

COLUMBIA Connecticut

2006 Plan of Conservation & Development



**Town of Columbia
Plan of Conservation and Development 2006**

Table of Contents

<i>Item</i>	<i>Page</i>
Acknowledgements	1
Section 1 Introduction	2
Chapter 1: The Plan, Purpose, Process & Structure	2
Chapter 2: Executive Summary	6
Chapter 3: Town Overview—Past, Present & Future	10
Section 2 Conservation Issues	20
Chapter 4: Community Character	20
Chapter 5: Natural Resources	28
Chapter 6: Open Space	42
Section 3 Development Issues	58
Chapter 7: Community Structure	58
Chapter 8: Housing & Residential Issues	60
Chapter 9: Business & Economic Development	78
Chapter 10: Agriculture	84
Chapter 11: Community Facilities & Services	90
Chapter 12: Recreation	102
Section 4 Infrastructure	108
Chapter 13: Transportation	108
Chapter 14: Utilities	118
Section 5 The Future	126
Chapter 15: Future Land Use	126
Chapter 16: Plan Coordination & Implementation	130
List of Maps and Charts	133

Acknowledgements

The Planning and Zoning Commission wishes to thank the members of the Plan of Conservation and Development Committee for their time and effort in researching and preparing the Town of Columbia 2006 Plan of Conservation and Development. We also wish to thank the members of the Town Boards and Commissions, elected and appointed officials and residents who contributed their thoughts and comments.

Chapter 1 **The Plan, Purpose, Process & Structure**

Plan Purpose

State statute requires that each town prepares and adopts a Plan of Conservation and Development (POCD) every ten years. The Plan's goal is to provide a vision for the town's future, along with specific strategies for achieving that vision. While the plan tries to address and direct long term changes that will occur within the town over the coming years, it also offers guidance for shorter term decision making. Every town commission and employee will be guided to some extent by the goals and objectives included in the Plan as they make day-to- day decisions.

History of Planning in Columbia

Columbia has had a town vision ever since it was founded by its original Puritan settlers. However, that vision was rarely defined except in time of significant change or crisis. The best planning is done in advance of the change or crisis that presents a threat to the town's character. Columbia took the first step toward a clearly expressed plan for the future in its Plan of Development completed in 1965. However, it was more a statement of current conditions than a forward-looking vision. In 1988, the town demonstrated its commitment to planning by creating a half-time position of Town Planner. The town's next plan became effective in 1991, and has had a strong influence on land use regulation and patterns of development in Columbia over the past ten years.

With this Plan, the town will have a more up to date and detailed tool for guiding its future. Such continued revision and updating will allow the town to move in the direction favored by its residents with guidance from the most recent information sources.

The Plan Process

The preparation of this plan began in September 2000, when a Plan of Conservation and Development Committee (POCDC) was formed, which included representatives from the Board of Selectmen, all town commissions, and interested organizations. The work since then has been guided primarily by the Town Planner and the chairperson of the Planning & Zoning Commission. The POCDC decided that its work would seek to answer the questions: where are we now, where do we want to go in the future, and what specific steps must be taken to get us to that goal.

1 **CHAPTER**

Chapter 1
The Plan,
Purpose, Process
& Structure

Important issues were identified, and for each issue the POCD developed the following:

1. an inventory of the current situation
2. an assessment about the adequacy of the current situation or near future
3. a ten-year program for addressing any inadequacies found in Step 2

In the development of this new Plan, it was determined that the process should begin with a survey of citizens, regarding a number of community issues. In June 2001, the University of Connecticut Center for Survey Research and Analysis (CSRA) was hired to do a telephone survey. A total of 354 residents were contacted and provided their views on fifty pertinent questions. The results on individual questions are presented in the form of bar charts that appear in the margins of relevant chapters of the Plan. The results of the survey were presented to the town at a well-attended public meeting. Questions that were raised at that time or issues where greater detail was felt to be needed were addressed in a second survey completed by mail in 2002. The results of that survey were also presented for public comment at a meeting. The results of selected questions from this second survey are shown in the form of pie charts in the margin of Chapter 12. At that point, the POCD had a pretty clear idea of the public vision for the town.

In addition to seeking input from the general public, the POCD worked to collect data on the current state of affairs in the town. Relevant information was requested from various town, state, and federal agencies, and was discussed at length. It was evaluated in terms of the town vision, and where the current situation was found to be lacking, strategies were developed to achieve the future Columbia as envisioned by its residents.

The Plan is now prepared, but the most important step is yet to come, and that is the implementation of its recommendations. It will take the diligent efforts and committed support of the residents and officials of the town to see that the Plan is actually put into effect, and that the future Columbia takes shape as desired.

Plan Structure

Each chapter of this Plan is formatted to parallel the process by which the Plan was developed.

Overview: Definition of the topic and its importance to the town

Inventory: Statement of the current situation



Section I — Introduction

Chapter 1 The Plan, Purpose, Process & Structure

Assessment: Adequacy of existing elements and projection of future needs

Program: Goals or Strategies to reach those goals.

The Program Action Plan provides an agenda for the next ten years. The Action Plan is given in chart form with the strategies stated at left, followed by a listing of the agencies to be responsible for carrying out the strategy and a number signifying the time period within which the strategy is to be applied.

Code 1 : To be initiated within 1-3 years

Code 2 : To be initiated within 4-7 years

Code 3 : To be initiated within 8-10 years

An asterisk (*) preceding the strategy and bold print indicates that it is of the highest priority.

Abbreviation Key to Action Plan:

P&Z – Planning & Zoning Commission

BOS – Board of Selectman

IWC – Inland Wetlands Commission

CC – Conservation Commission

SAN – Sanitarian

AC -- Agriculture Committee

RC -- Recreation Commission

Sample:

Goal: Coordinate all town agencies in an effort to protect open space				
	P&Z	BOS	IWC	CC
* Establish a town Open Space Commission to coordinate open space acquisition and preservation	1	2	1	1

Chapter 2

Executive Summary

2

CHAPTER

Overall Plan Philosophy

- Guide growth in order to protect rural character and natural resources
- Encourage economic development and open space protection to help maintain balance between growing service needs and the mil rate
- Remain sensitive to citizen concerns regarding quality of life

Major Strategies

1. Community Character

- Encourage preservation of and public access to identified scenic areas
- Protect prehistoric and historic resources
- Enhance community spirit/pride through support of local organizations, events, and activities

2. Natural Resources

A. Soils

- Foster soil-based land use decision-making
- Protect soils from contamination
- Carefully regulate soil disturbances to protect natural values and minimize erosion/sedimentation problems

B. Water

- Give greater protection to priority waters & wetlands
- Institute storm water management practices that will minimize water pollution and sedimentation and maximize infiltration and ground water recharge
- Provide recreational access along surface waters

Chapter 2
Executive
Summary

C. Wildlife

- Protect and foster a rich diversity of plants and animals in Columbia
- Protect appropriate habitat areas for the entire range of local wildlife

D. Open Space

- Coordinate all town agencies in an effort to protect open space
- Ensure adequate funding for open space protection
- Ensure that subdivision regulations protect priority open space areas

3. Community Structure

- Reinforce the defining elements of Columbia’s community structure to maintain the prevailing pattern
- Reinforce secondary focal points near areas of denser residential development
- * Develop protected open space areas to connect and define the town’s focal areas
- Develop areas for business opportunities while avoiding strip type patterns

4. Housing and Residential Issues

- Provide a diversity of housing options appropriate to all segments of Columbia’s population.
- Encourage a pattern of development that preserves rural character and natural resources.

5. Business & Economic Development

- Provide for additional areas allowing commercial use
- Expand opportunities for Economic Development
- Foster infrastructure to promote use of business zoned lands
- Promote business while protecting town character



6. Agriculture

- Support agriculture as a beneficial land use in Columbia
- Support economic and regulatory practices that make agricultural operations a viable business in Columbia

7. Community Facilities & Services

- Improve Town Hall
- Enhance the Town Green area
- Develop a contingency plan for school expansions
- Review and modify the Senior Center to provide a full range of services to the town's aging population
- Monitor emergency response times and provide for the availability of response personnel
- Provide appropriate and adequate facilities for the town's public works activities
- Provide for additional library facilities to meet projected needs for the next 20 years

8. Recreation

- Plan for and provide active and passive recreational opportunities for Columbia residents of all age groups
- Create a Recreation Commission to plan and coordinate town-wide recreation
- Provide greater and safe recreational access to town water courses
- Create a town wide system of trails to serve a variety of different users.
- Promote development of privately owned recreational facilities that allow public use

9. Transportation

- Improve roadway circulation and safety through transportation planning and access management
- Provide alternatives to private passenger car transportation

Chapter 2
Executive
Summary

10. Utilities

- Develop and implement a sewer avoidance policy in Residential Agricultural Zones
- Pursue cost effective and environmentally friendly solid waste disposal policies
- Develop and implement a public water avoidance policy
- Protect the quality and quantity of groundwater supplies
- Promote modern communications systems while protecting community character
- Permit commercial wireless telecommunication sites while protecting neighborhoods and minimizing adverse effects

Chapter 3 Town Overview: Past, Present & Future Conditions

Location

Located in Tolland County in northeastern Connecticut, Columbia is a town of 21.4 square miles. It is bounded on the north by the town of Coventry, on the west by Andover and Hebron, on the east by Willimantic and Lebanon, and on the south by Lebanon. It is a part of the 9 town Windham Regional Planning Area. Columbia is located about 25 miles east of Hartford, the state capitol. The center of town lies at the crossroads of state Routes 87 and 66.

