a stop controlled with an island separating each direction of the side approach. Speed limit on Route 7 is 35 mph. Corner sight distance is limited to the south due to nearby on-street parking. Potential safety concerns identified were as follows:

- Triangle geometry (the split Y intersection) add to the potential for confusion to drivers
- Maintaining adequate and safe bus turning ability is necessary
- Corner sight distance to the south is limited especially when parking is used in front of the church.
- High speed approaches from Macy's Corner (north approach)

<sup>&</sup>lt;sup>4</sup> The full analysis of the selected intersections is included in Appendix 5

**Berkshire School Road** – This intersection is located just south of Sheffield Center and Village Green and adjacent to the Police Station. The intersection also has a split island but stop controlled at two locations on each side of the island, and a "y" that splits traffic prior to Route 7. This "y" creates a third, uncontrolled intersection. The speed limit on Route 7 in this area is 35 mph. The results of the analysis:

- Current traffic volumes meet the four (4) hour and peak hour signal warrants, and will meet the 8 hour warrant in design year if growth trends continue
- If signalized: one-lane approaches will be adequate initially, but LOS will deteriorate in the future (volume to capacity (v/c) ratio on North approach is 0.93 in PM peak hour)
- Adding a lane on the west approach or a left turn lane on the south approach does not appreciably improve LOS
- Adding a right turn lane on North approach brings overall LOS to B and the v/c ratio to 0.53 in the design year

#### Other general concerns include:

- Triangle geometry
- Excessive delay and backups on Berkshire School Road potentially reaching beyond the railroad tracks
- Truck turning movements and tracking
- Heavy truck traffic (7% recorded on Route 7 during peak hour counts)
- Aesthetics of a signal in Town Center
- The need for extended sidewalk and safe crosswalk
- Widening of Route 7 may be difficult due to the steep bank to the east

**Silver Street** – Approximately 1 mile south on Berkshire School Road in a narrow rural section of Route 7, this intersection has similar stop control and "y" intersection geometry. Sight distance here is limited to the north by vegetation inside the guardrail and a curve to the east. The speed limit on Route 7 at this location is 45 mph. The results of the analysis were:

- Sideline volumes are very low, and not close to levels warranting a traffic signal.
- Auxiliary Lane warrants were analyzed, with the following results:
  - o NB left turn volume doesn't meet the minimum threshold for consideration (5%)
  - o SB right turn lane warrant is not met for 2003 but the <u>warrant is met in 2023</u> (77 RT in PM peak, 12% of advancing volume)
- Performance analysis (using the Highway Capacity Manual methodology for unsignalized intersections) resulted in AM/PM Levels of Service (LOS) of C/C for the Silver St approach, in the 2023 design year

#### Other general concerns include:

- Triangle geometry and the potential for confusion to drivers
- Poor sight distance approaching from and looking towards the north, attributed to the guardrail and dense growth to the northeast
- Narrow shoulders and close guardrail make truck turning difficult

- Poor edge condition on Silver Street approach particularly to the south near the culvert crossing under Silver Street
- Constraints due to this culvert and nearby stream to the south

**Clayton Road** – Located just north of the Town Line near Ashley Falls, this intersection is in a wide and open section of Route 7. Slip lanes for right turns off Route 7 are present. The speed limit on Route 7 is 45 mph. General concerns include:

- High speeds create potential for severe accidents for turning/crossing traffic
- Hard to judge speed due to lack of contrasting objects
- Corner sight distance on southwest corner
- Slip lane islands allow left turns for drivers that "overshoot" intersection

The analysis is of sufficient detail to enable the further development of detailed engineering plans for the intersections. For the purposes of the Master Plan, conceptual improvements at the 4 intersections were prepared that identify recommended transportation improvements relating to safety, access, congestion and environmental considerations. Preliminary cost estimates for the implementation of corrective actions were also prepared at Silver Street and Berkshire School Road.

# 8. Roadway Improvements & Maintenance

Many local roads were constructed long ago and predate design requirements made by the Town. In most cases, these narrower roads with non-paved surfaces work well, particularly where there is limited residential use and development potential. However, some roads have become more heavily used as collectors, and their narrow width and minimal base construction has required substantial improvements by the Town.

