

X. ECONOMIC BASE

Introduction

The term “economic base” refers to many different aspects of the local economy, including factors relating to employment, commuting patterns, financial status and taxes. All of these factors are interrelated: a change in one often affects one or more of the others. For example, factors that affect business development in the region determine what kinds of jobs are available to residents and how well these jobs pay. Local business development and personal incomes both influence how much property tax income is available to the Town for the provision of facilities and services. Consequently, the condition of a community’s economic base affects the quality of life for its citizens in many different ways.

The economic base of a community is evaluated using economic indicators. These economic indicators are numbers compiled by various sources that indicate one or more things about the trends and interrelationships of the local and regional economy. In this chapter on Economic Base, the Master Plan looks at available information on employment, commuting patterns, financial status and taxes.

New London, like most communities, has been affected by the recent economic turmoil in the United States and globally. The dramatic drop in the stock and housing markets and the instability of many financial institutions has created economic challenges not seen in this country since the Depression. New London historically has had a strong local economy based on the health care and education sectors that remain consistently strong and are less affected by downward shifts in the economy. Assuming these sectors remain strong, New London will again be able to weather well the current downturn in the economy. This planning effort should provide useful guidelines and direction for New London now and once the economy rebounds.

Following these sections presenting the data and trends on economic indicators, this Economic Base Chapter outlines the economic assets and limitations of the community and concludes with recommendations pertaining to the future economic development of the community over the next fifteen years.

Community Survey Results

In 2008, the New London Planning Board conducted a survey of the Town’s property owners and registered voters to help determine the community’s needs and preferences with respect to future development of the community. The following is a brief summary of the survey results relating to economic development.

Question #1: The Economic Development related responses to Question #1 (See table to follow) about which attributes make New London a desirable place to live and/or own property received relatively low marks. Combining the response categories of significant and very significant:

- convenient availability of professional services (health care, legal, etc.) received the sixth highest rating;
- convenient availability of commercial goods received the eleventh highest rating; and
- employment opportunities received the thirteenth or lowest rating.

Planning Board Community Survey 2008								
Question #1: Which of the following attributes do you think significantly contribute to making New London a desirable place to live and/or own property? (Please rate each attribute) <input type="checkbox"/>								
Answer Options	Very Significant	Significant	Neutral	Insignificant	Very Insignificant	Don't Know	Rating Average	Response Count
Village centers with New England charm	58.5% (300)	34.7% (178)	5.7% (29)	0.6% (3)	0.6% (3)	0.0% (0)	4.499025	513
Small town atmosphere with rural charm	63.5% (324)	31.6% (161)	4.3% (22)	0.2% (1)	0.4% (2)	0.0% (0)	4.57647	510
Scenic vistas of lakes, mountains & open spaces	72.8% (372)	25.0% (128)	1.6% (8)	0.2% (1)	0.2% (1)	0.2% (1)	4.694716	511
High visual quality of the built environment	44.5% (223)	38.9% (195)	13.0% (65)	2.0% (10)	0.8% (4)	0.8% (4)	4.219561	501
Good schools	51.5% (261)	28.8% (146)	16.0% (81)	0.4% (2)	1.0% (5)	2.4% (12)	4.22288	507
Friendly people with community spirit	49.7% (254)	40.3% (206)	8.4% (43)	0.8% (4)	0.6% (3)	0.2% (1)	4.37182	511
Availability of numerous outdoor recreational activities	43.5% (223)	42.7% (219)	10.3% (53)	2.3% (12)	0.8% (4)	0.4% (2)	4.245614	513
Availability of cultural & indoor recreational opportunities	29.2% (150)	44.6% (229)	18.3% (94)	5.7% (29)	1.6% (8)	0.6% (3)	3.925926	513
Convenient availability of commercial goods	21.5% (110)	40.9% (209)	27.6% (141)	7.4% (38)	2.2% (11)	0.4% (2)	3.710372	511
Convenient availability of professional services (health care, legal, etc.)	39.4% (201)	44.3% (226)	11.6% (59)	3.3% (17)	1.2% (6)	0.2% (1)	4.168627	510
Availability of a mix of housing types for all income levels	20.6% (105)	33.1% (169)	24.7% (126)	10.6% (54)	10.0% (51)	1.0% (5)	3.407843	510
Convenient access to the interstate highway system	23.1% (118)	42.1% (215)	24.3% (124)	7.4% (38)	2.3% (12)	0.8% (4)	3.737769	511
Employment opportunities	14.0% (71)	31.0% (157)	35.3% (179)	9.7% (49)	6.7% (34)	3.4% (17)	3.258383	507
Comments:								72
answered question								515
skipped question								0

Question # 2: The economic development related responses to Question #2 about how important people thought the following objectives are for planning for the future of New London over the next fifteen years received a majority of support. Combining the response categories of significant and very significant:

- restricting industrial development was the second highest response (68.4%);
- limiting commercial development was the third highest response (61.3%);
- expanding the commercial and professional services only to meet the Town's needs was the fourth highest response (56.5%);
- attracting clean, non-polluting light or high-tech industries was the fifth highest response (54.6%); and
- continuing to function and expand as a regional commercial and professional service center was the sixth highest response (50.4%).

Planning Board Community Survey 2008								
Question #2: Please indicate how important you think each of the following objectives are for planning for the future of New London over the next fifteen years. (Please rate each objective) <input type="checkbox"/>								
Answer Options	Very Important	Important	Neutral	Unimportant	Very Unimportant	Don't Know	Rating Average	Response Count
Attracting a more balanced mix of resident age groups	31.6% (162)	36.9% (189)	20.1% (103)	6.3% (32)	4.9% (25)	0.2% (1)	3.835938	512
Encouraging continued development of seasonal,	3.7% (19)	19.3% (98)	37.5% (190)	26.2% (133)	13.2% (67)	0.0% (0)	2.741617	507
Continuing to function and expand as a regional	13.5% (69)	36.9% (189)	26.4% (135)	14.8% (76)	8.0% (41)	0.4% (2)	3.318359	512
Expanding commercial & professional services only	14.1% (72)	42.4% (216)	26.7% (136)	11.0% (56)	5.1% (26)	0.6% (3)	3.477407	509
Attracting more tourist-related businesses	7.1% (36)	24.3% (124)	39.6% (202)	19.8% (101)	9.2% (47)	0.0% (0)	3.001961	510
Continuing trend as a retirement community	5.5% (28)	25.4% (129)	42.9% (218)	16.3% (83)	9.1% (46)	0.8% (4)	2.996063	508
Attracting more outdoor recreation-related businesses	9.6% (48)	35.5% (177)	36.5% (182)	13.2% (66)	5.0% (25)	0.2% (1)	3.308617	499
Attracting clean, non-polluting light or high-tech	20.0% (102)	34.6% (176)	25.1% (128)	10.0% (51)	9.8% (50)	0.4% (2)	3.438114	509
Limiting commercial development	27.8% (142)	33.5% (171)	21.3% (109)	10.2% (52)	6.8% (35)	0.4% (2)	3.639922	511
Restricting industrial development	44.0% (224)	24.4% (124)	17.7% (90)	5.9% (30)	6.9% (35)	1.2% (6)	3.891945	509
Comments:								75
answered question								515
skipped question								0

Question # 5: The responses were evenly split with no clear direction when asked how New London should respond to pressure for additional commercial growth generated by the population growth in the greater Kearsarge/Sunapee area.

Planning Board Community Survey 2008		
Question #5: How should New London respond to pressure for additional commercial growth generated by the population growth in the greater Kearsarge/Sunapee area?		
Answer Options	Response Percent	Response Count
Promote regional commercial growth	36.5%	175
Promote local commercial growth	32.1%	154
Do not promote commercial growth	31.5%	151
Comments:		62
<i>answered question</i>		480
<i>skipped question</i>		35

Question # 6: Respondents provided the following feedback when asked in what part(s) of Town they would support adding areas to be zoned for commercial use:

- on Main Street between Parkside Road and Little Sunapee Road was the highest response with 33.5%;
- around the I-89 interchanges with 31.9% was the second highest response;
- only where there is access to public water and sewer service was the third highest response with 30.2%; and
- nowhere/no further commercial development with 27.3% was the fourth highest response. Again with the responses fairly evenly split there was no clear direction.

Overall, no location received a majority of support to be zoned for commercial use. Two uses not receiving a majority of support were banks (46.6%) and high tech industry (research & development park) (37.8%).