The Past

The area that is now Columbia was settled by Europeans starting in 1699 when the area was purchased from the descendants of the Mohegan chief, Uncas. The two purchasers, Captain William Clarke and Deacon Josiah Dewey, were sons of immigrant Puritans who had settled in the upper Connecticut River Valley. Dewey and Clarke were looking for new opportunities for their sons and relatives, and in 1700 brought a group of thirty families to join with settlers from the Norwich area in forming the new town of Lebanon. Most of the Dewey-Clarke group settled in what is now Columbia, and in 1716 petitioned the General Assembly to become a separate town. The Assembly denied them town status, but allowed them to form their own parish, which became known as the North Society or Lebanon Crank. It was not until the early years of the new nation, in 1804, that the residents of the North Society were granted their request to form their own town, which they named Columbia (the poetic name for the United States).

From the time of its founding until after World War II, Columbia maintained a fairly constant population, economy, and outlook. Its economic base was farming, supplemented by numerous small industries: water powered mills of many types (saw, grist, bone, cider, sorghum) and small craft businesses (blacksmithing, tanning, cabinetmaking, basket-making, and hat making). The population remained in the 600-800 range, the maximum that could be supported by the 50-100 acre farms that were typical. Most residents were the descendants of the original settlers and maintained their independent and thrifty Puritan ways.

In the second half of the 19th century, a number of changes occurred that added new diversity to the population and the economy of the town. Textile factories arose and demanded constant water supplies and large numbers of

3 CHAPTER

unskilled workers willing to work for low wages. On the Hop River, Irish and later eastern European immigrants came to work in the Hop River Warp Company factory. In 1865, Columbia Lake was created as a reservoir for the Willimantic Thread Company. The lake soon became a magnet for “summer people”, many of whom later came to stay in Columbia for good. The railroad also arrived, connecting the town to new markets, educational opportunities, and the larger world. In the early 20th century, Columbia became the home to many Jewish residents who had fled persecution in Europe. These new residents added their own world view to the town mix, but continued the town’s agricultural heritage. However, all changed after WWII with the introduction of highways that made commuting to a job away from home the norm.

The Present

Today Columbia is a bedroom community with only a handful of full time farmers left. In the past 50 years, the population has grown from 800 to 5000. Most residents live in single family homes on lots of 1-2 acres and have their own well and septic system. Density is much greater around Columbia Lake where historically seasonal homes were built on smaller lots. While the overall impression of the town is still rural, with vistas dominated by stonewalls, woodlands, and hay fields, the 47% growth rate of the last 20 years is tipping the scale from rural to suburban. Today, only 10% of Columbia’s residents work within the town. The rest commute out of town, to jobs in the Windham (20%) or Hartford region (68%).

While historically, the commercial center of the town was around the Green at the junction of Routes 87 and 66, today retail and manufacturing businesses are largely confined to a zone lying along Rt. 6 and the northern portion of Rt. 66. Numerous professional and craft businesses also exist as adjuncts to homes in the town’s residential zone.

The Green is now a designated Historic District, dominated by buildings from the 18th and 19th centuries. A few small businesses continue to operate in The Landmark, an historic inn. Interspersed with these older buildings are public town facilities: town hall, library, firehouse, post office, a combined elementary/middle school, senior center, and two churches. The town has no police force or facility, relying on a Resident State Trooper who maintains an office in the Town Hall. Columbia also has no high school, sending students on a tuition basis to several high schools in Windham and Lebanon.

Columbia’s People

The 2000 US Census found Columbia to have a population of 4,971 people. This is an increase of 461 people or 10.2 % since 1990. The changes in total population numbers and the percentage of growth between decades are summarized below. The figures for 2010 and 2020 are projections calculated by the state Office of Policy and



Management (OPM). The “region” referred to in the data below is the Windham Region which consists of: Ashford, Chaplin, Columbia, Coventry, Hampton, Lebanon, Mansfield, Scotland, and Windham.

Total Population

1940	1950	1960	1970	1980	1990	2000	2010	2020
853	1, 327	2,163	3, 129	3,386	4, 510	4, 971	5, 220	5, 700

Percentage Change in Population by Decade

1930-1940	1940-1950	1950-1960	1960-1970	1970-1980	1980-1990	1990-2000	2000-2010	2010-2020
31.0	55.6	63.0	44.7	8.2	33.2	10.2	5.0	9.2

1. Age Distribution

The age distribution among residents is also important in understanding the make up of the town’s population and implications for future needs. An increase in the 25 – 34 year age range would imply an increase in the under 5 population in the near future. A rising number of children under 5 would signal an immediate need to plan for future educational facilities. An increase in the senior population would signal a need for services for this age group, especially housing suited to the mobility and health limitations of seniors.

Age Distribution Within the Columbia Population in 2000

Age Range	0 - 4	5 - 14	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 +
Actual Residents	327	783	421	528	976	900	496	540
Percentage of Population	7	16	8	11	20	18	10	11

In the 1990-2000 decade, the number of children under age 5 in Columbia fell at a greater rate than the region as a whole, while the number of residents over 55 rose at a rate much greater than the regional average.

Population Under Age 5

Year	1990	2000	Percent Change
Columbia	370	327	-11.6
Region	4,631	4,289	-7.4
State	228,356	233,344	+2.2

Population Over 55 Years of Age

Year	1990	2000	Percent Change
Columbia	842	1,036	+23.0
Region	11,944	13,532	+13.3
State	741,182	778,796	+5.1

2. Projected Age Distribution 2000-2020¹

OPM projections for Columbia’s population through the year 2020 show the preschool group increasing only slightly(3%), while the senior numbers soar (92%). The school age population is expected to actually drop 5% while the adult group aged 20-54 grows at a rate of 4%.

¹ Population Projection accuracy: The 1995 OPM projections for the total population of Columbia were over by 1000 residents. The projections were double the actual increase. For those over 55, OPM underestimated the numbers by 17%. Clearly such projections must be taken as indicators of the direction of growth, but not as hard and fast figures for future planning.

Projected Age Distribution in 2020

Ages	Under Age 5	Ages 5 - 19	Ages 20 - 54	Ages 55+
No. of Residents	337	1,060	2,640	1,664
Percent of Residents	6	19	46	29

3. Educational Background

The 2000 census shows the residents of Columbia to be a highly educated group. Of all Columbia residents over the age of 25, 94% have finished high school or higher. This percentage is higher than any other town in the region, and exceeds the state average by 10%. Of all Columbia residents, 36% have received a Bachelor’s Degree or higher, a percentage higher than any town in the region except Mansfield, and 5% higher than the state average.

4. Employment

The employment data reflects the residents’ high educational level in that 44% of the town’s employed residents work in management or professional occupations.

Employment

	Total Employed Persons, Age 16+	Management, Professional	Service Occupations	Sales and Office	Farming, Fishing, Forestry	Construction, Maintenance	Production, Transportation
No. of Residents	2,685	1,171	331	645	12	283	243
Percent of Residents	100	44	12	24	<1	11	9

5. Income

The median household income of Columbia’s residents as well as their per capita income are not only the highest among regional towns, but also exceeds the average for the entire state. Columbia led in these areas in 1990, and increased its lead in the decade ending in 2000.

Median Household Income

	<i>1990 Median Household Income</i>	<i>1990 Per Capita Income</i>	<i>2000 Median Household Income</i>	<i>2000 Per Capita Income</i>
<i>Columbia</i>	\$53,744	\$20,762	\$70,208	\$29,446
<i>Region</i>		\$15,062		\$21,353
<i>State</i>	\$41,721	\$20,189	\$53,935	\$28,766

6. Poverty

In 1990, 0.1 % of Columbia residents lived below the Poverty Line, way below any other town in the region and 6% less than the state as a whole. In 2000, the percentage living in poverty in Columbia had risen to 4.2%. This figure was still below the state average, but was nearer the median for the region.

In 2000, 27 Columbia households were living in poverty, with 22 of those households receiving public assistance. The figures show that 6% of all children and 5% of seniors were living in poverty.

Current Land Use

1. Developed

Columbia contains approximately 14,113 acres. A 2002 Land Use Study found that 40 percent of that acreage is currently developed for residential use, providing 2003 housing units. Approximately 2 percent of the town is developed for commercial or manufacturing use, 3 percent of the town is used for roads, and nearly 1 percent for public and institutional use.



2. Undeveloped

Over half the town remains undeveloped. The largest blocks of undeveloped land are privately held under a reduced tax assessment program known as PA 490. 1727 acres or 12% of the town are held as PA 490 forest land, while 1240 acres (9%) are held as PA 490 farmland. The reduced assessment is aimed at allowing owners to keep this land in an undeveloped state, but does not keep the land from being subdivided should the owner so desire in the future.

Open Space comprises 8% of the town and is managed for conservation or recreational use. This Open Space is owned by the town, state, or land trust, or is privately held with a deed restriction. Dedicated Open Space (land permanently protected from development) makes up only 2% of the town.

Of the 6% of the town zoned for manufacturing or commercial use, only 166 acres, or 20% of these zones, remain undeveloped.

Development Potential

1. Residential

In 2002 a Residential Build Out Study was completed in order to facilitate long term planning of residential development. After deducting all land with natural limitations (wetland, steep slope, etc.) or with constraints due to existing use, the study determined the amount of buildable land left in the residential zone to be 4,008 acres or 28% of the town’s area. If the current zoning and subdivisions stay unchanged, ultimately 1650 new single family dwellings could be built in Columbia, giving the town a total population of 9300 residents. Higher density development such as allowed by the Retirement Housing condominiums provision recently enacted, would allow that total to be greater.

The time frame for total “build out” (development of all available land) was not a part of that study. However, recent trends may give some indication of the rate of development that may come.

