

CHAPTER 11: MUNICIPAL FACILITIES & SERVICES

1. INTRODUCTION

The provision of municipal services is an important element in promoting and protecting the health, safety and general welfare of any community. Hanover's municipal facilities and public and private utilities are the infrastructure that support its local residents, businesses, institutions and visitors. Many of Hanover's municipal facilities and services represent a substantial investment by the Town, and in turn, many private property owners have made substantial investments which rely upon these facilities and services.

The need for public facilities and services is not static, but changes as the population grows or becomes different demographically; residential, commercial, industrial and institutional areas expand; old facilities become outmoded; and living standards and public expectations rise.

Following a description of the capital improvement program and community values and goals toward Town services and facilities, this chapter is divided into twelve sections, each addressing a specific municipal facility or service. They are:

Town Offices	Libraries
Meeting Rooms	Public Works
Fire Protection	Solid Waste & Recycling
Police Department	Energy & Power Supply
Human Services	Cable Television & Related Services

Recreation is addressed in Chapter 13.

Each section includes a brief discussion about the facility or service with a statement of policy or mission, if appropriate, and a description of current and projected needs in relationship to existing facilities and services, with recommendations to address these needs.

2. CAPITAL IMPROVEMENT PROGRAM AND BUDGET

Beginning in 1990, the Board of Selectmen began a process for annual consideration of a capital improvement program and budget for a six-year period. This program and budget has provided a base for the capital improvement requests which have been included in the Annual Budget. If capital budgeting and planning is to be useful and effective, it must be updated each year to reflect any changes which are made in the actual appropriations in the Annual Budget along with any adjustments made to accommodate changing conditions.

A capital budget and plan is authorized in the NH Statutes, RSA 674:5 through 674:8. There are several purposes to the establishment of a Capital Improvement Budget and Plan. First, it provides a schedule of capital projects which can be considered for the Capital Improvements Section of the Annual Budget. Second, the Planning Board can use the Capital Budget as it evaluates proposed developments in terms of the requirements to be placed on the developers for participation in needed projects. Third, good financial management requires

planning for capital projects in order to minimize the effects of such projects on the tax rate and to insure that there is a planned program for providing the various facilities needed by the Town.

The Capital Program in Hanover includes both the capital reserve funds and the proposed capital improvements for all departments.

Equipment Reserve Funds

In the past forty years, Hanover has done a significant amount of capital reserve programming. Since 1952, the Town has used the Capital and Equipment Reserve to accumulate funds for the replacement of virtually all its vehicular equipment. In recent years, this process has also been used for the replacement of a variety of equipment at the subsidized Summer-Park Residences. Reserve funds are programmed over a ten year period.

Capital Improvements

A capital improvement is defined as any project which meets one or more of the following criteria:

- Acquisition of land;
- Construction or expansion of a new facility or utility lines;
- Non-recurring rehabilitation or renovation of a facility or utility line with a cost in excess of \$25,000;
- Purchase of new equipment, not covered by the equipment reserve funds, with a cost in excess of \$25,000 and a life expectancy of five years or more.

Each Department has an opportunity to review the previous year's approved Capital Budget and Program and recommend any changes or additions they feel are necessary. These requests are reviewed by the Town Manager and compiled into the recommended program which appears in the annual Capital Improvement Program and Update. There are separate schedules for the General, Fire, Sewer, and Parking Funds. These schedules show the figures for the current fiscal year that were appropriated in the most recent approved budget and the recommended items and amounts for the next six years. Projects and equipment planned in the next six years are reported in the discussions which follow for each department in Town.

Capital Improvements and Development

Development impacts town services by placing greater demands on those services, sometimes in excess of the capacity to meet the demand. Unanticipated improvements to or expansion of town infrastructure may necessitate large increases in the local tax burden. To moderate tax increases, the capital improvements program should be related to growth in demand placed on town services. Because the planning and design of improvements to infrastructure often takes years, long-term plans for the expansion or upgrade of key municipal services such as water and sewer should be planned before demands stress the limits of a service.

3. TOWN OFFICES

The Hanover Municipal Building is centrally located on Main Street in downtown Hanover. Built in 1928 as a municipal precinct building, the two-story brick structure served as a

combination fire station/police station/town office building until the Lyme Road Fire Station was constructed to house the Fire Department in 1973. In 1989, the Police Department also moved to the Lyme Road location and the Municipal Building was renovated to better accommodate Town administration, and the District Court. Barriers to accessibility were removed and improvements were made to increase the energy efficiency of the building. In 1998, the District Court moved out of the building, upon its relocation in Lebanon.

In addition to the Town administrative offices located on the basement, first and second floors, the handicapped accessible former district court room is a popular meeting space. Records are kept in an orderly fashion in the basement of the building; however, the earliest records are stored in Dartmouth College's Rauner Library. The Municipal Building offers adequate space for current as well as projected Town office needs.

Summary and Recommendations

- The Municipal Building has enough space for current and projected Town needs. The building is energy-efficient and is now accessible.
- Although conversion of the Municipal Building to private use would allow for significant growth of the CBD without extending its boundaries, the Offices are in a very convenient location and should be kept downtown to keep alive the civic function of the downtown.
- The Town offices should remain in a downtown location.
- Provisions should be made to retain the open space in front of the Municipal Building. It should continue to be maintained as a gathering place and as a vegetated refuge from the busy streets and sidewalks.

4. MEETING ROOMS

Meeting space is available for use by the public at: the Board Room (former courtroom) and a conference room in the Municipal Building; the fire stations; the High School Auditorium; the Ray School; CRREL; Trumbull Hall; the Community and Senior Center and the Howe Library. Dartmouth College has meeting rooms of all sizes that are available on a rental basis. Additional meeting space will be available when the new community and senior center opens.

5. FIRE PROTECTION

The Hanover Fire Department has two stations: the main station on Lyme Road and a sub-station in Etna. The main Fire Station is located about 1.6 miles from the Hanover Inn on property just north of the Hanover Country Club. The 2.3 acre site was purchased in 1970 from the Fullington family. The two-story station, built in 1973, is of concrete block and wood construction. Built just prior to the 1973 "energy crisis", the building was not insulated or energy-efficient. Over the years, the Department has, however, added storm windows, insulated bay doors, replaced the roof and added insulation, and made nearly every other energy-related improvement that could be made short of re-siding in order to add insulation to the walls.

The Station has three drive-through bays which can accommodate up to six fire engines. The garage area also contains a workshop for repairs and maintenance, an emergency generator room, a boiler room, a two-story hose tower and storage rooms.

The remainder of the Station contains office, meeting and living space. The lower level contains four offices for the Chief, Captains, and an administrative assistant, a reception area, a "watch" room, restrooms and a multi-purpose room. The multi-purpose room, which has a projection screen and blackboard, is used for fire department drills and meetings, and occasionally for public meetings.

The upper level is primarily a living area with eight bedrooms (2 singles and 6 doubles), a TV/lounge area and a kitchen facility. There also is a traditional pole for quick exits to the lower level.

The Hanover Fire Station is well-located. The site is on the west side of Lyme Road, so trucks can turn south onto Lyme Road without crossing lanes, minimizing traffic conflicts or interruptions. Lyme Road is also flat in this area, so trucks can pick up speed quickly. They also can reach Dartmouth College buildings without facing the traffic congestion at the Main St./Wheelock St. and Main St./Lebanon St. intersections.

The Etna sub-station, built in 1952, is a concrete-block structure with three bays. Engine 3 and Engine 5 are housed in Etna.