Question #6: Existing commercially zoned areas include:

- Main St. from Seamans Rd. to Parkside Rd. (from the Police Station to Peter Christian's);
- Newport Rd. from Little Sunapee Rd. to the Post Office; and
- The center of Elkins (from Elkins Chapel to Hillcrest drive).

In what part(s) of Town do you support adding areas to be zoned for commercial use? (Please choose all that apply)

Answer Options	Response Percent	Response Count
Nowhere/no further commercial development	27.3%	131
Anywhere in Town	2.7%	13
Only where there is access to public water & ;	30.2%	145
Along all State highways and major town roads	16.7%	80
Behind existing commercial zone on Main Street	26.0%	125
On Main St. between Parkside Rd. and Little Sunapee	33.5%	161
Elkins area	17.3%	83
Route 11 between Main Street and Seamans Road	18.5%	89
Around the I-89 interchanges	31.9%	153
Comments:		71
<i>answered question</i>		480
<i>skipped question</i>		35

Question # 7: After combining the agree and strongly agree categories, the responses receiving a majority of support when asked which types of commercial/industrial uses should be permitted, assuming additional areas are zoned for commercial/industrial development, included:

- professional business offices (81.2%);
- medical offices (80.4%);
- restaurants (71.1%);
- inns and bed & breakfasts 67.1%);
- home occupations and home businesses (60.5%);
- professional services (barbers, laundries, hairdressers, etc.) (57.9%); and
- retail sales (53.2%).

Planning Board Community Survey 2008								
Question #7: Assuming additional area is zoned for commercial/industrial development in New London in the future, which types of commercial/industrial uses should be permitted in those areas? (Please rate each type of development)								
Answer Options	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Don't Know	Rating Average	Response Count
Professional business offices	30.7% (146)	50.5% (240)	12.4% (59)	3.6% (17)	2.1% (10)	0.6% (3)	4.023158	475
Medical offices	30.7% (145)	49.7% (235)	13.1% (62)	3.6% (17)	3.0% (14)	0.0% (0)	4.014799	473
Banks	14.3% (66)	32.3% (149)	30.3% (140)	15.2% (70)	8.0% (37)	0.0% (0)	3.296537	462
Personal Services (barbers, laundries, hairdressers, etc.)	16.2% (76)	41.7% (195)	26.9% (126)	10.3% (48)	4.7% (22)	0.2% (1)	3.538461	468
Restaurants	27.4% (128)	43.7% (204)	19.1% (89)	6.0% (28)	3.4% (16)	0.4% (2)	3.843683	467
Home occupations & home businesses	22.2% (103)	38.3% (178)	27.1% (126)	8.0% (37)	3.4% (16)	1.1% (5)	3.645161	465
Inns and Bed & Breakfasts	20.6% (96)	46.5% (216)	22.6% (105)	7.1% (33)	2.8% (13)	0.4% (2)	3.737634	465
Motels	5.8% (26)	13.6% (61)	27.7% (124)	26.8% (120)	25.3% (113)	0.7% (3)	2.458613	447
Retail sales	16.1% (74)	37.1% (171)	28.0% (129)	9.5% (44)	9.1% (42)	0.2% (1)	3.407809	461
Movie theater/entertainment center	17.0% (79)	19.8% (92)	19.8% (92)	20.0% (93)	22.2% (103)	1.1% (5)	2.862069	464
Convention/function center	6.4% (29)	13.2% (60)	17.8% (81)	27.9% (127)	33.8% (154)	1.1% (5)	2.27193	456
High tech industry (Research & development park)	15.0% (69)	22.8% (105)	21.3% (98)	16.7% (77)	24.1% (111)	0.2% (1)	2.872017	461
Light manufacturing	7.8% (36)	13.8% (64)	25.2% (117)	25.6% (119)	26.1% (121)	1.5% (7)	2.469828	464
Auto gas, service & repair	8.7% (40)	24.9% (115)	27.7% (128)	17.5% (81)	20.6% (95)	0.6% (3)	2.816017	462
Heavy industry	2.2% (10)	1.3% (6)	4.9% (22)	18.1% (81)	69.9% (313)	3.6% (16)	1.372768	448
Comments:								45
answered question								480
skipped question								35

Question # 8: Almost two out of three people completing the survey thought the Town should continue to encourage the development of a fiber optic network to serve all areas of New London.

Planning Board Community Survey 2008		
Question #8: A regional fiber optic network could deliver advanced telecommunications capabilities to every resident, public safety agency, educational institution, healthcare facility, and business in participating towns. The Town would not provide actual service, but would construct and manage the fiber network over which such services could be offered. The construction can be funded privately or using tax dollars. Should New London continue to encourage the development of a regional fiber optic network to serve all areas of Town?		
Answer Options	Response Percent	Response Count
Yes	65.8%	316
No	11.7%	56
Don't know – not enough information about what it is	22.5%	108
Comments:		64
answered question		480
skipped question		35

Question # 9: Seven out of ten people who encouraged continued efforts to develop a fiber optic network supported the Town investing in such a regional fiber optic network.

5. Job and Wages: When shopping locally, you create jobs and promote community development. Locally-owned businesses create more jobs locally and generally provide better wages and benefits than chains do.
6. Support Entrepreneurship: Entrepreneurship fuels our economy and elevates our families.
7. Public Benefits and Costs: Local stores in town centers require comparatively less infrastructure and make more efficient use of public services relative to big box stores and shopping malls.
8. Environmental Sustainability: Local stores help sustain vibrant, compact, walkable town centers, which are essential to reducing sprawl, automobile use, habitat loss, and air and water pollution.
9. Competition: A marketplace of small businesses is the best way to ensure innovation and low prices over the long-term.
10. Product Diversity: A multitude of small businesses, each selecting products based on the needs of local customer guarantees a broader range of product choices.

Economic Assets and Limitations

The New London economy is directly affected by its economic assets and the markets which it serves, as well as its limitations for economic growth and expansion. Although many of the forces which affect the local economy are beyond local control, there remain many factors which the Town government and business community can affect to achieve a desired vision for the New London economy. It is important for those people in the Town government and the local business community to recognize these assets and limitations, and to work together cooperatively to maintain a strong economic base. By using public improvements as a stimulus and complement to private investments, the town government and business community can work together towards achieving the desired economic future. This section briefly outlines New London's economic assets and limitations.

Economic Assets

1. Accessibility to distant markets via the Interstate Highway System: Without a doubt, the most significant factor affecting growth and development in New London, as well as the entire Region, was the construction of I-89 in 1969. The construction of I-89 has provided convenient accessibility to New London from the heavily populated areas in southern New Hampshire and Massachusetts. Boston is now an easy one and one-half hour drive on the interstate. The widening of the I-93 corridor south of Concord will increase the road carrying capacity bringing more people and traffic to this area, will decrease traffic congestion and will decrease travel time. This interstate widening project should again spur growth in the region.
2. Regional Market/Service Location: New London's location midway between the larger commercial centers in Concord and Hanover/Lebanon supports the Town's role as a small regional market and service center for people living in New London, as well as those living in the greater Kearsarge/Sunapee area.
3. Retirees' Market: The growth in the senior population in New London has been dramatic over the past thirty years. From 316 in 1970, New London's senior segment of the population increased to 867 in 1990 and to 1,228 in 2000. That equates to a fourfold increase over thirty years. As a percentage of the total population for each census, the

17. Undeveloped I-89 Interchanges: New London has maintained a policy for decades of not developing the areas around the I-89 interchanges. Not developing the interchanges will support existing businesses in Town and will preserve the scenic quality of the major entrances to the community.