Between 1990 and 2000, the total number of households in Columbia grew from 1, 794 to 1, 988 or an increase of 234 new households. Percentage-wise, the increase was 13%. There were 24 new subdivisions during the same period, adding 150 new housing lots to the town inventory. A total of 680 acres were subdivided. At the rate of the past decade, it would take about 100 years for the town to reach “build out” (see “Subdivisions 1990 - 2000” map in Chapter 8).



However, population growth rates vary considerably. For example, the town population grew 30% from 1980-1990, while only 10% 1990-2000. The OPM projects only a 5% growth rate for 2000-2010. However, Columbia building figures for the first two years of this decade already show a growth rate higher than that of 1990-2000. During that decade an average of 23 houses were built per year. The average in 2000-2002 was 28 houses per year, and the current year's rate will exceed even that. If each house built since 2000 holds the average 2.8 people, the town has already grown 4% since the 2000 census.

2. Commercial/Manufacturing

The potential for growth in this sector is very limited due to the small amount of suitable undeveloped land remaining in the area zoned for these uses. Much of the usable land in these zones is already taken up with residential or institutional uses or is in dedicated Open Space. Much of that which remains is rendered unbuildable by natural constraints – wetlands, floodplain, and steep slopes. In addition, there are environmental issues. The state has designated most of this area for conservation and preservation due to the sizeable stratified drift aquifer that underlies it. The town does not have to abide by the state's plan, but will certainly have to limit uses in the area to those that will not jeopardize this important water resource.

Fiscal Condition²

1. Expenditures

Columbia spends about \$10 million a year to provide services to its residents and property owners. Total expenditures have grown 89% from 1990 to 2001, a period when the town's population grew by a little over 10%. Columbia's expenditure growth rate of 28.8% from 1997-2001 leads the region and was nearly double the state average.

Education accounts for approximately 72% of the town's expenses. Between 1997 and 2001, the student enrollment rose 11.5% while education expenditures rose 29%. Nevertheless, the town's per-pupil expenditures (\$7,403 in 2001) remain in the lowest ranks of such expenditures statewide. Columbia is 161st out of 169 Connecticut towns.

The town's spending on other services such as fire, police, library, public works, and cost of government remain within the average for the region. This part of the budget has only grown 4.8% in the 1997-2001 period, very much in line with population growth.

Columbia's expenditures for debt services account for 10.8% of the budget. In 1999, debt service per capita was \$23. During the 1997-2001 period, the town's long term debt grew by \$500,000 (+5%) to a total of \$10, 430, 000.

² All figures given for the 1997-2001 are from the CT Policy & Economic Council.

However, during the same period, the annual debt service fell by \$52, 969 (-4.8%).

2. Revenue

Total revenues for 2001 were \$11,292,518. Of this amount, 68% was raised through property taxes while the rest came from intergovernmental revenues. The \$1 million in excess revenues raised in 2001 went to increase the general fund balance, which ended the year with a \$2 million balance.

During the period 1997-2001, the net Grand List grew \$2,332,723 or 9%. The mil rate during the same period rose 6.5 mils or 31.7%. Property tax revenues grew 45%, while revenues from governmental sources grew 5.5%. In 2001, the average tax levy per capita was \$1507, well below the state average of \$1606, giving the town a rank of 97th out of 169 towns.

3. Fiscal Summary

The town retains an A1 bond rating indicating a fiscal soundness typical of other towns its size in Connecticut. Nevertheless, its fiscal resources are becoming more strained as the cost of services demanded by population growth is outstripping growth of the grand list. The problem is compounded by proportionately less support from the state. The result will be a continued increase in the tax rate unless measures are instituted to control growth and expand the tax base.

The Future

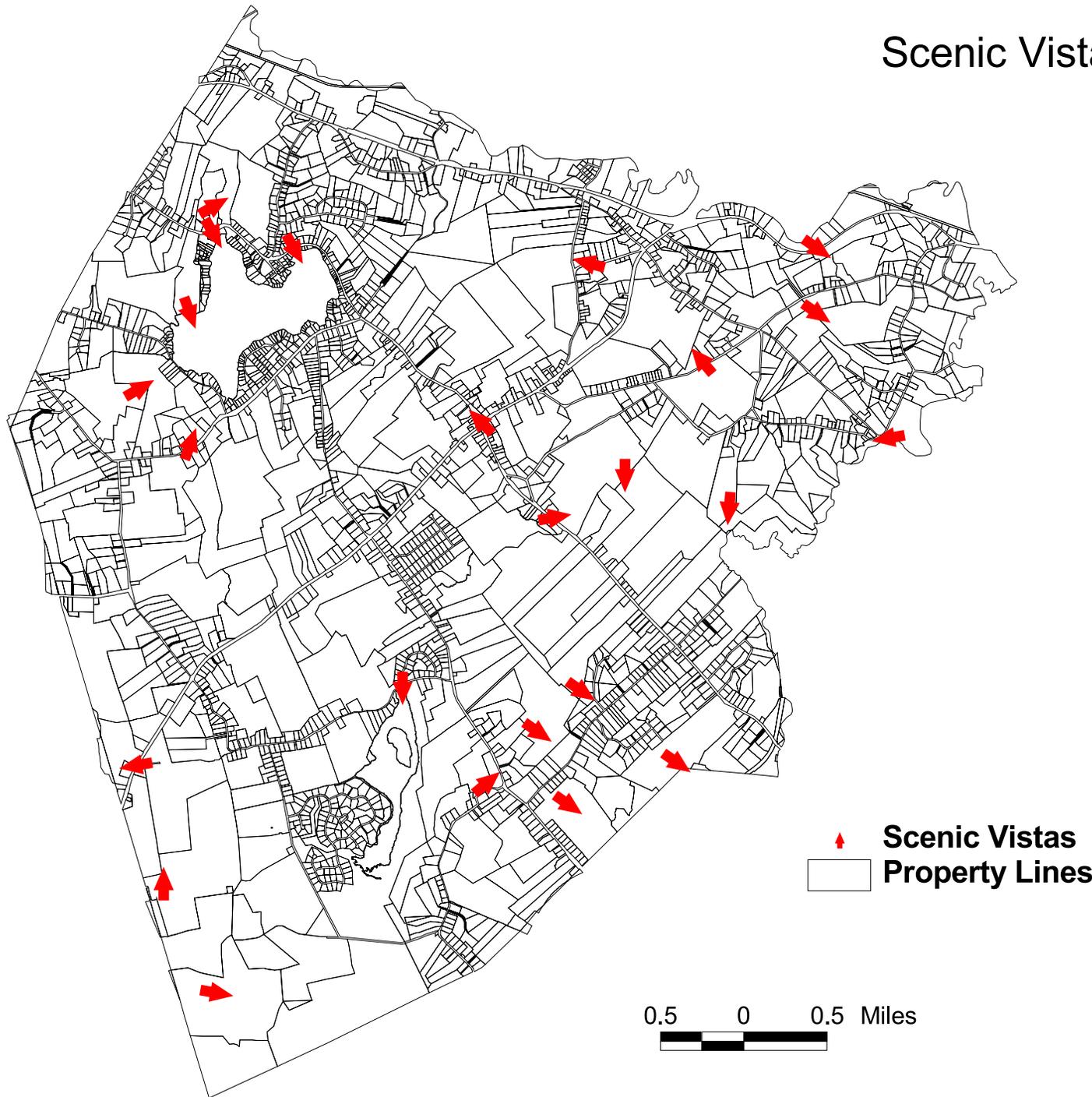
Columbia will continue to grow in population over the next decades, but the rate of that growth and the demographic make-up of that population is uncertain. Most likely new facilities for a growing school age and senior populations will need to be planned for. With a growing population density, there will also need to be greater protection for the town’s natural resources, as well as its historic rural character.

To balance the service requirements engendered by residential growth, it may be necessary to generate increased tax revenue through expanded commercial and manufacturing development. Location of such development will be difficult due to the uncertainty of the Rt. 6 corridor highway and the natural constraints of the remaining undeveloped land in Columbia.

Preservation of Open Space can also stabilize the tax rate while keeping the town’s character similar to that which attracted its residents in the first place.

Future trends and land use issues are addressed throughout the following chapters, and are summarized in the final chapter Future Land Use.

Scenic Vistas



↑ Scenic Vistas
□ Property Lines

0.5 0 0.5 Miles



Chapter 4 Community Character

4 CHAPTER

Overview

Columbia residents love the rural, small town feel of the community. That is one of the main reasons that brought them to and what keeps them in Columbia. They love the large forest blocks, farm fields, and the trees and stone walls along the narrow, winding roads. They enjoy the signs of the town’s past evident in historic houses, the town green, old cemeteries, and ruins of earlier mills. They enjoy the clean and abundant drinking water, the beauty of Columbia Lake, the scenic views from hilltops and along streams, and the abundant wildlife that shares the land with them. The shared appreciation of these aspects of Columbia foster community pride, and from that pride comes the willingness to take part in the many town organizations that rely on volunteers.

Ironically, the very qualities that draw people to Columbia may be threatened by the growth in population. Townspeople now feel concern that Columbia’s unique character could be lost if steps are not taken to guide future development and to protect that which makes Columbia a special place to live.

Inventory

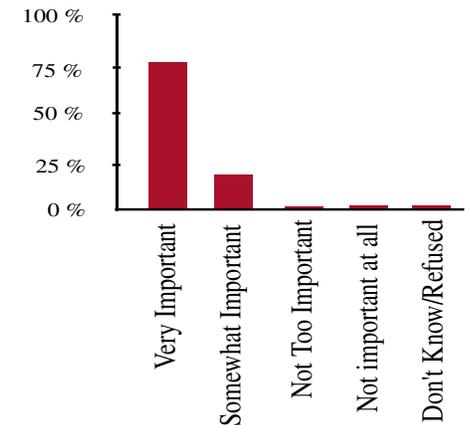
1. Important Scenic Resources

Scenic resources are those that emphasize natural beauties. Since “beauty is in the eye of the beholder”, the identification of scenic resources is necessarily subjective. However, the Columbia Conservation Commission has identified a number of scenic vistas, which probably include most of those most familiar to and beloved by Columbia residents. They are shown on the Scenic Vistas map on the opposite page.

