

Town of Sudbury



**Report of the
LAND USE PRIORITIES COMMITTEE**

May, 2002



Town of Sudbury
Board of Selectmen

Land use and land acquisition are among the critical issues facing the Town of Sudbury in the next twenty years. The industrial growth in neighboring towns along Interstate 495, and the desirability of living outside those areas but in proximity to the job base, has placed extreme pressures on undeveloped parcels of land in Sudbury and has strained the municipal services offered to residents. On the approximately 3000 acres of undeveloped land remaining in Sudbury, an estimated 1000-2000 residential lots could be constructed at full build-out. Current build-out analyses project population growth in the 20-30% range. The town must be equipped to handle the environmental, aesthetic and economic impacts of this growth. Studies such as this report, exploring long term growth and solutions to growth, are a critical management tool for the Town.

However, studies alone are not enough. Residents are called upon to join in discussions on these issues, educate themselves on the facts, and bring creativity and energy to the process of deciding the Town's future. We need to be able to effectively deal with long term issues, without the reactive band-aid approach commonly applied to problem solving. Through education, consensus building and mutual respect for others, Sudbury will be capable of sustaining the essence of this community that attracted us here.

The Board of Selectmen wish to dedicate this report to the late Jane Coddington. Jane was a long time Sudbury resident committed to forward thinking planning and land protection. Jane worked with the Land Use Priorities Committee until her death in 1999, and contributed greatly to the early and complex discussions of the mission of the committee.

John Drobinski

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The following citizens have contributed to the work of the LUPC and the completion of this report.

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BACKGROUND

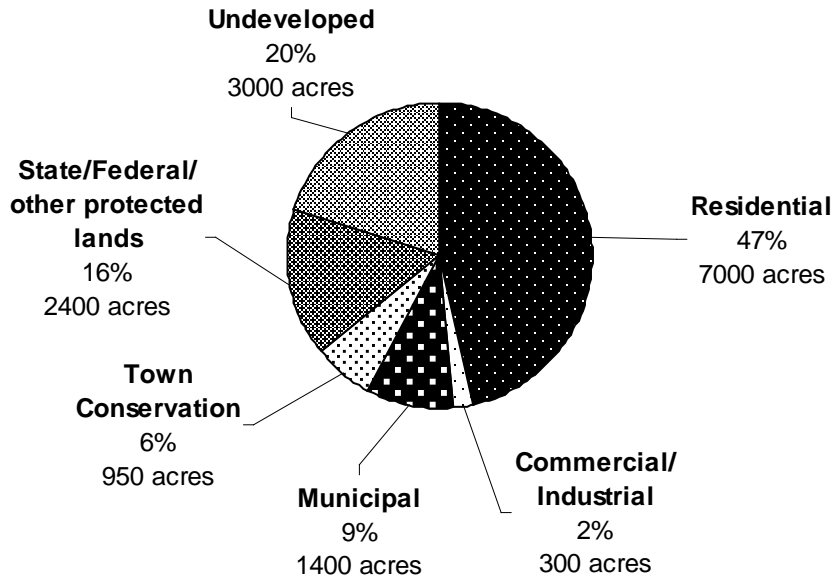
In 1998 the Board of Selectmen appointed the Land Use Priorities Committee (LUPC) to evaluate undeveloped land for the potential for preservation and a variety of other community uses. The goal of this effort was to help town officials and Town Meeting voters make informed, timely land use decisions, particularly as decisions needed to be made on the purchase of properties or exercise of the town's option on Chapter 61 lands. The impetus behind the inception of the LUPC had been the explosive residential housing growth in the late 1990's and consequent continued loss of remaining open land in town. A more comprehensive look at the need for additional municipal land, for a variety of municipal uses, was needed.

During the time period 1990-2000, Sudbury lost over 1,000 acres of open land to residential development (almost 7%). Over 640 new residential lots were created by subdivision approval during that decade. At the same time, less than 250 acres of land were permanently protected by outright purchase by the Town, with an additional 250 acres preserved in the new Assabet River Wildlife Refuge. In the 1999 book by author Curtis F. Garfield, Sudbury resident and historian, entitled "*Sudbury 1890-1989; 100 Years in the Life of a Town*", the author states that the amount of undeveloped land in Sudbury in 1980 totaled 6000 acres. By the year 2000, only 3000 acres remain.

Not only was vacant land being developed, but the demand for municipal services was growing with the increased population. School enrollment, recreation, government, cemetery land, water supply, road patterns – all of these are impacted by new growth in town. We need to be prepared for the future in order to adequately accommodate the existing and future residents of the town.

Sudbury's current land uses, by general categories, are shown below.

Primary Land Uses - 2000



Roughly 50% of the total land area of the town is developed into either residential or commercial/industrial. Approximately 30% is municipal, state, federal or other protected lands. The remaining 20% of the land is what is at stake, and its ultimate disposition will play an important part in the future of Sudbury.

The following chart compares the percentage of protected open space in Towns surrounding Sudbury. These numbers were obtained by MassGIS, and include conservation lands, recreation lands, town forests, parkways, agricultural lands protected under Agricultural Preservation Restrictions, aquifer and watershed protection lands, and cemeteries.

OPEN SPACE OF SURROUNDING TOWNS

<u>Town</u>	<u>Total Acreage</u>	<u>Acres of Open Space</u>	<u>Percent Open Space</u>
Marlboro	13,440	2,794	21%
Hopkinton	17,000	4,765	28%
SUDBURY	16,000	4,982	31%
Wayland	9,792	3,452	35%
Concord	16,000	6,222	39%
Lincoln	9,280	3,969	43%
Framingham	15,300	6,709	44%

Source: MassGIS, Commonwealth of Massachusetts, Executive Office of Environmental Affairs

The impacts of land preservation costs versus the cost to supply services to developed areas has been studied and documented by the American Farmland Trust. Cost of Community Services studies have been conducted in more than 70 communities nationwide since 1990 by the American Farmland Trust, and their collective findings demonstrate 2 key points: (1) It costs local governments more to provide services to homeowners than residential landowners pay in property taxes, and (2) open space generates less revenue than residential, commercial or industrial properties, but it requires little public infrastructure and few services. It can be assumed that the costs of development of 1000-2000 new homes will be greater than the tax revenue generated, and that additional capital expenses (possibly new schools) may be necessary. Although there is an initial cost to purchase land, its cost amortizes over time to zero, while the municipal expense to service a residential dwelling will never reach zero. Therefore, the development scenario becomes far more expensive than the preservation alternative, despite the high cost of land in Sudbury (currently estimated at over \$300,000 per buildable acre).