Economic Limitations

4. Competitive Markets: The competitive markets in other areas such as Hanover/Lebanon, Concord, Manchester and Boston which offer larger shopping centers, often anchored with national retail chain stores, compete with the smaller New London market. Here, the accessibility afforded by the interstate highway system works to the detriment of the local economy. The New London market offers location and service.
5. Seasonal, not Year-Round Market: Many of New London's commercial establishments rely on the strong summer season to carry them for the year. Summer is when most of the seasonal residents and tourists are present to support those businesses. The winter season is unpredictable. Bolstering the fall, winter and spring markets for existing businesses offering retail sales and services is an important goal and direction for the business community.
6. Small Labor Force: With a relatively low percentage of the population in the working age group (about 17% less than County and State levels), New London probably does not have a sufficiently large labor force attractive to a potential employer seeking a site to establish a new relatively-large business.
7. Business Community not visible from the Interstate: Businesses in the village do not capture business from the travelers just passing through on the interstate since the business community is located about two miles from either of the two interstate interchanges. The business loop accessing the businesses in the village is not well signed.
8. Lack of Mixed Population: The Town lacks a balanced mix of population groups.
9. Lack of School in Town: The Town now lacks a major school in the center of town that generates considerable business activity from parents, kids, visitors and employees associated with a major school.
10. Water Service: Public water service is provided by the New London Springfield Water System Precinct. Having a governmental entity managing this utility service separate from the Town makes it more difficult for New London to plan and provide for water service. Another limitation is that the Water Precinct Commissioners consistently have taken the position that they do not want to expand the service area for the water precinct.
11. Sewer Service: The Sunapee Wastewater Treatment plant serves both the Towns of New London and Sunapee. The decision-making process for planning and constructing upgrades to this facility is made more difficult with two towns involved in managing the facility.

expand rapidly over the coming fifteen years with the aging of the “baby boomers” making this an even larger proportion of the market for local businesses in future years.

4. Accommodate Economic Growth, Protect the Natural, Scenic and Cultural Resources, the Quality of Life and Preserve the Small-Town Character: New London’s single most important assets are the scenic and natural resources of this rural residential community. This is the key factor in attracting residents, businesses and tourists. All commercial and light industrial project proposals should continue to be closely scrutinized to ensure that they fit harmoniously into the community and do not degrade the scenic and natural resources, thereby ensuring they are a positive addition to the local economy. New London’s scenic visual resources should be protected and enhanced by continuing to require attractive landscaping and maintaining strict sign regulations. Additionally, the Town should develop and adopt regulations which prevent development from locating in open fields and ensuring sensitive and compatible building and site design.
5. Continue to Require Location of Commercial and Light Industrial Uses in the Commercial Zone District: With the exception of home occupation and home business uses, any commercial and light industrial uses should continue to be required to locate within the Commercial Zone District in the village centers and along Newport Road. These centralized locations will ensure convenient accessibility from all parts of the community and protect residential property values in the surrounding residential districts.
6. Continue to Exclude Medium and Heavy Industrial Uses from Locating in New London: The location of medium or heavy industrial uses in the community which would create adverse noise, visual and other environmental impacts are incompatible with the rural residential character of the community and should continue to be excluded from locating in Town.
7. Continue to Prevent the Spread of Strip Commercial Development Along Major Roads: Strip commercial development, particularly along the major state highways such as Routes 11, 103A and 114, should not be permitted. These and other major roads are the main transportation corridors in the community, serving the permanent and seasonal residents, tourists and businesses. Commercial strip development along these major transportation routes would:
 - a. transform scenic, visually pleasing roads into a potentially ugly line of commercial establishments adversely affecting the image of the community and making it less appealing for residents, tourists and businesses;
 - b. create traffic congestion and safety hazards; and
 - c. draw business activity away from the village centers.
8. Continue to Require All Developers to Pay Their Proportional Fair Share of Off-site Improvements Attributable to Their Projects: To ensure that an undue burden does not fall on the public’s shoulders, the Planning Board should continue its practice of requiring developers to pay their proportional fair share of off-site improvements, including road and signal improvements.
9. Encourage Home Occupations and Home Businesses: The Town should continue to accommodate home occupations and home businesses which are secondary and accessory to the principal residential use of the property and are compatible with neighboring residential uses.

10. Encourage the Concentration of Housing Near the Village Centers: Concentrating housing in and around the villages may benefit businesses located in the village centers. With the increased population generated by the nearby housing, more people may shop at those businesses located in the village centers, particularly during leisure hours (evenings, weekends, etc.). In addition, concentrating housing in and around the village centers has the added benefit of minimizing the cost of providing Town services which are also located in the village centers.
11. Promote Mix of Housing: The Town should aim to provide a balanced mix of housing types and values, and promote housing for all income levels.
12. Develop and Adopt Site and Building Appearance Guidelines for Non-Residential Development: Support for this recommendation comes from both the general public and from the business community. The Community Survey conducted by the Planning Board revealed that seventy-six percent (76%) of those surveyed supported Site and Building Appearance Guidelines for non-residential development. Only fourteen percent (14%) of those surveyed did not support Site and Building Appearance Guidelines for any type of development. A majority (52%) of those surveyed supported Site and Building Appearance Guidelines throughout Town. In meetings with the Planning Board discussing the Master Plan, representatives of the business community have indicated their support, as well as recognizing the link between maintaining a positive visual image of the community and attracting people to their businesses.

These Site and Building Appearance Guidelines should be integrated with or linked to the Site Plan Review process which addresses site development for new non-residential uses, a change in use for non-residential development or conversion of residential uses to non-residential uses.

13. Require Water and Sewer Services for Multi-Family Residential, Commercial and Light Industrial Developments: Multi-Family Residential, commercial and light industrial uses should be required to tie into the water precinct system in order to provide an adequate water supply for domestic and firefighting purposes. Sewer service should be required for these uses to protect both surface and groundwater resources.
14. Connect the Main Street and Newport Road Commercial Zones with Sidewalks/Bike Paths: Currently, the two commercially zoned areas are connected by roads, but alternative means of access by foot or bicycle is limited. Constructing pedestrian/bike paths may provide safe access between the two commercial areas by means other than vehicles and may encourage people to park their vehicles in one place and enjoy walking or biking between businesses.
15. Research and Development Park: The survey does not provide a consensus and leaves no clear direction on whether a Research and Development Park should be developed. If a Research and Development Park is sited in New London, it should be located in an area and developed in a manner that does not detract from the Town. This land use issue is considered in developing alternatives for the Future Land Use Plan in the Land Use Chapter.
16. Commercial Uses to Support: Respondents to Question # 7 showed support for 50% or

more of the following uses:

- professional business offices – 81.2%;
- medical offices – 80.4%;
- restaurants – 71.1%;
- professional services (barbers, laundries, hairdressers, etc.) – 57.9%;
- inns and bed & breakfasts – 67.1%; and
- retail sales – 53.2%.

These uses should continue to be supported by the Town.

17. Fiber Optic System: Continue to encourage the development of a fiber optic system to serve all areas of New London, and, at the appropriate time, have the Town of New London invest in the fiber optic system.
18. **Regional vs. Local Commercial Growth:** When combined the responses to Questions # 2 and # 5 do not provide a clear consensus on a preferred future commercial growth option:
- Local commercial development;
 - Regional commercial development; and
 - Limit/Do not promote further commercial development.

The survey responses are fairly evenly split between these three categories leaving no clear direction from the survey responses. These land use issues are considered in developing alternatives for the Future Land Use Plan in the Land Use Chapter.

19. **New Commercial Areas:** The survey responses to Question # 6 about where people would support adding areas for commercial use are fairly evenly split between:
- I-89 – 31.9%;
 - Areas served by water & sewer – 30.2%; and
 - Nowhere/No Further Commercial Development – 27.8%

The survey does not provide a consensus and leaves no clear direction. This land use issue is considered in developing alternatives for the Future Land Use Plan in the Land Use Chapter.

20. Improve Village Business Signage for Business Loop off I-89: The signage directing travelers on I-89 to the businesses in the New London village needs to be improved.
21. Support Local Agriculture: The Town should support and promote continuation and further development of working farms, farm families and agricultural enterprises.
22. Reuse of Former Middle School and/or Site: The School District and the Town should continue to work cooperatively together to find an alternative use or uses for the former Middle School. Some ideas in addition to the Community Center include:
- Business incubator site;
 - Senior housing; or
 - Private or charter school.

