

TOWN OF SANDWICH
2005 MASTER PLAN UPDATE

All of us who have worked on this master plan update are well aware that a master plan is never "finished". It needs to be a document that honors the ever changing needs of the community. We recognize that "the past is a guidepost but not a hitching post". In that spirit all those who have worked on this project have put forward their best effort to capture some of the town's needs as they are currently perceived. State laws give us a great deal of latitude in this process. Only a Vision and Land Use section are required to be addressed. We have continually reviewed the town's original 1981 master plan and have updated it where we felt we could. In addition to Vision and Land Use we have provided new input for Recreation and Economic Base. State Law further suggests that the Master Plan be revisited every 5 years. The Planning Board feels that this revision process needs to be addressed as circumstances dictate which may be more often than every 5 years. Each year we may need to update one or several sections. We don't feel that this 2005 update is a complete statement and we would encourage the community and new planning boards to continuously monitor Sandwich's changing needs.

Approved by the Planning Board February 3, 2005

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VISION STATEMENT

The Town's first Master Plan was adopted in 1981. Several updates have since been added, but most of the original plan still applies today. This suggests that the original document was thorough and well done. This statement represents a vision for the Town to convey its general feeling of what we want for the Town.

Most Sandwich residents appear to like the town the way it is. We want to control the rate of change within the Town so its character remains the same. The concept of what the town ought to be like in the future is similar to the way Sandwich is today. This conclusion has been supported by surveys, questionnaires, and weekend workshops sponsored by the Planning Board over the years, in which townspeople have expressed satisfaction with the existing qualities of the Town. Citizens expressed a reluctance to see change that might compromise the aspects of town life that they value. The challenge for the Planning Board will be to control change which may be inevitable, so as to minimize negative impact to the town.

Sandwich remains a dominantly rural small town. The pace of life is perceived to be slower than it is in other towns. It is not unusual to find no cars moving on Main Street on a Saturday evening.

Sandwich is set back from major highways. Most citizens acknowledge that the absence of major highways has helped insulate the town from development pressure. Well maintained dirt roads, limited street lighting and the adoption of the Scenic Highways Act, show a motivation to keep these country roads an integral part of Sandwich.

Sandwich residents place a high value on the natural environment. The Town's many views of the mountains, lakes, streams, and fields can be enjoyed throughout the town. Many who appreciate mountain panoramas and a relatively uncluttered skyline enjoy open spaces like the fields at the top of Wentworth Hill. The natural environment is an essential part of the quality of life within the Town. Outdoor activities are central to many of the lives of Sandwich residents. Citizens and visitors have easy access to the mountains of the Sandwich Range, and the presence of the White Mountain National Forest provides many areas of activity as well. The presence of that Forest on the northern edge of Sandwich also limits development possibilities in that direction. Safeguarding Sandwich's lakes, rivers, streams and wetlands is vital in maintaining the preservation of our natural environment. There is pride in the clarity of Squam Lake's water and its quiet ambience. Residents agree that it would be preferable to avoid the development path as seen on Lake Winnepesaukee, where the shoreline is studded with houses and crowded with fast power boats in the summer. Cold clear surface waters are important to this area and appreciated.

Equally valuable to Sandwich residents is the historical component of our surroundings that has gradually accumulated over the last two and a half centuries. The Historic District Commission has tried to insure that the concentration of historic structures, such as old white clapboard houses or barns, are preserved in Center Sandwich, with the focus on the preservation of a collective ambience. The Historical Society, with its museum, publications, and periodic programs, is an active group and should remain so. Interest in the Historical Society's activities is widespread in the community, consistent with the appreciation of traditional things. There is solid support for the preservation of town artifacts and the cultural landscape of our community.

Central to the village and a major focal point of our community is the Sandwich Central School, which has provided elementary education since 1950. The school and building itself is vital to the civic health of Sandwich and serves as a magnet for socially and economically diverse gatherings. SCS is home to a vibrant Parent Teacher Organization, as well as a variety of other community activities, including many recreational opportunities through the Sandwich Parks and Recreation Department. As a member of the Inter-Lakes School District, comprised of the towns of Meredith, Centre Harbor and Sandwich, our middle- and high-school students attend the Inter-Lakes Junior-Senior High School in Meredith. Sandwich has a history of active involvement with the school board and leadership within that body. Due to fluctuating student enrollment within the district, Sandwich Central School has recently suffered a loss of educators. It should be noted that there are ongoing discussions and negotiations with the School Board over the future of SCS.

There has been a regular infusion of new residents, balanced with those whose families are historically tied to Sandwich. Sandwich is fortunate to have both an influx of fresh perspectives and the continuity of multi-generational families. Population growth has been moderate and steady during the last twenty-five years. Affordable housing is becoming an issue that some citizens are beginning to address to try to maintain the diversity within the community. Attempting to sustain Sandwich's diverse population is a positive step for the town.

The town of Sandwich encourages traditional land uses that maintain the existing character of the land. This attitude has been manifested in various ways. Most Sandwich residents support the current use program, making it more feasible for landowners to keep large tracts of land undeveloped. Large natural areas have been put into conservation easements, including property almost surrounding Red Hill Pond and its associated wetlands, recent large parcels in Sandwich Notch, and elsewhere.