The Selectmen's appointment of the Land Use Priorities Committee followed Town Meeting votes to purchase two large conservation parcels (approximately \$10 million), and the appropriation of significant funds for school construction (\$43 million). It was thought, at that time, that a more detailed and objective process for evaluating all large capital expenditures, including land purchases, in context with one another and for their ability to fill multiple municipal needs, was necessary.

The committee was also charged with assessing long-term municipal property needs for a variety of reasons and uses. The LUPC charge is included in this report as Appendix A.

COMMUNITY PLANNING CONTEXT

Since the planning efforts of the Strategic Planning Committee (SPC) began in 1995, the town has taken a more pro-active role in deciding its future. Sudbury's historical and scenic resources were being threatened by development, and the town needed to take action. The SPC called attention to the myriad of issues facing the town as it grows towards full build-out, and numerous long-term projects have been initiated due to these efforts. A build-out analysis prepared by Mullin and Associates in 1997 (conservatively) estimated that an additional 1000 residential lots could be created in Sudbury over the next 10-15 years. A subsequent build-out analysis prepared by the Metropolitan Area Planning Council (MAPC) in 2001 projects an additional 2048 residential lots. Either scenario represents tremendous growth potential for Sudbury, with severe impacts on school population, water usage, traffic volume and open space. A summary of projected impacts at full build-out is included in Appendix B.

A Master Plan incorporating the work of the various SPC task forces has been written and adopted by the Planning Board following an extensive public participation process. The Master Plan provides a central resource for data, contains over 75 recommendations on managing land use and growth, and is the town's first comprehensive look at these issues since the 1960's. The Capital Planning and Improvement Committee has been formed to assess needs and costs of multi-year projects, and the Economic Development Committee has been formed to assist in diversifying the tax base and creating new revenue sources. Clearly, the town has begun to formulate a balanced approach to studying growth and its impacts, and hopes to be well prepared for the complex issues we face in the decades ahead.

COMMUNITY ROLES

The members of the Land Use Priorities Committee have learned, through their experiences with the Strategic Planning Committee and throughout the two years of discussion leading to the formulation of this report, that long term planning is as much a process as it is a solution. Education, consensus building, relationship building and thought provoking discussion are the methods of attaining respect and acceptance of ideas in Sudbury. Throughout the LUPC process, an inclusive atmosphere was encouraged during all committee meetings. Major landowners in town were notified of all committee meetings and encouraged to participate during discussion. A landowner representative was appointed to the committee in order to gain additional perspective. Representatives from most of the major town boards were appointed members of the committee in order to understand the specific municipal needs of the boards. Discussions with town boards focused on land currently in municipal use and future real property needs.

The involvement in the LUPC of landowners with substantial property holdings in Sudbury has established communication between the town and these landowners which did not previously exist. Many such landowners are committed to preservation of some or all of their land, and wish to discuss options with the town for attaining such goals. Some landowners are currently in discussion with the town about their properties. The LUPC has been an excellent forum for exploring, initiating and continuing discussion on the fate of the remaining parcels in town.

PROJECT METHODOLOGY

Phase I – Developing a Model for Future Use and Priority Setting

The LUPC studied two models in order to determine what its evaluation process would contain. The goal was to create an objective basis for evaluating lands in context with one another. The Town of Stow Open Space Committee had developed a detailed matrix of criteria to rate its critical parcels for open space acquisition. The Town of Hopkinton model was developed to help the Town make choices as parcels became available under Chapter 61, 61A and 61B, and its criteria included other uses than just preservation, including developability, capacity to support active recreational uses, elderly housing suitability, etc. Both of these models used a point system to rank parcels. The LUPC extensively used these models as the bases for a Sudbury model.

The committee first developed a listing of important criteria by which parcels should be evaluated in Sudbury, which included two basic groupings – Preservation criteria and Municipal criteria. In the Preservation category, criteria pertaining to groundwater resources, surface water resources,

agriculture/silviculture, natural resources (vegetation, wildlife, geological features), scenic views and impacts to town character, links and corridors to other open spaces, suitability for passive recreation and historic preservation attributes were identified. For example, questions such as “Would purchasing this property provide opportunities for public accessibility to a surface water body?” and “How is the property regarded, through direct testing or from testing on adjacent properties, as a potential water source?” were two of the questions in the preservation category.

In the Municipal category, criteria relating to the use of land for town offices and facilities, schools, recreation, affordable housing and transportation were developed. For example, questions such as “Can the soils on site accommodate a septic system to serve a specific municipal use?” and “Will purchase of the property for municipal uses be minimally objectionable to nearby residences or other sensitive neighbors” were two questions in the municipal category.

The list of criteria is contained in Appendix C. The LUPC believes that these basic criteria do not unjustifiably double count any one area, represent the major resource categories under discussion in Sudbury at this time, and are as objective as possible, being able to be backed up with facts and not opinions or perceptions.

A decision matrix software program (Criterion Decision Plus by InfoHarvest, see Appendix D) was used to develop the ranking system for tabulating responses of the committee. The program allowed the group to input any number of variables (criteria), assign weights to each according to the committee’s preference, and vary those weights according to priorities. This model was chosen due to its adaptability, so that if and when town priorities change, criteria and weights can be easily changed and the model will still be

functional. For example, if surface water resources become more critical than groundwater resources, the criterion under surface water can be assigned a larger percentile ranking. Or, if the town is looking for a parcel suitable only for development of groundwater resources, all other criteria can be assigned a “0” weight and only suitable parcels would be ranked. In addition to percentile ranking among the individual criteria, if a parcel is only being evaluated for Preservation, the Municipal categories can be assigned a zero value and will not be included in the ranking.

For purposes of presenting the model and testing parcels, the LUPC agreed to equally rank each criterion. Parcels listed on the Open Space and Recreation Plan were only ranked using the Preservation Criteria. Other parcels that might be appropriate for development into municipal uses were ranked using all the criteria.