**TABLE XI-5
Wastewater Flow Projections
Colby-Sawyer College Student Population
2010-2020**

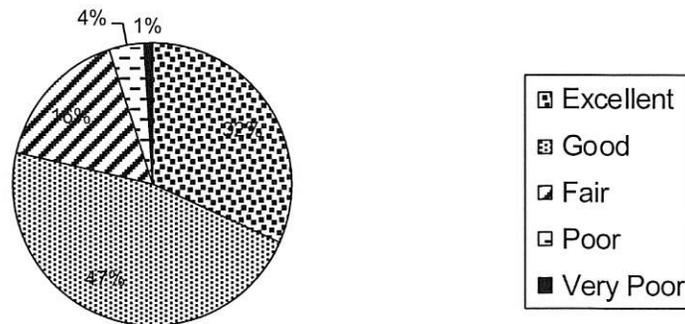
Year	Total Number Matriculated Students	Increase in Matriculated Students	Increase in Flows (GPD)
2010	1,103	78 (since 2007)	4,680 GPD
2015	1,202	140	8,400 GPD
2020	1,300	140	8,400 GPD
Total		358	21,480 GPD

As reflected in Tables XI-4 (Page 206) and XI-5 (Page 207), the Town sewer system is projected to serve an additional 358 students at Colby-Sawyer College and 64 additional dwelling units. The projected residential and student growth translates to approximately 33,000 GPD increased sewer demand. **These projected flows do not include estimates for increased commercial or industrial wastewater flows which may vary widely based on proposed use and size.** If New London is utilizing 65% (260,000 GPD) of its allocated 400,000 GPD treatment capacity in Sunapee, the 33,000 GPD of additional wastewater flows would increase the rate of utilization up to approximately 73% of total capacity.

Community Survey Results: Municipal Wastewater Collection and Treatment

When all respondents were asked to rate the Sewer Service in the 2008 Community Survey 52.9% of the survey respondents indicated they don't know how to rate the service; we assume that many of these respondents may not be connected to the sewer system and therefore do not use the service. When the survey responses to that question are tabulated with those people familiar with the service and eliminating the "Don't Know" responses, 78.6% of those familiar with the service rated it excellent or good, 16.4% rated the service as fair, and 5% rated the service as poor or very poor as reflected in Figure XI-2 (Page 207) to follow.

**FIGURE XI-2
Sewer Service Rating - Respondents Familiar with Service**



New London-Springfield Water System

New London is served by a municipal water works which is owned by the New London-Springfield Water System Precinct and governed by a three member Board of Water Commissioners. The original water system was constructed in 1925. The Precinct boundaries generally encompass the village center and the surrounding area. The area served by the New London-Springfield Water System Precinct is shown on Map XI-1 (Page 201). Areas outside the Precinct boundaries are served by private on-site wells.

The Water Precinct is now supplied by six gravel packed wells located on Colby Point on Little Lake Sunapee. These wells, which came on line in May 1996, have a design capacity of 500,000 gallons per day (GPD) and a yield of 720,000 gallons per day. The water from the wells is fed directly into the water distribution system via a water line connecting to the existing line located in the Twin Lake Villa Road. A 1,000,000-gallon water storage tank is located along the Kidder Brook in Springfield and is situated next to the existing water storage reservoirs which will be retained for emergency use. The entire water system can be fed by gravity from the new storage tank. The construction of the gravel packed well system and the storage tank brings the water system into compliance with the Federal Safe Drinking Water Act of 1977, as amended.

In 2009, the precinct provided water service to a total of 1032 connections in New London and Springfield. This includes year-round services (988) and seasonal services (44) for residential, commercial and institutional uses. The bulk of the customers (999 connections or 97 % of the total number of connections) were in New London. The Precinct extends into a portion of Springfield to serve 33 connections in the Twin Lake Villa area.

In 1990, 36% of the dwelling units in New London were served by the New London/Springfield Water System Precinct, about 60% were served by on-site wells and about 4% were served by other sources. By 2009 the numbers of residential units had increased, but the percentage splits between the sources of the water supply remained relatively constant. There were an estimated 2,271 total housing units in New London in 2009 based on The Current Estimates and Trends in New Hampshire's Housing Supply Update: 2009 prepared by the New Hampshire Office of Energy and Planning. The New London-Springfield Water System Precinct reported that 827 residential units in New London were served by their water system in 2009 or 36.4% of the total number of estimated residential units in New London in 2009 as outlined in Table XI-6 (Page 210). Out of the remaining 1,444 residential units, 1,373 residential units or 60.5% were served by on-site wells. The remaining 71 residential units or 3.1% were served by other sources.

This data in Table XI-6 comparing water supply sources reveals that 180 additional homes were served by the precinct in 2009 compared with 1990 for a 27.8% increase. In comparing the growth between 1990 and 2009, new homes were served by about the same percentage splits for the sources of water supply as they were in 1990.

Water line extensions have been made as part of the following subdivisions: Trussell Ridge, Highland Ridge, Woodland Trace, and Fenwood. Additionally, the Water Precinct has closed grid loops in the water system through the installation of 8" water mains on Lakeside Road, Knights Hill, and a connection between the Fenwood Subdivision and Pine Hill Road.

**Table XI-6
Source of Water Supply: 1990 & 2009**

Type of Source	1990		2009		Change 1990-2009	
	Dwelling Units	Percent of Total	Dwelling Units	Percent of Total	Dwelling Units	% Growth
Precinct Water	647 ²	36.0%	827 ^{1,6}	36.4%	180	38.1%
Wells	1,080 ²	60.1%	1,373 ⁵	60.5%	293	61.9%
Other	71 ²	3.9%	71 ³	3.1%	0	0%
Total	1,798 ²	100%	2,271 ⁴	100%	473	100%

Footnotes:

¹ Source: New London/Springfield Water System Precinct, 2010

² Source: US Census 1990

³ No data for 2009. Assumes same number as 1990

⁴ Source: The Current Estimates & Trends in New Hampshire's Housing Supply Update 2009

⁵ Calculation based on other numbers

⁶ Please note that the number of services for some of the multi-family units may be undercounted since some of the multi-family units have one water service for all of the units

The Water Precinct constructed a booster pump station and water storage tank on the Colby-Sawyer campus in 2006. This now provides a back-up water supply should service be interrupted on the main water line from Springfield. A new water flow meter was installed as part of that construction project.

The average daily water consumption in gallons per day (GPD) for each month from April 2009 through March 2010 is presented in Figure XI-2 (Page 211). The data indicates fluctuations in demand that are consistent with seasonal water demands (e.g.: peak summer demands associated with irrigation and recreational uses). The average daily flow throughout the year from April 2009 through March 2010 was 218,333 GPD. Table XI-7 (Page 211) identifies the water consumption by type of use.

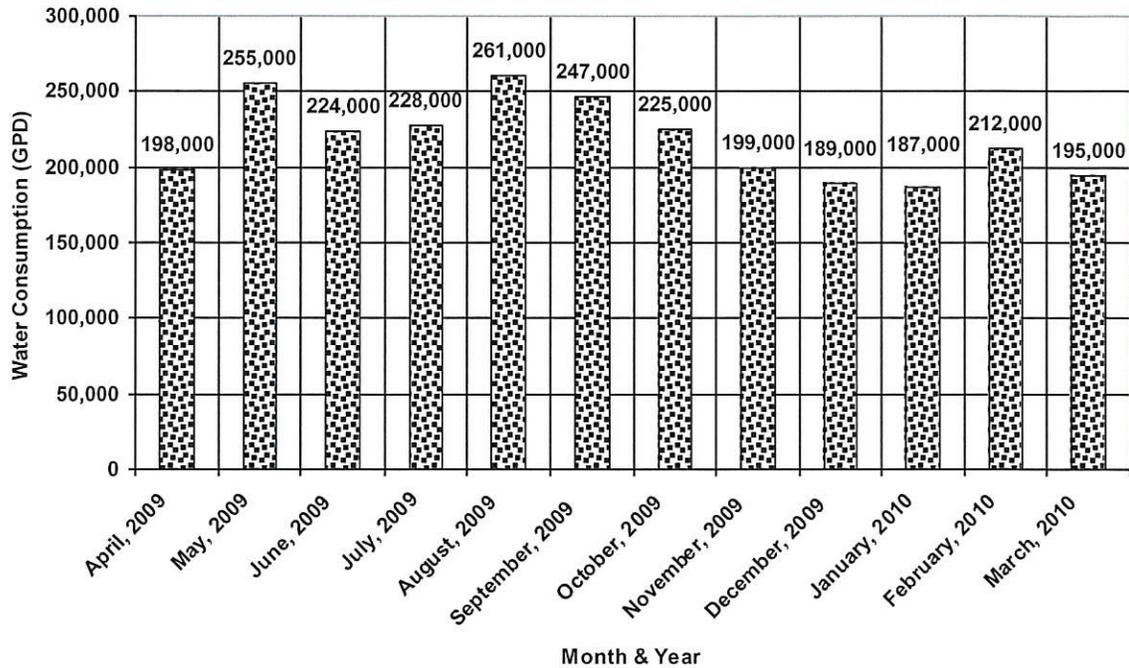
The information indicates that residential uses were by far the major water user each day by consuming almost one-half (49.3%) of the daily water use. Commercial uses were the second major water user and consume one-fourth (25.1%) of the daily water use. Colby-Sawyer College was the third major water user and consume 17.0% of the water used each day.