In addition to two pumper, three engines, and an aerial tower, the Fire Department also owns several other important pieces of equipment. They include a 1995 ambulance, a 1999 rescue/ambulance, and a compressor which recharges air packs. A snowmobile which is owned by Dartmouth College and housed at the station, is used three or four times each winter, usually to rescue skiers injured on the adjacent cross-country skiing course at the Country Club. A trailer with hazardous waste response equipment, maintained by the Town and College, is stored at the Lyme Road Station.

The Hanover Fire Department has 16 full-time firefighters and 14 call (volunteer) firefighters. The full-time firefighters also double as EMT's. As is the case in many communities, day-time response by volunteers during the work week is sporadic given the fact that many volunteers work out of Town. However, in the event of a major fire, some volunteers have arranged with their employers to respond to a call for help.

Both Hanover's fire-fighting and ambulance services are regional in scope. The Fire Department participates in the Upper Valley Mutual Aid Association, which encompasses communities on both sides of the river from Claremont to Piermont, as far east as Grafton and Grantham and as far west as Woodstock. The Hanover Fire Department also operates a regional ambulance service which includes Norwich, Hanover, and Lyme.

Evaluating the annual response summaries included in the annual Town Report reveals that the total number of Fire Department responses has increased over the years. Almost all of the increase can be attributed to emergencies not related to fires. In addition to responding to

calls, the Fire Department is very active in trying to prevent fires. For example, the Department issues burning permits and conducts fire exit drills and building inspections. Fire fighters also provide fire protective programs for children at the schools and at the Station. The firefighters attend several training sessions themselves to improve their effectiveness and enhance public safety.

Where Is the Department Going?

Two departmental goals have been set: for the emergency medical service responders to be certified as full paramedics and to restore the full-time fire prevention officer. The number of ambulance calls has increased significantly over the past decade and probably will continue to increase further in the coming years. The Fire Department will continue to emphasize fire prevention and safety, thereby reducing the number of potential fires.

The Hanover Fire Department is rated highly by both Town residents and outside consulting firms. This high performance is reflected in lower fire insurance rates.

Capital improvements scheduled for the next ten years include: an exhaust system for the apparatus room, air conditioning for the second floor, replacement of the air compressor and mobile radios and repainting of the exterior of the Station. Equipment reserves have been established for the replacement of ambulances and fire apparatus.

Summary and Recommendations

- This equipped department serves the Town well.
- The department contributes to regional safety services through mutual aid and dispatch and by making specialized equipment available in emergencies in other towns.
- Continue to enforce and administer building codes. The enforcement of building codes, especially the 101 Life Safety Code and the National Electrical Code, is one of the best ways to prevent fires.
- Continue the Fire Department Training Programs and the Fire Inspection Program. Periodic fire inspections of existing structures helps the Town and property owners identify and correct existing fire hazards and prevent fires from occurring. The Town should also continue to support and encourage firefighters to attend training programs.
- Continue public education programs. The Hanover Fire Department has a very active and successful public education program. It should continue its efforts to increase public education and awareness through tours of the station, lecture-demonstrations in schools and through media exposure (articles about woodstoves, smoke detectors, common fire hazards, etc.)
- Require and encourage the use of smoke detectors and sprinkler systems. Smoke detectors are required in all multi-family residential, commercial, industrial and institutional buildings and in new and extensively renovated single-family homes. The Department provides the batteries and labor to change smoke detector batteries in a "change your clock, change your battery" program tied to daylight savings time. Sprinkler systems should be required in all large-scale projects. The Department has begun to encourage the installation of residential sprinkler systems especially in new homes built in more remote locations of Town.

- Concentrate development in those areas readily serviced by Town water. The Town of Hanover has a very large land area - 50 square miles. Some homes in the remote areas of Town are a 20-minute drive from the main station on Lyme Road. Single-family residential subdivisions and multi-family, commercial and industrial developments are inappropriate in these areas. By concentrating these developments in the water service area, private property owners and the Town of Hanover can benefit as a result of: (a) reasonable response time to calls; (b) availability of water to fight fires; (c) less expensive hydrant systems and alarm systems; and (d) reduced insurance rates (closer to station, sprinkler systems, etc.).
- Require or encourage fire ponds and dry hydrants, as appropriate. Fire ponds and dry hydrants can greatly aid fire protection in rural areas. The Planning Board should continue to consult with the Fire Chief regarding new development proposals in rural areas to maximize fire safety.
- Require adequate access for fire department vehicles and equipment. The Town should continue to require regulations governing front, rear and side setbacks, building height limitations, road specifications for maximum slopes, minimum widths and base materials and adequate turn-around areas.
- Continue the capital reserve fund for fire vehicles and equipment. New fire trucks are extremely expensive. The capital reserve fund allows the Town to avoid major budget jumps for new, expensive equipment by anticipating these costs and spreading them evenly over time.
- The Fire Department should conduct regular inspections of places of public assembly and businesses for fire safety.
- The Department should pursue its goal of 100% participation in an aerobic and strength physical fitness program.
- The Department should pursue funding opportunities to meet nationally-recognized standards regarding minimum staffing for emergency response. Currently, the Department is short one person per shift.
- The Department should continue to maintain and expand the number of call firefighters.

6. POLICE DEPARTMENT

The Hanover Police Department's mission is to "provide professional and compassionate police service through partnerships that build trust, reduce crime, create a safe environment and enhance the quality of life in our community" The composition of the Police Department includes the following divisions: Administration, Patrol, Investigation, Dispatch, and Parking.

In 2003, Hanover Police Department's twenty full-time and four part-time sworn staff consisted of the Police Chief, Captain/Detective, Patrol Lieutenant, three Patrol Sergeants, an Administrative Sergeant in charge of Parking and Community Service, a detective, twelve patrol officers, and two special patrol officers. The number of part-time officers does not represent added personnel in the sense that there are more officers on the street. The part-time officers fill in when a full-time officer is not available and only after the other full-time officers are given the opportunity to cover open shifts for overtime pay.

The full time support staff (non-sworn) includes the Chief's secretary, a record clerk, a

dispatch coordinator and six dispatchers, two parking enforcement technicians, a parking record's clerk, the parking garage supervisor and one parking garage attendant. Dispatch has two part-time employees and Parking has four.

The Hanover Police Station is located at 46 Lyme Road, approximately one mile north of the Dartmouth Medical School. Built as an addition to the firehouse in 1988, the building occupies approximately 13,000 square feet of workspace on two floors. The day-to-day operations of the building occur primarily on the first floor that houses the Administration, Patrol, Investigation, and Dispatch Divisions. There are offices for the Chief and the Chief's secretary, the Lieutenant, the detective division (shared office space) consisting of the Detective Captain and one detective, an office shared by the three patrol sergeants, an office for the records secretary and a separate area for the records themselves. There are also a squad room with two ancillary work rooms, kitchen facilities, an interview room, a library, a booking room serviced by an electronically controlled "sally port" for cruiser entry with access to three detention cells, a general workroom for greeting the public, and an office for the Prosecutor of the Lower Grafton County Prosecutorial Association. The first floor is rounded out by the Dispatch Center that provides communications services for police, fire, ambulance, and highway crews to fifteen towns located both in New Hampshire and Vermont. Fees are based on use and are a percentage of the total annual operating budget. The Dispatch Center recently went through an extensive renovation with an anticipated life expectancy of 12 to 15 years. In that time, it is expected that the communications technology will have changed and that this equipment will need to be replaced.