Phase II - Identifying Parcels

After listing the criteria for evaluation, and finding a way to numerically rank the criteria, the committee discussed which parcels should be evaluated. Assessor’s records indicated that over 700 parcels totaling over 3000 acres were still vacant. Due to the numerous fragmented, small parcels of undeveloped land in Sudbury, the committee decided to limit which parcels would be evaluated. The decision was made that only undeveloped parcels currently enrolled under one of the Chapter 61 tax assessment categories with 10 acres or more would be evaluated, and a list of between 15-30 of those would be developed. With the decision matrix in place and able to be easily adapted to current priorities, the Town would be able to evaluate any parcel as needed in the future, and therefore the committee did not need to rank every single parcel. The committee looked at critical parcels, including those listed in the 1997-2002 Open Space and

Recreation Plan, and others identified by the LUPC as eminently developable or especially vulnerable to development with a corresponding loss of community character. The list of parcels evaluated by the committee is contained below. A complete listing of parcels currently in Chapter 61, 61A and 61B is contained in Appendix E.

PARCELS EVALUATED FOR PRESERVATION

<u>Assessor's Map,Parcel</u>	<u>Street</u>	<u>Owner</u>	<u>Acreage</u>	<u>Status</u>
H10,300 G11,200	Rice Road	Piper	67 acres	61A - Purchased for conservation use.
F07,500&600 G07,100&500	Goodnow Road	Prichett	67 acres	61, 61A - Under agreement for development with significant preservation. Town waived its rights under Chpt 61.
L05/06 H11,400 G11,500	Nobscot Road Water Row Newbridge Rd	Boy Scouts Libby Meade	311 acres 31 acres 74 acres	61B
E10,200 G10,500	Concord Road Plympton Road	Waite Hill	100 acres 24 acres	61A 61A
E06,500 M07,4&5 L07,1&26	Maynard Road Nobscot Road	Cutting Mahoney	38.5 acres 67 acres	61A 61A - In litigation with Town of Sudbury.
G11,300	Plympton Road	McLagan	12 acres	61A

PARCELS EVALUATED FOR PRESERVATION AND SUITABILITY FOR MUNICIPAL USES

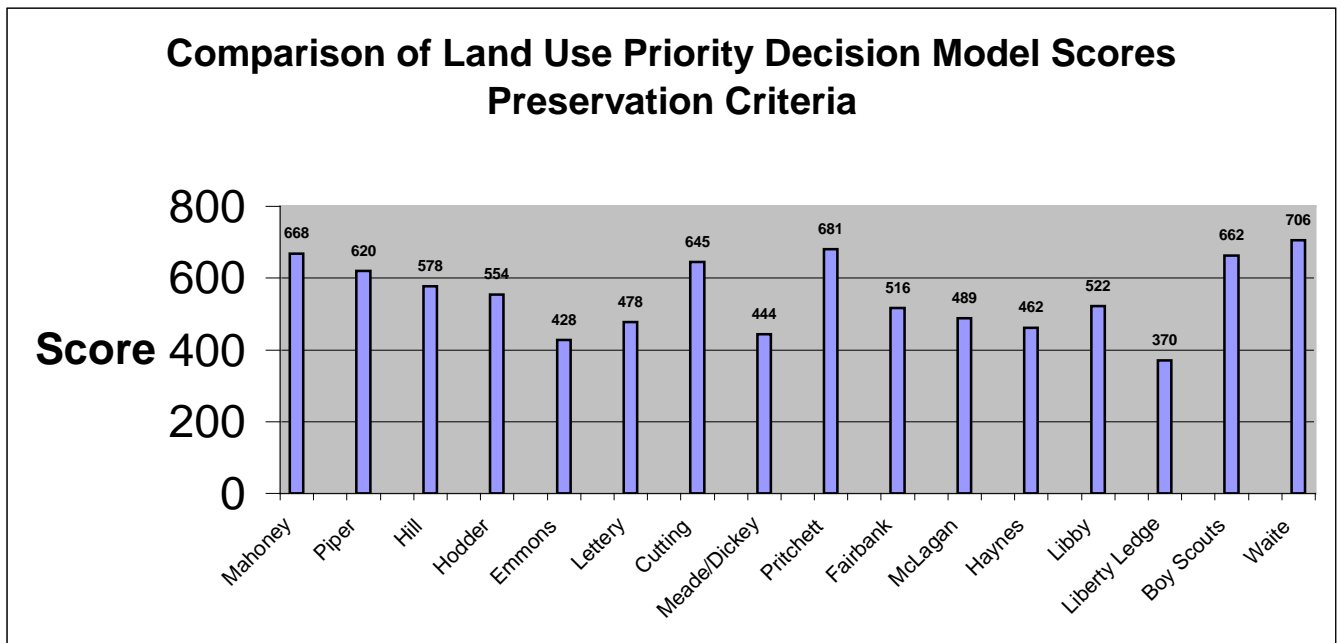
<u>Assessor's Map,Parcel</u>	<u>Street</u>	<u>Owner</u>	<u>Acreage</u>	<u>Status</u>
L10,600 G08,704	Landham Road Hudson Road	Lettery Hodder	28 acres 12 acres	61A 61A - 4 lot subdivision approved. Town waived Chp. 61 rights.
H10,200 F09,2&4 H09,16&18	Old Sudbury Rd Morse Road Concord Road	Fairbank Haynes Emmons	26 acres 35 acres 16 acres	61A 61A 61 - Sold with Conservation Restriction.
C08,115-164	Haynes Road	Liberty Ledge	50 acres	35 lot subdivision approved

Phase III – Field Work

During the fall and winter of 1999-2000, the LUPC conducted site visits on 5 properties, and evaluated 9 others from roadside and property boundary inspection. After viewing the properties, the committee met several times to assign rankings for each criteria category. Technical assistance was obtained from various town officials who had familiarity with the parcels or had sufficient information on the criteria to assign rankings (Health Director, Conservation Coordinator, DPW Director, Town Planner, Historical Commission, Council on Aging, Housing Authority, Park and Recreation Director) . The final rankings are consensus-based, i.e., meet with the approval of the entire committee. The criteria rankings of the 16 properties evaluated to date are contained in Appendix B.