2. Important Cultural Resources

Cultural resources are those that have significance due to prehistoric, historic, or current use by humankind. While prehistoric sites have been identified by the state, their locations are not published here in order to ensure their preservation. Historic sites include early homes, mills, and schools, as well as cemeteries. The Columbia Historical Society and Town Historian maintain archives that document these sites as well as other aspects of Columbia’s history. The Town Historian is currently working on a project to document all the houses in town that were constructed prior to 1860.

Generally speaking, how important is it to you to protect the town's character?



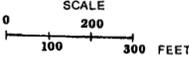
Columbia Center Historic District



- Contributing
- Noncontributing
- Ⓢ Photo Position
- - - District Boundary

Number of Resources within Property:

Contributing	Noncontributing	
<u>40</u>	<u>25</u>	buildings
<u>2</u>	<u> </u>	sites
<u>1</u>	<u> </u>	structures
<u>43</u>	<u>3</u>	objects
	<u>28</u>	Total



Historic Sites

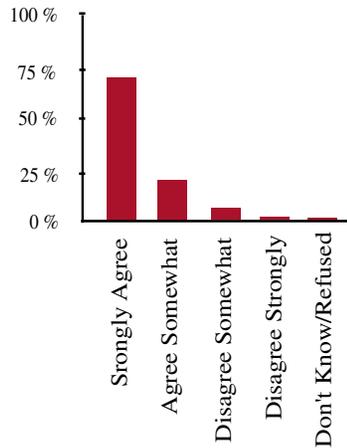


- Giffords Brook Mill
- Hop River Village
- Ten Mile Bridge & Mill
- Lake Brook Mill
- Utley Brook Mills
- West Street School
- Town Green & Historic District
- Old Burying Yard
- Ten Mile Mill
- Dam Brook Dam
- Mint Brook Mills
- Wells Woods School
- Wells Woods Foundations
- ▭ Historic District
- ▭ Property Lines

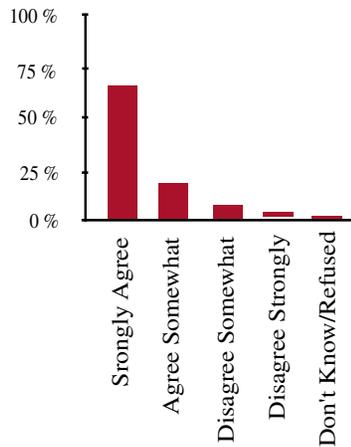


Chapter 4 Community Character

Having trees and stone walls along the roads of Columbia is important.



Having open fields in Columbia is important to me?



Two relevant maps are included on the preceding pages: Historic Sites and Village Historic District. The historic district in the town center has been registered with the State Historical Commission and Federal Register of Historic Places, but such registration places no restrictions on modification or demolition of these historic buildings.

Assessment

Both physical elements and community spirit are important aspects of defining community character. In town wide surveys, residents have always emphasized the importance of protecting the town’s rural character.

Program

- Protect and preserve the physical aspects of community character. Protect the things that make us feel “at home” in Columbia.
- Foster the elements that contribute to community spirit such as local events and organizations. Recognize the contribution of volunteers.

Scenic Resources

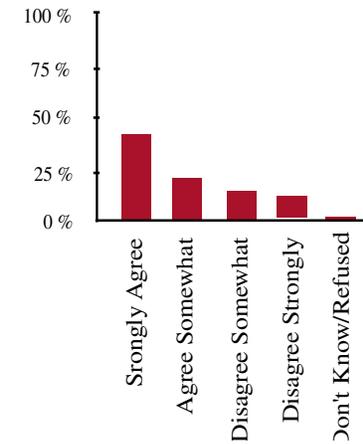
Goal: Encourage preservation of and public access to identified scenic areas				
* Pursue measures to protect scenic and historic character of Route 87	1	1		1
Create scenic road ordinance for town roads	2	2		
Preserve scenic Columbia ridge lines through subdivision review	1			
* Use conservation density development to preserve unique visual townfeatures	1			
Minimize development that reduces visibility of attractive agricultural features, including barns, silos, and other out buildings	1			
Preserve road side open fields / meadows	1			
Preserve road side trees of a diameter greater than 15 inches	1			

Section II — Conservation Issues

Chapter 4 Community Character

	P&Z	BOS	IWC	CC
Preserve stone walls	1			
* Utilize direct purchase, easements and rights-of-way to preserve scenic areas and their public access	1	1		
Require roadside tree planting in new developments	1			
Require more landscaped areas at town-owned and commercial sites along Routes 66/6	2	1		
Encourage consideration of scenic vistas and landscape qualities in all town planning and public works	1	1		
Consider an assessment deferral ordinance (CGS 12-65c-f) for the preservation of historic structures		2		
Coordinate with regional advocacy groups: Quinebaug-Shetucket Heritage Corridor, Willimantic River Alliance, Airline and Charter Oak Greenways	1	1		1

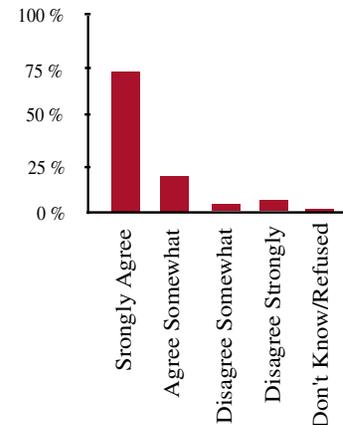
Having narrow country roads in Columbia is important to me.



Cultural Resources

Goal: Protect Prehistoric and Historic Resources				
	P&Z	BOS	IWC	CC
* Encourage adaptive reuse of historical /agricultural structures to aid in their preservation	1			
Promote awareness of state and federal programs which provide incentives and relief for the rehabilitation of historic buildings		1		2
* Enact a demolition delay ordinance to allow time for identification and preservation of historic structures	1	1		
* Ensure that the character of the town's historic district is preserved	1	1		
Enhance the resources of the Town Historian to makes records of the town's past readily available		1		
Keep our cemeteries as important historical records of those who preceded us	1	1		1
Work with the State Archaeologist to protect archaeological sites	1			1

Having large forest blocks and areas for wildlife is important to me.



**Chapter 4
Community
Character**

Community Spirit & Pride

Goal: Enhance community spirit/pride through support of local organizations, events, and activities

		P&Z	BOS	IWC	CC
*	Encourage greater coordination among community groups in projects that enhance community character		1		
	Use the Senior Center and Library to lead in scheduling cultural events		1		
	Encourage appropriate use of all town facilities to aid in the activities of community groups		1		
*	Activate a town recreation commission to plan for both active and passive recreation opportunities		1		
	Develop a town wide trail system for bicycles and pedestrians that link us to important scenic and historical sites and to regional trails	2	1		
	Encourage recreational spaces in areas that have large numbers of young children	1	1		



Chapter 5

Natural Resources

Overview

Columbia’s natural resources consist of the soil, water, and living plants and animals that are a vital part of our community. They should not be of concern only to nature lovers because they play a role far larger than many realize. They provide for our drinking water and for the safe disposal of wastes. They provide for adequate home sites and for construction materials such as sand and gravel. They provide places for recreation on both land and water. The health of our natural resources is very much connected to our own health and well-being and thus must be carefully protected.

Inventory

Soil Resources

The town’s soil resources are the result of thousands of years of interaction between the bedrock geology of the town and the climate. The most significant climatological factor has been the glacial activity, which has ground down bedrock, deposited glacial till, and formed the contours that determine where water will flow. Since the last ice age, plants, animals and water have contributed to the development of the soils we have today.

Awareness of the contours of Columbia is basic to an understanding of its soils. Columbia has high land in its southern and western ends which slope down to major rivers. Two of those rivers (the Yantic and Salmon) lie outside the town borders. The other two, the Ten Mile and the Hop River make up the town’s eastern and northern boundaries. During periods of glaciations, the higher elevations were scoured by tons of ice, which ground up bedrock. The resulting glacial till was plastered down in a nearly impenetrable layer in the uplands. These hardpan soils presented problems for farmers of the past and still do for the developers of today. In areas that were lower-lying, glacial outwash streams deposited finer glacial till (sand and gravel) in stratified layers, most notably along the Hop River. In some of the uplands, bedrock and large boulders remain exposed as soils fail to build up on the steep slopes. In natural depressions or where surface drainage has been impeded by man-made or beaver-made dams, wetland soils have developed. Over time many of these depressions have come to contain deep deposits of peat soils. In the flatter areas between slopes and wetlands are found the town’s best farm soils.

5

CHAPTER

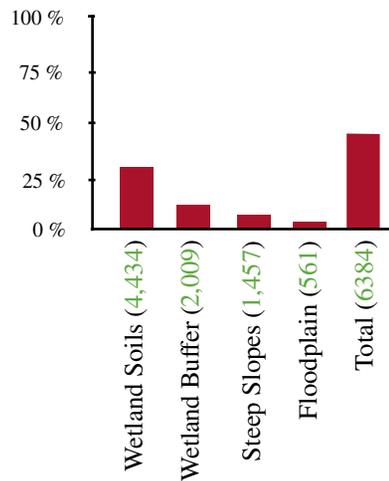


Chapter 5
Natural Resources

The town’s soil resources have greatly influenced Columbia’s pattern of development. In the past, farming was tried in most parts of town. Today, farming accounts for less than 15% of land use. The farms that persist today lie largely in areas of prime farm soils where such operations can still prove economical, mostly along Routes 66 and 87. In contrast, farm settlement in the Wells Woods area in the southeast part of town failed largely due to very limited soils resources. Farm development along the Hop and Ten Mile Rivers was limited by the droughty nature of excessively drained soils and the dangers of regular flooding. Instead industrial and transportation activities developed along these watercourses and have evolved today into the Route 6 corridor and the commercial uses that parallel the Hop River.

