

VI. COMMUNITY FACILITIES

Chapter VI

COMMUNITY FACILITIES

Introduction

The purpose of the Community Facilities section of the Master Plan is to inventory and analyze the public infrastructure of the community. All available facilities and services, such as fire, police, schools, parks, and water, are assessed for their adequacy to accommodate existing and future populations and development.

There are several uses for such an inventory and analysis within town government. The Planning Board needs reliable information when reviewing development proposals. The information is spatial - Is a given part of town served adequately under existing conditions? ; numerical - How many police officers do we have per capita? ; and temporal - When will we need an additional fire truck?

The objective of the Community Facilities Chapter is to list existing conditions of current facilities and make recommendations for the future needs of the Town in one comprehensive, coordinated summary. Information contained within was provided by the Board of Selectmen, department heads and elected officials, and volunteers. At the end of this Chapter is a list of people who contributed to specific sections of the Community Facilities Chapter.

Another use for the Community Facilities Chapter is for the Capital Improvements Program (CIP). Generally, a CIP is a list of municipal department needs for major equipment and facilities over a six year time period. Some items that might be included in a CIP are vehicles, new facilities (highway garage, police and fire stations), land and roads, or special studies. In 1988, the Planning Board was authorized by Town Meeting to initiate a (CIP) for the Town. The Planning Board has defined capital needs as items with a cost over \$10,000 with a useful life of more than three years.

The Planning Board adopted the current CIP for the Town in November, 1998. This document covers the years 1999-2004 and should be updated annually prior to the Town budget process to reflect changes in department needs and Town growth. One of the impacts of using a CIP in the annual budget process is to even out municipal expenditures so that property taxes do not greatly fluctuate from year to year. With annual updates to the CIP, the Selectmen and Budget Committee can use the information in making sound budget decisions.

Town Hall and Community Offices

The Town Hall, which was constructed in the early 1900's, is in good condition and is a cornerstone of the community. Renovations in 1988 and 1989, made the building handicapped accessible and added restroom's and offices for Town Administration. Other improvements within the past decade include new windows, trim, wiring, new hardwood floors, foundation drains, fire alarm system, public address system, entrance, outdoor lighting, walkways and landscaping. The condition of the Town Hall roof, however, is currently substandard and is in need of major repair. The slate roof is almost 100 years old and very brittle. Each winter, due to snow and ice, slate breaks off causing leaks. This situation needs immediate attention in order to avoid major damage to one of the Towns most important buildings.

If the new police station is constructed as planned, the future space needs for Town Administration will easily be accommodated within the existing Town Hall building.

The Old Grade School building was built in 1910. It is home to a number of community-based programs, including Kearsarge Children's Center, Kearsarge Valley Community Action, the Senior Center, Senior Community Service Employment Center, Head Start, kindergarten, Commodity Supplemental Food Program, Congregate Meals, Emergency Food Pantry, and the Women, Infants, and Children Program. This heavily used facility is in adequate condition, however it is in need of roof repair, new fire alarm and suppression system, and a new furnace system, which requires asbestos removal.

Solid Waste

The most significant event that occurred since the 1989 Master Plan was the construction of the Warner Transfer and Recycling Station on Route 103. Prior to 1989, Warner had been using the Hopkinton/Webster landfill on an annual agreement basis. When the landfill was ordered to be closed, Warner had to seek an alternate trash disposal option. After exploring all the alternatives, Warner voted to adopt mandatory recycling. In a nearly unanimous vote at the 1989 Town Meeting, Warner chose to adopt a long-term solution to emphasize recycling and to dispose of non-recyclable trash at the Concord Regional Solid Waste/Resource Recovery Cooperative. The Cooperative has a 500 ton per day waste to energy plant in the Penacook section of Concord. As part of this decision, the Town had to construct a new transfer station that could handle the Town's recycling capacity.

The Transfer/Recycling Station has been a tremendous success. Countless hours of volunteer and staff effort went into educating the Town about recycling. The station is the center for waste disposal, recycling, and even supports a "swap" area for items that can be reused by others in Town. In 1998, a \$20,000 expansion was approved to accommodate additional storage which allows loads of recyclables to be consolidated. The latest Master Plan Survey results showed this facility to be the highest-rated (88.2%) among the community services in Town.

Table 6-1 shows the tons of materials that have been recycled through the Transfer Station and the total cost savings to the Town.

**Table 6-1:
Materials Recycled in Tons and Total Savings**

Material	1991	1992	1993	1994	1995	1996	1997	1998	Total Tons
Metal & Steel Cans	62.9	81.1	82.57	98	123	111.392	87.9	132.01	778.872
Aluminum Cans	4.2	5.17	4.21	4	4.23	2.38	0.99	2.021	27.201
Newspaper & Magazines	28.7	29.24	56	48	52	79.83	38.9	70.508	403.178
Cardboard	62.2	77.02	124	120	128	120.983	115.7	108.707	856.61
Plastic	7.5	16.73	16.76	12.5	12	n/r	9.14	9.802	84.432
Textiles	n/r	n/r	n/r	1.5	5	8.37	7.6	5.68	28.15
Glass (approx)	37	37	48	53	50	54	47	68	394
Total Tons Recycled	202.5	246.26	331.54	337	374.23	376.955	307.23	396.728	2,572.443
Total Savings Recycling	\$17,277	\$1,141	\$29,306	\$33,270	\$46,785	\$29,969	\$29,233	\$37,529	\$224,510

n/r = not reported

Source: Town of Warner Annual Reports

The Transfer Station currently houses the following equipment:

<u>Equipment</u>	<u>Purchase Date</u>	<u>Exp Yrs</u>	<u>Replace Date</u>	<u>Replace Cost</u>
1. Accurate 450-HD Trash Compactor	1989	15	2004	\$25,000
2. Philadelphia Tram Rail Bailer 3400	1990	15	2005	\$15,000
3. Bob Cat Skid Steer	1996	10	2006	\$15,000

In 1998, the Town negotiated an agreement with the Towns of Hopkinton and Webster regarding Warner's share of the cost to close the Hopkinton Landfill. This agreement provides that Warner will pay approximately \$18,000 per year on a 20 year bond issue, and \$5,000 per year for ongoing monitoring costs.