Phase IV – Using the Decision Model

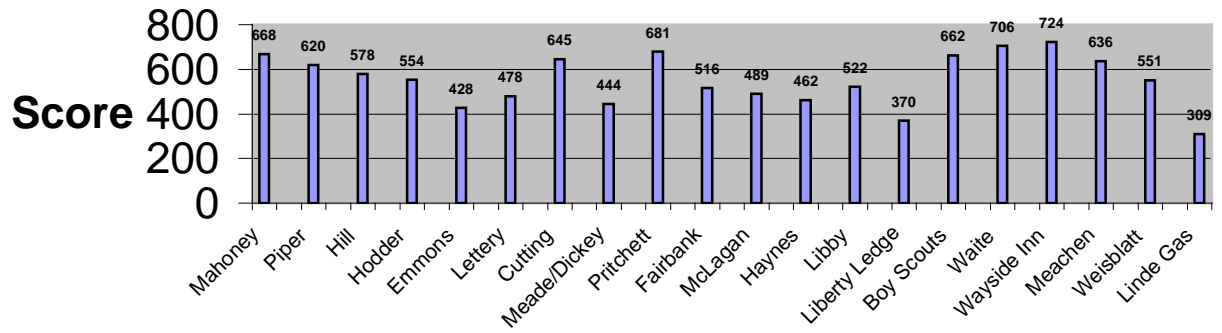
All rankings were then added to the decision model, and results were tabulated. The comparative rankings of the original sixteen (16) parcels evaluated by the LUPC are shown below.



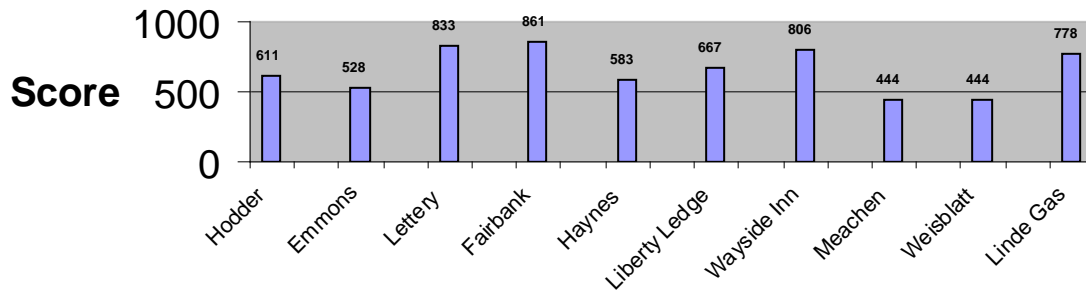
Benchmark, or test, parcels were also run by the Committee, in order to determine if the original ranking system was logical. Four benchmark parcels were chosen by the committee for their familiarity and high visibility. Two parcels highly regarded as prime parcels for preservation and recently purchased by the Town for conservation purposes were ranked and run in the model (Meachen and Weisblatt), along with the Wayside Inn property (highly desirable and visible preservation parcel) and the Linde Gas parcel (commercially zoned 21E site located on Route 20). Refinements to the model were made based on the relative rankings of these four parcels.

As seen from the graphs below, two sets of comparison are needed since evaluating preservation resources in the context of municipal needs may lead to an erroneous conclusion about their relative value. However, what the model points out is that parcels that rank high for preservation value may also have high value for development needs, especially if the parcel is farmland or other cleared, level property. Agriculture has defined Sudbury for centuries, and many of the remaining farms in town define, to a great extent, Sudbury's character. These parcels are highly developable and typically rank high on the preservation list. Again, the priorities or specific needs of the Town should be firmly established when ranking parcels using this model. The model can then show the possibility of multiple uses on a single parcel.

Comparison of Land Use Priority Decision Model Scores -- Preservation Criteria w/benchmarks



Comparison of Land Use Priority Decision Model Scores -- Municipal Uses w/benchmarks



Phase V – Continued Discussions

Several issues that the LUPC could not fit into the decision model were subjective issues such as toxic waste liability (21E), development threat, development potential, and price of land. These issues will be taken into consideration as the Town discusses parcels on a case-by-case basis. Following a set protocol procedure when faced with a decision to purchase a property, as recommended below, will foster these discussions.

FUTURE ACTIONS

1. Present findings and publicize work of LUPC.

This report represents the preliminary findings of the committee, and is the evaluation of 16 parcels for preservation purposes only. The Municipal Uses evaluation chart shown above is for illustration purposes only. That chart shows only that the parcels evaluated have development potential for any number of municipal uses, but does not indicate exactly what use would be suitable. The higher the ranking, the more uses the parcels could sustain. It is the committee's opinion, based on past actions of the Town, that a need should first be established, and then a parcel sought for that need. Since we had little data on property needs of the town departments, the committee will wait for the completion of the Town Facilities Master Plan before finalizing that segment of the committee charge.

2. Continue Discussions with Landowners.

All major landowners in Sudbury should be given a copy of this report. Communication with the landowners is critical so that they understand that the Town of Sudbury is interested in discussing the future disposition of their land and how it fits into the Town's long range plans.

If a landowner is going to sell a parcel that the Town has identified as critical, the town should attempt to negotiate with a willing landowner prior to the formulation of a purchase and sale agreement with a third party buyer. Charitable donations, conservation restrictions, bargain sales and other means of reducing financial liability to the Town while preserving the property should be explored, including outside fundraising and grants. Each parcel should be assessed for limited development potential, again to reduce costs. Expertise should be requested from local, state and national conservation organizations to provide the town with additional resources.

3. Solicit Gifts of Land and Conservation Restrictions from Residents and Landowners.

One of the most important and underutilized methods of preserving land is by soliciting donations of land and voluntary conservation restrictions. Another such method is to purchase the development rights of a parcel, which preserves a parcel's critical resources, but still allows ownership of the land by private individuals. The town must pursue this goal by soliciting the commitment and financial backing of residents, landowners and land trusts to buy and protect undeveloped land for the town's public purposes. Community input into implementation of these strategies is sought.

4. Implementation/Funding.

In order to implement these recommendations, the Town must explore funding sources for acquisition of priority parcels.