The second floor houses a training/conference room, evidence storage areas, evidence processing room, long term record storage, men's and women's locker rooms, a mechanical room for the building's heating and cooling, and two small rooms housing the radio and telephone equipment. A generator supplies electricity to the entire building during power failures. The Parking Division, which had been previously housed at the main facility on Lyme Road, has been moved to two offices on the 2nd floor of Municipal Building located in the center of Town. The Parking Division is also responsible for the administration of the 289-space parking garage downtown. This office also serves as the location for the Community Service function of the Administrative Sargeant.

The Police Department purchases its vehicles through a capital reserve program. The patrol fleet consists of four full-sized marked police cruisers and an SUV. Except for the SUV that is kept for six years, the others are replaced every three years. In addition, the vehicles for the Chief and the detectives are mid-sized cars that are kept for a period of six years. The Parking Division has a mid-sized pick-up truck that is replaced through a capital reserve program every six years. All patrol vehicles are equipped with TV recorders, radios and laptop computers. Data (local, state and national) is received via radio frequencies. The patrol supervisor's, Chief's and detective's vehicles are equipped with mobile telephones.

There is close coordination between the Dartmouth College Campus Safety and Security and the Department.

The Future

Although the number of employees covered under the aegis of the Police Department has increased in the past ten years, it is interesting to note how the department has covered its duties with basically the same number of employees in some strategic areas, even though the number, type, and calls for service have increased. Notably, the number of patrol officers has remained static. It is believed that the technological advances employed by the department have enabled the officers to handle larger workloads with a more efficient use of their time. However, any future population increases will probably result in the need for additional officers. It is expected that the two-person detective division will have to be increased probably by promoting a patrol officer. Thus, the department anticipates the need for one new detective and one new patrol position in the next ten years.

At the Lyme Road station, a few improvements should be planned. These include covered parking to garage the vehicle fleet and the combination of the back-up power plant for both the police and fire into one unit. This new power plant would have a thirty-year life and result in more efficient provision of power to the building.

The present arrangement of setting aside funds for major capital purchases should continue. It is anticipated that the high-use patrol vehicles will continue to be replaced every three years. It is anticipated that this core patrol fleet will be increased by one unit to a total of five when the new patrol position is needed. The others (two mid-sized and a SUV) will continue to be held for a period of six years. The present plan is to keep one of the mid-sized cars as a general use vehicle for the department, such as transportation to training sites.

Although the Dispatch Center had recently undergone an extensive renovation, the Town should adopt and fund a capital improvement plan for the Center in order to avoid bond payments and related interest costs. Also, its current radio grid, specifically antennae sites, base radios, phone lines, and emergency power generation, needs to be studied. The system has numerous dead zones for portable radios and paging devices and has limited redundancy in case of a significant failure. This study is underway with the Fire Fund and Ambulance Fund splitting the \$33,000 cost.

The Parking Division has seen significant growth within the past few years with the opening of the downtown parking garage and the consequent need to staff the facility. Parking staff have had an opportunity to work in and evaluate the performance of the present facility. It is expected that there will have to be modifications, especially in the attendant's booth, in order to provide a better working environment. As to ticketing and fine collection, technology again has been a boon to productivity with no attendant increase in staffing at the enforcement level anticipated. It is expected that the police department will continue to manage parking operations, to include enforcement of the Hanover Parking Ordinance, collection of parking revenue, staffing and operation of all public parking areas.

As with most law enforcement agencies, the public's perception of the police role in society is to enforce the law. However, the Hanover Police Department performs services for the community that range from unlocking a car when the keys have been left inside, to performing

vacant residence checks. The Department takes great pride in this type of community service and will continue to provide the best service possible to citizens and visitors alike.

Summary

- With modifications, the Police Station has enough space for current and projected Town needs.
- Staff increases should be anticipated reflecting increases in population and demands on police.

7. HUMAN SERVICES

Human service programs serving Hanover and the region support the physical and mental health of residents. An array of services are available: counseling, education, medical care, income and fuel assistance, crisis intervention, child care, housing, transportation and employment services. There are services addressing specific issues: substance abuse, domestic violence, children with special needs, mental illness, etc. Human service agencies and services provided in the Hanover area are described in the *Resource Directory of Human Services*, a listing of local human services compiled by the United Way of the Upper Valley.

There has been an increase in the number and type of housing options for elderly within the past ten years. These range from condominiums for persons over 55 to assisted living communities. This development is related to the growth of elderly residents; according to the 2000 Census, of the 17.78% increase in Hanover's population between 1990 and 2000, the percentage of people over 75 years old more than doubled.

A number of human service programs receive financial support from the Town of Hanover in recognition of the important services being provided to Hanover residents. Typically, an agency funding request appears as a warrant item for three years. If successfully funded in each of those three years, the annual request is transferred to a line item in the human services section of the Town budget.

Hanover also provides direct assistance through its Community Counselor, substance abuse counselor, Senior Center, and subsidized housing – Summer Park Residences.

Community counselor - This position is jointly funded by the Town and the Dresden School District. The Counselor is responsible for counseling adolescents and their families, general counseling, social service referrals and casework for adults and elderly. The Counselor also provides administrative and social work support to Summer Park Residents and administers the Town's general assistance program. As required by NH law, the Town has adopted guidelines for providing general assistance.

Substance abuse counselor - The Town and Dresden School District also jointly fund the position of a substance abuse counselor three days per week.

Alcohol Diversion Program - The Police Department and Community Counselor created the Alcohol Diversion Program. This program offers an alternative to court for youth, ages 16- 20,

and juveniles, 12-15 years old who are found to be in possession of alcohol. Youth attend group sessions with a counselor; juveniles meet individually with a counselor prior to being assigned to a community service project. A similar program is being developed for youth up to age 17, who are arrested for possession of marijuana.

Senior Housing and Senior Center – In 1976 the Hanover Housing Authority developed 24 units of subsidized housing called Summer Park Residences. These units are owned and operated by the Town and provide one of the only affordable in-town housing options for persons 62 years and older and for persons with disabilities. All three buildings have chairlifts to the second floor. The nearby Senior Center is used as a drop-in recreation center for adults. The Town contracts with the Lebanon Housing Authority for professional management of the housing complex. The complex is located within walking distance of a grocery store and bank and is on the bus route to Main Street and to Dartmouth-Hitchcock Medical Center. Main Street is only a ten-minute walk up the street.

The Senior Center Director and Steering Committee plan and run a full program for the Town's older residents including dinners, crafts and trips. A new community/senior center is being built on the other side of the housing complex. Enhanced programming is anticipated because of the more spacious and modern facility. The building is scheduled for completion by summer of 2003.

The Future

Ranked as one of the best places in which to retire, Hanover is becoming a community of high-middle to upper income residents. Hanover residents are typically generous in terms of donating to the United Way and to Upper Valley human service agencies. With the exception of the Upper Valley Hostel, human service agencies, however, are not located in Hanover.

According to the Community Counselor, the two major human services issues in Hanover are housing and transportation.

Housing: The lack of affordable housing for low and middle-income families and the lack of subsidized housing for families is a serious problem. This is a national and state problem as well as an Upper Valley concern. Consequences of this housing gap are:

- Difficulty for employees of Hanover businesses and institutions to find affordable housing in Hanover;
- Difficulty for low income single parent families to move to or to remain in Hanover; and
- School population from mostly upper middle class to upper income families, thereby increasing the perceived pressure on the small number of students from lower income homes.