Water Consumption Projections

Water consumption projections are presented in Tables XI-8 (Page 212) and XI-9 (Page 212) to follow. These projections are based on the following assumptions:

1. The base population in 2010 is 4,397. Population growth is assumed to be 50 persons per year as stated in the Population Chapter;
2. Conversion of the year-round population projections into dwelling units is 2.35 persons per household based on the 2009 American Community Survey by the US Census Bureau;

FIGURE XI-2
Average Daily Water Consumption by Month
New London/Springfield Water System Precinct: April 2009 – March 2010



Source: Superintendent, New London/Springfield Water System Precinct

Note: The figures above are based on total system demand including both metered and unmetered use.

TABLE XI-7
Water Consumption by Type of Use for Metered Water Services
New London/Springfield Water System Precinct: October 2009-April 2010

Type of Use	Services	Total Usage (GPD)	Percent of Total Usage	Average Usage per Service
Residential	827 ¹	77,261	49.3%	93
Commercial	163 ²	39,356	25.1%	241
Colby-Sawyer College	29	26,717	17.0%	921
Hospital	4	10,800	6.9%	2,700
Laundromat	1	2,700	1.7%	2,700
Irrigation	8	4,289 ⁴	NA ⁴	427
Total	1,032³	156,811	100%	152

Source: Superintendent, New London/Springfield Water System Precinct, 2010

Notes:

¹ The number of services for some of the multi-family units is undercounted since some of the multi-family units have one water service for all of the units

² The number of services for some of the commercial uses is undercounted since some of the commercial uses have one service for several uses

³ Forty-four are seasonal services

⁴ Irrigation figures are for the summer of 2009 and not included in total GPD figure

3. The 2009 percentage of homes served by the precinct (36.4%);
4. The average water consumption rate is 180 GPD per dwelling unit. This is lower than the consumption rate per dwelling unit used by the New Hampshire Department of Environmental Services for planning purposes, but higher than the water consumption rate in Table XI-7 (Page 211) for the period from October 2009 through April 2010. This assumption matches the assumed average wastewater flow generation rate per dwelling unit;
5. The Colby-Sawyer College student population will increase to no more than 1,300 students by 2020 as discussed in the Population Chapter; and
6. The average water consumption is 60 GPD per student.
7. Water usage rates do not consider periods of peak demand (e.g.: private irrigation of fields and lawns) or likely consumption by new commercial or industrial uses.

TABLE XI-8
Water Consumption Projections
Year-Round Population: 2010-2020

Year	Total Dwelling Units	Overall Estimated Increase In Dwelling Units	Increase in Dwelling Units Served by Water District	Increase in Water Consumption
2010	2,303 D.U.	-	-	-
2015	2,409 D.U.	116 D.U.	39 D.U.	7,020 GPD
2020	2,515 D.U.	116 D.U.	39 D.U.	7,020 GPD
Total		232 D.U.	78 D.U.	14,040 GPD

TABLE XI-9
Water Consumption Projections
Colby-Sawyer College Student Population: 2010-2020

Year	Total Number Matriculated Students	Increase in Matriculated Students	Increase in Flows (GPD)
2010	1,103	78 (since 2007)	4,680 GPD
2015	1,202	140	8,400 GPD
2020	1,300	140	8,400 GPD
Total		358	21,480 GPD

Recommendations: New London-Springfield Water System

1. The Water Commissioners should continue to advise and communicate the planned capital projects and priorities of the Water Precinct for the water supply and the distribution system to the Planning Board to aid in the Planning Board's annual CIP update.
2. The Planning Board should understand and cooperatively reinforce policies on providing new service by the Water Precinct through the CIP and the development review process. The Planning Board and the Water Commissioners should continue to communicate about the needs and impacts created by new development proposals. The groups should continue to work together and to find ways to improve their communications and be responsive to the needs and constraints of the Water Precinct and its Commissioners, the applicant, and the Planning Board.

Stormwater Utility

Continued development of land and corresponding increases to impervious land cover will cause broader impacts to the quality and quantity of stormwater runoff. New London development patterns and future land use goals of focusing development in village-scale or smaller residential-scale clusters where appropriate. The infrastructure to serve these areas, as they develop and increase in size and complexity, may become incorporated into a municipally managed stormwater utility and adoption of some private stormwater systems as public utilities in the interest of the public health and welfare.

Electric Utility

As of January 2010 approximately 3,237 customers in New London, including residences and businesses, receive electricity from Public Service of New Hampshire (PSNH). Three-phase power, which serves high capacity/high demand commercial, residential, and institutional properties, is available along Newport Road and Main Street from the Post Office to Colby-Sawyer College, Pleasant Street, Seaman's Road, at the Transfer Station and on Route 11 from just east of Brookside Drive to Country Club Lane. Single phase service is offered in the rural areas of Town principally serving individual residences with relatively limited power demands.

About 80 miles of electrical distribution lines are maintained by PSNH in New London. A power substation is located on South Pleasant Street, which was upgraded in 2009 with approximately double the capacity of the older substation to accommodate current electrical demand and accommodate growth in Town.

Communications

Telephone

TDS Telecom is a nationally based telephone company which provides service to most New London residents. As of November 2009, they had a total of 6,600 access lines in New London. Of that total, 4,800 are residential access lines. The number of customers or residents served is hard to determine, since many homes have multiple lines and some businesses have as many as twenty access lines or more. FairPoint serves a limited number of residents in the western parts of New London.

XII. TRANSPORTATION

Introduction

New London's transportation network is defined by its good connections with larger regional centers via Interstate 89 and New Hampshire Route 11. New Hampshire Routes 114 and 103A also make the Town a focal point for nearby towns which share our commitment to retaining this region's rural character. Because of its combination of scenic geographic location and easy access to surrounding towns and to larger, more distant population and commercial centers, New London has maintained its role as a strong sub-regional center for tourism, services and employment despite economic fluctuations. Consequently road transportation systems continue to figure prominently in the Town's overall planning strategy. Additionally, hiking and biking trails are an essential component of the area's tourism economy. Trails provide important recreational benefits for residents and visitors and can be developed as the basis for the long-term goal of creating a "livable, walkable community" enriching the commercial and residential center of New London while reducing the density of motorized transportation as the town grows.

Goals

The New London Planning Board continues to support the same broad transportation goals that have successfully guided the community's growth over the past decade:

1. To provide a cost-effective transportation infrastructure which will meet, to the greatest extent possible, the mobility needs of local residents; and which will provide for the safe, efficient movement of goods, services and people within and through New London;
2. To continue the excellent Town road maintenance and reconstruction program;
3. To minimize the negative impacts of traffic and transportation infrastructure on New London's natural and cultural resources.
4. To emphasize in the Town's transportation planning the importance of a "livable, walkable community" based on the development of a network of non-motorized pathways, trails, bike lanes and sidewalks enabling residents and visitors to enjoy pedestrian and bicycle access to the Town's business centers and recreational assets.
5. To develop cooperative planning processes with neighboring towns on transportation issues that build a healthy economic base while preserving our core commitment to retain the rural character of the region.

Community Survey Results

New Londoners, in the 2008 Community Survey, registered their opinions on transportation-related issues not specifically addressed elsewhere in this Master Plan that included the following.

Question # 1: There was only one transportation-related response in Question #1. When asked about the attributes that significantly contribute to making New London a desirable place to live and/or own property, respondents indicated that convenient access to the interstate highway system was the tenth highest attribute out of a total of thirteen attributes.

an entirely new framework for state transportation planning programs, in that it articulates the need for a multimodal, intermodal and multi-goal approach.

Transportation is not only closely linked to land use, it is a land use. A large percentage of New London's land area is taken up by transportation infrastructure, primarily roads and parking lots. Transportation uses have increasingly replaced other land uses as the settlement pattern has become more and more dispersed, and the Town's residents have come to rely on automobile travel as their primary mode of transportation.

Like any other land use, transportation impacts the environment, both through development of infrastructure and through motor vehicle use. ISTE's more holistic approach to transportation planning permits protection of environmental and cultural resources to play a more important role in future infrastructure expansions. The presence of wetlands, rare flora, scenic views, historic buildings and interesting natural land forms all influence the planning process to a greater degree than in the past. Since most New Londoners cherish their high environmental quality, this integrated approach is a good idea.