Recreation

Respondents to the 1997 Master Plan survey gave recreation facilities a rating of "good," with youth recreation and the Town beach rating high among town services. Over half of the respondents ranked improvements for youth recreation and public lake and river access as important public projects for the Town to undertake.

Warner's recreational facilities include:

1. Bagley Field, located on Route 103 between Exits 7 and 8 off of I-89, which has soccer fields used by summer and fall soccer camps.
2. Silver Lake Recreation Area, which hosts swimming programs and has popular picnicking facilities.
3. Riverside Park, located on a 16 acre parcel off North Village Road, which includes a little league baseball field that is fenced and in good condition, as well as a softball/T-ball field, that is also in good condition. The field has a new sprinkler system using water from the Warner River. The facility also is used by the football program for the towns of Warner, Bradford, Henniker, Hillsborough, Hopkinton and Sutton. A new skateboard park was recently constructed at the Park as well, funded through the Nancy Sibley Wilkins Trust and private donations.
4. Snow mobile trail system, maintained by the Kearsarge Trail Snails, connecting to surrounding communities. In 1998, a suspension bridge over the Warner River was completed, linking additional trails to the system.
5. Chandler Reservation, which has numerous hiking trails.
6. Warner River, which is used for canoeing.
7. The Sunapee, Kearsarge, Ragged Mountain Greenway trail system connects Warner to surrounding communities for hiking and cross country skiing.
8. Rollins State Park - hiking trails at Mt. Kearsarge

As indicated in the Master Plan survey, there is a need for more youth/teen recreation activities, possibly in the form of a community building. The Board of Selectmen also indicated that further recreation opportunities could be created by better utilization of Town-owned land, including the Chandler Reservation, which includes 1,345 acres of land in the Mink Hills, future use of the Town reservoir, and land fronting along the Warner River. Other locations that present possible recreational opportunities include Carriage Trail Acres, land behind Simonds School, and the

railroad beds that run through Town.

The future land use map indicates that future population growth should be concentrated within close proximity to the village center so that improvements in the areas mentioned above, or in Riverside Park, would allow for easy access to the majority of Warner's population. Although no park and recreation development plans have been formulated, it is clear that additional facilities will be required as Warner's population grows.

Police Department

Respondents to the 1997 Master Plan Survey indicated that the Police Department was doing a good job (61.1%) but that police protection was the community service needing the most improvement. This is probably due, in part, to the increase in activity requiring department attention during the last ten years. Table 6-2 illustrates this increase in activity, as reported by the Warner Police Department.

The Police Department now has four full time police officers, two part time police officers and two police cruisers, a 1994 model and a 1997 model. The Town voted, in 1999, to replace the 1994 cruiser. The Police Department estimates that it will need a third cruiser in the year 2000, due to increased patrols, investigations and court time.

The current status of the Warner Police Facility consists of all seven employees working out of three rooms in the Town Hall. As previously determined by the 1988 Master Plan Survey, the Police Department's present quarters continue to be inadequate with intensifying space restrictions, increased liabilities, and safety being of great concern.

In January of 1997, the New Hampshire Municipal Association Property-Liability Trust conducted a visitation/inspection of the current facility. The inspection called attention to the many deficiencies that exist at the present time. Some of the inadequacies include the need for: a secure lobby, a secure booking area, gun lockers, evidence storage, temporary holding facility with separate juvenile/adult facilities, safe communications room, alternate back up power system, and interviewing area.

The Police Department has received recommendations for a future facility from Compensation Funds of New Hampshire and the Police Standards & Training Council. Any new facility must be compliant with all building and fire codes, as well as with the Americans with Disabilities Act. A new station must be built with an eye toward the future. It should be able to accommodate a growing police force and have expansion capability.

After careful consideration and research, a facility of 4,800 square feet has been proposed to meet the needs and requirements of the Warner Police Department. This proposed facility would allow for efficient, liability conscious, day-to-day operations to be completed in a professional manner.

**Table 6-2:
Warner Police Department Activity 1990-1998**

Type	1990	1991	1992	1993	1994	1995	1996	1997	1998
Motor Vehicle									
Accidents	29	17	27	23	43	50	58	45	49
Summonses	118	73	92	72	27	40	61	72	90
Check Ups	n/r	n/r	n/r	26	62	62	115	99	69
D/E Warnings	n/r	n/r	576	568	334	379	285	461	349
Sub Total	147	90	695	689	466	531	519	677	557
Criminal									
Investigations	n/r	n/r	90	77	195	190	261	226	243
Juvenile	23	13	12	10	11	13	19	45	41
Untimely Deaths	0	2	1	3	4	4	4	5	1
Bench Warrants	9	4	18	0	8	4	2	7	12
Arrests	24	13	17	15	7	17	27	31	59
Sub Total	55	32	138	105	225	228	313	314	356
Alarms	n/r *	n/r *	13	67	62	83	26	51	79
Total Activity	n/r *	n/r *	846	861	753	842	858	1042	992
Total Calls Received	n/r *	n/r *	2,389	2,754	2,231	2,885	2,881	2,839	2,886

Source: Warner Police Department

n/r * = not reported

Fire Department

With the addition to the Fire Station in 1992, which doubled the space of the Fire Department, the space needs of the Fire Department are met for the foreseeable future. If needed, one or two trucks could be housed at the new Highway facility, if additional bays were added to that structure.