### **Recent Improvements**

In addition to state-funded projects listed on the TIP, the Town evaluates the local road network on an annual basis to prioritize the need for maintenance, safety, and capacity improvements. In recent years the Highway Department has made improvements to several local roads:

Road	Type of Work			
Old Joe Road	Resurfacing			
Hickey Hill Road	Resurfacing			
East Road (section)	Re-opened with new gravel and drainage			
Hewins Road	Bituminous concrete resurfacing on 5,800 feet			
Spring Hollow Lane	Bituminous concrete resurfacing on 750 feet			
Boardman Street	Bituminous concrete resurfacing on 2,500 feet			
Polikoff Road	Sealing with liquid asphalt and stone			
Bunce Road	Sealing with liquid asphalt and stone			
Hulett Hill Road	Sealing with liquid asphalt and stone			
Rote Hill Road	Surfacing with asphalt and stone			
Lime Kiln Road (section)	Surfacing with asphalt and stone			

Berkshire School Road (section)	Level course of bituminous concrete
Salisbury Road	Level course of bituminous concrete on 6,800 feet
County Road	Level course of bituminous concrete, box paving
Hickey Hill Road	Re-paved
Cross Road	Re-paved
Maple Avenue	Re-paved
Guilder Hollow Road	Oil & Stoned
Rote Hill Road	Oil & Stoned
Railroad Street	Oil & Stoned
Home Road	Box paving
Clayton Road	Box paving, bituminous concrete on 5,300 feet
Barnum Street	Box paving, bituminous concrete on 3,100 feet
Kellogg Road	Box paving

Source: Sheffield Annual Town Reports

Local road maintenance is an important issue in Sheffield. However, the Town does not have a formal road surface management program. Developing a comprehensive multi-year program (which could include routine maintenance strategies and long-term improvements) provides a rationale system for prioritizing necessary improvements. The Town can coordinate this program with the Capital Improvement Plan to ensure efficient distribution of costs over time.

#### Paved vs. Dirt/Gravel Roads

Dirt and gravel roads can have a wide range of serviceability. A well-graded road, with adequately drained base material and good roadside drainage can last indefinitely. However maintenance increases with vehicle volume, size & speed, severe weather, as well as a number of other factors. Paving roads may dramatically reduce the frequency of maintenance, but higher material costs must be weighed in a life-cycle cost-benefit analysis<sup>5</sup>.

Before considering paving a road all costs and benefits should be weighed. To keep these costs as low as possible every resource should be explored for ensuring that the best management and construction techniques are used. The decision to pave a dirt road needs to be made on a case-by-case basis, as many factors may be relevant. Factors to consider include:

- Cost This may include many possible factors such as road construction & maintenance costs as well as user maintenance costs. For example all other considerations being equal a paved road might have the same cost-benefit, as a gravel road if re-grading is required 6-8 times a year although this may change if viewed over the long-term, with maintenance and repaving costs.
- Traffic volume The relationship of volume and cost is clear from the perspective of wear and tear on materials. However, paved roads can lead to higher traffic volumes if speeds increase and shorter travel time result. Additional considerations include emergency access requirements, and plans/potential for future development and how paving may affect these

-

<sup>&</sup>lt;sup>5</sup> The Town of Phillipstown, MA completed a cost-benefit analysis of dirt roads in 1997. For more information see Appendix 1.

<sup>&</sup>lt;sup>6</sup> Assume equipment operating cost of \$150/hr., \$100/ton for asphalt.

entities. Generally, roads, which have reached a traffic level of 300-500 cars per day, can be candidates for paving.<sup>7</sup>

- Aesthetics/Nuisance Tangible qualities to consider may include proximity to
  development and its relationship to dust, speed, noise, vibration, and the affects of periodic
  maintenance.
- Steepness of grade A dirt road will wash-out more frequently and/or require more grading to compensate for, or avoid, such occurrences as the profile grade increases. The steeper the road grade, the less effective the cross slope is at getting the stormwater off the road, and runoff will tend to wash longitudinally.
- Environmental Sediment and erosion concerns are higher on dirt roads, while oil and salt run-off are higher on oil & stone and paved roads, especially if the roads are near a sensitive aquatic resource.
- Community Character For Sheffield, preserving the community's rural character is an important consideration and many residents feel that unpaved roads exemplify this rural character and complement the natural scenic beauty that is so abundant throughout town.

#### Regional Transportation Improvement Plan (TIP) Projects

The **Transportation Improvement Plan (TIP)** is a prioritized, multi-year program for the implementation of transportation improvement projects throughout the region. As such, it serves as a management tool to ensure the most effective use of limited funding for transportation improvements. It is also necessary for two other reasons. First the TIP is a requirement of the transportation planning process as most recently legislated by the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21). Secondly, a local transportation improvement is not eligible for Federal funding unless it is listed in the TIP. In recent years, movement of projects through the TIP list has been very slow.