A related issue is the limited number of units available at Summer Park. The turnover at Summer Park is extremely low – 2-3 apartments per year. In 2003, there was one Hanover household on the waiting list. The number of vacancies per year is also low because tenants with disabilities are usually younger than 62 and therefore usually remain longer at Summer Park.

Another housing problem is the lack of local shelter beds. The Haven in Wilder houses

families only and is always full. Headrest in Lebanon no longer offers shelter beds. This means that the Town has to house a homeless person at a local motel or provide taxi or bus transportation to a shelter. The closest shelter outside of the immediate area is in Claremont.

Hanover has designated an Affordable Housing Commission, which is looking into increasing the availability of affordable housing for moderate-income families.

Transportation: Despite Advance Transit and the Grafton County Senior Center van, elderly residents who don't drive find it difficult to get to appointments and shopping. Taxi service is perceived as expensive and inconvenient.

Recommendations

- The need for housing low and middle-income families and singles should be recognized and addressed.
- Work to develop affordable, accessible transportation which will dovetail with existing transportation services to meet the needs of senior citizens who are no longer able to drive.

8. LIBRARIES

Hanover has two public libraries, the Howe Library and the Hanover Town Library located in Etna.

Hanover Town Library

The Hanover Town Library (also known as the Etna Library) was built in 1905 with funds appropriated by the town in 1903 and 1905. The building, set on a stone foundation, has brick veneer walls and a slate roof. Highlights of the interior are the ceiling woodwork and Waterbury Clock. It is served by town sewer and a well located in back of the Etna Fire Station. The Library is overseen by three elected trustees.

Long Range Plan In March 1999, a committee of community members developed a *Long Range Plan* which was adopted by the Library Board of Trustees. According to its mission statement, "Hanover Town Library will be an active presence in the village, providing its services to the community in a personal manner while preserving its historic building."

To fulfill this mission the library has three goals:

- (1) The library will ensure its presence in the community by promoting its services and programs, fostering an awareness of the history of the library, and developing an interest in the significance of its present building.
- (2) The library will ensure the maintenance and safe access to the building as well as the preservation of the integrity of the historic library building and its contents.
- (3) The library will provide adult and children's programming and services that are appropriate to maintaining library presence in the community.

Library Hours The library is open 20 hours a week. These hours are spread over mornings, afternoons and evenings. The library is staffed on Saturday mornings by volunteers. The building is available for small meetings.

The Collection The collection features children's books, adult fiction and non-fiction, books-on-tape, and magazines. Through the library's participation in the Librarians of the Upper Valley Coop, the library provides a rotating collection of videos, DVDs and recorded books. The library extends its collection through access to the Howe Library collection and through interlibrary loans from other libraries. Etna Library reciprocates by sending requested items to Howe and to other libraries through the New Hampshire State Interlibrary Loan system. All items are accessible through the integrated automation system for the Hanover Consortium, KnowHowe.

Programming for Adults and Children In keeping with the goals of its Long Range Plan, Etna Library maintains a focus on programs for adults and children. Adult library programs include a monthly adult reading group and the Mud Season Reading Program which concludes with a presentation by a local author.

During the school year, Etna Library offers two weekly programs, *Hands on Books* for children under three years and *Stories and Art* for children three to six years old. Programs for school age children are held several times throughout the school year.

The library participates in the New Hampshire State Summer Reading Program. During the summer, the library provides weekly family programs as well as a series of community picnics for patrons of all ages.

Volunteers The library is strongly supported by a dedicated group of about 25 volunteers. In addition to staffing the library on Saturday mornings, volunteers organize the Mud Season Reading Program for adults, run the annual June picnic/book sale, and contribute in numerous ways to maintain the library's active presence in the community.

Future Issues

Parking and Accessibility Parking at the Etna Library is limited and hazardous especially in winter. To get to the library for programs, parents walk with children along the road. The library can only be accessed by steep steps which are particularly difficult for the elderly and young children. A handicapped accessible entrance into the building would require a road to the side of the library and a parking area in back. In order to address these issues, the library will need to acquire land.

Space Constraints Size of the collection is restrained by available space. This is noticeable in both adult and children's collections as well as the rotating collection of videos, DVDs and recorded books. In addition, attendance at programs has increased over time, creating a need for more space. Both problems will be exacerbated as population increases.

Staff Hours As population grows in the area, the library will need to increase staff hours for processing materials, staffing the circulation desk and providing programs.

Summary and Recommendations

- The Hanover Town Library building in Etna has been well maintained and is in good condition.
- The Library provides a meeting location in Etna.
- Parking and accessibility to the library need to be improved.
- Expansion of the library will be necessary to serve the growing population in rural Hanover.

Howe Library

The Howe Library Corporation managed the Library and its operating budget from its founding in 1899 until 1972. Increasingly during this time, the Town supported the Library services through appropriations at Town Meeting. In 1972, the Town for the first time took over the operating budget of the Library, and its functions became a department of the Town. At the same time, the Library was outgrowing its building on West Wheelock Street and plans were begun for the present building.

Since 1972, the Library has been a partnership between the Town and the Corporation. While the Library is a Town Department that operates using Town funds, the building is owned by the Howe Library Corporation. The Corporation Board of Trustees acts to set policy, the Selectmen set fees and the Town Manager is its overall administrator.

Howe Library is located at 13 East South Street in a building constructed in 1975 to satisfy Hanover's library needs for about 15 years. The Long Range Plan in 1996 (and updates in 1999 and 2002), The Aaron Cohen Associates Master Facility Plan of 1997, and Trustee approved space expansion recommendations, 2002 cited expansion needs. In 2002, the Board of Trustees hired the original architect to plan for the renovation and expansion of the building. The Corporation is responsible for raising capital funds for the project. The Planning Board and Trustees agree that the Howe Library should remain downtown, reinforcing the civic function of and enriching the cultural offerings of the downtown.

The current building is 18,000 gross square feet and houses more than 76,000 books and audio/visual items. Due to space constraints several thousand items need to be kept in the closed stack area that is not accessible to the public. The Library offers a full range of adult and children's services as well as many special services. The public is welcome to use one of the many computers and laptops for Internet access. The two meeting rooms are both well-equipped with audio/visual machines and well-used by community groups and by Howe staff for programs. The larger meeting room has a sound system. Other services include workshops and training sessions, outreach to daycare centers, nursery schools, and senior centers, homebound delivery, an on-going book sale, and a comfortable place for users to relax, read, and meet others in the community. The Library is heavily used by Dresden students during the afternoons. There is cooperation between the Library and school's media centers. The Library also provides sessions to introduce students to its facilities.

In 1995, Howe and Etna libraries formed a consortium with an integrated automation system. There is one library card, Libraries of Hanover card, for everyone in the town and one integrated catalog of collections, KnowHowe. The system is continually upgraded with a major

migration to an Internet based program occurring in 2001. Virtual access is 24 hours, 7 days/week. Website development managed by Howe staff is ongoing for both the Howe Library and for the Town.

The library is open 56 hours per week, October through May, and 52 hours per week, June through September. In the future the Library recognizes the need to add hours open to the public, starting with Friday mornings. Howe Library's staff includes six full-time and fourteen part-time people, and eight pages. Without volunteers, the Library would not be able to provide the excellent services that it does. Performance statistics are presented annually in the Town Report.

Future Issues

The future of the Howe Library is guided by its mission and roles as adopted by the Corporation Trustees and the Selectmen in 1996 and stated below:

As a vital Hanover institution, Howe Library brings together people, ideas, and information. We encourage everyone to read and enjoy the resources we offer.