New London has a vibrant and diversified core with a variety of commercial and residential uses. Most of the time, the village is buzzing with visitors, local shoppers and business people. There is usually a good mix of foot-traffic, cyclists and motor vehicles. The peripheral areas have largely followed the more recent national development trend of sharply segregated land uses, resulting in considerable travel distances between places that are essential to people's lives, such as home, work, shopping and school. A case can be made for returning to more traditional neighborhoods with a mix of diverse, but compatible, land uses. There are multiple benefits of such a development model, e.g. shorter travel distances and times, reduced number of trips, increased walking and bicycling, reduced infrastructure costs, improved environmental quality and greater social interaction within the community. Future zoning amendments in New London should, therefore, also be evaluated in terms of their transportation impacts.

Public Road System: Motorized Transportation

Transportation Infrastructure

Maintained and Unmaintained Roads

The public maintained road system in New London totals 81.29 miles. This number represents a moderate increase over the past decade. The Town is responsible for maintaining 54.9 miles of Town roads (67.5% of the total) and the State of New Hampshire is responsible for maintaining 26.4 miles of state and interstate roads in New London (32.5% of the total).

Putney Road is the only unmaintained Class VI town road in New London. The New London Board of Selectmen's policy is to not issue building permits along Class VI roads. This practice is prudent and should continue.

Road Conditions

The Town's roads are, overall, in good condition. In 1996, the Upper Valley Lake Sunapee Regional Planning Commission completed a Road Surface Management Survey (RSMS) of all the town-maintained roads and state highways, except interstates, in New London. Unfortunately the RSMS Data has not been updated since 1996 and since it is so outdated it is not presented here. However, the Director of the Public Works Department has indicated that over the past thirteen years the Town has been aggressively grinding and repaving paved roads

TABLE XII-5
Projected Average Daily Traffic Volumes: 1998 -2023
Based on Annual Growth Rates 2000 - 2007

Location	Annual Growth Rate	2008	2013	2018	2023
I-89 - South of NH 11 Junction	1..7%	19260	20608	22051	23594
I-89 - At the Sunapee Town Line	0.9%	17153	17307	17463	17620
I-89 - At the Sutton Town Line	1.4%	17846	18096	18350	18606
NH 11 - West of NH 114	1.8%	5090	5182	5275	5370
NH 11 - At the Sunapee Town Line	1.1%	7337	7418	7499	7582
NH 11 - At the Wilmot Town Line	2.1%	5309	5421	5535	5651
NH 114 - West of NH 11	2.9%	3807	3918	4031	4148
NH 114 - At the Sutton Town Line	0.0%	1300	1300	1300	1300

Source: KBM & Associates

The Main Street/Pleasant Street intersection is frequently congested for brief periods due to a combination of heavy foot and vehicular traffic. A contributing factor is the lack of designated turning lanes. The intersection was improved in the spring of 2008 with the introduction of curbing along the travel lane in the northwest corner and the addition of landscaping & seating on the corner.

During the summer and fall of 2004 the Upper Valley Lake Sunapee Regional Planning commission conducted a "Parking & Traffic Study dated March 2005" to assess traffic and parking conditions in the downtown commercial district, to identify problems, to evaluate alternative solutions and to make recommendations. Please note this study was done before the Kearsarge Middle School was moved out of the downtown to the new school in Sutton, but it is the most recent study of its kind for the downtown area in New London. The study found that the traffic volumes at that time at the Pleasant/Main Street intersection warranted mitigation either by a traffic signal, turning lanes, a roundabout or limiting turning traffic or rerouting traffic.

More conspicuous crosswalks now serve the Main Street/Pleasant Street intersection. A number of individuals, especially children, cross the street in unmarked locations. Public education and the assistance of formal crossing guards for the elementary school children could potentially improve the traffic flow in the intersection and, at the same time, enhance pedestrian safety.

Traffic Impacts of Regional Interest

The new owners of the Ragged Mountain Resort have indicated to New London that the route they are advertising to access the Resort is via I-89 to Exit 11 and then Route 11 to Route 4. This could add significant traffic to the section of Route 11 in New London. If it becomes an issue, the town should work with the Upper Valley Lake Sunapee Regional Planning Commission, the Central New Hampshire Regional Planning Commission, the Lakes Region Planning Commission, the NH Department of Transportation, the Town of Wilmot, the Town of Danbury, the Town of Andover and the Ragged Mountain Resort on addressing this issue.

To address the impact of traffic accessing Mt. Sunapee, the town should work with Newbury, the Upper Valley Lake Sunapee Regional Planning Commission, the NHDOT and the Mt.

(e.g., at the resident's home). This not only reduces the costs of maintaining the distribution grid, but also reduces the consumption of fossil fuels required to generate the electricity at the power plant. Various government and utility programs provide subsidies to make energy produced by these systems more cost-competitive with traditional energy sources, and the costs for many of these systems are declining. Within 10 years, distributed wind and solar electric systems, when installed in advantageous locations, are expected to produce electricity over their useful lives at a cost that is equal to or less than the price of electricity from the electric distribution utility.

By encouraging and promoting energy conservation behaviors, the selection of energy efficient alternatives and the investment in cost-effective, sustainable energy systems, New London can mitigate the negative effects of power consumption, benefiting the local community. The easiest and least costly approach to reducing energy consumption is to conserve energy—that is, to stop wasting energy that is of no value. Energy efficiency measures generally provide the next best return on investment in terms of both time and money. Indeed, many replacement decisions can be financially attractive based on expected energy savings even before the item being replaced has exhausted its current useful life—the replacement measures literally pay for themselves through reduced energy expenses and other operating costs. Finally, New London can encourage and facilitate investments in local, sustainable energy generation systems, which are becoming more cost-competitive relative to traditional sources of energy, even today, thanks to various government and utility incentives.

New London's Primary Areas of Energy Consumption

In order to better understand how to affect New London's energy consumption, it is helpful to examine its consumption through four primary areas of energy consumption in the community: buildings, transportation, electricity and commercial & industrial uses.

Buildings are responsible for about 40% of energy consumption in the United States, and more than 70% of electricity consumption. Nearly 30% of New Hampshire's total energy consumption is used for heating buildings. Approximately 75% of New London's households are heated by combusting fossil fuels.

Transportation accounts for 70% of U.S. oil consumption, and it accounts for nearly one-third of the state's net energy use. Most vehicles use gasoline; less than 15% burn diesel; a growing number of hybrids can be seen driving around town. The town was one of the first municipalities in the state to convert its diesel fleet to bio-diesel.

Electricity accounts for a growing percentage of New Hampshire's total energy use, currently estimated at about 40% of its net energy consumption. Almost none of this energy is generated in New London, although distributed, sustainable energy generation systems could change that.

Commercial & Industrial consumption of energy is used to measure how energy inputs are used to create the products and services that companies provide. New London does not have much industry that requires lots of energy to help transform raw materials into finished goods, but its commercial businesses often require energy beyond basic occupancy energy uses (e.g., for lighting, heating and electrically powered office equipment) in order to provide their services (e.g., power equipment such as refrigeration, air compressors and pumps).

From a power sources or generation viewpoint, New Hampshire currently generates about 8-9% of its energy from domestic, renewable energy sources, mostly generated from hydro and wood,

split about evenly. The only material renewable energy generation in New London is the use of wood for heating. Wood burning appliances in New London represent an area of opportunity for the town: today's advanced combustion stoves and fireplaces burn up to 90% cleaner and one-third more efficiently than conventional appliances.

Does New London Care, And What Does It Value Most?

The community survey conducted by the Planning Board to provide community input into the shaping of the Master Plan provided clear support for New London to amend its regulations to encourage sustainable practices within its own operations and to promote sustainability throughout the region (84% of participants supporting the issue; second only to their desire to conserve land areas significant to the character of New London). Support for alternative energy sources on residential and commercial property was close behind, with 81% and 73% supporting, respectively. There was not a question, explicitly, on their support for New London's encouraging energy conservation and efficiency. Given the high level of support for sustainability and alternative energy, however, the Local Energy Committee believes that it is highly correlated, and, thus, quite strong.

Survey participants also believe that village centers with New England charm are significantly important (93%). Fortunately, this view supports many Smart Growth community development principles, as does their support for scenic areas and open spaces (98%). More compact communities require less energy for transportation, and the "carbon sinks" of preserved open space and forests helps to offset some of the pollution caused by fossil fuel combustion. More directly, 65% of the survey participants indicated a preference for more concentrated residential development within or adjacent to village centers with outlying areas remaining low density.