In Berkshire County, the MPO consists of the State Executive Office of Transportation & Construction (EOTC), the Massachusetts Highway Department (MHD), the Berkshire Regional Transit Authority (BRTA), and the Berkshire Regional Planning Commission (BRPC). The BRPC is responsible, under contract with MHD, for conducting the regional transportation planning process utilizing federal planning funds. The following projects are listed on the Region 1 FY2003-2007 TIP for the Town of Sheffield for funding:

-

<sup>&</sup>lt;sup>7</sup> Vermont Roads Program (LTAP)

I.D. No.	ortation Improveme Facility	Description	Lead	Priority Rating	Year Ready	Bid Year	Funding Source	Estimated Cost	Remarks
602610	RT 7A Bridge S10-20	Bridge over Konkapot	MHD	46.4	2007	2007	Undetermined	\$ 1,242,000	75% Design
602884	Village Green	Beautification & Streetscape Project	Town	1.12	2000	2001	STP-E	\$ 520,000	100% Design, Under Review
601486	Berkshire School Rd	Resurface Rte. 7 to Reg. High School & SW	Town	.0125	2000	2002	STP	\$ 2,002,396	100% Design and Ready
602315	Route 7A	Resurface from Route 7 to CT. Line	MHD	0.24	2007	2007	Undetermined	\$ 1,500,000	24% after YR3
601485	County Road	Reconstruction	Town	0.048	2003	2007	Undetermined	\$ 1,300,000	<75%, No Further Activity
XXX00F	Route 7 Signing	Tourist Routing Improvements	MHD	NA	2003	2007	Undetermined	\$ 300,000	NA

Source: Berkshire Regional Planning Commission

Ready = # of years until ready to bid; Year = Year scheduled to bid

# 9. Transportation/Land Use Policy & Regulations

#### **Zoning Bylaws**

The Town of Sheffield has a small amount of commercially and industrially zoned land compared to similar size towns in New England. This is not surprising given the small population, cherished and protected rural character, and limited access along the southern portion of Route 7. However, as more commercial and residential development has occurred over the past 20 years, so has the concern over traffic congestion and safety.

In addition to potential new commercial development within the northern section of the Route 7 corridor, a program could be developed to provide incentives for infill and enhancement of certain properties in the Town Center and Ashley Falls Village areas. This would be in keeping with the community's wishes to prevent strip development along the corridor and control commercial development in residentially-oriented areas of the community.

#### Subdivision Roadway Design Standards

Sheffield's roadway design standards are included in the subdivision regulations and contain minimum roadway material requirements and design elements such as curbing, sidewalks and dimensions. Roadway standards are established to provide safe travel conditions. The stated purpose in the regulations is also to ensure that public roads are "compatible with existing streets, and to rationalize traffic patterns within new subdivisions".

Residential streets are classified according to their design, use (actual or intended), their relationship to other streets in the hierarchy and their residential character in the following categories:

• Arterial Street: A proposed or existing street servicing more than 120 dwelling units, or for non-residential subdivisions is to be used for major through traffic with a volume in excess

- of 1200 vehicles in a representative 24 hour period, as determined by the most recent edition of <u>Institute of Transportation Engineers (ITE)</u>, <u>Trip Generation</u>.
- Collector Street: A proposed or existing street, which is to be used primarily for residential purposes, and servicing no more than 120 dwelling units. Or in the case of a non-residential subdivision is to be used for through traffic with a volume of not more than 1200 vehicles in a representative 24 hour period, as determined by the most recent edition of <u>Institute of Transportation Engineers (ITE)</u>, <u>Trip Generation</u>.
- Industrial-Commercial Street: A proposed or existing street, which, in the opinion of the Board, is to be used to provide local access to industrial-commercial enterprises.
- Lane: A proposed street, which, in the opinion of the Board, is to be used primarily for residential purposes and servicing no more than 10 dwelling units.
- **Minor Street:** A proposed or existing street which, in the opinion of the Board, is to be used primarily for residential purposes and servicing no more than 40 dwelling units.

Residential streets in each category are required to meet construction specifications as required in the regulations after inspection and analysis of the soil types, site contours and site considerations deemed necessary by the Planning Board to obtain the objectives of the town.

According to these classifications, nearly all existing roads in Sheffield, and all subdivision roads planned or built over the past 10 years fall into the "Lane" or "Minor Road" category.