Columbia’s earliest settlers stuck to flatter areas that were high and dry. However, as population has increased, areas with severe or moderate soil limitations began to see housing appear. Today’s Planning and Zoning and Inland Wetland Commissions work to monitor and limit development in these less suitable areas. All land within 75 feet of wetlands or watercourses are regulated by the Inland Wetlands Commission (IWC), and buildings are usually excluded from these areas. Today’s building lots must include 30,000 square feet that are neither wet nor steep, and must provide a suitable site for a properly functioning septic system. The map and chart of Lands with Severe Limitations (opposite page) show the extent of lands not suitable for future development. However, it should not be thought these unbuildable areas are useless. Many of these areas are very important to wildlife and to maintenance of groundwater quality. With adequate knowledge of and attention to its soils, Columbia will continue to develop in a manner that will be both safe and productive for both its human and wildlife occupants.

Lands With Severe Limitations
(number of acres in parentheses)

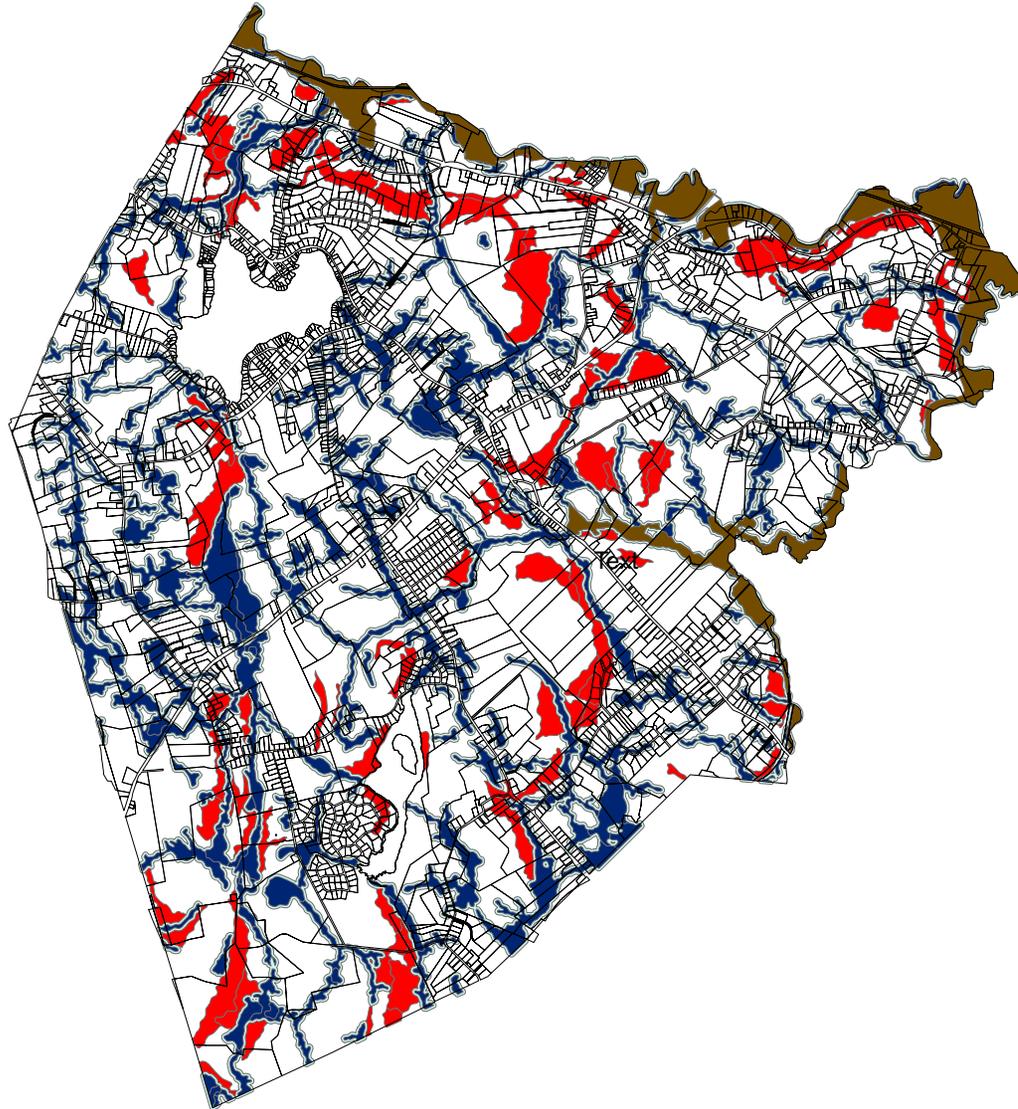


Water Resources

Columbia is in the unusual and enviable position of having nearly all its water originate within its own boundaries. The exceptions lie at the northern and eastern boundaries in the Hop and Ten Mile Rivers, which also drain Bolton, Andover, Coventry, and Lebanon. These rivers have the only water in town that is not rated as Class A (drinking water quality). The degradation of these waters comes from three solid waste disposal sites, which are no longer used.

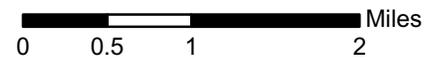
In 2000, the Inland Wetlands Commission hired a consultant to complete an evaluation of all the town’s major wetlands. The study rated each wetland for five values: ecological integrity, wildlife habitat, groundwater recharge, nutrient/sediment trapping opportunity and nutrient/sediment trapping efficiency. The study also identified noteworthy wetlands- those with a particularly important attribute. The results of this study have been entered into the town’s Geographic Information System (GIS) database, and may be referred to both electronically or in print form as a set of maps. This study provides a very important tool for the future protection of the town’s water resources.

Land With Severe Development Limitations



Legend

- Property Lines
- Floodplain
- Wetland Soils
- Regulated Wetland Buffer
- Steep Slopes



Chapter 5

Natural Resources

The town's water resources can be classified into the following categories:

Streambelts and Drainage Basins

Water resources are best understood as a series of streambelts lying in a number of drainage basins. By definition, a streambelt is a natural environmental corridor along a stream or watercourse. A drainage basin is the watershed or area contributing water to a particular watercourse. Columbia has approximately 3,990 acres of streambelt lying in four major drainage basins or watersheds. The two largest basins drain into the Willimantic River and consist of the Hop River Basin (38% of Columbia) and the Ten Mile River Basin (50%). The Salmon River Basin (9%) is the next largest. It originates in Mint Brook in the Wells Woods area of town and drains into Hebron. The Yantic River basin is the smallest (3%). It lies along the Columbia-Lebanon line and feeds Lake Williams.

Aquifers

An aquifer may be thought of as an underground reservoir. More technically, it is a water-bearing stratum of permeable rock, sand, or gravel. Columbia depends entirely on these underground supplies for its drinking water. Rock aquifers tend to have a small flow, suitable for wells serving single households. Where more dense populations must be served, sand or gravel aquifers (stratified drift) are usually tapped as they yield much greater amounts of water.

Columbia has a number of stratified drift aquifers of varying depth and water quality. Most are only about ten feet deep. While they hold water that will help recharge nearby wells, they will probably never be sufficient for a town-wide supply. The three largest of these lie under and adjacent to Dam Brook, Gifford's Brook, and the Ten Mile River. Deeper aquifers, ranging up to eighty feet in depth, lie under and adjacent to the Hop River, with the deepest and most extensive aquifer lying nearest Willimantic.

In the Ten Mile and Hop River corridors, much of the groundwater is of B quality and unsuitable for drinking, due to past siting of town landfills. The only deep, high-yielding aquifer with drinking water quality is along the Hop River at its junction with the Willimantic River.

It is important that the water quality of these aquifers be carefully monitored and protected. Unfortunately, the town's only commercial zone lies over the town's most extensive aquifer. While aquifer protection is state-mandated for aquifers used as public drinking water supplies, Columbia's aquifers are not so used, and hence, have no legal protection. When a reservoir is underground, it may easily be neglected or abused. A heightened awareness of the function and importance of this water resource is needed.

Lakes and Ponds

The town has 408 acres of open water (2.9% of the town’s area). The largest water bodies are Columbia Lake (277 acres) and Mono Pond (110 acres). Both these are artificial impoundments whose water level and management program are monitored by the state DEP. Both are used for recreation and have public access. The town also has numerous smaller ponds, most of one acre or less, which lie on private property.

Columbia Lake was created as a reservoir for a Willimantic textile mill in 1865, and is now owned and maintained by the Town of Columbia. It is managed for scenic and recreational values. The lake shore is almost completely developed with dense housing. A large church camp owns a significant portion of the undeveloped shoreline. The town-owned beach and boat launch areas are important lake shore features.

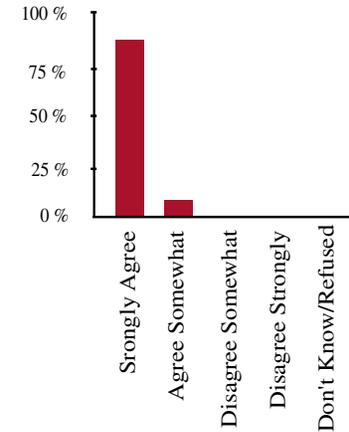
The lake bottom is mainly sand and gravel with interspersed boulders, creating a relatively sterile environment limiting plant growth. Annual draw-downs of water level also limit plant growth along the shoreline. The main tributary of the lake is Utley Brook, an A quality stream. A large part of Utley Brook’s watershed is protected by town and land trust-owned lands. The lake’s water quality is monitored by the Columbia Lake Management Advisory Committee under the supervision of a private consultant. A comprehensive Lake Management Plan has been prepared which designates three different zones within the lake watershed, and requires varying levels of protective measures within those areas. Implementation of this plan is just beginning.