In 15-20 years, a sub-station located either in the village center or to the south of the village, will probably be needed, since this is where the Fire Department responds to most of its calls. Any substation or new station should be in a central location for visibility and for safety reasons during emergencies. Table 6-3 below shows Department activity since 1991.

Since approximately 50-60% of calls are medical emergencies, the Fire Department has an Emergency Medical Technician (EMT) on retainer Monday - Friday from 7am-5 pm. Although Warner has 8 EMT volunteers, the majority of volunteers work out of Town and are available mostly at night and on the weekends.

Since the last Master Plan, the E-911 system has become operational in Town. The 911 system has enhanced emergency capabilities, however it has also increased the number of “nuisance calls” to the Fire Department. The Department responds to many more calls that would not have been considered “emergencies” in past decades.

The fire department is staffed entirely by volunteers, however, it is expected that a full time Chief, and possibly other personnel, may be needed at some point in the future. One change since the 1989 Master Plan that has occurred is that it is harder to get people to volunteer their time to the Fire Department because many residents have jobs out of Town, making it more difficult to respond to calls. Also, volunteering requires a substantial time commitment.

The Fire Department equipment inventory is listed in Table 6-4.

**Table 6-3:
Warner Fire Department Activity**

Type of Call/Alarm	1991	1992	1993	1994	1995	1996	1997	1998
Auto Accident	22	29	27	24	32	31	35	36
Brush/Grass	2	1	2	4	0	5	4	5
Chimney Fire	8	11	15	10	8	7	9	3
False Alarm	18	23	27	23	28	18	15	23
Medical Aid	86	62	88	119	96	110	108	129
Other/Misc.	13	13	5	0	13	7	32	41
Service Calls	10	3	28	18	23	10	0	0
Motor Vehicle Fire	1	9	4	9	4	0	4	5
Mutual Aid to Allenstown	0	0	0	0	0	0	0	1
Mutual Aid to Boscawen	0	0	0	0	0	0	0	1
Mutual Aid to Bradford	2	1	7	6	5	3	2	8
Mutual Aid to Bow	0	0	0	0	1	0	0	0
Mutual Aid to Concord	0	0	0	2	0	0	0	0
Mutual Aid to Henniker	0	1	0	0	1	2	0	1
Mutual aid to Hillsboro	0	0	0	1	0	1	0	0
Mutual Aid to Hopkinton	3	4	7	5	3	2	2	8
Mutual Aid to Newbury	2	0	1	0	0	0	0	0
Mutual Aid to Salisbury	0	1	0	2	0	0	1	2
Mutual Aid to Sutton	3	0	3	2	2	0	1	7
Mutual Aid to Webster	4	2	1	3	1	1	2	2
Structure Fire	5	6	2	4	3	2	5	40
Smoke Investigation	3	2	3	3	3	1	1	0
TOTAL	182	168	220	235	223	208	222	276

**Table 6-4:
Warner Fire Department - Capital Equipment Inventory**

Equipment	Life Expectancy	Replacement Cost	Replacement Date
1999 Freight Liner	20 yrs	unknown	2019
1988 Ford Pumper	20 yrs	\$225,000	2008
1973 GMC Pumper	20 yrs	\$165,000	1993
1981 GMC Tanker	20 yrs	\$ 75,000	2001
1964 Ford Tank Pump	unknown	\$ 125,000	2000 or 2002
1952 Tanker	unknown	Belongs to State	n/a
1960 Jeep and Trailer	unknown	Belongs to State	n/a

Cemeteries

Maintenance of town cemeteries is the responsibility of the Trustees of Town Cemeteries, an elected five member board. Table 6-5 lists the cemeteries in Warner under the responsibility of the Trustees.

**Table 6-5:
Town Cemeteries**

Name and Location	Number of Lots	Lots Available
Davisville Cemetery, Route 103	208	some
New Waterloo Cemetery, Route 103	352	yes
Schoodac Cemetery, Webster Road	242	some
Bartlett Graves, Newmarket Road	private	no
Bean Graves, off Bean Road	private	no
Coal Hearth Cemetery, Pumpkin Hill Road	81	no
Colby or Collins, off Melvins Road	22	no
Ferrin Graves, off Red Chimney Road	private	no
Gore or French's Brook Cemetery, Kearsarge Mt. Rd.	45	no

Name and Location	Number of Lots	Lots Available
Hoyt Cemetery, Old Henniker Road	5	no
Johnson Cemetery, Collins Road	7	no
Kittredge Cemetery, Collins Road	11	no
Lower Warner Cemetery, Route 103	97	no
Magdalen College Cemetery	private	no
Melvins Cemetery, Route 103	47	no
Morse Cemetery, Route 103	10	no
Old Warner Village Cemetery, Main St	194	no
Page Cemetery, Page Road	45	no
Parade Ground Cemetery	127	no
Peaceful Retreat Cemetery	21	no
Poor Farm Burial Ground, Pumpkin Hill Rd.	5	no
Poverty Plains Cemetery	unmarked	no
Pumpkin Hill Cemetery, Old Pumpkin Hill Rd	54	no
Sanborn Cemetery, past Bear Pond	6	no
Seavey Cemetery, Tory Hill Road	private	no
Sisco Cemetery, off Route 114	69	no
Tory Hill Cemetery, Tory Hill Road	private	no
Waterloo Cemetery, Newmarket Road	183	no
Wheeler Grave, Willoughby Colby Road	private	no