The Subdivision Regulations contain the following dimensional requirements for new roadways:

Sheffield Roadway Requirements							
Classification	Defined Characteristics	Minimum Paved Width	Minimum R-O-W	Min. Pavement Thickness			
Arterial Road	More than 120 D.U., 1,200 VPD	34 feet	75 feet	2 ½ inches			
Collector Road	Up to 120 D.U., 1,200 VPD	30 feet	60 feet	2 inches			
IndComm. Road	Access to Comm./Ind. Enterprises	N/A	N/A	3 inches			
Minor Street	Up to 40 D.U.	22 feet	50 feet	2 inches			
Lane	Up to 10 D.U.	18 feet	40 feet	1 ½ inches			

Additional requirements for streets and sidewalks include:

- **Dead-end streets:** Must provide a turn-around having an outside roadway diameter of at least 100 feet unless otherwise specified by the Planning Board. The Board has the option of allowing an outside roadway diameter of up to 200 feet with the placement of a circular landscaped island with a minimum radius of 20 feet at the center of the turn-around.
- Loop roads: These roads may not be longer than 500 feet in length unless the non-loop portion is constructed as a two-lane divided arterial street with each lane having a paved width of not less than 17 feet and one-way traffic. A landscaped median strip of not less than 10 feet is also required with low maintenance street trees, shrubbery and grass. The non-loop portion of a loop road cannot less than 200 or more than 500 feet in length. These are more urban-type requirements for large-scale commercial and industrial developments, and would probably not fit the character of the community.

Pedestrian and Bicycle Paths: Sidewalks may be required by the Planning Board and must be placed parallel to roadways on both sides of all arterial or collector streets or if the street is within one-half mile of any public school. Sidewalks are required on one side of a minor street. Sidewalk design must be varied in horizontal layout and location to enhance aesthetic value. When located within the street right of way, sidewalks must be located at or near the outside of the layout, when possible, to maximize pedestrian-vehicular separation. This separation may be achieved by either distance or plantings.

Public bicycle paths may be required by the Board to provide circulation or access to schools, recreational areas, retail facilities, transportation and community facilities, or where in the opinion of the Planning Board, bicycle travel in the streets would be dangerous. These paths may, or may not, be part of the normal sidewalk provisions. Bicycle paths must be designed with a minimum ten foot right of way, 4-6 feet paved width and a maximum gradient of 5% except for segments of less than 200 feet, where a maximum gradient of 10% is allowed.

Generally, the roadway, bicycle and pedestrian design requirements in the Subdivision Regulations are well thought out and consistent with community character and values. Comparing existing local roads, dimensional requirements for new road construction are similar.

While it's not unusual for new residential access roads (Minor Streets) in Sheffield to be built to a higher standard than the collector roads they feed into, in some cases, the width of these new streets may be unnecessary and could potentially diminish the rural character of the community. However, provisions are made in the regulations for width reductions, which are a part of an overall drainage plan to reduce the impervious surface in the subdivision and reduce runoff from the parcel. This is permitted if asked for by the applicant and plans for safety, parking, pedestrian circulation and other factors are deemed superior by the Planning Board to accommodate the requested reductions. However, the Planning Board should also be empowered to reduce the given standards if the same factors apply and it's deemed to be in the best interest of the community to reduce unnecessary road widths.

### Scenic Road Designations

Except for Wheatogue Road, there are currently no scenic roads designated in Sheffield. In accordance with state law, a town road can be designated as a "scenic road" for the purpose of preserving its aesthetic attributes and rural character. Any repair, maintenance, reconstruction, or paving work done with respect thereto involving the cutting or removal of trees, or the tearing down or destruction of stone walls, can not be done without prior written consent of the Planning Board after a public hearing. According to the respondents to the Sheffield Community Survey, and the planning process, the most commonly identified road in Sheffield deemed as "scenic" were the following:

- Barnum Street
- Boardman Street
- Bow Wow Road
- Cooper Hill Road
- Giberson Road
- Guilder Hollow Road

- Hewins Street
- Lime Kiln Road
- Route 41 (ineligible for local designation, would need to be through state program)
- Route 7 (ineligible for local designation, would need to be through state program)
- Salisbury Road
- South Egremont Road
- Wheatogue Road (already designated)

### **Local Transportation Policy**

Based on the assessment and analysis of transportation and circulation, the Town of Sheffield should adopt a multi-pronged policy approach to improving the transportation system in the community with specific emphasis on the following areas:

- Upgrades to the Route 7 corridor and key intersections;
- A formal local road maintenance and improvement program;
- A scenic roads program, and
- Creating new alternative transportation opportunities.

This comprehensive transportation policy and the following strategies & actions are intended to provide long-term policy direction to the Planning Board with respect to transportation and its relationship to land use planning.

Please see Map # 20:
'Town of Sheffield
Transportation Improvements'
behind the MAPS tab.

# TRANSPORTATION & CIRCULATION ACTION PLAN

The purpose of this section is to outline recommendations to meet Sheffield's future transportation & mobility needs.

### Overall Goal

Sheffield residents and visitors use a safe, well-defined transportation and circulation network, with supporting facilities and services, which provides transportation opportunities for all people and preserves and enhances our villages and the scenic roads and corridors that help define the rural character of our community.