We will fulfill our mission by:

Providing materials responsive to users' interests:

The Library features current, high-demand materials, fiction and nonfiction, in a variety of formats for all age levels while maintaining balance and depth in the collection.

Delivering comprehensive reference and information services:

The Library actively provides timely, accurate, and useful information.

Serving children and parents to encourage their interest in reading and learning:

The Library encourages young children to develop an interest in and love of reading and learning through services for children and for parents and children together.

Supporting schools and independent learning:

The Library supports students of all ages in meeting educational objectives during their formal courses of study and during pursuit of independent study.

Promoting area library cooperation and resource sharing:

The Library will promote regional cooperation and networking with the Etna Library and Hanover School libraries. Cooperation with other area libraries and institutions will be explored.

Importance of Children's Services Based on the mission statement and responses to surveys of Hanover residents for confirmation of the roles adopted to achieve the mission, children's services top the list in importance to the community.

Effect of Changing Needs for Children's Programming In response to the growing awareness among parents and educators of the important role books can play in the lives of very young children, the increasingly popular story/activity time was joined by both toddler and kindergarten story times. The staff was increased to a full-time Children's Librarian in and part-time Assistant in 2001. A full-time assistant will be needed within the next five years.

Responsiveness to Public Needs: Balancing the Collection Books continue in popularity as people access information online at the Library and at home while seeking recreational/self-

improvement reading materials at the library. Surveys are conducted regularly to determine patron needs.

Role of Reference Services Service has changed with the use of electronic databases and the great need to guide users through the imperfections of the Internet. Reference questions are more complicated and people's service expectations are higher than ever. In the future there will be growth in the use of electronic databases, search engines to access all resources through one query and expanded use of interlibrary loan as a means of extending collections.

Effect of Dwindling Volunteer Pool Statistics show a steady decline in the number of volunteer hours given each year. The shrinking volunteer pool is a national phenomenon, and although affected, the Howe is better off than many libraries. The volunteered full-time-equivalent hours are about equal to the average in New Hampshire libraries. The duties of Volunteer Coordinator were included in the full time Assistant Director's position to cultivate volunteerism at the Howe. The volunteer jobs of today must be meaningful and increasingly require some technical expertise.

Effect of the Unattended Children Syndrome Librarians everywhere seek ways to cope with growing numbers of children and teenagers who wait for working parents after school in the warm, safe comfort of their public libraries. At Howe, good progress is being made, but the staff is continually looking for new solutions. An after-school monitor was hired in 1999 to maintain order and to ease the time required by staff. A task force was established in 2001 to plan space in the expanded building that responds to these needs. More input is needed from the teenagers themselves.

Effect of Growing Collection and Added Services In 2002, Howe reached its limit in the current facility. Several major space reorganizations have taken place since 1990, but staff and experts agree that there is no additional space to be had.

Response to Technological Change The entire technology revolution has been layered into a building not constructed with this service in mind. Howe is fortunate to have had high speed Internet access since 1975. Wireless communication has expanded access throughout the library. Keeping pace with change in both the integrated library automation system and public access will continue as a challenge.

Summary and Recommendations

- The Howe Library has served the Town well judging from patronage and program attendance.
- The facility has reached its growth limit and the expansion and renovation project is essential to continue to provide the level of service expected and needed by its users. The Trustees accept as their responsibility the need to provide high quality service for now and for future generations.
- The Howe Library should remain downtown where it is convenient to the public schools and many Hanover residents, it is accessible and it contributes to the vibrant downtown.
- Minimal additional personnel will be needed due to the open, flexible floor plan design of an expanded facility.

- Parking pressures are relieved by the presence of the parking garage across the street from Howe Library.
- The Howe Library Corporation will raise capital funds for the renovation and expansion project with the Hanover Select Board's full support.
- An energy efficient renovation and expansion of the Howe Library should be completed before 2005. The design should enhance the coming changes in the surrounding area contemplated by Dartmouth in its plans for the South and Sargent blocks.
- The plan for parking at Howe Library should be constructed according to the parking requirements in the Zoning Ordinance. Use of Advance Transit should be encouraged to minimize parking needs.
- The collection should grow at a rate of 1.5% over the next 15 – 20 years not to exceed a maximum of 100,000 items, integrating a variety of formats and materials.
- A balanced collection of recreational reading, non-print holdings, and reference materials should be provided.
- Expansion of the collection should occur by using electronic databases to access information off-site and through interlibrary loan.
- Surveys of users will be regularly administered to determine needs.
- Capital reserve funds should be budgeted each year in both the Town and Corporation budgets in anticipation of the need to re-tool for changes in technology.
- To provide expanded information resources, the Town website, managed by Howe Library, will be enhanced.
- New ways to fund additional hours of service for the public should be identified.
- The Howe should continue to encourage cooperation between the public and school libraries and encourage the schools to join the Howe/Etna automated consortium.
- The Howe should continue to cooperate with other area institutions including the Richard Black Community Center, Dartmouth College, ValleyNet, Montshire Museum, Kendal, nursery schools and day-care centers.

Other Libraries

For a fee, area residents who are not otherwise affiliated with the College may use the Dartmouth College Library system. This extensive collection is one of the largest in the country. Books are also available to municipalities through inter-library loan.

9. PUBLIC WORKS

The Public Works Department in Hanover has the following seven divisions: Highway, Buildings, Cemetery and Grounds, Fleet service, Administrative and Engineering, Sewer Line Maintenance, and Water and Wastewater Treatment and Water Distribution. The Department's office is housed at the Richard Hauger Public Works Facility on Route 120. The buildings include a block structure, a metal equipment storage shed, wood frame storage and a pole barn for salt storage. The Public Works Complex is situated on five acres with about an acre and a half suitable for storage of construction and maintenance materials. There is a parking area for Town vehicles, staff and visitors, as well as a three hundred ton salt storage shed on-site. Shed #2, located off the Greensboro Road in Etna, is an off-season storage site for vehicles and a staging area for stone and gravel.

Highway Division

The Highway Division employs a full-time equivalent staff of 12 who maintain and service the 100.5 miles of road in Town. Road reconstruction, graveling, sealing, sloping, ditching, repair and replacement of culverts, catch basins, bridges, paving and sidewalks are among the duties of the division. Mowing, tree trimming and limbing are done to keep roadsides clear and trees in good health. Department personnel has developed a capital replacement program for bridges, highways, sidewalks, intersections, culverts and other major construction items in an attempt to spread cost out more evenly, improve substandard infrastructure and reduce overall costs of repairs.

The division operates a winter maintenance program based upon level of service, traffic volumes, temperature and moisture conditions and is responsible for all roads, sidewalks and Town building snow removal and ice control.

Approximately 1,900 tons of salt, 4,000 tons of sand and 3,500 tons of overlay material are used in a year. Asphalt work is bid jointly with surrounding communities to contractors responsible for new work, overlay, curbing, sidewalks and handwork. The town has adopted standards based upon NH Department of Transportation Division 400 Road and Bridge Construction standards. Each year new overlay is applied to approximately three miles of road. The Town actively and aggressively maintains the paving program which is updated regularly and provides for overlaying town roads approximately every 12 years.