Increasing the "productivity" of our built environment can also generate energy savings. More people living in the same residence, and more workers in the same office reduce energy costs per square foot and per capita. One means of achieving this higher utilization of existing space is by allowing accessory dwelling units ("in-law apartments"), which 72% of survey participants support. Additional measures that could improve building utilization were favored by a majority of survey participants: denser workforce housing (50%), more rental unit opportunities (56%), conversions of large single family houses into multiple units near the town center (53%), and housing units over businesses in the commercial district (55%).

Reducing energy consumed through transportation can also be achieved if people can accomplish more from their place of residence. Development of a regional fiber optic network has been proposed. The network would not only benefit residents with increased online and communication capabilities, but also the businesses in the area. In fact, it could help to attract the types of businesses survey participants would like to see expand, such as professional services (81%), medical offices (80%), Inns and B & B's (67%), and home-based businesses (60%). More than two-thirds of the survey participants support New London's investing in such a project, and while lower transportation costs were not highlighted as a potential benefit, it is one of the expected benefits, especially with a growing percentage of people working from their homes or telecommuting.

While a majority of survey participants (52%) supported development of public transportation within the region, a full two-thirds of survey participants were supportive of expanding public transportation to major regional transportation hubs. Additionally, there was strong support for additional sidewalks, bike lanes and multi-use paths along the major transportation corridors around New London, which would make it safer and easier to walk or ride a bike instead of

Lake Sunapee Watershed:

Through time, Lake Sunapee has been and will continue to be the critical natural resource that is the focus of this region. Continuing to protect the water quality of this mountain lake is critical to New London and the surrounding area.

Lake Sunapee is important to New London and the other watershed communities in many ways. It is one of the major natural and recreational assets that attract visitors as well as people who want to move to the area. The seasonal high-valued homes bordering the lake provide a significant portion of the tax base for the three communities with frontage on Lake Sunapee: Sunapee, Newbury and New London.

New London should continue to participate with the other communities in the Lake Sunapee Watershed and the Lake Sunapee Protective Association (LSPA) in the Sunapee Area Watershed Coalition's (SAWC) efforts to develop and implement a watershed plan to ensure the long-term protection of Lake Sunapee. Other Lake Sunapee Watershed communities include: Sunapee, Springfield, Newbury, Sutton and Goshen.

In crafting land use regulations which could impact the Lake Sunapee watershed, those proposals should be shared and discussed with the other watershed communities to request their input and possible participation.

Growth & Expansion of Local Ski Resorts

In 2003, the Mt. Sunapee Resort proposed an expansion of the ski area in their Master Plan submitted for approval. This proposal has not moved forward since Governor Lynch refused to approve the Master Plan in 2004. However, presuming that it might be raised again sometime in the future, the proposed expansion plans for Mt. Sunapee have raised concerns for potential impacts in New London and area communities including: traffic congestion, increased demand and cost for emergency services, and the impacts from spin-off residential and commercial growth. Peak weekend traffic accessing Mt. Sunapee from I-89 impacts neighboring towns including Bradford and Warner along Route 103, Sunapee along Routes 11 and 103B and New London along King Hill Road and Route 103A. The proposed ski area expansion plans affect Goshen and Newbury directly and indirectly impacts residential and commercial growth in other area towns.

Ragged Mountain Resort was purchased by Pacific Group in May of 2007 and they are developing plans over the following ten years for a fully planned community for the entire family. The new owners have plans to add 60 areas of skiable terrain by expanding the ski area to a third peak, to add more ski lifts, to add more ski trails, to add hiking and nature trails, to renovate the golf course, to add an indoor water park, to add a fitness center, to add a new day lodge, to add a 200-room hotel, and to add as many as 850 seasonal homes and condos. The redesigned golf course, including a future clubhouse with pro shop, dining and locker facilities, is planned to be the only course in New Hampshire to be qualified as a member of the Audubon International Signature program. The planned improvements would change the resort from a day trip destination to a family getaway. Only 15% of Ragged Mountain's 2,000 acres would be developed leaving 1,700 acres of natural open space. When the project is complete, the resort could see as many as 120,000 visits a year which is a three-fold increase compared with the estimated 40,000 visits in 2006. The new owners have indicated to New London the route they are advertising to access the resort is I-89 to Exit 11 and then Route 11 to Route 4 that would add significant traffic to the section of Route 11 in New London. The owners are also proposing

#	Chapter	Recommendation
1	III: A Vision for Land Use	Examine rezoning those areas deemed viable for expanding the number of village size residential lots, particularly where they can be served by Town sewer and Precinct water.
2	III: A Vision for Land Use	Consider accommodating housing needs in the village: a. Rental units; b. Housing over businesses in the Commercial District ; and c. Conversion of large single family homes into multiple units.
3	III: A Vision for Land Use	Consider changes to the existing Commercial District boundaries and permitted commercial uses to meet New London's future needs.
4	III: A Vision for Land Use	Consider opportunities to provide for clean, non-polluting light industry or high-tech industry by Special Exception in areas served by Town sewer and Precinct water.
5	III: A Vision for Land Use	Consider site and building design guidelines for aesthetics.
6	III: A Vision for Land Use	Consider a gateway protection ordinance aimed at preserving the Town's scenic quality and rural character along roads leading into New London and around Interstate interchanges.
7	III: A Vision for Land Use	Consider developing an Aquifer Protection Overlay District to minimize potential pollution of aquifers.
8	III: A Vision for Land Use	Explore innovative land use practices to preserve New London's rural character, natural and historic resources.
9	III: A Vision for Land Use	Conduct a feasibility study to identify future Water and Sewer Service Areas and defining sewer line extension policies.

#	Chapter	Recommendation
13	IX: Housing	<p>Reinforce the traditional, small town New England settlement pattern of smaller lots and higher density housing in and around the village centers with predominantly open space in the outlying areas through:</p> <ul style="list-style-type: none"> a. Enactment of transfer of development rights provisions whereby the density allowed on a property located in an outlying area can be transferred to a property located in a village area. b. Consideration of amendments which would provide for lower densities of development in the outlying areas and higher densities in and around the village centers where water and sewer service is available. c. Enactment of innovative land use techniques outlined in RSA 674:21.
14	X: Economic Base	<p>Develop and Adopt Site and Building Appearance Guidelines for Non-Residential Development: These Site and Building Appearance Guidelines should be integrated with or linked to the Site Plan Review process which addresses site development for new non-residential uses, a change in use for non-residential development or conversion of residential uses to non-residential uses.</p>
15	X: Economic Base	<p>Require Water and Sewer Services: Multi-Family Residential, Commercial and Light Industrial Developments within the water/sewer precincts should be required to tie into the water precinct system in order to provide an adequate water supply for domestic and firefighting purposes. Sewer service should be required for these uses to protect both surface and groundwater resources.</p>
16	X: Economic Base	<p>Support Local Agriculture: Utilize innovative land use techniques to support and promote continuation and further development of working farms, farm families and agricultural enterprises.</p>
17	XII: Transportation	<p>Include Town bridge improvements, as needed, in the Capital Improvements Program for improvements to the Elkins Road bridge over the brook from Pleasant Lake just before the Wilnot Town line, the Goose Hole bridge over the brook below Goose Hole Pond and the Elkins Road bridge just below Pleasant Lake Dam.</p>

#	Chapter	Recommendation
18	XII: Transportation	Implement sustainable land use policies that encourage safe and convenient transportation regardless of transportation mode (e.g.: private vehicle, transit, bike, and foot traffic). Opportunities to mitigate the impact of new development on the transportation network may include encouraging mixed land uses in appropriate locations, developing and maintaining a trail network that links residential and commercial areas, and retrofitting existing roads to support safe pedestrian and bicycle use.
19	IV: Conservation & Open Space Lands	The Town should document the decline in agricultural lands in Town since the 1940s through a series of maps. The Town should recognize and assist the efforts of citizens currently engaged in food production and agricultural activities. The Planning Board should consider crafting an agricultural overlay district aimed at preserving the Town's remaining agricultural resources and producing more locally grown food. The Town should consider appointing an Agricultural Commission to assist in these endeavors.
20	V: Watersheds & Water Resources	The recently completed <i>Sunapee Watershed Infrastructure Project</i> reports the likelihood of increasing frequency and severity of storm events, which may cause impacts to the existing infrastructure and increased impacts to surface and subsurface water quality. The Town should promote stormwater Best Management Practices for existing and new development and investigate the feasibility of creating a stormwater utility to manage stormwater techniques.
21	XIII: Energy	Encourage energy efficiency and sustainable energy development practices through development guidelines, regulations, and municipal policies. Including, but not limited to, allowances for on-site energy generation, guidelines and incentives for developers to implement energy efficient site and building design practices.