#### **Transportation & Circulation Objectives**

- 1. Provide safe roads, pathways and surroundings for all users.
- 2. Inform community members and visitors about our roads, recreational routes and walkways and their supporting facilities and services.
- 3. Create opportunities for social interaction within the community.
- 4. Promote, enhance or create alternate routes and modes of transportation.
- 5. Establish partnerships with other towns and organizations to achieve a safe, integrated circulation network.

## **Transportation & Circulation Recommendations**

Recommendations are based on an analysis of the inventory and current conditions and trends found above, and the additional public review and work of the Steering Committee and Transportation Subcommittee.

# Recommendation 1. Develop transportation plans to support village, neighborhood and rural character.

#### a. Set appropriate speeds for road conditions.

According to the *Plan* research, speed is the number one cause of most accidents/fatalities in Sheffield. Work with Mass Highway Department and Sheffield Highway Department to review and adjust road speeds, e.g., 25 mph in town/village centers, also move signs which increase speeds before an intersection to after the intersection (i.e. north of Berkshire School Rd to south of Berkshire School Rd. Same with Root Lane).

#### b. Upgrade Intersections

- Review, redesign, and reconstruct the most heavily used or 'problem' intersections to reflect future usage, including a variety of users, continuing the work done in the Plan.
- Heavy commercial local and thru trucks require wide turns, longer sight distances, etc

#### c. Review and modify current roadway design, where needed.

- Redesign the village approaches to slow traffic
- Review and redesign passing zones, Yield vs. Stop signs, Sight distances, etc.; Paint or repaint road lines, pedestrian walkways, and Town Hall 'lane'
- Review and install new guardrails, where needed, of stone and wood (black locust) or biocomposites, not metal chain where possible to enhance character of area

#### d. Install consistent, visible signage.

- Work with Mass Highway and SHD to review appropriateness, placement, and consistency of road signs
- Design and install easily read signs of particular colors, shape, and possibly historical 'bent' to provide clarity of information about Town resources

#### e. Evaluate traffic calming measures.

- Work with Mass Highway Dept. and Sheffield Highway Dept. through the Footprint Roads Program and Flexibility in Highway Design to maintain appropriate or reduce required road widths within heavily populated areas, especially the Town Centers to enhance safety and historic and community character and reduce maintenance costs.
- Review and modify the Town by-laws governing the Town accepting roads to reflect design and building standards for roads and building requirements which promote or enhance the rural character of the Town and decrease construction and maintenance costs.
- Install traffic calming measures and devices, such as raised rumble strips, at the entrance to residential side streets and at crosswalks.
- Use dirt roads as traffic calming devices.

#### f. Evaluate a 'Routing Plan'.

- Route interhighway traffic on feeder roads, not neighborhood or scenic roads (e.g., Berkshire School Rd., not Salisbury Rd or Lime Kiln Rd.)
- Erect "No Trucks' signs on scenic roads and heavily residential roads (Salisbury Rd., Canaan-Clayton Rd., Cooper Hill Rd, Curtiss Rd., etc.) where there are viable alternatives and truck traffic presents a safety issue

## g. Create a 'Parking Plan'.

- Establish a parking 'plan' which moves people safely between parking areas and buildings
- Erect signs directing visitors and residents to parking ["P"]
- Consider an information kiosk at high visibility sites with maps that include parking areas and directional street traffic

- Promote landscaping areas directly related to size of parking areas to decrease heat, increase aesthetics, and direct traffic flow. (Example, planting islands with a minimum of 10ft in width, which visually break up the parking area into smaller increments.)
- Minimize impervious surface area to allow infiltration by stormwater, e.g.; install gravel parking spots adjacent to paved travel lane.
- Incorporate large tree grates around base of trees in 'parking area' to minimize compaction of tree roots and allow for infiltration of water. (e.g. minimum 60 sq ft).
- Site parking spaces and gathering places away from traffic wherever possible (e.g. by planting trees and using fencing) to decreasing noise and create more comfortable surroundings, etc.
- Create provisions for the "parking" of bicycles in locations separate from auto traffic and parking.
- Create design provisions for stormwater, e.g.; reuse to water landscaped areas
- Where possible, locate parking at the side or rear of structures and promote a front yard setback for parking and garages.
- To the extent possible, create shared 'service roads' & parking areas along the back of businesses. One service road for several businesses.
- Incorporate safe and convenient pedestrian access and universal access of excellent visual quality.
- Promote landscaped buffer strips between adjacent uses incorporating native grasses, shrubs, and trees, which highlight our natural heritage and make Sheffield distinct.
- Screen exposed storage areas, dumpsters, machinery, truck loading areas, services areas, etc., from the view of abutting properties and streets.
- Designate an area for a Car/Van Pool.