The Town has been blessed with many benefactors. Sandwich has two types of trust funds. One type is from funds donated to the Town by individuals or organizations, usually with a specific purpose attached, which was of interest to the donor. Examples are the Quimby Fund, Samuel H. Wentworth Library Endowment, cemetery Perpetual Care trusts, the Doris Benz trust, and several others. The other type of fund is established by the Town for a specific purpose, and funded with tax dollars, being referred to as a capital reserve. Capital reserves are useful so the Town can save money over time for some future need. Some representative purposes of capital reserves are to pay for fire trucks, highway equipment, road repairs, etc. Currently the Town has 46 active trusts, including capital reserves. The Trustees of Trust Funds manage the trusts and utilize professional advisors for investment purposes.

Sandwich supports a strict zoning ordinance that limits unrestricted development, large-scale retail establishments, and major manufacturing facilities. However, home-based and low-impact economic commercial efforts are welcomed and should be fostered.

The town of Sandwich took a progressive tack in 1981, when a group of citizens created the first Master Plan. As stated earlier, that original plan is still viewed as a supporting basis for the town's ordinances and planning. One of the wonderful virtues of Sandwich is the involvement of its citizens within the community, governing bodies, and school system. This was true thirty years ago, and remains true today. We need to promote the continued diverse involvement within our community. Socially and economically varied participation in the community should continue to be encouraged *and* recognized.

LAND USE

SUMMARY

Only a small percentage (perhaps four percent) of all land within town borders has been developed to accommodate housing, businesses, community facilities, roads, and power lines. Agriculture also accounts for a small percentage of Sandwich's land area. The town is fortunate to have approximately 16,000 acres of public and semi-public parks and conservation preserves accounting for about 27 percent of its total land area. Remaining land is classified as undeveloped land in private ownership.

Sandwich enjoys numerous natural and man-made assets that together help define the image of the town. Natural features such as locations with significant views, wildlife habitats, surface water, and forests constitute a vital part of the town's landscape. Artifacts of the last 250 years of human occupation such as historic sites, active farmland, historic buildings, and dirt roads and trails complement the town's natural assets. Such special features should be respected and preserved as an important part of the town's heritage.

Land use patterns have shown minor and incremental changes since the 1981 Master Plan was produced. Major trends have been a steady addition of single-family residences widely distributed throughout the town and conversion of existing seasonal homes to year-round use. There are concerns regarding lack of affordable housing in the town. Affordable housing is necessary to sustain the town's eclectic demographic.

The timing and quality of future development should be guided by carefully formulated policies and a critical review of all proposed development. A large portion of the town's total land area is occupied by "critical resources": wetlands, steep slopes, floodplains and prime agricultural soils. Protection of the areas hosting these critical resources should be continued, and consideration should be given to expanding the areas subject to more active protection (such as conservation easements). However, indiscriminate use of conservation easements or equivalent measures to permanently remove large land areas from any possibility of human activity is not supported, unless careful consideration is given to the values to be conserved.

INTRODUCTION

Land use is closely linked with the perceived quality of life in Sandwich. Themes related to land use were prominent in the 15 community goals set forth by the Planning Board in 1980 during preparation of the first Master Plan, and also in the results of the 1997 community forum ("Sandwich 2002") and the 1999 Master Plan survey. Any factor that affects the quality of life in Sandwich can be expected to leave its imprint on the physical environment. Population growth, housing, commerce, industry, transportation corridors and community facilities must inevitably be integrated into the town's landscape.

This chapter is intended to provide data that can support planning that is consistent with community values. It is organized as follows. First, existing land use patterns are described. Second, some of Sandwich's "Special Features," resources of particular cultural or scenic interest, are noted. Third, land use changes and local subdivision activity in recent years are reviewed.

Fourth, projections are made regarding future land use patterns if current trends continue. Finally, variations in the capability of the land to support development are acknowledged.

Community Goals and Attitudes

In the 1980 Community Goal Statement, prepared by the Planning Board as a policy guide for future planning activities, the following overall land use goal was established:

Land Use –“Sandwich should promote a well-balanced land use pattern capable of meeting present and future community needs in an efficient, environmentally sound, economical, equitable and aesthetically pleasing manner.”

This statement was prepared on the basis of the results of a survey that gave residents the opportunity to express their feelings about various aspects of community life and to indicate their preferences for future land uses in Sandwich.

In their answers to the 1980 survey questions, Sandwich's year-round and seasonal residents placed a high value upon the scenic beauty, environmental quality and small-town atmosphere of Sandwich, and indicated they did not want these attributes altered by inappropriate development or rapid population increase.

With respect to future housing, only two types of housing, single-family units and retirement housing, were desired, while extreme opposition was expressed toward high rise units, mobile home parks, and condominiums.

Businesses thought suitable for Sandwich's future development included farms, home businesses, professional offices, retail businesses and restaurants. The respondents were evenly split in their attitudes toward light industry and rooming houses, while shopping centers, motels and heavy industry were strongly opposed. Route 25 and the village centers of Center Sandwich, North Sandwich and East Sandwich were most often listed as desirable locations for business activity.