As shown on Table 6-5, three cemeteries have lots available. The New Waterloo Cemetery is the main cemetery that has lots for sale to the past and present residents of Warner. The property was donated in the 1960's, logged, filled, graded, and seeded. The Cemetery Trustees have had the back section of New Waterloo Cemetery surveyed and marked. About 55-60 lots have been sold since the 1970's, with approximately 10-15 lots being sold per year. The Trustees estimate that there is more than adequate space for the foreseeable future.

There is no full time cemetery attendant or staff in any of the Town cemeteries. The summer maintenance of mowing is contracted out to landscapers. Ongoing maintenance projects include painting and replacing gates, and straightening and repairing stones. The Trustees recommend that a "Friends of Cemeteries" Committee be established to deal with on-going maintenance and upkeep.

Education

Kearsarge Regional School District, SAU #65, is located in New London. The district is composed of seven towns governed by one regional School Board consisting of nine members. Warner and New London each elect two representatives to the regional School Board, while the remaining towns elect one. The towns represented in the District are: Bradford, Newbury, New London, Springfield, Sutton, Warner and Wilmot.

Warner students in grades 1 - 5, attend Simonds Elementary School, located off Main Street behind Town Hall. Students in grades 6-8, attend Kearsarge Regional Middle School in New London, and high school students attend Kearsarge Regional High School in Sutton.

Simonds Elementary School

The physical plant at Simonds consists of the original 1871 two story brick school building onto which two additions have been constructed. The original building consists of 4 classrooms, a nurse's room, 3 rooms designated for Speech, Occupational Therapy and Resource, and a storage area. The first addition, built in 1960, consists of 4 classrooms, offices for the principal and secretaries, a guidance room, teachers room, library and learning disabilities room. The second addition, built in 1987, consists of 3 classrooms, an art and music room, reading rooms, conference room, and a multi-purpose room (gym, cafeteria). Currently, the school has the capacity for 250 students.

Enrollment Trends and Projections

The following numbers were compiled by the New Hampshire Office of State Planning for the 1999 update of the Warner Master Plan. Please note that these figures are based on past enrollment projections and should be used only as a basis for future planning. All future projects should be based on the changing conditions within the Town and District, such as new residential development, and based on a yearly accounting of enrollment figures.

Figure 6-1 shows the historic enrollment figures from 1980-1999 for the Kearsarge Regional School District. After a sharp decrease in enrollment in the early 1980's, the figures have climbed steadily to a high of 2,046 students for 1999.

Figure 6-2 shows the school enrollment figures from the Town of Warner in the KRSD.

Although the historic figures for the KRSD and the Town of Warner show an upward trend, specific projected enrollment numbers for the Town of Warner show that the Town's number of children enrolled in the district will decline over the next decade. Figure 6-3 shows three different types of projections. Grade progression projections are based on the ratios of historic numbers that are carried out for ten years.