#### h. Review street & parking area lighting.

- Analyze lighting and its influence on safety, visual quality and maintaining dark night skies
  - Light pollution/fog
  - Temporary blindness of drivers/pedestrians
  - Area too dark or too light for users
  - Seek grant money to install period lighting in Historic Districts
  - Encourage lighting of trees and buildings that eliminates glare, improves safety, and creates ambience that does not negatively impact the community (e.g. light pollution).
- Encourage the feeling of "cross streets" (to counter-act the corridor effect of Route 7).
  - Paint road lines and edges to denote road 'edges' (no "cut" for road where Barrington Stage is, lack of "road" to Town Hall).
- Plant native trees and shrubs for visual cues to drivers and maintain a rural atmosphere
  - Work with Sheffield Tree Project to create an inventory of existing street trees and a shade tree plan with grant monies received from the MASS RELEAF program. (Note: Burlington VT has an excellent street tree inventory system.)
  - Apply for funding with National Tree Trust to get trees.
  - Ask for assistance from and hold a Spring celebration with the Arbor Day Foundation to plant new trees and teach citizens about trees.
  - Work with the garden club, Boy Scouts, or similar organization to maintain town landscaping cues and historic sites/rest stops.

- Ask area Professionals to perform pro bono services, conduct workshops, supervise volunteer days, donate materials & equipment, etc.
- Hang seasonal decorations from poles (e.g., corn stalks in fall, garlands in winter, Sheffield flags in summer).

# i. Continue to enforce speed limits and drunk driving regulations; publicize enforcement results.

• Given that Sheffield's #1 traffic problem is speed and that the Town continues to be serious about remedying that (i.e. S. Egremont and how the heavy ticketing through the center of town keeps traffic slow.)

# j. Encourage 'village-scale', pedestrian-based development rather than strip development.

- Promote shared driveways, service roads, and parking at the sides and backs of buildings, for businesses and residences.
- Promote 'mixed use' to encourage development in a more traditional style.
- Promote 'village' designs, which encourage shared sloped curb cuts or limit the number of curb cuts, have good visibility, acceptable distances from intersections, and 'fit' the character of the town.
- Consider design review for all (ANR) Approval-Not-Required Lots. Review should include sightlines, a maximum limit to drainage onto roadway after construction, curb cuts, etc.

# k. Encourage foot traffic and biking to and in public gathering areas and retail development.

- Redesign and enlarge the village green so it may serve more functions and be a comfortable gathering place
- Consider benches and water fountains for public use, especially by older residents
- Upgrade or install sidewalks that are consistent with a traditional New England village, to define the village center and support rural character (i.e., like new sidewalks in town and not suburban)
- Consider a sidewalk from cemetery across from Root Lane where 'Historic Center' begins to the center of Town to encourage visitors/residents to walk (from business to business or into Town) and not use cars. This could be in conjunction with a pull-off at the cemetery
- Maintain walkways in the Village Green, especially after snowstorms, so pedestrians can safely cross between east and west sides of Rte 7 without walking in street

#### 1. Analyze the viability of pull-offs for views as well as safety.

- Analyze the viability for a pull-off (e.g., cemeteries near Town Center)
  - Sightline & Drainage
  - Speed of on-coming traffic
  - Adequate slowing distance
  - Adequate signage to inform people of pull-off
  - ADA requirements maintenance & materials
  - Bike areas

#### m. Create a Scenic Roads Program and seek 'Scenic Road' designations

#### where possible.

- National Scenic By-ways Program, provides federal funds for planning, designing and developing scenic byways programs and "transportation enhancement activities" such as conservation easements, tree planting, billboard removal, and to develop trails, greenways and bicycle paths.
- State Scenic Roads Program (Chapter 40, Section 15C).
- Town 'Scenic' Roads
  - 1. Maintain cultural features tied to our past such as stonewalls, old trees along roads, fences.
  - 2. Maintain dirt roads as recreational/tourist asset, as well as neighborhood asset
  - 3. Erect signage in areas with agricultural vehicle traffic.
- Apply to the Footprints Roads Program when undertaking 'improvements'.