Local land use regulations were strongly supported by both year-round and seasonal residents. A large majority of the respondents were in favor of zoning, subdivision regulations, wetlands regulations, septic field regulations, water pollution control, steep slopes regulations, current use laws, and the Town Master Plan.

Public opinion and public values with regard to Sandwich land use do not appear to have changed much since 1980. When residents attending the first evening session of the Sandwich 2002 forum were asked what they wanted Sandwich to be like in the future, they offered a number of opinions that might be considered related to land use. Among the many topics mentioned were maintenance of the town's rural character, an "intentional conservation plan," lake access, improved forest stewardship, and avoidance of condominium development. Many of the comments indicate a desire to minimize change. The changes that are supported tend to be marginal ones, and the overall implication is that the participants are well satisfied with the town as it is. Moreover, the comments are compatible with the sentiments expressed in 1980.

The Sandwich 2002 forum report contains many more opinions relevant to land use. In the group discussion dedicated to "Growth and Development," the group's vision for the future

emphasizes support for the existing land use and zoning policies to help things "stay as they are" (Sandwich 2002 forum report, p. 28). Tighter zoning is endorsed, condominiums are opposed, and cluster housing development receives qualified support. A list of five key issues includes land conservation and equitable tax regulations as the first item, with "protect and continue rural setting (MASTER PLAN)" as the third. The group considering "Tax Base, Tax Policy" was generally supportive of the current use program and open space programs, but felt that better management was needed. Finally, a working group considering land use incentives favored sustainable forestry.

In 2000 the Planning Board published the results of a survey completed to furnish information for the Master Plan update. Several questions have relevance to land use, and the responses to those questions are considered here. Thirty-eight percent of the respondents favored slight population growth, and forty-seven percent favored zero population growth, for a total of eighty-five percent who preferred little or no population growth. Respondents did not favor major malls or auto dealerships in the commercially zoned land along Route 25, but they favored professional offices, banks, and light industry.

Several questions were related to the advisability of establishing a new "Village District" zoning category to cover the village of Center Sandwich. Many of the structures in the village could not be built today without violating the setback or lot size requirements of the Rural Residential zone that applies there, and it was felt that a modified regulation set that acknowledged the existing density of lots and structures might result in more equitable administration of the zoning ordinance in the village. However, many respondents found the questions confusing, and the survey results were ambiguous. The question of whether townspeople would favor application of modified zoning rules in a Center Sandwich village district remains unresolved.

Existing Land Use

The present land use pattern reflects the town's historical development. Sandwich developed with a number of small villages, most of which have either disappeared or have been reduced to remnants, and with farms widely scattered over the countryside. In the town's early days each village contained a cluster of houses, at least one general store, a school, and frequently a grist mill. Some of them also had churches to serve religious needs and to act as community centers. The larger villages contained more shops and taverns. The decline in Sandwich's population resulted in the abandonment of farmhouses and the decline or elimination of villages. Today, only Center Sandwich and North Sandwich have the characteristics of active villages.

Over the years many of the old buildings have been renovated for year-round or seasonal occupancy and many new buildings have been constructed. However, the predominant pattern of land use continues to be rural and forested. Vast areas of the town (about 15,000 acres, which is about one-fourth of the land area) are preserved in virtual wilderness by the White Mountain National Forest. Additional land is subject to development restrictions as either publicly or privately owned conservation lands, and the granting of conservation easements has been an increasingly popular concept in recent years. Finally, steep slope and wetland areas, which together comprise a large portion of the land area, are protected from development by local ordinances.

Residential development in Sandwich is scattered across the town. Concentrations of housing are in the old villages of Center Sandwich and North Sandwich. New development continues to be widely distributed across the town.

The largest concentration of seasonal homes can be found on or near Squam Lake and its many coves. There are also seasonal homes on or near Bearcamp Pond, with others scattered around town in scenic locations.

Commercial businesses are concentrated in Center Sandwich. The remainder of the businesses are scattered throughout the community, and most of these could be termed home businesses.

There are only two industrial firms in Sandwich. Senter Forest Products operates a sawmill on Bearcamp Pond Road near Tamworth. Ambrose Brothers Construction Company, a sand and gravel operation, is located on Route 113 near the Tamworth border.

Sandwich's community facilities are largely concentrated in Center Sandwich, and include Sandwich Central School, Quimby Field, the Post Office, Town Hall, Central Fire Station, Wentworth Library, and the Benz Center. Community facilities also exist in North Sandwich (Town Garage, Post Office, Remick Park) and Whiteface (Fire Station and Potholes swimming area).