Links on town Website were added for area carpooling/ridesharing services. As gasoline prices have continued to climb over the past 15 years, the carpooling/ridesharing services are used frequently.

Housing

1. Affordable housing is provided for young families, people in the work force and seniors in and around the village through increased density, decreased lot sizes, second floor apartments in the commercial district, and increased opportunities for multi-family residential housing.
2. A mix of housing types, sizes and values is provided for all age groups from young families to seniors in a variety of neighborhoods close to work and services.
3. New residential growth is focused where infrastructure for public water and gravity wastewater collection and treatment already exists.
4. A "Continuing Care Retirement Community" project is developed on the hospital campus.
5. The Zoning Ordinance is amended to permit more housing options such as allowing two-family and multi-family residential development by special exception.

Economic Development

1. New London remains a regional hub providing goods and services for neighboring communities. New London has innovatively created opportunities for economic growth, viability and diversity in order to create a sustainable long-term economy by continually working with the New London-Lake Sunapee Region Chamber of Commerce, local businesses and citizens.
2. New London continues to support new and redevelopment opportunities for economic development consistent with the scale and architectural style of a historical New England community.

A new low visual impact research and development park is being considered that provides local well-paying jobs.

New London continues to be the economic engine in the Kearsarge area and continues to cooperatively work with area towns on economic development issues.

Parking for commercial uses is improved.

Historic Preservation

New London is currently considering a proposal to create historic districts in a variety of places around town.

The town and New London Historical Society continue efforts to identify and preserve historical sites, buildings and features such as stone walls throughout town including areas such as, for example, Hominy Pot, Old Main Street and Elkins. Public access is available to many historic sites.

the state provides funding to assist individual landowners with treating or replacing private, domestic wells that have become contaminated.

New London is cooperating with neighboring communities and the Upper Valley Lake Sunapee Regional Planning Commission in protecting aquifers overlapping town boundaries.

New London is vigilant in protecting its groundwater resources from large groundwater withdrawals by coordinating and communicating with the New Hampshire Department of Environmental Services who has authority for such applications.

Alternative Energy Sources and Energy Conservation

The community is making great strides in minimizing and conserving energy usage over the past decade and a half. New developments and all town residents are encouraged to minimize the "Carbon Footprint" and reduce energy consumption.

Alternative energy sources and technologies are being developed and used in New London much more in the past fifteen years with the increasing cost of petroleum. Several landowners now have windmills generating electricity for their domestic needs and selling energy back to the electric grid. Solar energy is used in many homes to heat hot water.

The town is evaluating its fleet of vehicles and, where feasible, it is now using alternative fuel sources.

The town is completing energy audits on all of the town buildings and is making improvements to improve the energy efficiency of those buildings where needed.

The community supports "Green Building Practices".

Land Use

1. New London today is a vibrant village center with small-scale developments that include a mix of uses developed consistent with traditional New England architecture and character. New London is a "livable, walkable community" with all the added and improved pedestrian facilities and bike lanes. Many new housing units have been added to the village over the past 15 years either as infill projects, redevelopment projects or new projects on the fringe of the village as it existed 15 years ago. A mix of housing types, sizes and values have been added to meet the needs of all segments of the population including seniors, young families and singles. With all of these changes, New London has been able to preserve the village character that has always been so important to the community.

2. Elkins Village is essentially maintained as it was fifteen years ago by encouraging and supporting small-scale commercial retail and mixed uses that do not detract from the traditional social and physical character of the existing village and do not pose threats to the underlying aquifer. Safety improvements are being made in Elkins Village for both pedestrians and vehicles. Elkins Beach is improved and a new self-guided Historic Trail, highlighting the Village's industrial history, is developed.

3. Over the years, several of the properties along Newport Road have been redeveloped with small size and small-scale buildings consistent with traditional New England architecture.

These changes are improving the appearance of the buildings and properties and the area now mirrors the character of the Main Street commercial area.

In conjunction with the Stormwater Management Ordinance requirement for stormwater management plans for individual lot development for single or two-family residential homes, the Planning Board included a requirement for submitting a building envelope showing that the area to be developed does not include any protected resources such as wetlands, steep slopes, 100 year floodplains, etc.

The impervious surface lot coverage standards adopted by town maintain a low density of development along the lakeshores, preserving and improving water quality.

The town continues to monitor its need for commercially zoned land working closely with the New London-Lake Sunapee Region Chamber of Commerce and local businesses.

Proximity to I-89 continues to provide convenient connection to areas outside New London. The completion of the I-93 widening project has been one of the factors that have generated growth in New London and the region by improving access to the larger populations in southern New Hampshire and Massachusetts. This growth in the traffic on I-89 continues to place pressure on developing the interstate interchanges for commercial retail and service uses. The community continues to have a policy to maintain the scenic gateways to the community and commercial retail and service uses have not been permitted to develop around New London's interchanges on I-89.

New developments using the Conservation Subdivision Design approach result in shorter streets that follow the topography across the terrain and result in curvilinear streets.

The new Site Plan Review Regulations adopted in 2007 included outdoor lighting standards. Implementation and enforcement of those new standards is helping New London to minimize impacts from outdoor lighting and to maintain "Dark Skies,"

New London continues to lead other towns in crafting creative land use ordinance solutions to growth issues. It diligently investigates and promotes innovative methods to manage growth, development and redevelopment consistent with the needs and desires of the townspeople, while protecting the environment.

an entirely new framework for state transportation planning programs, in that it articulates the need for a multimodal, intermodal and multi-goal approach.

Transportation is not only closely linked to land use, it is a land use. A large percentage of New London's land area is taken up by transportation infrastructure, primarily roads and parking lots. Transportation uses have increasingly replaced other land uses as the settlement pattern has become more and more dispersed, and the Town's residents have come to rely on automobile travel as their primary mode of transportation.

Like any other land use, transportation impacts the environment, both through development of infrastructure and through motor vehicle use. ISTE's more holistic approach to transportation planning permits protection of environmental and cultural resources to play a more important role in future infrastructure expansions. The presence of wetlands, rare flora, scenic views, historic buildings and interesting natural land forms all influence the planning process to a greater degree than in the past. Since most New Londoners cherish their high environmental quality, this integrated approach is a good idea.

New London has a vibrant and diversified core with a variety of commercial and residential uses. Most of the time, the village is buzzing with visitors, local shoppers and business people. There is usually a good mix of foot-traffic, cyclists and motor vehicles. The peripheral areas have largely followed the more recent national development trend of sharply segregated land uses, resulting in considerable travel distances between places that are essential to people's lives, such as home, work, shopping and school. A case can be made for returning to more traditional neighborhoods with a mix of diverse, but compatible, land uses. There are multiple benefits of such a development model, e.g. shorter travel distances and times, reduced number of trips, increased walking and bicycling, reduced infrastructure costs, improved environmental quality and greater social interaction within the community. Future zoning amendments in New London should, therefore, also be evaluated in terms of their transportation impacts.

Public Road System: Motorized Transportation

Transportation Infrastructure

Maintained and Unmaintained Roads

The public maintained road system in New London totals 81.29 miles. This number represents a moderate increase over the past decade. The Town is responsible for maintaining 54.9 miles of Town roads (67.5% of the total) and the State of New Hampshire is responsible for maintaining 26.4 miles of state and interstate roads in New London (32.5% of the total).

Putney Road is the only unmaintained Class VI town road in New London. The New London Board of Selectmen's policy is to not issue building permits along Class VI roads. This practice is prudent and should continue.

Road Conditions

The Town's roads are, overall, in good condition. In 1996, the Upper Valley Lake Sunapee Regional Planning Commission completed a Road Surface Management Survey (RSMS) of all the town-maintained roads and state highways, except interstates, in New London. Unfortunately the RSMS Data has not been updated since 1996 and since it is so outdated it is not presented here. However, the Director of the Public Works Department has indicated that over the past thirteen years the Town has been aggressively grinding and repaving paved roads