# n. Highlight Historic Districts including the incorporation of 'village' visual cues.

- Such cues may include signage and lighting. (The following bullets were taken from draft Master Plan sub-recommendation i. which was folded into this sub-recommendation.)
- Encourage the feeling of "cross streets" (to counter-act the corridor effect of Route 7).
  - Paint road lines and edges to denote road 'edges' (no "cut" for road where Barrington Stage is, lack of "road" to Town Hall).
- Plant native trees and shrubs for visual cues to drivers and maintain a rural atmosphere
  - Work with Sheffield Tree Project to create an inventory of existing street trees and a shade tree plan with grant monies received from the MASS RELEAF program. (Note: Burlington VT has an excellent street tree inventory system.)
  - Apply for funding with National Tree Trust to get trees.
  - Ask for assistance from and hold a Spring celebration with the Arbor Day Foundation to plant new trees and teach citizens about trees.
  - Work with the garden club, Boy Scouts, or similar organization to maintain town landscaping cues and historic sites/rest stops.
  - Ask area Professionals to perform pro bono services, conduct workshops, supervise volunteer days, donate materials & equipment, etc.
- Hang seasonal decorations from poles (e.g., corn stalks in fall, garlands in winter, Sheffield flags in summer).

#### o. Consider adopting Project Integration Procedures.

 Refer to <u>Smarter Land Use</u> by Karl Kende for collaboratively designed projects, including the Trail Network.

### p. Develop and adopt design parameters.

Such parameters may include:

- Burying utility lines to alleviate visual distractions and improve historic character.
- Encouraging that any new roads or road networks be placed along gently curving
  contours where possible to maintain natural grades, slow traffic, minimize construction
  costs, and enhance the aesthetic character so that the road 'fits' the land, this also
  provides for neighborhoods with slower traffic, that look like they fit the landscape and
  at the same time decreases investor costs, land disturbance, and erosion.

- For more than two buildings, design a 'pass-through' connection at the end of a subdivision to provide for future vehicle movement and decrease traffic congestion.
- For cul-de-sacs, design with either a maximum radius of 30 ft or a minimum radius of 60ft with a landscaped center island. The latter is preferred. The former has a turning radius for the most frequent users, cars, vans, small trucks, not fire trucks. Fire trucks would have to make one reverse direction to turn around. Such design decreases use of cul-de-sacs in new planning and increases the connection of a planned access road to existing roads so that traffic, including Town service providers, have an alternate means of access and road widths and pavement are decreased in neighborhoods.
- Consider a bylaw that requires pre-construction drainage volumes onto Town-maintained roads, especially at driveways, to be equal or less than post-construction drainage volumes. For example, new driveways off Upper Barnum St. now dump additional water volumes onto Barnum St., creating increased maintenance needs to a once stable, effectively drained Town road.
- Design criteria linked to safety, zoning and other regulations that support the village scale and uses and rural character, such as wooden guardrails made from locally grown hemlock, oak, etc.

#### q. Consider developing an Easy Reference Design Guide.

- This may be given to property owners and / or developers.
- r. Evaluate roads in light of maintenance costs.

# <u>RECOMMENDATION 2</u>: Create an institutional memory\* and road management and maintenance program.

\*Institutionalized memory is a written record of valuable department information and experiences which can be passed on in a standardized form to successive personnel, and used to assist in efficient and effective planning and budgeting. Especially important since the Highway Department is a significant part of Sheffield's budget.

#### a. Establish a Roads Advisory Committee.

Such an advisory committee would benefit from broad representation including members of the Highway Department, the Tree Warden, Town Administrator, Police Chief, representatives of the Conservation Commission and Planning Board, and interested community members. This committee could increase the resources available to the SHD without having to increase costs through volunteer time and ideas. The committee's responsibilities could include:

- Assist the Highway Department in establishing and setting criteria for a Roads
   Management Program including analyzing roads based on current and future use, social,
   financial, environmental, and cultural benefits and constraints.
- Make recommendations based on social, financial, environmental, and cultural analysis for short-term and long-term strategies and goals for a Roads Management Program.
- Review Roads Management Program seasonally and adjust recommendations as needed.

- Compile a resource list of people & organizations for exchange of information and expertise.
- Work with the SHD on formulating scenic road designations per earlier recommendations.
- Help create a written record which includes job descriptions, training needed, schedules, procedure manuals, resource lists, internal record keeping procedures, annual data, etc., and adjust as needed to reflect changes in Transportation System.
- Establish recording system for SHD work, and an effective, efficient mechanism to do yearly cost analysis (e.g., PDAs & EZ software for categorization and tracking of work).
- Establish a baseline of the roads by inventorying the usage, users, and types and conditions of town roads. Produce a map documenting this information.
- Using information from Sheffield Hwy Dept records and from other similar communities, estimate cost per mile of maintenance of various roads and kinds of roads.
- Develop categories of Town street design standards to insure function and character of roads, and use these standards in both subdivision and public street reconstruction. They should be context specific; flat vs. hills, village vs. outlying, etc., and explicit, and be the basis for acceptance as a 'Town' road. This could be done in conjunction with the Planning Board and Building Inspector so that if the Town ever needs to take over the care of the road, the town will not have undue maintenance costs and the road will 'fit' with the community character.