Table 1 shows how individual land parcels have been categorized in the Town's tax records. The table gives some sense of the amounts of land in various land uses. A few points should be kept in mind when reviewing the table. Although each land parcel is assigned to a single use category in the tax records, portions of many properties are actually dedicated to land uses other than the primary use to which the property is assigned. This is most clearly a factor in the housing category. A total of 1425 properties encompassing 28,124 acres are listed under "Housing", but it is clear that only a small fraction of that acreage is directly associated with residential use. A 200-acre lot on which an old farmhouse sits may be mostly covered with fields and forest, but the entire lot will nonetheless be listed in the tax records under one of the residential categories. In the 1981 Master Plan, a total of 745 acres was reported as belonging in the housing category, and that number was obtained by assuming that one acre should be allocated to each housing unit. Presumably, if we used the same assumption now, a total of 1425 acres would be reported under the housing land use (an increase of 72% since 1981).

If we subtract the 1425 acres directly attributed to residential use from the total of 28,124 acres listed under the housing category in Table 1, we are left with 26,699 acres whose actual use is undetermined. Presumably most of this land would be categorized as forest or agricultural land. In 1981, the sum of the areas listed for housing, agricultural land, and undeveloped land in private ownership (essentially, private forest) was 42,493 acres.

TABLE 1
2004 Sandwich Land Use

Category	Count	Acres
Housing		
1F-Residential	1,284	26,838
1F-Residential-Waterfront	138	1,252
2F-Residential	2	27
3F-Residential	1	7
Total Housing	1,425	28,124
Commercial and Industrial		
Commercial/Industrial	6	22
Total Commercial/Industrial	6	22
Public Property		
Exempt-Municipal	35	361
Exempt-State	45	1,702
Exempt-PILT*	5	16,946
Total Public Property	85	19,009
Agricultural		
Farm Land	5	94
Total Agricultural	5	94
Forest		
Managed Hardwood	25	3,209
Managed Other	8	311
Managed Pine	25	2,113
Unmanaged Hardwood	20	1,326
Unproductive	1	128
Unmanaged Other	29	1,275
Unmanaged Pine	24	925
Total Forest	132	9,287
Utilities		
Utility-Other	1	1
Utility-Electric	3	
Total Utilities	4	1
Totals	1,657	56,537

*PILT = "payments in lieu of taxes," mostly White Mountain National Forest.

From the table above, the sum of the housing, agricultural, and forest categories is 37,505 acres, a roughly similar figure. If the ratio of agricultural land to private forest is the same now as it was in

1981, then the town might currently contain approximately 1200 acres of agricultural land (active or idle) and 36,000 acres of private forest.

In a similar manner, commercial and industrial land use as shown in the tax records may somewhat understate the land area in town that should be considered as belonging in that category. Home businesses will of course be included under housing in the table above. However, operations at a larger scale than what is usually meant by "home business" will also be included in the residential category if a residence is located on the same property as the business. Despite that, the total acreage in commercial and industrial land use remains small. The 1981 Master Plan showed 86 acres in this category, as compared to the value of 22 acres reported in Table 1.

Two other land use categories that are not reflected in the table are of interest. The Town of Sandwich Annual Report for 2003 shows that a total of about 21,000 acres is enrolled in the current use program. The same source lists a total of about 2400 acres covered by conservation easements, but this figure includes only land in such easements that are claimed for tax purposes. At least several hundred additional acres are actually protected by conservation easements, but are not taxed as conservation land.

Active Agriculture

Farming was the main economic activity in Sandwich during the late 1700's and early 1800's when the population was largely composed of subsistence farmers and their families. As the population migrated to the cities and to more fertile lands in the midwest, many farms were abandoned, with fields and pastures growing up to bushes, saplings, and finally, renewed forest.

Today, there are only a handful of farms left in Sandwich, and few residents rely on farming to make a living. The significance of these farms should not be underestimated, however. In addition to producing crops, livestock and poultry which increase local self-reliance, the farms in Sandwich are an important part of the town's rural character. Much of the open space in town is farmland, and these open spaces are often the locations of scenic views.

The list of produce from Sandwich's farms currently includes hay, grain, maple syrup, honey, eggs, vegetables, organic produce, flowers, seedlings, cattle, swine, and horses. Comparison of current farming operations with farms listed in the 1981 Master Plan suggests that there are fewer farmers in Sandwich now. Subjectively, it appears that some of the town's field land is gradually being allowed to revert to forest.

Scenic Views

The varying topography of Sandwich affords town residents and visitors numerous scenic views that contribute to the town's unique character. Fine views are available from stretches of roadway throughout the town. The best of these might be considered for "pull-off" or picnic areas, while some could warrant the negotiation of scenic easements, development rights or outright purchase. In addition, tree-cutting practices should be encouraged that will ensure that Sandwich's residents and visitors can enjoy these views in the years ahead.

The visual quality of the subjects of these views should also be preserved. Development on the town's hilltops would significantly alter the town's rural character, and clear-cut logging operations on hillsides can turn beautiful scenes into marred landscapes overnight.

Forests

Sandwich's forests are a major asset, and maintenance of the land as forest is the dominant land use in the town. More than three-quarters of Sandwich's land area is forested.

Sandwich's abundant forests provide many functions and benefits. These include providing a permanent supply of wood products, holding soil in place (especially important on hillsides), providing natural wildlife habitats, offering areas for outdoor recreation, and providing natural beauty and scenic views.