The primary funding source at this time is the Community Preservation Act (CPA), which was adopted by the Town of Sudbury in March 2002. The CPA is new legislation that helps Massachusetts communities plan for sustainable growth and raise funds to achieve their goals, and is known to many as the former Land Bank. The CPA creates a semi-permanent funding source dedicated to acquiring and protecting open space, preserving and restoring historic buildings and landscapes, increasing recreational opportunities and creating and maintaining affordable housing. All of these items are goals of Sudbury's Master Plan.

CPA funds are raised through a community-wide residential property tax surcharge of up to 3 percent, and state matching funds. State matching funds, up to 100% of the local monies collected, will be made available through the state Community Preservation Trust Fund. The matching funds are funded by a surcharge on Registry of Deeds fees, and are not dependent upon appropriation by the legislature. Sudbury anticipates generating approximately \$700,000 per year from the local surcharge, plus the state funds.

Projects can only be funded with CPA funds if they are recommended to Town Meeting by the Community Preservation Committee, and pass Town Meeting by a majority vote.

Opportunities for creating open space and/or recreational uses have been lost in Sudbury in the past several years due to limited funds to purchase property. Recent parcels that have been offered to the Town under Chapter 61 of the M.G.L., that could have been possible candidates for CPA funding for either open space or recreation include the Hodder property on Hudson Road, the Prichett property on Goodnow Road, and the Ashley property on Willis Road. Other CPA-eligible projects, such as preservation of the Raymond Road water tower and restoration of existing historic structures such as the Hosmer House and the Loring Parsonage, will continue to present themselves.

5. Develop a Process for Future Evaluation.

A protocol process for using this report must also be developed, so that future parcels can be evaluated in a similar, objective manner before making decisions to purchase land. The process must ensure broad representation and creativity. One or more of the following strategies should be used:

- All major boards and committees should be immediately notified of a potential land purchase or removal of property from Chapter 61, including the Land Use Priorities Committee and the Community Preservation Committee.
- The LUPC model should be run to evaluate the parcel (if it is not one of the parcels included in this report) and compare its relative ranking to other parcels. A broad base of knowledge is essential to rating parcels, and will include assistance from town staff. The software and evaluation criteria are currently installed on the Planning Board's drive, but can also be shared on the public server for intra-departmental usage.

- Results of the model, including criteria ratings, should be publicized.
- Particularities of parcels should be discussed (voluntary reduction in density, limited development potential, price, etc.) prior to rendering a final recommendation.
- The property rankings should be run every year to remove parcels that have been sold or preserved, and to add appropriate new parcels.

6. Seek Additional Funding Sources.

Costs for land purchases should be incorporated into the Town's Capital Budget on an annual basis.

Charitable donations, conservation restrictions, purchasing development rights and other means of reducing financial liability should be explored, including outside fundraising and grants, and the potential for limited development on the parcel.

7. Complete Report for Municipal Uses.

A final component of this report should evaluate town and private lands for identified municipal uses. This should be done once the Town Facilities Master Plan is completed.

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Mission Statement

The Town of Sudbury is concerned that as the Town continues to develop there will be less opportunity to obtain real property to meet long-term municipal needs and to preserve the character of Sudbury.

Therefore, the Board of Selectmen shall establish the Land Use Priorities Committee. The Land Use Priorities Committee shall evaluate all remaining land in Sudbury (including Chapter 61, 61A and 61B lands, open space, and undeveloped parcels) for use by the community.

The Committee in their evaluation shall determine the priority ranking of existing properties and determine which sites meet specific long range Town needs.

The following needs shall be considered:

- to preserve the character of Sudbury so defined by the SPC.
- to provide alternative housing
- to preserve and protect open space for conservation and recreation purposes, utilizing the Open Space Plan
- to provide for community activities
- to preserve for future town/school use
- to enhance municipal revenue
- to protect natural resources, including water resources

The Committee shall meet with Town Boards and Departments to determine their long-term real property project needs.

The goal of the Committee is to target critical parcels for appropriate action by the Town. The Committee shall be appointed by the Board of Selectmen and report its evaluation findings in writing to the Board.

The Committee shall be appointed for a one-year term and shall consist of the following:

A representative of:

- Conservation Commission
- Council on Aging
- Finance Committee
- Lincoln-Sudbury Regional District School Committee
- Park and Recreation Commission
- Planning Board
- Sudbury Chamber of Commerce
- Sudbury Housing Authority
- Sudbury School Committee
- Sudbury Water District
- four citizens-at-large.

And as ex-officios, a representative of:

- Board of Assessors
- Board of Health
- Department of Public Works
- Town Planner
- Conservation Commission

APPENDIX D

Summary of
Metropolitan Area Planning Council
2000 Build-Out Analysis
Sudbury, MA

	Existing	Additional At Full Build-Out	Total	% Increase
Residential Lots	5,400	2,048	7,448	+38%
Population	17,000	4,865	21,865	+29%
Residential Water Use	1.5 mill gal/ day 700 million gal/year	434,700 gal/ day 200 mill gal/year	1.9 mill gal/ day 900 mill gal/year	+29%
Student Population	3,950	1,310	5,260	+33%
Miles of Roads	150	44	194	+29%

APPENDIX D

Purpose of Decision Modeling

The purpose of decision modeling is to foster open dialogue and develop consensus from a group of stakeholders who are party to the ultimate decision. Frequently, the benefit of the modeling process is more the dialogue generated while making decisions than it is the ultimate decision itself. It is during the decision-making process that ideas are expressed and the relative importance of each input criterion is weighed against other criteria. Also during that process, the potential outcomes (alternatives) are evaluated using the input criteria, thus generating a ranking of alternatives with respective scores.

Decisions are made by defining the ultimate outcome (decision), by establishing a set of reasonable alternatives that might meet the desired outcome, and by establishing the defining criteria used to weigh alternatives. We use this process casually in virtually every decision we make throughout the course of everyday life. Simple decisions can be made without a lot of effort. However, considerable effort has to be spent in making difficult decisions that represent choices among several alternatives and that use several criteria to judge those choices. The need to build consensus among a diverse set of stakeholders, all who are interested in the outcome of the decision, increases the effort even further. Complex decisions can be aided through the use of a computer model, and this was the case for evaluating the merits of purchasing one property versus another.