There are 26 miles of shim/paved roadway in Town. Shim/paving involves laying down 3/8" hot mix in a single course covering the whole roadway. The shim/paved roads are on a six-year shim/pave improvement cycle in which one-sixth of the paved road surface is shim/paved each year with the result that over the six-year period, each paved road is maintained. The Town has begun a reclaim/rebuild program in an effort to improve road surfaces and lengthen the paving cycle. A similar cycle has been established for the Town's 27 miles of gravel roads, but this improvement cycle is a ten-year cycle. Gravel road maintenance includes grading three to four times per year for most roads. During the past few years the department has begun a program to reduce erosion (both water & wind) on gravel roads through the application of liquid calcium chloride and crushed asphalt. In exceptional cases, such as Pinneo Road, grading used to occur as often as ten times per year. With the calcium chloride, this has been reduced to three or four times per year, resulting in less dust and fewer washboards.

Buildings Division

The Buildings Division is responsible for both executing and overseeing contract repairs and maintenance of 18 municipal buildings, including the HUD-funded 24 Summer Park garden apartment units. There is one full-time building superintendent who is responsible for managing contracted maintenance and repair services provided for Town buildings including fuel delivery, alarm system maintenance, HVAC maintenance, electrical repairs, elevator maintenance, cleaning services, sprinkler and extinguisher inspection and maintenance, overhead door maintenance, lock repairs, miscellaneous carpentry projects and building supplies.

Grounds & Cemetery Division

Four full-time and four seasonal people are employed by the Grounds Division to assist the Parks and Recreation Department with recreation fields, to maintain Town buildings and their surrounding grounds, ten cemeteries, Town parking lots, sidewalks, trees, flower gardens, bike racks, and libraries and to develop grave sites. As with the highways, the gardens have a weekly maintenance schedule. This division has also been responsible for the administration of a grave stone preservation program for which consultants were hired to inventory and repair gravestones in Town. The division has developed a geographic information system to monitor and develop gravesites

The Grounds Division actively pursues a street tree maintenance program which involves fertilization, root development, inoculation and watering. The division regularly assists private homeowners with tree issues and occasionally adds private trees of historical, cultural or botanical significance to the maintenance program. Through the divisions continuing efforts Hanover has been selected and continues to qualify as a “Tree City”.

Fleet Service Division

The Fleet Service Division is responsible for maintenance of all Town vehicles, standby generators, operational equipment, and fuel systems. The Division provides regular scheduled preventative maintenance on 96 mobile pieces and an additional 60 fixed pieces of equipment. In addition, mechanics service ten standby generators. Just a few years ago, the Fleet Service Division maintained only Public Works equipment, which accounted for approximately 75% of all equipment, had no preventative maintenance program and spent over \$120,000 on parts annually. Today, the Fleet Service Division services all Town equipment and has reduced the entire parts budget to \$75,000.

The division continues to refine maintenance costs and collect data for development of a comprehensive Fleet Replacement Schedule. The division assists in the development of specifications of town equipment and provides bidding and is responsible for the establishment and continued updating of capital equipment programs for all town departments.

Administrative & Engineering Division

The Administrative Division is responsible for review of all plans submitted to the Planning & Zoning Department for conformance to Town and engineering standards. Staff engineers provide on site inspection and design and contract administrative service for Town projects. Inspection and enforcement is provided for both construction projects undertaken by private developers and for the construction of utilities. The division is responsible for issuing permits for driveways, excavation in the town right of way, sewer connection, industrial sewer discharges, water service, and obstruction of highways and sidewalks.

The division processes some 5,000 invoices annually for materials, service, equipment and contracts related to the department’s activities. In addition, the division receives road, water, sewer, recycling, drainage, building and tree complaints and inquiries.

Water Supply

In reaction to a plague of fires, the Hanover Water Company was chartered in 1893 to provide a safe and adequate public water supply. The Company is organized as a private water company; 52.8% owned by Dartmouth College and the remaining 47.2% is owned by the Town of Hanover. As a private utility, the financial structure of the Company and its water rates are regulated by the New Hampshire Public Utilities Commission (PUC). Dividends are paid semi-annually to the stockholders - the level determined by the Board of Directors in the light of profitability and special financial requirements. Revenues for operating the Company are mainly derived from metered sales and fire protection charges to the Town and certain private customers. The regular source of water is provided by the collection of surface runoff in three impounding reservoirs and gravity deliverance to the customers. Areas outside the service area of the Water Company depend upon private wells.

The user rate system includes a flat charge based upon meter size and a consumptive rate based on the volume used. In addition, the company charges the Town and private individuals for hydrant and fire flow capacity. On the average, the Company serves a total of 1,695 users, 1,472 domestic, 189 commercial, 15 industrial and 19 municipal users. The total population served is estimated to be less than 10,000 people.

There has been considerable discussion by the Board of Directors as to the future ownership structure of the Water Company. The Board has contemplated municipalizing the utility to better utilize community resources, expertise and efficiency while containing costs, preserving resources and improving water quality. Prior to such a potential transaction, the Board felt it necessary to determine the utility's value, the condition and the future regulatory hurdles it will face. To prepare the community for such a discussion the Board undertook a valuation study and a water treatment study.

Hanover's current water supply is disinfected, fluoridated and treated for corrosion control. The land surrounding the prime source of water is owned by the Water Company and a Town Ordinance excludes all unauthorized human presence.

In 1992, the Company petitioned the NH Department of Environmental Services for a waiver from the EPA rule that all surface water supplies must provide filtration. The important features of this petition were the quality and the protection of the source. This petition was granted in 1993 with the provision that the chlorine dioxide disinfection system be installed. The improvement was completed and made operational in 1994. Since that time the Company has found it very difficult to continue to provide aesthetically pleasing water. In addition, the treatment system design limits the draw down of the lower reservoir to approximately nine feet effectively making 100 million gallons of the approximately 520 million gallons of stored water unavailable.

The combined safe yield of all sources prior to the disinfection improvements was estimated to be about 2.5 million gallons per day (MGD). After the improvements the safe yield was reduced by 20% to 2.0 MGD. The current average demand is about 1.2 million gallons a

day and this figure had been decreasing from the high of 1.4 MDG in 1991 when the hospital left Town, until the past year when it stabilized at the current rate.

The Board of Directors has committed to improvements in the distribution system in an effort to improve water quality and hydraulic conditions. In 1999 the Public Utilities Commission (NHPUC) authorized the borrowing of funds from the NHDWSRF to undertake a water main replacement project including, pipe replacement of West, Prospect, Park and Lebanon Streets. In addition, an 800,000 gallon concrete storage tank was installed off Route 120 on Sand Hill.

The Board of Directors adopted a Drought Mitigation Plan, which included voluntary conservation measures and contacted other municipal water systems in the region in an attempt to determine the availability of potable water from other systems. Large and new development will burden the system unless additional supplies are developed or non-drinking related activities are removed from the system. These activities could include; irrigation, industrial uses and evaporation processes. Fortunately, the spring of 2002 turned out to be wetter than normal, allowing for a very quick recovery of the supply reservoirs. While the design of the reservoirs take the dry periods into account, the loss of the lower nine feet of reservoir #1 effectively returned the community to the pre-1960 era when the town began to approach the available capacity. Two solutions exist: increase storage capacity or modify treatment to allow usage of all the stored water.

As the system ages and water quality requirements of the Clean Water Act apply to Hanover-size systems, it will become more difficult to remain in compliance. There have been numerous odor, taste and color complaints and a number of bacterial violations related to the distribution system. These issues can be attributed to the form of disinfection, age and condition of the distribution system and the continued influx of organics, which can't be removed without filtration.