Figure 9-1

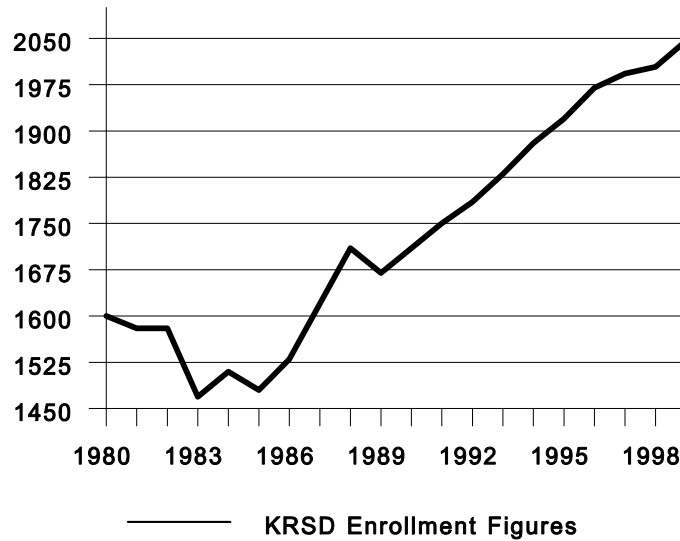


Figure 9-2

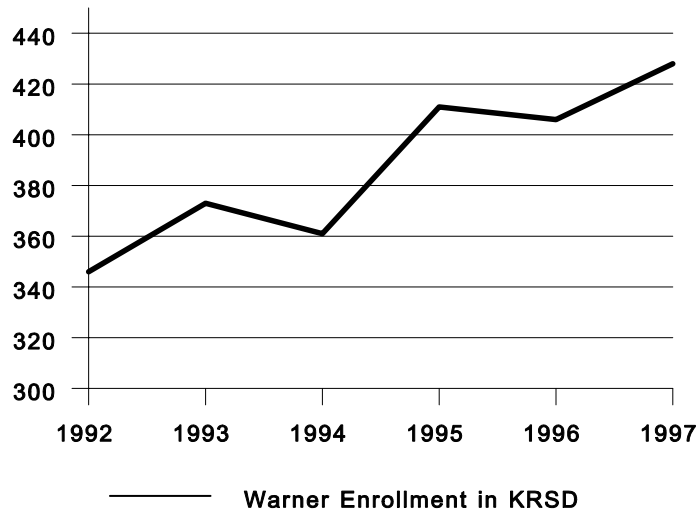
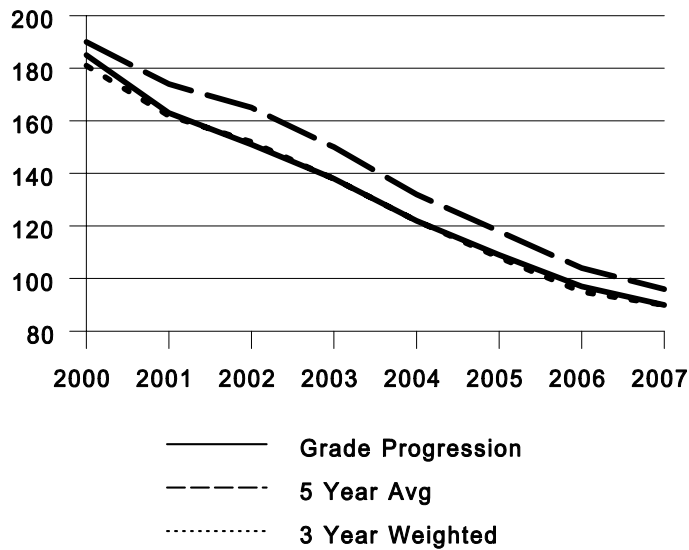


Figure 9-4



The five year average projections are the average of the grade to grade progressions over the last five years. The three year weighted average progression ratio gives greater weight to the last three years of enrollment figures. All three methods show that barring some unforeseen events, such as a new housing development or a baby-boom, the number of school enrollments in KRSD from the Town of Warner may decline over the next 10 years.



Projections for grades 1-5 at the Simonds Elementary School were made using the same methods as described above. Figure 6-3 shows that school projections will decline significantly in the next decade.

Highway Department

The Highway Department is located on Route 103, near the Town's Transfer Station and the State Department of Transportation Highway Facility. The Highway Garage consists of a steel facility that was constructed in 1998. The Highway Department received very favorable ratings in the 1997 Master Plan Survey for both road maintenance (74.1% rated this as "good") and snow removal services (81.2% "good" rating).

Table 6-6 summarizes the inventory of equipment used by the highway department as of November 1998, and includes replacement costs and dates.

The Town Road Agent recommends a number of long term highway projects to keep the road system properly functioning:

1. Shim and Pave Program. This program maintains and extends the life of the current road system.
2. Road Construction Program. There are a number of roads that need to be completed either by paving or by improvements to the road base. These roads include Newmarket Road, Plains Road and Bean Road. Please refer to the Transportation Chapter for more information.

Other needs of the Highway Department Include:

1. New Sand/Salt Shed that is environmentally sound.
2. Addition of staff, such as a full time mechanic, maintenance person, part time transfer station operator, and snow plow operator.

Other Highway Department projects relate to downtown improvements. Sidewalk replacement is recommended to replace the existing sidewalks with brick, for both safety and aesthetics. The development of a municipal parking lot is also recommended. The limited parking available is perpendicular to Main Street, resulting in backing maneuvers in and out of parking spaces onto Main Street. Safety could be improved and congestion could be lessened by providing an off-street parking lot in the downtown area.

**Table 6-6:
Warner Highway Department Equipment Inventory**

Description	Date Purchased	Current Miles/Hrs	Life Exp Yrs	Replacement Date	Replacement Cost
Cat 206 Excavator	1987	9000 Hrs	10	1998	\$140,000
Gallion Grader	1999	13,559 Hrs	15	2013	\$170,000
Cat Loader 936	1990	11,706 Hrs	10	2000	\$120,000
Massey Tractor	1981	---	20+	---	---
F350 4x4	1993	85,151 M	7	2000	\$27,500
F350 4x4	1999	2432 M	7	2004	\$32,000
Mack* /Water Tank	1982	99,624 M	3	2001	---
Mack♦	1986	157,269 M	3	2001	---
Mack⊕	1991	81,676 M	10	2001	\$125,000
Mack∇	1997	31,000 M	10	2007	\$95,000
Mack*	1998	7,805 M	10	2008	\$115,000
Swenson Sander Steel	1986	---	4	2001	\$15,000
SS Highway Sander	1988	---	20	2008	\$17,000
SS Highway Sander	1991	---	20	2011	\$17,000
SS Highway Sander	1996	---	20	2016	\$18,000
SS Sander Pickup	1997	---	20	2017	\$6,000
Cub Cadet-Snow Blower#	1999	---	10	2009	\$20,000

*1982 Mack will be sold in 2001 ♦1986 Mack will replace 1982 ∇ 1997 Mack has new plows and wing frame
⊕ 1991 Mack will replace 1986 and in year 2001, a complete new truck, cab and chassis, dump body, plow and frames
* 1998 Mack plow equipment will be 20yrs old and needs to be replaced at the time of trade
Cub Cadet will be replaced with a 4-wheel drive tractor and attachments \$24,000

Library

The red brick and granite Richardson Romanesque style Pillsbury Free Library building was constructed on a 0.3 acre parcel at the corner of Main Street and Depot Street in 1890-91, as a gift to the Town from the George A. Pillsbury family. When the Town voted to accept the library in 1890, it also voted to support the library annually with funds equal to 1/15 of 1% of the Town's net assessed valuation for that year.