Various factors suggest that there is an abiding need for policies that address land use issues relating to Sandwich's forests. The region's persistent growth encourages conversion of forest land to more intensive uses. Housing development on the fringes of large tracts of forested land increases both the risk of forest fire and the risk of damage to life and property when forest fires occur. Demand for wood products has produced high lumber prices, making timber harvesting attractive to woodlot owners. Increasing energy costs have resulted in sustained demand for fuelwood (either as cordwood or biomass), placing additional pressures on forests as an energy resource. Finally, ownership of forest land has become increasingly fragmented, complicating educational efforts directed toward forest management.

One government program that appears to have been quite effective in encouraging maintenance of forest land as forest land is the current use program. Under the program, forest land and other categories of open, undeveloped land that have been enrolled in the program are taxed at a significantly lower rate than would otherwise prevail. There are two categories of current use designation. Land classified under the "stewardship" category must meet certain statutory requirements, including a forest stewardship plan prepared by a licensed forester, and the implementation of sustainable management practices. Recent developments have resulted in somewhat more involved documentation requirements for all current use properties, with associated costs to the landowner. Although the town receives significantly lower tax revenue from current use properties than it would if the program did not exist, the effects of the program appear entirely in agreement with the stated preference of townspeople to maintain the town's rural atmosphere.

In judging the cost-effectiveness of the current use program, it is worth noting the results of studies that have been done in towns throughout New Hampshire. In the studies, costs to run a town were assigned to three categories of ownership, including residential, commercial and current use land. In all instances, the income generated through property tax from the current use land exceeded the cost burden attributable to that acreage in running the community. In the case of residential land, the costs associated with that category far exceeded the property tax generated. In the case of commercial land, in some instances it broke even and in other cases the cost exceeded the revenue or the revenue was slightly higher than the cost. Acreage in current use does not place demands for services upon the community.

A conclusion that can be drawn from these studies is that property taxes will increase whether landowners take advantage of the current use program or not, but that larger amounts of

land in current use will be associated with lower rates of tax increase, since placement of a land parcel in the program implies that its owner does not have near-term development intentions. When a change in use occurs, a penalty tax equal to 10% of the ad valorem value of the property based upon the new use is assessed. Many towns are taking all or a portion of this current use penalty tax and applying these funds to other land protection efforts in the community.

Projected Use of Forest Resources

Continuing population growth will place increased pressure on forest resources, largely by promoting gradual or wholesale subdivision of large forest tracts into smaller parcels for house lots. Fragmentation of private ownerships into small woodlots will remove more of the resource base from the commercial sawtimber market. To the extent that harvesting of wood continues on the forested portions of the resultant small lots, it will be dedicated largely to fuelwood production.

Proposals to place additional National Forest acreage located in Sandwich into a non-manageable "wilderness category" could have far-reaching ramifications. The National Forest comprises approximately 30 percent of the total forest land in the town.

Tree Farms

A total of 29 certified Tree Farms covering about 7000 acres were reported to have existed in Sandwich in 1980. Roughly a third of the owners listed in 1980 are no longer in the program. Forest lands that are designated as Tree Farms must be managed in a manner that will assure continuous production of commercial forest crops in accordance with forestry practices approved by the American Forest Institute.

Surface Water Bodies

Surface water bodies are important for a number of reasons including: (1) recreational opportunities, such as swimming, boating, fishing and winter open space for snowmobiling, skating and cross-country skiing; (2) the attraction of seasonal homes which, in turn, ease the tax burden for year-round residents; (3) wildlife habitats; (4) scenic views; (5) flood protection; and (6) water supplies.

It is therefore important from both an economic and environmental standpoint that the town protect these waters from pollution. Some of the existing and potential threats to water quality include: (1) inappropriate shoreline development where nutrients (predominantly phosphates) from subsurface sewage disposal systems migrate through the groundwater and into the surface waters, resulting in health hazards, increased water vegetation and eutrophication, (2) excessive boat activity; (3) introduction of exotic aquatic plant species; (4) erosion and sedimentation caused by construction activity and logging operations, and (5) acid precipitation, which raises the acidity of water in ponds and lakes, resulting in the release of toxic metals from surrounding soils into the water, which changes the lake chemistry so it is unable to support fish life. Sandwich's high-altitude lakes are especially vulnerable because their water and surrounding watershed soils contain few materials to neutralize acids.

Recognizing the importance of surface water quality, several local institutions carry out routine monitoring of water quality in Sandwich surface water bodies. The Squam Lakes

Association monitors Squam Lake for a variety of indicator parameters at monitoring points distributed across the lake, including some in Sandwich. Similar work is done by the UNH Lakes Lay Monitoring Program (LLMP) on Bearcamp Pond. The Green Mountain Conservation Group monitors selected water quality parameters at monitoring stations throughout the Saco River watershed, including one point on the Cold River in Sandwich.

Rivers and Brooks

Sandwich is endowed with numerous brooks and small rivers which are tributaries to several larger rivers and lakes in the area. Examples include the Beebe River, which empties into the Pemigewasset River; Smith and Eastman Brooks which run into Squam Lake; Red Hill River, which makes its way to Lake Winnepesaukee; and Whiteface River, Cold River, Meadow Brook and Atwood brook, whose waters travel into the Bearcamp River, which extends to Ossipee Lake.