Mono Pond is maintained by an earthen and concrete dam built at the turn of the century and repaired in 1987. The pond was for many years managed as a private game preserve, but in 1993 was bought by the State of Connecticut under the Natural Heritage and Recreation Area program. It is now managed for wildlife and recreational values. The pond has a limited watershed of 1.1 square miles and is a seasonal tributary of Gifford’s Brook. The portion of the pond north of the twelve acre island is characterized by open water ranging from two to eight feet in depth. South of the island is a marsh and swampland with water standing at four feet or less. The lake bottom is composed primarily of a layer of peat up to 30 feet thick. State land protects the pond’s entire shoreline on the eastern side, and about half of the remaining shoreline is protected by dedicated open space and conservation easement.

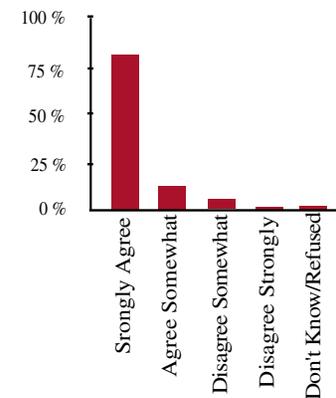
Vernal Pools

A vernal pool is a small, shallow water body that usually dries up entirely during a portion of the year, is not connected to a watercourse, and contains no fish. These characteristics create a special habitat area that is home to a number of rare and endangered species. A number of vernal pools have been identified through aerial photos of Columbia, but it remains to do a comprehensive mapping and evaluation of these special wetlands.

Protecting the Columbia Lake watershed area is important to me.



Would you favor or oppose more stringent development regulations within the Columbia Lake watershed area to preserve water quality?



Chapter 5

Natural Resources

Living Resources

The living community of plants and animals are also a key resource in Columbia. They are easily taken for granted until a noticeable change in one of them warns us that all is not well. A pond choked with algae and aquatic plants tells us of pollution. A dying tree species can tell us of the loss of birds that feed on disease-spreading insects. Deer in our backyards can tell us of loss of habitat or natural predators. In the natural world, everything is interdependent. Living in a house that protects us from the elements, shopping at a supermarket rather than hunting for or growing food, it is easy for humans to lose sight of this connection. It is nonetheless there. We are dependent on the living things around us.

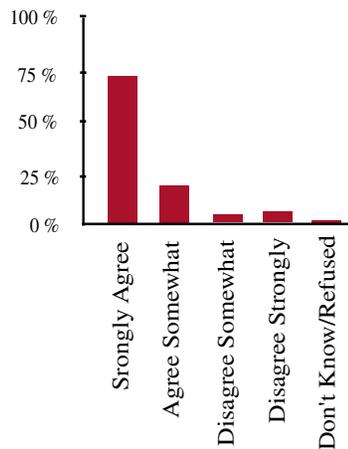
Plants play a major role in maintaining a plentiful supply of quality water. They also produce the oxygen we breathe, helping to counteract polluted air that comes to Columbia from sources beyond local control. Green surroundings are a primary means to good air quality. Plants are also a food source: for humans, in the agricultural products that are produced in Columbia; for wildlife, in the leaves, nuts, and fruits that sustain them. Trees may also provide a renewable source of wood products for human use.

Wildlife plays an important role in Columbia, too. When we think of wildlife, we often think only of mammals, those which make their presence obvious – deer, skunks, raccoons, squirrels. We forget those seldom seen amphibians who eat the mosquito larvae that would otherwise overwhelm us. We see the wild turkeys and blue jays that invade our yards, but forget those forest-loving warblers who also play a key role in controlling insect pests. We notice beaver when their dam-building causes nuisance floods, but we don't notice them when the ponds they created help hold back storm waters and reduce pollutants. Some enjoy watching wildlife. Others enjoy hunting and fishing. However, we all enjoy the unrecognized benefits animals bring us without which our quality of life would suffer.

Plants

A detailed study of the plant species in town has not yet been undertaken. Vegetation information is available for about two-thirds of the wetlands mapped in the study mentioned above. The state has developed a general map of the vegetative types throughout the town, and also has identified the areas where threatened species were reported in the past. The Conservation Commission has also identified a number of sites with special botanical interest such as the stand of paper birch on the steep slopes above Route 6 and the hemlock grove lining portions of Clarks Brook. While not rare species, such plants are not numerous within our town and provide an important mini-habitat area as well as being scenic.

Having large forest blocks and areas for wildlife is important to me.



Wildlife

Animal species within town are not well documented, but increased sightings of previously unusual species are occurring. These include fisher, black bear, wild turkey, black duck, and wood duck. Much of this increase is due to the return of forest on previously cleared lands. Other animals previously considered unusual such as coyote, beaver, and bluebird are now considered common.

Fisheries

Three rivers in town are stocked with trout by the state: the Willimantic, the Hop, and the Ten Mile. From these watercourses, some fish move into tributaries such as Gifford's Brook and Lake Brook. In general, the town's first and second order streams are of appropriate water quality and temperature to provide spawning areas for our native fish species. Five stream segments were included in the 2000 Wetland Evaluation Study, and were found to provide significant fishery resources.

Columbia Lake, Jones Pond, and Mono Pond all provide good habitat for fish that tolerate warmer temperatures. Jones Pond and Mono Pond with their well-vegetated shallows provide superior habitat. Many smaller ponds have also been stocked with panfish and bass but all these remain in private ownership.

Assessment

Soil Resources

Our soils determine where a house can be built without danger of a flooded basement, a failed septic system, or a polluted well. They determine the best areas for the production of forest products, where agricultural pursuits can remain viable, and where sand and gravel can be obtained. Too often, soil type is ignored by a landowner until a problem develops. Soil type and slope should be a primary factor in all land use decisions. Engineered solutions to soil limitations are expensive, not just for the individual but for the whole community, and often the solution is only short-term. Prevention of soil contamination should be a basic concern. Contaminated soils are difficult and expensive to remedy. Disturbance of soils should be carefully monitored to prevent soil erosion and sedimentation of surface waters. Removal of all soils should be carefully regulated. Soils sustain not just human lifestyles, but the very lives of plants and animals that depend on them.

Water Resources

Water resources provide for a safe drinking water supply, quality recreational waters, and habitat for much of the community's wildlife. When drinking water does not come from a surface supply, it is easy to forget that our



Chapter 5
Natural Resources

activities on the surface may have serious effects on the town’s ground water. Loss of water quality is much easier to prevent than it is to repair.

Natural vegetation is a key to preserving the quality of surface and subsurface waters. Vegetation slows runoff, allowing water to sink in, recharging our drinking water supplies and preventing flooding. Plants and their roots filter water, removing pollutants and trapping sediment that could clog our streams.

Lawns and pavement should be minimized to keep Columbia’s water safe. The application of fertilizers and pesticides to lawns pose a constant threat to pure water. Pavement and accompanying storm drains concentrate pollutants and deliver them speedily to surface waters. They hasten departure of water from Columbia’s land, not allowing time for the water to sink in and recharge water supplies.

Living Resources

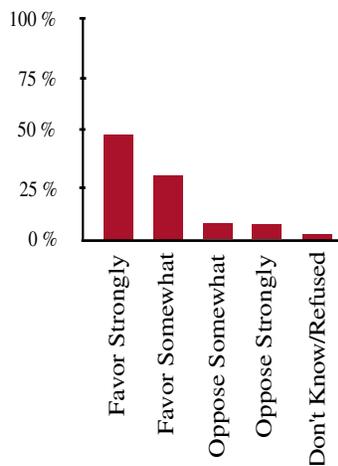
Columbia provides a wide range of habitats including upland forest, pasture, and cultivated field, pond and lake, swamp, and marsh, floodplain and alluvial terrace. There are consequently a wide range of plants and animals in town. At present, no nationally threatened or endangered species are known to exist in Columbia, but there are a number of state-listed species. Columbia provides numerous good locations for recreational fishing, but has somewhat limited public access.

Program

Ensure that town regulations and practices foster long-term protection of Columbia’s soil, water, and wildlife resources.

- Promote development that will allow indefinite town-wide use of private wells and septic systems through soil-based land use decision-making.
- Protect the quality of Columbia’s ground water (aquifers), surface waters (lakes, ponds, and rivers) and wetlands through watershed-based Planning.
- Protect habitat of watercourse and wetland dependent plants and animals
- Provide suitable access to surface waters for recreation
- Protect and foster a rich diversity of plants and animals in Columbia. Protect appropriate habitat areas for the entire range of local wildlife.

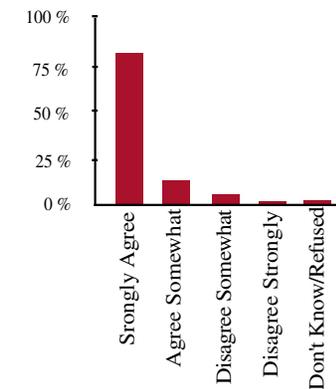
Do you favor or oppose required environmental studies for any development?