Since the last Master Plan, the expansion which was the pressing need then is now a reality. The new addition, which brings the square footage of the library from approximately 1,800 to approximately 5,000, was completed in 1993, and dedicated in April, 1994. An added benefit of the expansion is that all the extra shelving, files and furniture that were crammed over the years into the original building, an elegant Richardsonian Romanesque design by a noted Minneapolis architect, have now been removed, allowing the main floor Pillsbury Room to be restored to its original glory.

The new wing, in addition to providing enhanced space for all the library functions, provides unrestricted handicapped access to both floors, something sorely lacking in the original building. The former children's room in the basement of the old building has been converted into a public meeting room, which has proven to be very popular with many groups in town.

The library is currently open 26 hours a week, has 1,850 cardholders, and 17,502 transactions a year. The collection includes 17,049 books, 1,053 recordings, 239 videos, and 74 current periodicals.

While the Pillsbury Free Library will enter the next millennium with a physical plant adequate to meet the needs of the community for many years to come, the challenge for the future will be dealing with the demands of new technology and the changing role of libraries, as computerized data storage systems and the Internet now compete with traditional printed materials for the library's limited resources. Students of all ages are increasingly using the library for research and homework help, as well as for leisure reading and after-school activities.

As computers have become more ubiquitous, one of the roles the library has assumed is in providing computer access for those who do not have access to a computer at home. The Pillsbury Free Library has already computerized its card catalog and circulation desk, and currently has 4 public use computers, a variety of research and educational materials on CD-ROM, and offers public access to the Internet. The library's public access computers have been used to create resumes, research health care options and write term papers. Many of these functions, while commonplace today, were unanticipated ten years ago and, with the rapid pace of technology, we can only speculate at what the future may hold for the Pillsbury Free Library.



Other future goals include increasing the hours the library, maintaining and enhancing the quality of the collection, and funding more staff hours in order to serve the community in new ways. Literacy programs, programs and exhibits for adults and young adults and more afterschool activities, such as the continuation of the very successful weekly after-school program that was initiated in 1998-1999, are a few of the services that the library would like to initiate in the future.

Warner Village Water District

Also known as the "precinct", the District is a separate governing entity within the Town of Warner and was organized originally to provide fire protection, water and sewer services. The district includes the more densely populated Warner Village, including Main Street, Kearsarge Mountain Road, Geneva Street, Roslyn Avenue, Kirtland Street, School Street, Old Main Street, Mill Street and Depot Street. The executive body of the District is a board of three elected Commissioners, with an annual district meeting serving as the legislative body. The 1989 annual meetings of both the District and the Town voted to turn over administration of the Fire Department to the Town, effective January 1, 1990.

The district is comprised of 156 residences and 30 non-residential establishments, including commercial and governmental buildings. Funding is secured primarily through the collection of quarterly water and sewer charges, composed of: \$10 service availability fee, plus a water charge of \$2.00 per 1,000 gallons used, and a sewer charge of \$6.00 per 1,000 gallons. Property tax assessment is also available to support the District's operations, although this source has been reduced to a minimum amount of \$.15 per \$1,000 of valuation, in 1998.

Water System

Source

Until November 1991, District residents were provided with water from a reservoir created by an impoundment of Silver Brook, located on North Village Road, supplemented by an emergency bedrock well, located south of the reservoir. Utilizing 1987 Community Development Block Grant (CDBG) funds, the District installed a new gravel packed well at what is known as the Royce site, near a bend in the Warner River off Chemical Road. The determined maximum safe sustainable yield of the well, based on pump testing, is 250 gallons per minute (gpm). A second CDBG grant of \$350,000 was received in 1989 for construction of a pump station and 900 feet of 8 inch diameter ductile iron water main to connect the well to the existing transmission line on North Village Road. These improvements were completed in September, 1990, making this well the primary water source with the reservoir serving as backup until an additional groundwater source was secured. In 1995, a second well was installed, again with CDBG funding. This gravel-packed well, capable of producing 190 gpm, was located 40 feet from the primary well on the Royce site.

Storage

In 1987, a 98,450 gallon concrete storage tank was constructed on Denny Hill to address several concerns: to equalize pressure in the system; to assure adequate quantities of water for normal daily demands; and to provide necessary storage capacity for the new well. A storage volume of 430,500 gallons was recommended to provide for sufficient flow in the district for fire suppression (DuBois and King, 1984). Available funding was not adequate to permit the construction of a facility with the recommended capacity. However, the storage tank was designed to accommodate an increase in storage capacity, through additional concrete modules. Currently, fire protection is provided through a combination of the water system for immediate response and the nearby Warner River so that all areas of the village are covered. In the future, consideration of an additional tank may be needed to deal with adequate fire suppression.

Distribution System

Much of the distribution system was constructed in 1893, and consists of 10, 8, 6, and 4 inch cast iron pipe. The effective diameter of the pipes may be constricted by sediment build up and corrosion. There are 51 fire hydrants incorporated in the system. Until the winter of 1988-89, five blow-offs were employed to prevent water line freezing. These have been discontinued by the District. Steps have been taken to eliminate water line freeze-ups by insulating and burying entrance lines deeper. Currently, only three customers must run water during winter months to prevent water freezing.