From both a local and a regional perspective, it is extremely important that these rivers and streams be kept clean. In addition to their importance as a water supply, the rivers and brooks of Sandwich are vital to a variety of wildlife species and offer numerous recreational opportunities. Town residents, hunters, fishermen, environmentalists and even businessmen who want to capture the tourist's dollar all have a stake in the quality of Sandwich's waters. The water resources of Sandwich are an asset which should not be abused.

Land Use Changes

The 1981 Master Plan reported on land use trends between 1954 and 1970 that had been discerned based on an aerial photographic mapping project. The main land use change recognized by that study was a marginal gain in forested land at the expense of idle agricultural land. Essentially, field and pasture land that was not being used for agricultural purposes was not being kept clear, and was gradually reverting to forest.

In the years since 1970, land use patterns have remained relatively stable, and such changes as have taken place have been gradual. The most obvious change may be a steady increase in the number of single-family houses. In 1970, buildings were absent for long stretches of most roads through town, including both the major traveled routes like Route 113 and Route 109, and less-traveled "back" roads like Dale Road, Middle Road, and Wing Road. In the time since 1970, these open stretches have been gradually filled in with single-family residences on lots that tend to occupy at least a few acres. The building activity is not concentrated, but appears to occur throughout town wherever unoccupied road frontage remains.

Much of the new building has occurred on land that would previously have been classified as forested. Although much of the forested area survives on these parcels, it is clear that these properties are effectively withdrawn from the inventory of forest land available for commercial log harvesting operations.

Some land clearing has taken place in conjunction with residential development. Commonly, the purpose of the clearing has been to create views rather than to produce field land that would be actively farmed.

Land Subdivision

Table 2 shows lot-size statistics for selected larger subdivisions created since the 1960's. Note that the term "larger" is relative; the number of lots involved in Sandwich's largest subdivision (27 lots for Hannah Road) is modest compared to the large-scale residential developments that have been created in other parts of the state. Each of the subdivisions shown resulted in creation of nine or more house lots. The average lot size for the 150 lots is 5.9 acres, and the median size is 5.0 acres. Ninety percent of the lots produced by these subdivisions are between 2.0 acres and 13.9 acres.

Table 2 - Lot Size Statistics for Selected Residential Subdivisions

Subdivision	Subdivision Date	Number of Lots	Vacant Lots	Total Acreage	Average Lot Size	Median Lot Size
Hannah Road	1975	35	16	169.7	6.3	5.2
Sandwich Slopes	1974	23	11	60.1	2.6	2.5
Partridge Hill	1967	19	6	87.4	4.6	4.0
Miles Pond	1976	18	5	110.0	6.1	5.2
Metcalf Road	1967	13	0	39.6	3.0	3.4
Prescott Road	1993	12	7	110.7	9.2	8.9
Oak Ridge Road	1987	11	5	83.9	7.6	5.0
Heritage Woods	1989	9	4	58.2	6.5	4.3
Birch Tree Lane	1973	9	2	39.7	4.4	3.8
New Road Turn*	1974	9	4	128.8	14.3	6.4
Combined		150	60	888.2	5.9	5.0

NOTES: Selected residential subdivisions resulting in largest number of individual house-lot parcels per subdivision. Data compiled from tax maps and tax records. Statistics exclude common land and road parcels. Lots classified as "vacant" are not necessarily all buildable. Where tax records show that a lot has a building whose value appears too low to be a dwelling, the lot has been classified as vacant.

* "New Road Turn" refers to the intersection of Route 25 with Little Pond Road and Palmer Hill Road. The "new road" was Route 25, when this section was built in the early 1950's. The subdivision includes properties along the north side of Little Pond Road and Route 25 at the intersection.

The table shows that only a few of these relatively larger-scale residential subdivisions have been created since 1981, the date of the original Master Plan. Of the lots in the subdivisions shown in the table, 21% by number are the result of subdivisions that were created after 1981, representing 29% of the land area involved in the subdivisions.

It is possible that the lots that are easy to build on, from the standpoint of satisfying setback and other regulatory requirements, are growing scarce. Increasingly, building permit applications are being submitted that would require a variance from some portion of the requirements. As building activity continues, the town may run out of land that can be developed under current regulations. The Planning Board might consider making an inventory of the remaining undeveloped-but-developable land to predict how quickly the limits to growth of residential housing could be reached under current regulations.