# b. Identify and implement cost-saving measures for all aspects of the Highway Department.

Consider during the identification of such measures, the appropriateness of the following:

- Adopt the design recommendations and construction specifications from <u>Design Guide</u>
   <u>for Rural Roads</u> as a guideline for future road construction, upgrading, and maintenance.
   For example, reduce infill and slope requirements where possible.
- Create scheduled equipment maintenance program to reduce expensive repair and/or replacement costs.
- Develop a chart of anticipated road and machinery maintenance work with built-in contingency hours for emergencies and a detailed map of roads by work priority based on criteria such as amount of usage, types of vehicles, and adjacent land-use, etc. The latter might be a project for the Conway School of Landscape Design.
- Provide opportunities for SHD personnel to keep up-to-date on the most current techniques, materials, maintenance options, costs, equipment, etc.
- Coordinate the Roads Management Program and the Capital Improvement Plan.
- Enlist volunteers to install native short grass/wildflower/groundcover around shrubs in intersections & parking areas to reduce or eliminate mowing costs.
- Change infill & slope requirements where possible By using cut & fill guidelines that
  ensure adequate runoff of water and minimizes infill needed on downhill side of road
  there will be fewer trees removed and fill purchased; decreasing costs and stabilizing soil.
- Reduce salt usage where possible which will save money, extend life of equipment, require less materials, and lower detrimental effect on environment.
- Explore alternative fuels and fuel cells (e.g., biodiesel).

# <u>RECOMMENDATION 3</u>: Promote integrated alternatives to single-person automobile travel.

#### a. Consider creating a pedestrian and bicycle trail network.

Such a network would connect important sites, such as schools, Town Park, Town Hall, Senior Center, etc. (This mechanism would also provide funds for historic preservation and affordable housing projects.) The network could incorporate areas of high use/population and natural resources, for recreation and commuting, locally and regionally. This network would be safely accessible, interconnected, and serve residents and visitors of all ages, conditions, and interests.

- Encourage adoption of the Community Preservation Act for open space, affordable housing and historic preservation funds.
- Consider using Town-owned land as the 'base' for the Trail network.
  - A Stewardship/Management Plan of Town lands could help meet community goals. Funding for the Plan could come from the Forest Stewardship Program and from forestry cost-sharing.
- Investigate local, State, and Federal programs which fund recreation & transportation, such as the Forest Stewardship Program, Greenways, Blueways and Gateways grants, etc.).
- Develop partnerships with other organizations for support and expertise, such as Berkshire Bike Path Council, Conway School of Landscape Design, Housatonic Valley Association, Simons Rock, land trusts and conservation organizations, Berkshire Regional Planning Commission, sporting organizations/stores, etc.
- Incorporate safe routes for bicycling, walking, horseback riding, etc.
  - o 'Safe' includes design of traveling area for physical safety and a comfortable, welcoming feeling to the user social safety.
  - o Reuse trolley tracks, where possible.
  - o In village centers, install bike lane(s) consistent with the adjacent to 'main' street with intervening grass swath to maintain village character and encourage pedestrian use.

Enlist the help of landowners in the Stewardship & Chapter 61 programs. Provide incentives to landowners who allow access to their land, assisting the establishment of the transportation network.

Once a trail has been established, neighborhood teams could monitor & care for each section.

Encourage people to use and care for the trail. Usually, the more people; the fewer the problems.

Encourage neighboring towns to connect their trails to Sheffield trails.

- b. Consider dedicating a set percentage of the town's funds for non-automobile improvements, such as sidewalks, bike paths and bike racks.
- c. Encourage that new construction actively promote universal, pedestrian and bicycle access.

- d. Encourage businesses to promote alternatives to automobile usage, including various incentives for doing so.
- e. When road improvements are planned, ensure that there is no net loss of safety and convenience for pedestrians and bicyclists.
- f. Encourage design guidelines, which require pedestrian, bicycle and recreation easements within new subdivisions to create a circulation network within each neighborhood.
- g. Consider incentives for developers to connect adjacent neighborhoods.
- h. Encourage car/van pooling through 'pooling' sites.
- i. Explore the feasibility of expanding public transportation to Sheffield and Ashley Falls.
- j. Explore bus, taxi and van sharing within Sheffield and neighboring towns.
- k. Research ways to meet the transportation needs of seniors and others.
- 1. Explore the increased use of the Housatonic Railroad for freight to help slow the influx of large trucks and cars passing through Sheffield.
- m. Investigate expansion of Berkshire Scenic Railroad routes to town.