As part of system improvements undertaken in 1986-87, several lines were added or replaced. To connect the new storage tank on Denny Hill to the system, 1,580 feet of 8 inch main was constructed. An additional 500 feet of existing main on School Street was replaced with new 8 inch pipe. Service connections were also replaced along School Street. DuBois and King also

recommended replacement of 6 inch water lines along Main Street, from Mill Street to Roslyn Avenue, with a 10 inch diameter water main, and replacement of existing 4 and 6 inch water mains on Kearsarge Mountain Road with 8 inch mains. The Kearsarge Mountain Road improvement was completed in the summer of 1991, and improved fire flow and water pressure to this part of the village. As part of its 1989 CDBG grant, the District received funding to replace water main along Main Street from Depot Street to Mill Street, a total of 1200 linear feet, with 12 inch diameter ductile iron pipe, at a cost of \$168,000. This improvement was completed in the fall of 1990. Water line improvements to replace 2,630 feet of 4 inch mains on Roslyn Avenue, Kirtland Street and Geneva Street with 8 inch pipe are scheduled to be carried out in the year 2000.

Sewer System

The sewage collection system was installed in Warner in 1902, with outfalls discharging directly into the Warner River. Consistent with State and Federal efforts to eliminate such pollution, a sewage treatment facility was constructed on the south side of the Warner River, on Joppa Road, in 1975.

The design capacity of the plant, which operates on an aerobic system, is 170,000 gallons per day. The plant is currently processing an average of 45,000 gallons per day of sewage. The service area closely approximates that of the water system, and includes 181 service connections, 151 residential and 30 commercial establishments or public buildings.

All of the original collection piping consisted of tile pipe, with loose joints. In 1976, a major sewer line replacement was carried out, with 12,900 feet of tile pipe being replaced with 8 and 12 inch asbestos cement pipe. In 1980, the sewer collector main on School Street was replaced and lowered to accommodate gravity flow of effluent from several residences at the end of the street. In 1987, old sewer pipes on Church Street and North Main Street were replaced with new sewer line. A CDBG grant was awarded to the Town to replace approximately 1,400 feet of deteriorated sewer line on Kearsarge Mountain Road in 1991, in conjunction with a storm sewer project. Nine hundred and thirty-five feet of old sewer mains in Roslyn Avenue, Kirtland Street and Geneva Street will be replaced in the year 2000.

Loose joints in the sewer collection system are also susceptible to groundwater infiltration, which requires the plant to treat a greater volume of water than that produced by system customers. Currently, infiltration is only a problem during storm events. However, as system demand increases, infiltration will become more of an issue.

All sewage treatment systems produce a concentrated by-product called sludge. The sludge must then be disposed of in an environmentally acceptable manner. Although sludge has a greater solids content than the raw sewage entering the plant, it still contains a considerable amount of water. In order to decrease disposal costs as much as possible, sludge is dewatered in drying beds located at the treatment plant site. This method relies on evaporation and sand filtration to reduce the water content of the sludge. Although this method is effective, its operation in the Warner

plant has been a problem, especially in winter due to freeze-up and sludge accumulating faster than the beds can dry it.

To solve this problem, an innovative sludge drying technique was installed in the drying beds in 1987. Phragmites reeds, which have a high demand for water, were planted in the drying beds. The reeds can speed up the drying process by absorbing water through their roots. During the summer of 1989 and again in 1995, the sand filter layers were removed and replaced with new bedding material.

The roof panels on the drying bed building were removed and the reeds replanted. This procedure has resulted in healthier plant growth and more efficient operation of the sludge drying process. The plant operator estimates that the drying beds will handle the sludge accumulation for approximately five years, after which, the sludge will have to be removed. The drying bed walls were raised in 1999, as part of a system improvement project, with CDBG and State grants, to increase holding capacity of the beds. The next sludge removal is scheduled for 2001.

Before its closure, dried sludge had been disposed of at the Hopkinton landfill. The Concord Regional Solid Waste/Resource Recovery Cooperative incinerator in Penacook does not accept sewage sludge for disposal. Disposal at the Concord Sewage Treatment Plant has been used in 1995, and other disposal sites may be available. Land spreading is an option that could be cost effective, provided it can be accomplished in an environmentally sound manner.

Current Issues Relative to Water and Sewer Facilities

Precinct Boundaries

The capital costs associated with operating public water and waste water treatment facilities in Warner are borne by the people who benefit from these services. The Warner Village Water District is a separate entity within the Town of Warner with its own political boundaries. Property owners within these boundaries are subject to a property tax to cover certain operating and capital costs. In addition, precinct residents pay service fees for water and sewer usage to cover the bulk of the costs of operation and management costs. The situation has occurred, and will continue to do so, where a landowner outside of the precinct boundaries desires utility services. Where the District Commission determines that capacity exists to serve a customer outside of the precinct, and such service would not be detrimental to the District, both it and the potential customer are forced to negotiate a reasonable payment plan, on an ad hoc basis, to cover the associated costs.

Over the past ten years, the District has enlarged its boundaries to bring in new or existing customers. In accordance with RSA 52:5, the Selectmen of the town in which a precinct has been established have the power to change the precinct's boundaries. The process is initiated by a petition of ten or more residents of the precinct to the selectmen requesting a change. The

selectmen then hold a public hearing on the request, after providing notice to all interested parties, and render a decision, either allowing or not allowing the change. The petition, Selectmen's proceedings, and decision must be forwarded to the Precinct to be made a part of its official record.

The District has adopted two principles to guide it in the matter of changing its boundaries:

1. The first principle is that the limits of the precinct should include all residential and commercial users served by sewer and water.
2. The second principle is that residential and commercial entities outside the precinct, wishing to be connected to the water and sewer systems must first be required to pay for all necessary mains, properly sized and constructed, and related improvements. The precinct boundaries would then be changed to incorporate the area to be served.