Projections of Future Land Use

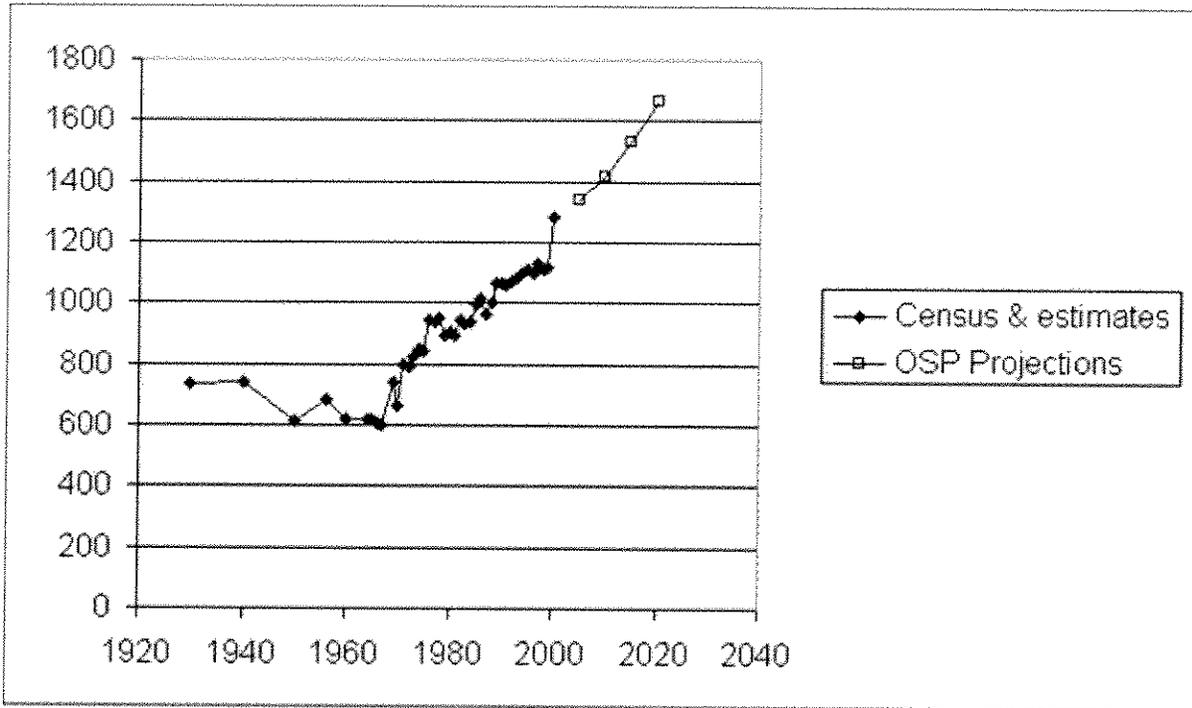
Population is an important determinant of land use. Figure 1 shows trends in Sandwich's population from 1930 through 2000, along with population projections at five-year intervals through 2020. After a number of years during which Sandwich's population was generally constant, a trend of steady population increase began around 1967. As of the 2000 census, the town's population had approximately doubled since the 1960's. Projections produced by the New Hampshire Office of State Planning indicate that this trend will persist in the future, and that Sandwich's population could reach 1667 people by the year 2020, a 30% increase over the 1286 people reported living in town during the 2000 census.

In 1981, 401 year-round residences were reported in Sandwich. The 1980 census counted 905 residents, so that the average size of a household at the time was 2.26 people. Assuming that the household size remains the same, this implies that the 381 people to be added to the town's population between 2000 and 2020 will need 169 housing units. Some of this housing demand may be satisfied by reoccupation of vacant dwellings, and by conversion of seasonal homes to year-round use. However, most of the demand will undoubtedly be satisfied with new building. The average building rate would be eight or nine houses per year if all the demand were met with new building, and this appears generally consistent with recent building-permit history.

Based on population trends, it seems clear that expansion of residential land use should be expected to continue in the future. Housing construction can be expected to occur along existing streets due to the high costs of road construction. Recent subdivisions have been scattered throughout the town. Development that will tend to minimize the cost of providing services, decrease the dependence on fossil fuels (automobiles), and protect our open spaces and forested land should be fostered. Certain models of affordable housing encourage community-centered living, shared land, and sustainable growth. An affordable housing development near one of the villages could provide residents easier access to facilities and will encourage the use of alternative transportation, at least within the community. By supporting the development of affordable housing units, the town will progress toward encouraging sustainable population growth and development.

Aside from continuing expansion of residential land use, we can expect the establishment of commercial land uses along Route 25, continuing an encroaching trend of commercial development that has become evident in Moultonboro to the west and Tamworth to the east. The increase of residential and commercial land use would be expected to come through the conversion of forest land, which, however, remains the dominant land use in the town.

Figure 1 - Sandwich Population Trends and Projections, 1930-2020



Year	Population	Year	Population	Year	Population
1930	731	1975	843	1990	1066
1940	742	1976	945	1991	1059
1950	615	1977	936	1992	1073
1956	681	1978	952	1993	1085
1960	620	1979	892	1994	1099
1964	620	1980	905	1995	1109
1965	618	1981	896	1996	1101
1966	606	1982	947	1997	1129
1967	601	1983	935	1998	1112
1969	743	1984	939	1999	1120
1970	666	1985	993	2000	1286
1971	796	1986	1016	2005	1339
1972	790	1987	966	2010	1419
1973	823	1988	1002	2015	1534
1974	848	1989	1068	2020	1667

Data through year 2000 are census results and Office of State Planning estimates. Population projections for 2005-2020 were made by OSP in October 1997.