In the spring of 2002, the Board of Directors voted to undertake a study to look at long-term treatment options and methods of improving water quality, storage and improvements to the aging distribution system, additional sources, potential regulatory changes and the ability to improve water quality. The study is expected to be completed by early fall of 2002. Preliminary conclusions are that the community should move to filtration utilizing a method that will allow for source augmentation and improve the overall aesthetics and ability to effectively and safely treat the current water source.

The recommended treatment option is ultra filtration. Ultra filtration utilizes membranes that have the ability to provide a physical barrier to potential water borne contaminates from widely varying water sources. In August 2002, a pilot study began with the objectives of preventing future bacterial contamination, improving the water's aesthetic qualities, and providing full use of all reservoir storage. The pilot study utilizes a small-scale treatment process that is directly proportional to a full-blown process, allowing operators to demonstrate the effectiveness of the process in actual conditions. The pilot will operate through a cold weather "turn over" event when water quality deteriorates to determine function and limitations. Over the next several years, a new filtration system will need to be installed.

Currently the Public Works Department operates the water system under an operations contract. Personnel are employed by the Town to provide operation of the distribution system, treatment system, billing and collections and administration. There are four full-time employees responsible for distribution system operation, one full-time responsible for accounting, billing and collections, one part-time employee providing data base support, one part-time utility engineer, a part-time General Manager and five part-time treatment operators (wastewater treatment employees). There is one part-time bookkeeper employed directly by the Hanover Water Company. Employees are integrated into the Public Works Department while operating the company as a private utility in conformance with PUC.

Sewage Disposal

Hanover's sewer system serves the population within the urbanized area of Town, and along Greensboro and Etna Roads, and in sections of Lebanon within the Mink Brook watershed. Wastewater flow is conveyed from 1930 connections, 1,778 in Hanover, and 152 from sections of Lebanon including Centerra, Dartmouth Hitchcock Memorial Hospital, and Route 10 in the Sachem Village area, through a system of lateral and intercepting sewers, pumping stations and force mains to the sewage treatment plant located near the mouth of Mink Brook adjacent to the Connecticut River. The rest of the Town's sewage is disposed of by on-site systems. The treatment plant receives approximately 250,000 gallons of septage annually pumped from private septic tanks.

Prior to 1960, the Town was served by five separate sewer systems discharging directly to the Connecticut River through outfall sewers. Hanover's primary treatment plant, on-line between 1964 and 1988, was replaced by a secondary treatment plan that now handles an average of 1.4 million gallons per day. Fifty miles of sewer lines and six pumping stations collect and transport the sewage to the treatment plant. In addition, the system includes a seasonal pumping station and two smaller pump stations. Five full-time employees staff the treatment plant. The wastewater treatment personnel are also responsible for operation of the Hanover Water treatment process and sampling program. Two employees work in the Line Maintenance Division and assist in winter operations for the Highway Department.

The current treatment facility provides secondary treatment including grit removal, screening, aeration, primary and secondary clarification, and disinfection with treatment effluent being discharged into the Connecticut River. Sludge is digested anaerobically and dewatered before transferred to the New England Organics Composting Facility located at the Gile Tract former landfill Site. Grease, grit and rags are disposed of into a dumpster which is hauled to the Lebanon landfill by a private hauler. All effluent must meet Federal and State water quality standards before being discharged into the river. The plant's discharge permit requires that the biochemical oxygen demand (BOD) and total suspended solids not exceed 30 mg/l. Standards for average flow, settleable solids and total coliform are also set forth in the permit.

During the past few years, the BOD levels have approached the treatment facility's design capacity, and the treatment process has been unable to continually provide adequate removal of solids, resulting in disinfection problems. The Town initiated a study in the spring of 2002 to determine the improvements necessary to achieve capacity requirements, reduce

potential of violations and improve the plant's function. The study was completed in December of 2002 outlining equipment conditions and treatment capacity.

Conclusions of the study are that the Treatment process is at 90-95% of Biological Oxygen Demand (BOD) capacity, which is a measure of organic strength, and 100% of Total Suspended Solids (TSS) capacity while the facility is at a hydraulic capacity of only 65%. Water conservation programs and efforts through the community are in large part the reason for this disparity.

In the fall of 2002 the bacteriological violations became acute and the NHDES began enforcement to remedy the inadequacies, the Town is anticipating and Administrative Order by Consent (AOC). As part of the negotiation process it became evident that improvements to the biological treatment process were necessary and disinfection improvements would be required. The Underwood Engineering, the consulting engineer, with Town staff developed a set of improvements for the 2003 Town warrant necessary to prevent further bacteriological violations (per the anticipated AOC) and provide additional capacity for the next five years.

Additional studies will be undertaken with the goal of determining: future capacity needs, likely timing of expected growth, treatment options, and anticipated capital and operational costs. This data will be the basic for further discussion on whether flow should continue to be accepted from the Gile Tract and Route 10 in Lebanon, conditions for an updated Intermunicipal Agreement (IMA), development of a new sewer rate structure, zoning change impacts and an update to the capital replacement program and related reserves.

As with the water system, a carefully planned expansion program for the sewer system can be an effective way to control and guide growth. The Town should develop a plan to guide more intense land uses to the areas best suited to accommodate them.

Summary and Recommendations- Public Works

- Hanover's water supply is adequate for existing drinking and fire protection needs. Water quality will continue to suffer and residential supplies will not be adequate for the next twenty years, assuming droughts and the continuation of current growth rates, unless the current treatment process is replaced with a system that provides filtration.
- Hanover water is fluoridated and chlorinated to meet State standards.
- The company operates under PUC regulations while being managed by Public Works Department personnel in an attempt to streamline staff and equipment.
- Future discussion between the Board of Directors and Board of Selectmen will be necessary to establish the parameters of municipalization.
- The existing sewer system has a relatively complicated, inefficient secondary treatment process which is approaching its biological capacity and will require substantial improvements to continue to treat the existing and any increased waste stream. The community must consider how to address growth in loadings from sources both inside and outside of Hanover.
- The Public Works Department has adequate work and storage facilities with the exception of salt storage.
- Continued use of maintenance schedules and a capital improvements program will

contribute to cost savings in the future.

- Carefully plan and implement changes to the municipal infrastructure including the continuing adequacy, quality, and reliability of the water and sewer systems. This capacity needs to be in-step with the build-out expected.
- There should be little or no expansion of the water or sewer service area.
- Growth in the town should be directed to areas already served by the public water and sewer systems and the established road network.
- The wastewater treatment facility needs to be improved to increase its organic and solids capacity.
- A new Intermunicipal Agreement (IMA) needs to be developed which will allow Hanover to control volumes and strength of wastewater received from Lebanon.
- Pumping stations should be improved to ensure dependable and efficient operation and maintenance.
- All flows in sewer connections from Lebanon need to be continually monitored to reduce infiltration and inflow and those lines with infiltration or inflow should be repaired.
- Increased organic loading to the system should be controlled. The Town needs to update the Sewer Use Ordinance and adopt an Industrial Pretreatment Permit (IPP) process to eliminate at the source constituents, such as metals, excessive BOD, or inorganics, which are untreatable or upset the treatment process.
- The water system should be upgraded to achieve both an increase in the amount available and an improvement in water quality.
- Future improvements to the water system should give consideration of downstream water supply recognizing the importance of Storrs Pond to the Town.
- Continuing to provide wastewater treatment to Lebanon users should be carefully evaluated.
- The Public Works Department needs to continue to develop capital replacement and inventory programs for the Town's infrastructure to contain costs and to be compliant with GASB 34 requirements.
- The Department must continue to integrate its operating divisions to reduce manpower and equipment demands and improve efficiency.
- The Department must continue to improve inspection requirements and design standards in support of the Planning & Zoning Department.
- The Department must continue to refine the Town's winter maintenance snow and ice control strategies and research new ice removal techniques, which reduce the volumes of salt without sacrificing safety.
- A long range program for road and sidewalk reconstruction should be continued.
- The paved and gravel road maintenance schedule should be continued.
- A bridge replacement program and associated reserve needs to be developed and reviewed annually.
- An annual staff review of personnel and equipment needs for continuous updating of the capital improvements program should be conducted.
- The scheduling of equipment purchases in the capital improvements program should be continued.