The first principle was followed in the expansion of precinct boundaries to encompass several properties which had been receiving services for a number of years; two apartment complexes and two single family homes. The second principle applied in the extension of District services to the commercial area at I-89, Exit 9, where the initial mains and associated improvements were constructed at the expense of the business served.

Source of Water

At the time of the last Master Plan update, the District needed a back-up source of water to augment the Royce well. The reservoir, while still available as a water supply would have required the installation of a filtration plant, at significant expense to the District. In 1995, the District installed a back-up well, in response to State and Federal requirements under the Safe Drinking Water Act (SDWA).

Available Capacity/New Service Connections

The District has recently revised the fee schedules for new service connections. New residential customers are charged a tie-in fee of \$2,000 for water service. The service pipe must be installed to District specifications, at the customer's expense. The District is responsible for the service line from the main to the shutoff, while the customer is responsible for the line from the shutoff to the meter.

All sewer pipes from the main collector line to the building must be installed and maintained at the expense of the customer. An entrance fee of \$2,000 is charged for residential connections, and the material may be supplied, at cost, by the District.

Non-residential water and sewer connections are assessed a tie-in fee for service at \$8 per gallon per day for water and a like amount for sewer, although these rates are negotiable.

All costs of construction, including labor, materials, permitting, and any related costs incurred for the purpose of extending water and sewerage lines beyond the boundaries of the District to an entity outside its boundaries, shall be borne by the entity to be served by such extension. This includes the necessary costs of upgrading any lines within the District in terms of quality or capacity. All workmanship and materials must meet the approval of the Commissioners and applicable specifications.

Capital Facilities Inventory and Needs

This section describes the adequacies and inadequacies of existing facilities to provide service to the existing customers, and to identify improvements necessary to accommodate new customers.

Water Supply

Capacity of primary gravel packed well: 360,000 gallons/day

Capacity of back-up gravel packed well: 273,600 gallons/day

Existing average daily demand: 75,000 gallons/day

Maximum daily demand: 144,600 gallons/day

The new wells provide adequate capacity for existing water demand, and any likely service extensions in the foreseeable future. In 1990, the District acquired a 3.5 acre parcel of land west of the Royce site, along the Warner River, as a possible future well location.

Water Supply Storage

Existing storage capacity: 98,450 gallons

Recommended storage capacity: 450,000 gallons

The recommended storage capacity was determined by DuBois and King in the 1984 Water System Master Plan. To meet fire flow requirements in the Village Center area, an estimated 375,000 gallons of storage were needed. Domestic storage needs were computed to be equivalent to the average daily demand, 57,500 gpd, at that time. During the 1991-1998 period, average daily demand has grown to 75,000 gpd.

Due to a lack of funding for the recommended storage capacity, the tank was designed to meet domestic needs, plus the need to supply a "first strike" supply in the event of a fire, with the Warner River providing the primary source of fire flow. The District should consider establishing a capital reserve fund to expand the capacity of the storage tank.

Distribution

Total water main: 31,500 linear feet in sizes ranging from 4 to 12 inches

Ductile iron/cement lined main: 19,675 feet

Cast iron main: 11,125 feet

Asbestos main: 700 feet

Many of the original pipes remain in use today. Sediment buildup and corrosion have reduced the carrying capacity in some sections of piping. Line replacement has been recommended along Main Street, from Mill Street to Roslyn Avenue. In 1992, 750 feet of 6 inch ductile iron cement lined (DICL) pipe was installed on Depot Street and 200 feet of 4 inch DICL pipe on Kearsarge Street Extension.

In case of any service extension, the existing conditions of lines affected by such an extension must first be determined. The District by-laws require applicants for service extension to pay for any system upgrade necessitated by the service extension. The cost for the Main Street line replacement, which is 1,383 linear feet of 12" ductile iron water main for approximately \$62,000.

Sewerage System

Treatment Plant Design Capacity: 170,000 gpd

Existing Average Daily Flow: 45,000 gpd

Although the plant has excess design capacity to process sewage, the actual design of the facility limits its capacity to 110,000 gallons per day. The processing and disposal of sewage sludge limits the ability of the system to handle increasing flows. A plan needs to be created to deal with the disposal of the final product.

As solid waste disposal costs increase in general, and sites for sludge disposal decrease, the District needs to investigate alternative sludge disposal and management practices, such as composting.

Other capital needs may include the replacement of piping where deteriorated conditions exist. These areas need to be identified and incorporated in the overall system plan.

Other Recommendations:

1. Continue to include utility needs in the Town's Capital Improvement Program to aid the Budget Committee, District Commissioners, and residents in their consideration of the annual budget. The CIP should include: an analysis of recent trends in capital and operating costs; the schedule of capital improvements over a six year period; and proposed funding sources for improvements, including the impact on the tax rate.

2. Continue the District policy of requiring applicants for service extensions to pay their share of the costs associated with system upgrade or expansion.
3. A problem, which affects the rural areas of Warner beyond the precinct limits, is the need to dispose of septage from pumping of on-lot septic systems. Settling lagoons and other methods of disposing of these concentrated wastes are becoming scarce. New technologies for converting these wastes into benign and useful materials are currently being developed. The District and the Town should cooperate with private septage haulers to examine opportunities for incorporating septage processing facilities at the sewage treatment plant as a long term disposal solution.
4. Although the sludge drying process has been greatly improved at the treatment plant, periodically the accumulated sludge must be removed and the beds restored and replanted with phragmites reeds. The District should pursue methods, such as the spreading the dried sludge on forest land or other environmentally sound areas under State permit, as a means of safely disposing of it.

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