Soils Program

Goal: Foster soil-based land use decision-making					
	P&Z	BOS	IWC	CC	SAN
Protect prime farmland soils from removal, contamination, or erosion	1				
Foster continued agricultural use of prime farmland soils	1	1			
Prioritize prime farmland soils for open space protection	1			1	
* Restrict development in problem soil areas (poorly drained, steep slopes, bedrock close to surface)	1		1		
Make soil maps available to developers, loggers, and landowners with guidelines to foster appropriate land use	2				
Goal: Protect soils from contamination					
Require removal of all underground steel fuel storage tanks over 20 years old	2				
Develop long term plans for renovating & rehabilitating septic systems		2			1
Institute a program to require regular pump out of septic systems		1			1
Develop a rapid response plan for soil contamination events		1			1
Develop policy concerning safe application of pesticides		1			1
Develop guidelines and regulations concerning recreational uses that rely heavily on pesticides, herbicides, and irrigation	1		1	1	
Continue to provide public information on the proper use and disposal of hazardous materials		1			1
Provide public information on maintenance of septic system health		2			2

Would you favor or oppose more stringent development regulations within the Columbia Lake watershed area to preserve water quality?



Chapter 5
Natural Resources

Goal: Carefully regulate soil disturbances to protect natural values and minimize erosion sedimentation problems					
	Soil removal permits should require an environmental impact statement, a reclamation plan, and use Best Management Practices (BMPs) in accordance with CTDEP erosion control recommendations	1			
*	Development plans should minimize size of soil disturbance areas. A vegetated buffer should be maintained between disturbance and sensitive areas, such as vernal pools, steep slopes, wetlands and watercourses, trees over 15" in diameter. Limit of disturbance should be flagged prior to soil disturbance	1		1	
	Development/disturbance plans must avoid any steep slopes (> 30%)	1		1	
	Requires a performance bond for timely and successful re-vegetation of disturbed areas	1			
*	Require performance bond to cover of costs of repairs of erosion/sedimentation systems failures	1			

Water and Wetland Resources Program

Goal: Give greater protection to priority waters and wetlands					
		P&Z	BOS	IWC	CC
	Identify priority wetlands with high value for wildlife habitat, ecological integrity, or ground water recharge			1	1
*	Develop protection measures appropriate for priority wetlands, which may include: a. required pre-application review b. additional application items such as environmental impact review and location and impact within the local watershed c. required conservation density development plan d. protection through conservation easement or acquisition e. limit on lawn size and impervious surface within set distance f. prohibition of wet ponds within the upper watershed g. reference IWC permit and conditions in the deed record	1		1	1
	Adopt & enforce Columbia Lake Watershed Management Plan	1			
*	Actively pursue acquisition of land or easements in Columbia Lake Watershed to minimize development	1	1		
	Establish variable upland review area dependent on soil, slope & importance of water/wetland resource			1	
*	Require 50' wide vegetated buffer along all priority wetlands, and 25' wide along all streams and water bodies, with 10% exemption	1		1	1

Chapter 5
Natural Resources

Goal: Institute storm water management practices that will minimize water pollution and sedimentation and maximize infiltration and ground water recharge					
		P&Z	BOS	IWC	CC
	Devise watershed-based, versus site-based, storm water management goals and methods	2		1	
*	Mandate site design that minimizes impervious surfaces and maximizes ground cover	1			
	Modify road design requirements to allow roads of variable width dependent upon use	2			
*	Modify subdivision regulations to allow substitution of natural filtration (bioretention) methods for curbs and storm drains	1			
	Modify cul de sac regulations to allow vegetated island and hammerhead design	1			
	Map and stencil exiting storm drains on watershed basis		2		2
	Schedule regular clean-out of storm water sediment traps		1		
*	Minimize direct discharge of storm water from impervious surfaces into streams and water bodies. Remediate existing discharges when possible		1	1	1
	Locate storm water detention ponds and constructed wetlands outside of natural wetlands	1		1	
	Develop an informational packet on pervious surface materials	2			2
	Modify parking lot requirements to require pervious cover in overflow parking area and bioretention treatment of storm water	1			
	Road sanding/salting procedures should follow state BMPs		1		
	Protect all stratified drift aquifers over 10 feet deep with the same regulations that apply to aquifers used as drinking water supplies	2		2	
Goal: Provide safe recreational access along surface waters					
	Provide public fishing access to highly rated fin fish streams: Hop River, Ten Mile River, Giffords Brook, Clarks Brook through shoreline easement or acquisition		2	2	
	Provide public boating access to Hop River		2		2

Living Resources

Goal: Protect and foster a rich diversity of plants and animals in Columbia. Protect appropriate habitat areas for the entire range of local wildlife

	P&Z	BOS	IWC	CC
* Foster protection of natural vegetated buffers along streams and water bodies	1		1	1
Conserve a mix of field, forest, and wetlands to assure diverse communities of plants and animals	2	2	2	1
Establish forest/habitat priority areas on productive forest soils adjacent to priority wetlands. Such areas should contain unbroken areas of 200 acres or more			1	1
* Develop protective measures for forest/ habitat priority areas. To include: required pre-application review, additional application items such as environmental impact review and wildlife inventory, required conservation density development plan, protection through conservation easement or acquisition, limit on lawn size, required common driveways	1	1		1
* Require all development plans to minimize habitat fragmentation	1		1	1
Establish a system of wildlife corridors to connect priority habitat areas. Protect them by easement or acquisition	1			1
* Develop a section in the subdivision regulations to allow conservation easements to be used systematically	1			1
Encourage preservation of native vegetation by developers and promote use of native plants to enhance local habitats and enforce State ban of invasive species	1		1	1
Devise ordinances to control and monitor chemical applications that affect the natural food web	2			1
Use DEP endangered species overlay on all subdivision applications to identify areas in need of special protection	1		1	1
Identify and map vernal pools			2	2
Develop informational brochure on vernal pools				2
Provide natural resource information to residents including wildlife and forest management strategies			2	1

Chapter 6 Open Space

6 CHAPTER

Overview

The words *Open Space* refer to undeveloped land or land in its natural state. In 1997, the governor of Connecticut set a goal of 21% of the state's lands to be preserved as open space by the year 2023. 10% of the open space land was to be preserved by the state. The other 11% was to be protected by municipalities, land conservation organizations, and water companies. Why is as much of one fifth of the state to be preserved as permanent open space? Is open space that important? Yes. In appropriate quantities and locations, open space can:

1. **Protect water supplies**
2. **Shape development patterns**
3. **Offer outdoor recreation**
4. **Protect scenic features and historical sites**
5. **Protect and define community character**
6. **Conserve natural communities and habitats for plants and animals**
7. **Maintain a landscape that promotes the harvest of farm and forest products**
8. **Enhance the quality of life for residents, businesses, and visitors to the town**

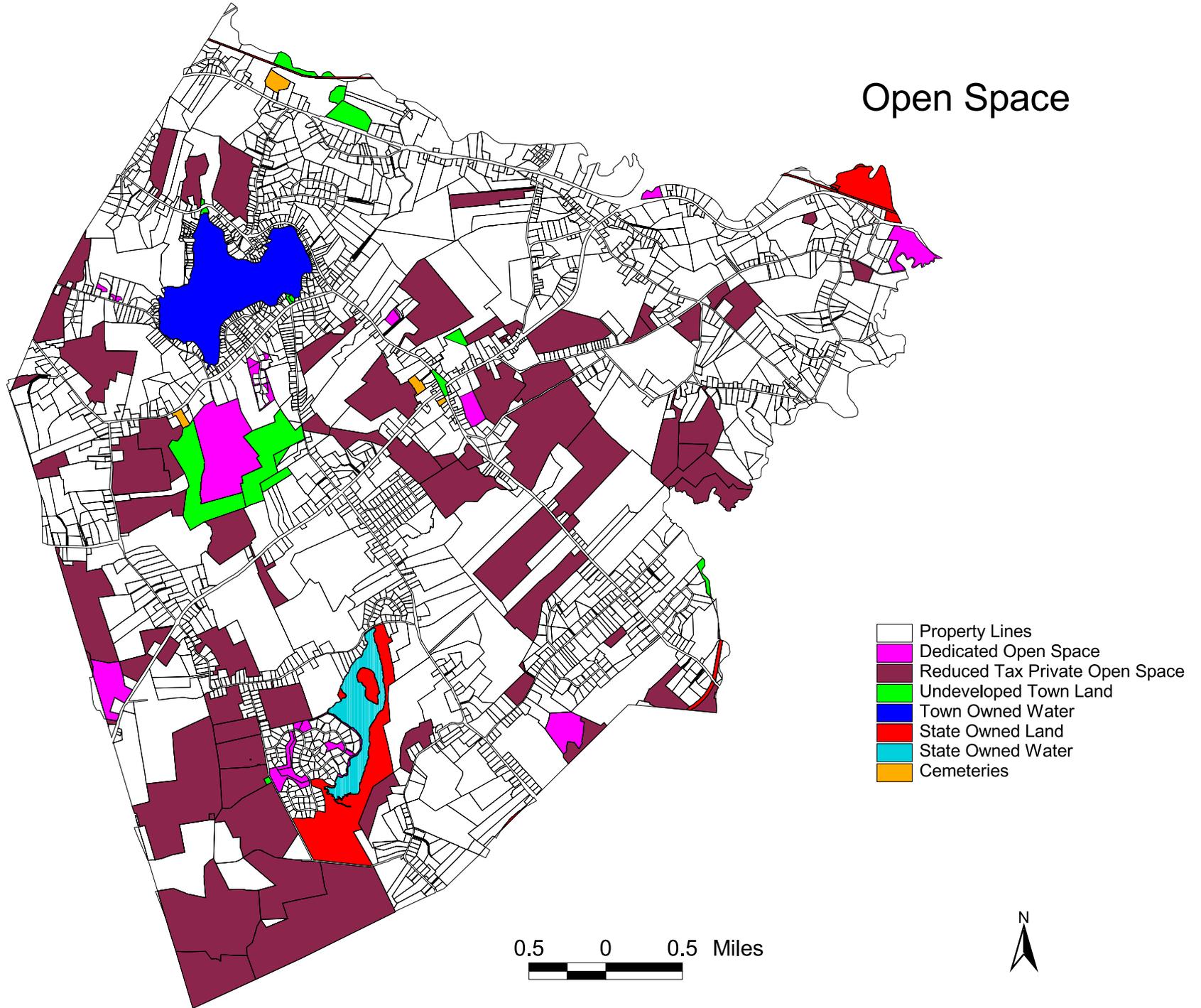
Economic Benefits

While appreciating these reasons, there are those who feel protecting open space will cost too much in diminishing the grand list, or in the costs of purchase and maintenance. Often we do not realize that open space can actually bring fiscal and economic benefits by elevating property values and retaining the town features that we love.