A computer model helps decision making by exposing the thought process behind the decision and thus allowing stakeholders the chance to observe the importance of decision criteria. The greatest benefit to the use of decision models is the dialogue that is developed as a consensus is built. The ultimate decision will have been developed clearly and logically.

In the final analysis, the results have to make common sense. The computer model is only a tool to help in making this assessment. It is only beneficial if it can be used to foster dialogue that leads to a decision and the respect of the group for the development of the decision.

Method to Determine Land Use Priorities

APPENDIX D

The steps we used in the computer-aided decision process were as follows:

1. Define the desired goal.

Determine which properties are the most logical for Sudbury to purchase from a perspective of preservation only. Municipal uses were removed from this first phase of analysis due to a lack of understanding of specific municipal needs. The LUPC may rank Chapter 61 parcels for municipal uses after needs have been identified in the Town Facilities Master Plan. In the meantime, parcels for municipal use should be evaluated on a case-by-case basis, depending upon the needs of the town at the time the land is available for purchase.

2. Establish the possible alternatives.

List the parcels for evaluation.

3. Define the criteria by which the alternatives are judged (weighed).

- Groundwater Resources
- Surface Water Resources
- Agriculture Potential
- Natural Resources
- Passive Recreation
- Historic Preservation
- Scenic Views
- Links/Corridors

4. Assign relative importance (numerical values) to each criterion.

For the purposes of this analysis, each criteria was weighted equally.

APPENDIX D

5. Place a value for each criterion for each parcel (alternative).
Decide what the potential is for groundwater development on the site; what value of surface water on the site; and so on for each criterion and each parcel. Factual knowledge is essential to this task, as well as familiarity with the parcels.
6. Run the model.
The computer model then multiplies values of criteria with the assigned values for each criterion for each parcel. It then sums the products for each alternative (parcel) and compares one parcel with the other.
7. Results.
The highest alternative with the highest sum would, in theory, be the Number 1 preference for purchase. However, this is theory, and the results have to make sense.
8. Re-run the model.
The advantage of using a computer model is that a group can assess the sensitivity of the weighting of criteria and the values assigned to each parcel according to the criteria. If the group believes that there is too much emphasis (weight) assigned to a specific criterion, then a lower value could be assigned and the model re-run. The results can then be compared to the original run. In some cases, the change may not have much influence in the comparative results. In other cases, there may be considerable differences in results.

APPENDIX D

RESOURCE CRITERIA	MAHONEY 61A	LETTERY 61A	EMMONS 61 (forestry)	HODDER 61A	PIPER 61B (rec.)	HILL 61A	CUTTING 61A
	Open Space Plan				Open Space Plan	Open Space Plan	Open Space Plan
GROUNDWATER RESOURCES							
Is the property within a Zone II or Zone III? YES, NO, MAYBE	YES	NO	YES	YES	NO	NO	YES
Will purchasing this property eliminate an existing environmental hazard? YES, NO, MAYBE	NO	NO	NO	NO	NO	NO	NO
How is the property regarded, through direct testing or from testing on adjacent properties, as a potential water source? EXCELLENT, ABOVE AVERAGE, AVERAGE, BELOW AVERAGE, POOR	BELOW AVG	BELOW AVG	POOR	AVERAGE	not tested	not tested	AVERAGE
AGRICULTURE/SILVICULTURE							
How are the soils for agricultural uses? EXCELLENT, ABOVE AVERAGE, AVERAGE, BELOW AVERAGE, POOR	BELOW AVG	ABOVE AVG	BELOW AVG	BELOW AVG	BELOW AVG	AVERAGE	ABOVE AVG.

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MAXIMUM, HIGH, MODERATE, LOW,
MINIMUM

MOD LOW LOW MOD MAXIMUM HIGH LOW

How important are the geological
features?

CRITICAL, VERY IMPORTANT,
IMPORTANT, UNIMPORTANT, TRIVIAL

VERY IMPT IMPORTANT TRIVIAL VERY IMPT VERY IMPT VERY IMPORTANT IMPORTANT

**SUITABILITY FOR PASSIVE
RECREATION**

How important is this property in
terms of increasing the availability of
passive recreation needs?

MAXIMUM, HIGH, MODERATE, LOW,
MINIMUM

MAX LOW LOW MOD MAX MOD HIGH

HISTORIC PRESERVATION

Is the property listed as a national or
state historic site?

YES, NO, MAYBE

NO NO YES NO YES NO NO

How important are landmarks on this
site from a historic perspective?

CRITICAL, VERY IMPORTANT,
IMPORTANT, UNIMPORTANT, TRIVIAL

IMPORTANT TRIVIAL VERY IMPT IMPORTANT IMPORTANT VERY IMPORTANT VERY IMPT

SCENIC VIEWS

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How would you rate the scenic views of the property from outside the property?

EXCELLENT, ABOVE AVERAGE, AVERAGE, BELOW AVERAGE, POOR

EXCELLENT **BELOW AVG** **ABOVE AVG** **AVERAGE** **AVERAGE** **EXCELLENT** **ABOVE AVG**

How would you rate the scenic view from within the site?

EXCELLENT, ABOVE AVERAGE, AVERAGE, BELOW AVERAGE, POOR

EXCELLENT **AVERAGE** **ABOVE AVG** **AVERAGE** **EXCELLENT** **ABOVE AVG** **EXCELLENT**

LINKS/CORRIDORS

How important is this property as a connection to other protected lands?

CRITICAL, VERY IMPORTANT, IMPORTANT, UNIMPORTANT, TRIVIAL

CRITICAL **VERY IMPT** **IMPORTANT** **CRITICAL** **CRITICAL** **VERY IMPORTANT** **VERY IMPT**

How important is this property as a connection to existing trails?