LAND CAPABILITY

The planning process in rural areas is based on the premise that different sites have different abilities to accommodate development without negative environmental or aesthetic impacts. The variables that determine the suitability of a site for development include such things as soil characteristics, topography, and water resources. These natural factors, and the degree to which they could limit the suitability of land for development, have been taken into account during the initial writing of the Zoning Ordinance and related regulations, and during subsequent revisions of these documents. The specific natural factors in question, and their variation throughout the town, were considered in detail in the 1981 Master Plan. Interested readers are referred to that document.

ECONOMIC BASE

A complete review of the 1981 Master Plan and the Updates of 1990 and 1997 and the recent questionnaire reveal that the basic information is the same only the names, personnel, and locations of businesses have changed. As in the past, the private sector primarily includes construction, service sector, retail/crafts, and agriculture/forestry employment. The public sector (not specifically included in earlier surveys) includes school, town, and state employment.

The goals and attitudes also remain similar to those in evidence during earlier Master Planning efforts. Although residents believe that local employment opportunities remain limited, this is not a pressing concern for most working-age residents who are willing to trade the employment difficulties for the improved quality of life they perceive in Sandwich. Residents are in favor of selected types of economic activity in Sandwich; these include local business, light industry, home business, agriculture, and professional offices. Heavy industry and large retail establishments are not favored by residents.

One change is evident. High speed Internet access, presently available on a limited basis in Sandwich, is now viewed as a necessity of modern large and small businesses as well as a desired residential amenity.

Recommendations

1. The commercial Zone exists along route 25; no attempt has been made to develop in this zone. Special exceptions for several types of economic activity do exist in the Rural/residential zone. These exceptions are reviewed yearly by the Planning Board to determine if revisions are required; this process should continue.
2. Tourists and seasonal residents are important to the Town's economy. Sandwich should protect and promote its natural and environmental assets to ensure that they will continue to find Sandwich a desirable place to visit in the future.
3. The town should encourage agriculture and forestry which is conducted according to Best Management Practices. Both activities are desirable and historically significant forms of business in the community which should be encouraged. The land use section discusses these activities in further detail.
4. Home business should continue to be supported through such actions as the recently enacted Home Occupation Site Plan review process and periodic review of the allowed and special exception uses in the Zoning Ordinance.
5. Support for high speed communication is now important for modern economic activity. This communication is currently through the Internet, although this may change in the future. Current and future communication needs may require systems and physical installations not contemplated or authorized in the existing zoning ordinance; the Town should commit to rapid positive response when code changes are required to implement high speed communications systems.

Recreation

The Town of Sandwich is blessed with a varied and large amount of natural recreational opportunities. With approximately 100 square miles of largely undeveloped terrain, including lakes, forest and mountains, the Town is a cornucopia of outdoor activity. Most residents cherish this fact, and hold such recreational activity dear to heart. These facts are evident in the history of the settlement and livelihoods of Sandwich over the years, and to this day are still proving true as a strong draw to residents.

The consensus is that the recreational services provided by the Town of Sandwich are generally adequate. A Park and Recreation Advisory Commission was established in 1983 to oversee Town funded recreation activities, and to provide a focus for recreation planning and coordination. Sandwich has had a full time Recreation Director for many years offering a wide variety of programs.

The Town and immediate surroundings offer a large variety of natural public venues. These include: The White Mountain National Forest, The Sandwich Range, The Ossipee Range, Squam Lake, Beede Falls Natural Area, and Bearcamp Pond. There are also a number of private venues open to the public: Quimby Field, Sandwich Fairgrounds, Little Pond, Alice Bemis Thompson Wildlife Sanctuary, L.B. Chapman Wildlife Sanctuary, and a number of hiking trails crossing private property.

The Town of Sandwich has created and maintains a number of recreational sites, these include: the Town dock and beach on Squam Lake, The Potholes, Remick Park, the beach and boat launch at Bearcamp Pond, the skating rink at Town Hall (with a new pump house for flooding), tennis courts, baseball and soccer fields, and winter trails for cross country skiing. The Town also sponsors year round recreation programs.

In addition to the town's recreation programs other groups provide many activities. These include: Over The Hill Hikers Club, Sandwich Sidehillers Winter Trails Club, Ice Hockey League, Sandwich Notch Dog Sled Races, Five Days of Sandwich, Bearcamp Pond Association, Camp Hale, Sandwich 4H Club and the Bearcamp Valley Garden Club.

The abundance of outdoor opportunities allow for individuals to hunt, fish, canoe, kayak, swim, hike, walk, bike, cross-country ski, snowmobile and boat. Some well known private organizations have emerged to preserve and support the natural environs that allow these activities to flourish. Among them are the Squam Lakes Association, Lakes Region Conservation Trust, the NH Audubon Society and the Society For the Preservation of New Hampshire Forests.

In 1997, The UNH Cooperative Extension sponsored a "Sandwich 2002 Community Forum Report." In this report the community brought out a number of concerns. A large number of these have been resolved either publicly or privately, with the exception of a safe bike path. The Park and Recreation Advisory Commission will be conducting a 2005 survey to determine the communities current desires.