- The tree planting and maintenance program should be continued, to maintain the urban environment and to continue to improve aesthetic qualities in conjunction with the “Tree City” program.

10. SOLID WASTE AND RECYCLING

The residents, businesses, and institutions in Hanover generate a solid waste stream which is disposed of in three ways: general rubbish is landfilled in Lebanon; stump and brush is disposed of in Hartford; and glass, cans, box board, mixed paper, newspaper, cardboard, HDPE milk and juice jugs and PET soda bottles are voluntarily recycled. There is no municipal trash collection; however, recycled materials are collected at the curbside by a private hauler under contract to the Town for this service.

The Town’s Recycling Committee promotes all facets of community recycling, including the town’s curbside collection program, Christmas tree mulching and four hazardous waste collections and two scrap metal collections each year. In 2001, 640 tons of recycled materials were diverted from disposal at the Lebanon Landfill. In recent years the amount of recycled material has declined from the peak of 1101 tons recycled in 1998.

The Town presently contracts with the City of Lebanon to use its landfill. Residents and businesses are responsible for getting their trash to Lebanon. Since there is no municipal collection system or transfer station in Hanover, most town residents contract with one of four private rubbish haulers. Other residents take their trash directly to the Lebanon Landfill.

In August 1998, the composting facility used by the Town of Hanover and Dartmouth College opened. The facility was designed to compost most of the Town’s biosolids from the waste water treatment plant and Dartmouth’s food waste from the dining halls. Town and College yard waste and/or shredded paper from Dartmouth Hitchcock Medical Center have been added to the mix. The compost is used by the Town and College for landscaping purposes. Over the years, operators have determined that only about two thirds of the Town’s biosolids can be incorporated into the process. Even so, the process has successfully diverted tons of waste from the waste stream.

Summary and Recommendations

- Since 1972 Hanover has no municipal trash facilities; residents and private haulers may dispose of refuse at the Lebanon landfill. This disposal system should continue.
- Stumps and brush are disposed of in Hartford.
- Voluntary recycling has been very successful.
- Recycling should be encouraged to reduce landfill costs. Public awareness of the environmental benefits and cost savings of recycling should be increased.
- Proper disposal systems for household hazardous waste should continue to be publicized and utilized.
- The business community should work together to achieve economies of scale in recycling.

11. ENERGY AND POWER SUPPLY

The Town has accomplished a great deal in terms of reducing its overall energy consumption. Energy retrofits have taken place in the Police/Fire Station, Municipal Building, and Howe Library. Mercury vapor street lamps are being converted to energy saving high pressure sodium lamps. The Town has actively supported energy efficient transportation by installing bicycle racks in the downtown, planning and securing funding for bike paths and cooperating in the provision of shuttle and public transit services.

The Town could do more and one way to establish priorities would be to initiate a Town energy plan. The overall goals of the Town energy plan would be to reduce the overall energy consumption within the town through conservation and efficiency and thereby saving money and decreasing adverse environmental impacts associated with energy consumption and to increase public awareness of energy issues and build public support for energy efficiency and sustainable energy policies. The Conservation Commission's Energy Committee has been interested in developing such a plan in addition to promoting energy efficient design for public buildings and doing outreach work to educate residents about energy saving light fixtures. Both the Howe Library and Community and Senior Center have been designed to incorporate energy efficient features.

A brief discussion of one form of power, electricity, follows.

Most of the Town of Hanover is serviced by Granite State Electric (GSE) Company, which buys its power from New England Power and resells it to customers. Sources of power are from the New England Power Pool, which includes a mix of hydro, coal, oil and nuclear. A portion of the area to the east of Moose Mountain is serviced by the New Hampshire Electric Cooperative. A few customers just south of the Lyme town line buy their power from Connecticut Valley Electric Company. Dartmouth College's heating plant also generates close to 50% of the College's electric needs.

Summary and Recommendations

- Hanover has access to all of the electric power it needs, and plans are well enough advanced that an adequate supply can be provided in the future.
- Energy efficiency and conservation in Town facilities and services should be promoted.
- Energy efficiency and conservation should be encouraged by increasing public awareness of conservation techniques and through good building design and careful site planning.
- A Town-wide energy plan and implementation program should be developed.
- Underground installation of utility lines is required for subdivision and should be considered for all new development to minimize maintenance costs. If overhead lines are necessary they should be placed in the Town right-of-way and trees should be preserved wherever possible.
- Undergrounding of utilities is an important part of the Downtown Vision. Implementing the undergrounding should occur in a piecemeal fashion as new projects are approved and during routine maintenance of roads.

- Wind-powered electric generators should be allowed only in rural areas where there is land adequate to accommodate the use and safely and aesthetically site the wind-powered electric generators.

12. CABLE TELEVISION AND RELATED SERVICES

Adelphia Communications Corporation currently provides local cable television throughout the downtown area and in some, but not all, of rural residential Hanover. There are plans to expand Adelphia's cable plant throughout much of Etna (up King Road and out Hanover Center Road) and to upgrade existing cable to newer technology in order to provide high-speed data and voice services. Securing high-speed data access for Hanover's residential communities is an immediate priority. In 2003, a study was undertaken to determine interest in such data access.

The Town of Hanover should work in cooperation with Adelphia, and any future cable services provider, to insure future expansion of the cable plant coincides with projected residential and commercial development.

Infrastructure planning should include the installation of conduit to accommodate wiring for existing and future telecommunications technology. This feature will allow people to more easily work from their homes and will potentially reduce the number of vehicles traveled on local and regional roadways.

Despite the Town's rural nature and relatively small population, the citizens of Hanover demand access to new and emerging telecommunications infrastructure. Zoning and other local regulations should allow for the careful siting and installation of telecommunications capabilities such as fiber optic cabling, and the wireless, cellular and satellite communication infrastructure needed to support and retain commercial and residential interests. Whenever possible, unobtrusive installations and co-location should be implemented.

Summary and Recommendations

- With the advent of the information economy, telecommunications infrastructure is increasingly important.
- State of the art telecommunications infrastructure may contribute to economic development and improving the quality of life.
- Town policies governing the public right-of-way and universal services should be revised to accommodate the improvement of cable and other telecommunications services.
- A strategic telecommunications plan should be developed to address provision of universal services.
- As technology and feasibility allow provision of these services, they should be expanded to wider areas of Town in the course of private development without sacrificing rural character and scenic values.
- Unobtrusive installations and co-location should be required for siting new telecommunications facilities in order to maintain the look of the town, including its uninterrupted ridgelines and the downtown's forested back-drop.
- Zoning and other local regulations should allow for the careful siting and installation of telecommunications capabilities, such as fiber optic cabling, and the wireless, cellular and

satellite communication infrastructure, needed to support and retain commercial and residential interests.