CRITICAL, VERY IMPORTANT, IMPORTANT, UNIMPORTANT, TRIVIAL

CRITICAL **UNIMPORT** **UNIMPORT** **IMPORTANT** **CRITICAL** **IMPORTANT** **UNIMPT**

MUNICIPAL CRITERIA

MAHONEY

LETTERY

EMMONS

HODDER

PIPER

HILL

CUTTING

APPENDIX D

POSSIBLE MUNICIPAL NEEDS:

SCHOOLS

TOWN OFFICES AND FACILITIES (Police Station, Fire Station, Highway Garage)

RECREATION

AFFORDABLE HOUSING (Senior, Family)

TRANSPORTATION

Open Space

Open Space

Open Space

Open Space

Can the soils on the property accommodate a septic system to serve a specific municipal use?

YES, NO, MAYBE

MAYBE

MAYBE

YES

Is the property easily accessible? Is it on a main road? Does it have safe ingress and egress?

YES, NO, MAYBE

YES

YES

YES

What is the potential for development free from environmental constraints, such as wetlands?

HIGH, MODERATE, LOW

LOW

MODERATE

MODERATE

Is the topography of the property manageable for the specific municipal use?

YES, NO, MAYBE

YES

YES

YES

APPENDIX D

Is the size of the property adequate for the specified municipal use?

YES, NO, MAYBE

YES

MAYBE

MAYBE

Is the property located in proximity to other municipal services?

YES, NO, MAYBE

YES

YES

MAYBE

Will purchase of the property for municipal uses be minimally objectionable to nearby residences or other sensitive neighbors?

YES, NO, MAYBE

YES

NO

NO

APPENDIX D

RESOURCE CRITERIA

MACONE

CAVICCHIO WEAVER

LINDE GAS

RAYTHEON

SOUSA GAS

MERCU

BOARD OF HEALTH

**GROUNDWATER
RESOURCES**

Will purchasing this
property eliminate an
existing environmental
hazard?

YES, NO, MAYBE

AGRICULTURE/SILVICULTURE

How are the soils for
agricultural uses?

**EXCELLENT, ABOVE
AVERAGE, AVERAGE,
BELOW AVERAGE, POOR**

SUITABILITY FOR SCHOOL
OR OTHER MUNICIPAL
SERVICE OR HOUSING

How does this property
rate for suitability for
municipal uses?

**EXCELLENT, ABOVE
AVERAGE, AVERAGE,
BELOW AVERAGE, POOR**

RESOURCE CRITERIA

**TOWN PLANNER/TOWN
STAFF**

GROUNDWATER
RESOURCES

How is the property regarded, through direct testing or from testing on adjacent properties, as a potential water source?

EXCELLENT, ABOVE AVERAGE, AVERAGE, BELOW AVERAGE, POOR

Is the property is within a Zone II or Zone III?

YES, NO, MAYBE

TRANSPORTATION

How important is purchasing this property to improving or minimizing traffic problems?

**CRITICAL, VERY IMPORTANT,
IMPORTANT, UNIMPORTANT,
TRIVIAL**

SUITABILITY FOR SCHOOL
OR OTHER MUNICIPAL
SERVICE

How amenable is this site
for use as a disposal
area for effluent from a
wastewater treatment
facility?

**EXCELLENT, ABOVE
AVERAGE, AVERAGE,
BELOW AVERAGE, POOR**

RESOURCE CRITERIA

**CONSERVATION
COMMISSION**

SURFACE WATER
RESOURCES

Is the property within a
riparian zone?

YES, NO, MAYBE

Would purchasing this
property provide
opportunities for public
accessibility to a surface
water body?

YES, NO, MAYBE

NATURAL RESOURCES

How important is this
property as a wildlife
habitat?

**CRITICAL, VERY IMPORTANT,
IMPORTANT, UNIMPORTANT,
TRIVIAL**

What is the diversity of
vegetation?

**MAXIMUM, HIGH, MODERATE,
LOW, MINIMUM**

Are there important water
bodies, wetlands or
vernal pools on the
property?

YES, NO, MAYBE

RESOURCE CRITERIA

How important are the
geological features?

**CRITICAL, VERY IMPORTANT,
IMPORTANT, UNIMPORTANT,
TRIVIAL**

SUITABILITY FOR PASSIVE RECREATION

How important is this property in terms of increasing the availability of passive recreation needs?

MAXIMUM, HIGH, MODERATE, LOW, MINIMUM

**RESOURCE CRITERIA
HISTORICAL COMMISSION**

HISTORIC PRESERVATION

Is the property listed as a national or state historic site?

YES, NO, MAYBE

How important are landmarks on this site from a historic perspective?

CRITICAL, VERY IMPORTANT, IMPORTANT, UNIMPORTANT, TRIVIAL

RESOURCE CRITERIA

**LAND USE PRIORITIES
COMM.**

AGRICULTURE/SILVICULTURE

Is the site currently in agricultural production?

YES, NO, MAYBE

SCENIC VIEWS

How would you rate the scenic views of the property from outside the property?

EXCELLENT, ABOVE AVERAGE, AVERAGE, BELOW AVERAGE, POOR

How would you rate the scenic view from within the site?

EXCELLENT, ABOVE AVERAGE, AVERAGE, BELOW AVERAGE, POOR

LINKS/CORRIDORS

How important is this property as a connection to other protected lands?

CRITICAL, VERY IMPORTANT, IMPORTANT, UNIMPORTANT, TRIVIAL

How important is this property as a connection to existing trails?

CRITICAL, VERY IMPORTANT, IMPORTANT, UNIMPORTANT, TRIVIAL

RESOURCE CRITERIA

SUITABILITY FOR SCHOOL OR OTHER MUNICIPAL SERVICE

Is this property near
existing municipal
buildings?

YES, NO, MAYBE

How is the property rated
for being accessible by
existing roads?

**EXCELLENT, ABOVE
AVERAGE, AVERAGE,
BELOW AVERAGE, POOR**

How important is this
property in terms of
increasing the availability
of identified municipal
needs?

**MAXIMUM, HIGH, MODERATE,
LOW, MINIMUM**

ENHANCEMENT OF
MUNICIPAL REVENUE

How does this property
rate for potential to
generate revenue for the
Town if purchased by the
Town?

**EXCELLENT, ABOVE
AVERAGE, AVERAGE,
BELOW AVERAGE, POOR**

RESOURCE CRITERIA

What is the potential for
rezoning this property for
commercial purposes?

**EXCELLENT, ABOVE
AVERAGE, AVERAGE,
BELOW AVERAGE, POOR**

RESOURCE CRITERIA

PARK & REC. COMMISSION

SUITABILITY FOR PASSIVE RECREATION

How is this site rated in terms of unique features?

MAXIMUM, HIGH, MODERATE, LOW, MINIMUM

How important is this property in terms of increasing the availability of identified passive recreation needs?

MAXIMUM, HIGH, MODERATE, LOW, MINIMUM

SUITABILITY FOR ACTIVE RECREATION

How is this site rated for capacity for active recreational uses?

MAXIMUM, HIGH, MODERATE, LOW, MINIMUM

To what extent does the general area of this property already have active recreational areas that might be linked to new facilities on this property?

MAXIMUM, HIGH, MODERATE, LOW, MINIMUM

RESOURCE CRITERIA

How important is this property in terms of increasing the availability of identified passive recreation needs?

MAXIMUM, HIGH, MODERATE, LOW, MINIMUM

RESOURCE CRITERIA

COUNCIL ON AGING

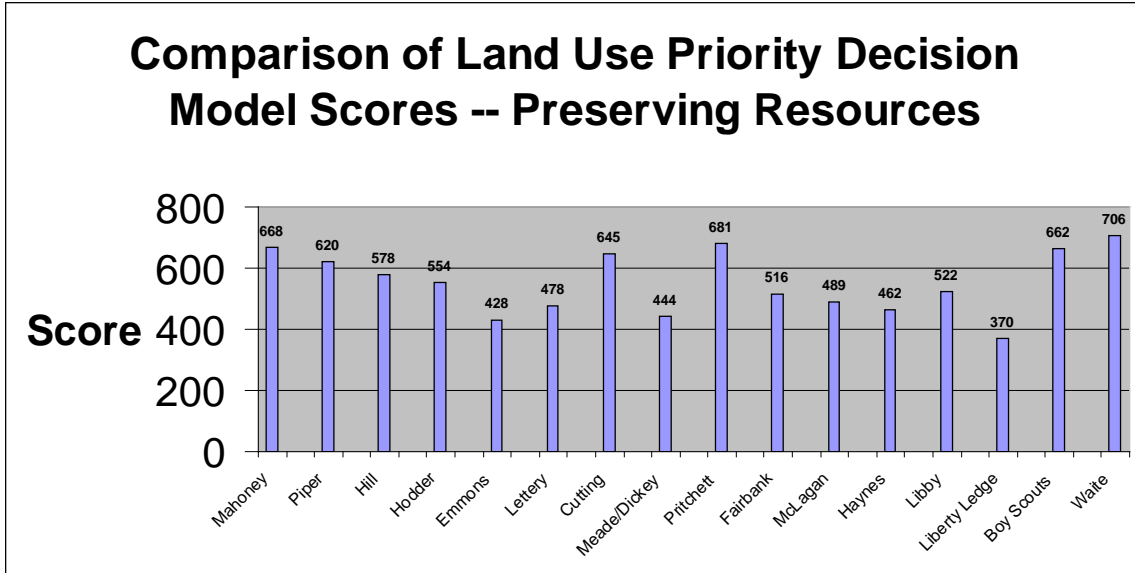
ELDERLY HOUSING

How accessible is this property to municipal services or other elderly housing developments?

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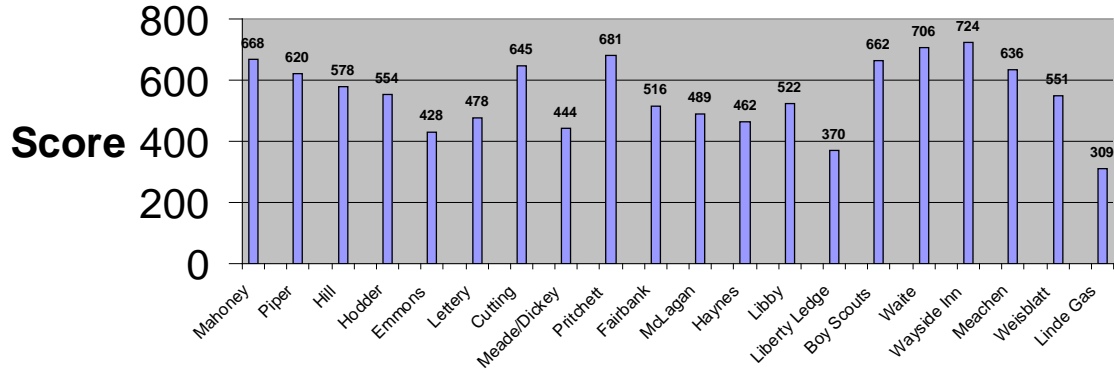
**EXCELLENT, ABOVE
AVERAGE, AVERAGE,
BELOW AVERAGE, POOR**

APPENDIX D



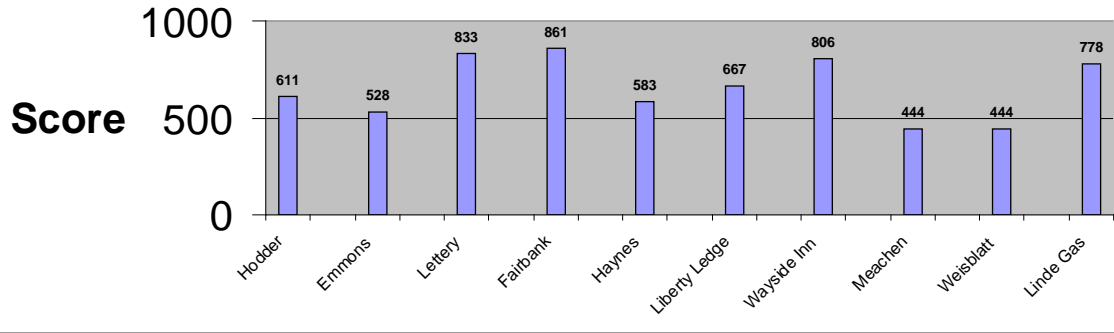
APPENDIX D

Comparison of Land Use Priority Decision Model Scores -- Preserving Resources



APPENDIX D

Comparison of Land Use Priority Decision Model Scores -- Municipal Uses w/benchmarks



APPENDIX D