1. **Lower Taxes**

Farm, forest, and open space land provide a town more money in tax dollars than they require in service expenditures. A 1986 study in Hebron found that for every tax dollar generated by residential properties, the town spent \$1.06 in services such as road maintenance, schools, police protection, etc. For every tax dollar generated by open space, only \$0.36 in expenditures was required. In other words, residents who kept their land in open space were actually subsidizing residential property owners and keeping their taxes low.

Open Space



2. Improved Financial Ratings

Communities with sound conservation plans have been shown to actually improve their bond rating. The ratings reflect the fact that poorly managed growth can be expensive and threaten a town’s fiscal health. Good planning including open space will ensure quality of life and avoid environmental problems that are costly to remedy.

3. Lower Utilities Costs

Conserving our natural resources allows the town to continue to use private drinking water wells and private septic systems. The town thus avoids the higher taxes needed to provide public drinking water and sewer systems. Property values are protected as well. Imagine the losses in property value if Columbia Lake were to become polluted.

4. Increased Property Values

Properties close to permanently protected open space increase in value. This benefits not only the property owner, but the entire town by increasing the grand list.

5. Business Opportunities

Outdoor recreation and tourism are big business today, and with continued growth in the state’s population and density, they promise even greater financial rewards in the future. Managed properly, the historical and scenic assets of the town will provide the potential for drawing recreational and tourism dollars to our town.

Inventory

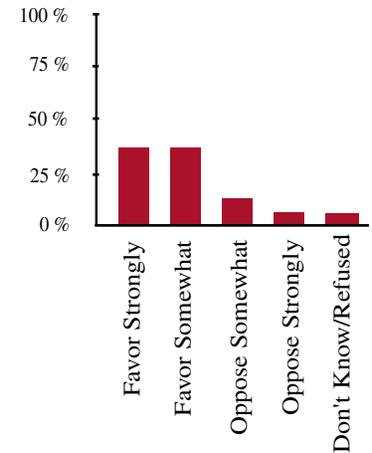
The Past

In 1992, the town had the following land use pattern. 235 acres (or 1.6 %) of its total land was in dedicated open space. “Dedicated” means land whose use has been legally restricted to ensure that the land will remain undeveloped. Another 252 acres (or 1.7%) were undeveloped lands owned by the town or state which allowed public access or were currently used as public open space, but with no assurance of remaining so in the future. Another 3% of the land was publicly held but developed in some manner, such as the school property, town transfer station, and so on. 21% of the town was subdivided to the full extent legally allowed, and 71% of the town remained as undeveloped land in private hands. Columbia was at the bottom of all towns in Tolland County in the amount of dedicated open space.

The Present

Today, the picture has changed quite a bit. The largest change came when the state bought the 284 acre Mono Pond Parcel in 1993. Although not protected from recreational development such as the clearing and paving of a parking

Do you favor or oppose more funding dedicated to open space?



Chapter 6 Open Space

lot area, this parcel should remain largely natural. Other additions to town open space have come from donations by developers and land acquired by the town in lieu of back taxes. These new public lands have added 11 acres abutting Recreation Park, and 3 acres along the Ten Mile River. The town acquired 14.6 acres of dedicated open space as part of the transfer of Fireman's Field. The town has also been deeded a number of small conservation easements, covering a total of about 7 acres.

The town has established an Open Space Fund, separate from the town's Land Acquisition Fund. To help endow this fund, the town sold 28 acres of land near Brousseous Brook and ensured that the property will remain in its natural state through a permanent deed restriction on the property. Through taxation, the town has made contributions to this fund over the last several years, but to date has not used any of the monies for open space acquisition or protection.

The last ten years have brought 50 acres of dedicated open space to the town, and 298 acres of public lands which will probably remain in their natural state. The total dedicated open space is now 285 acres or 2 %, and the land that will probably remain as open space is 522 acres or 4% of Columbia. The change in open space from 3.3% to 6 % is a fairly large one. Yet we remain *far* behind the goal set for us by the state.

During the same ten years the rate of development has continued to grow, with 262 new houses since 1992, or approximately another 1000 acres subdivided. More recently there has been a trend to larger subdivisions of ten lots or more. Yet, the town has not yet adopted an Open Space Plan to make sure that new development is balanced by protection of important natural resources, scenic and historic sites, and recreational opportunities.

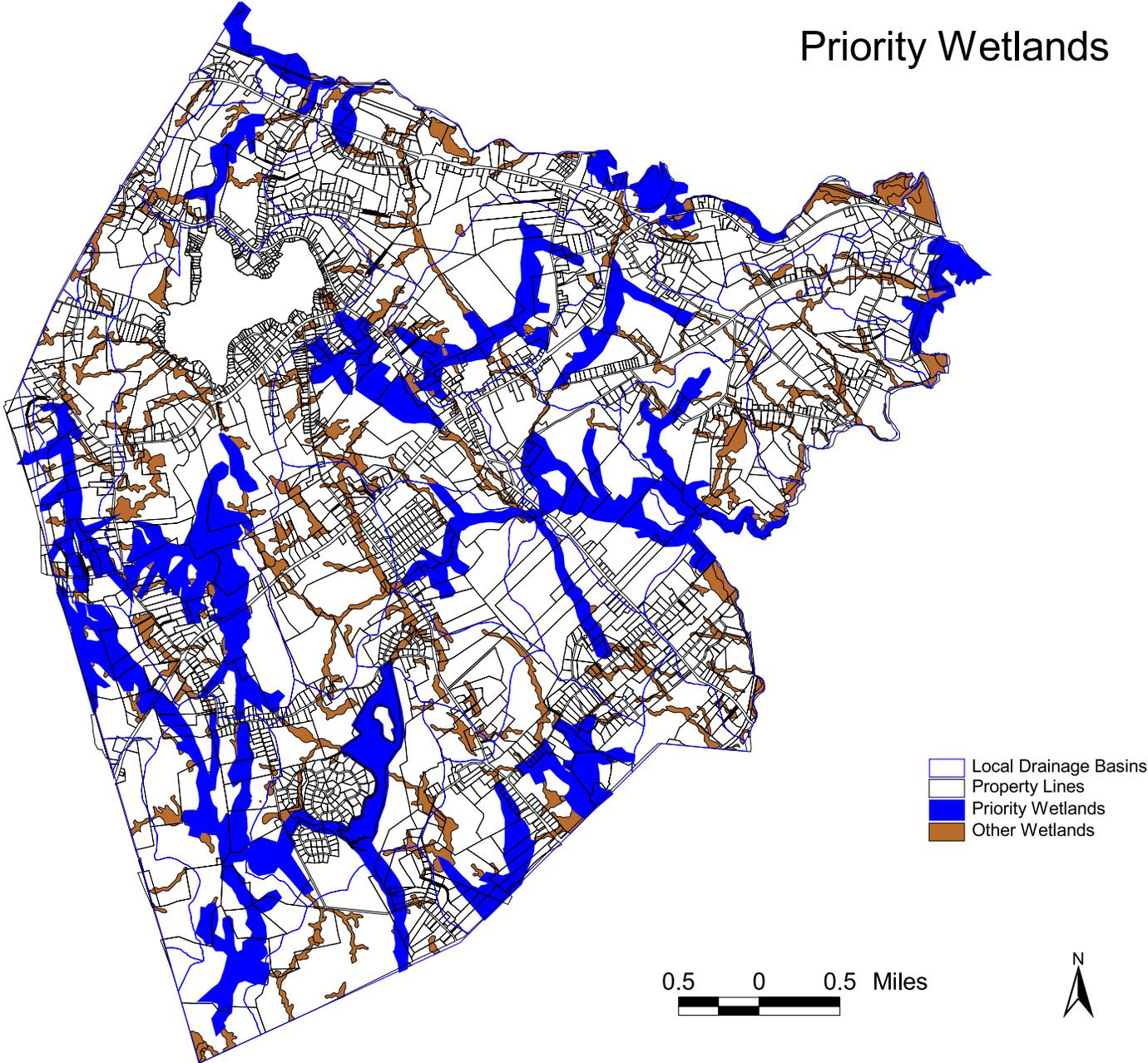
Assessment

Columbia needs to take action now to protect those aspects of Columbia that it wishes to remain the same in the future. Open space protection is not limited to the outright purchase of land. There are numerous other methods which may achieve the same goals. These include conservation easements, taxation policies, subdivision requirements, and land use regulation.

The 2001 Town Survey found that 84% of residents wanted additional land set aside as Open Space, and 71% favored using town tax dollars for such open space protection. 85% of residents were in favor of restrictions on development in priority areas, and 80% favored more environmental review of development. 78% favored reduced tax assessment on open space. The following recommendations would carry out the people's wishes as expressed in the survey, and would lay the groundwork for a sound approach to open space protection in Columbia.



Priority Wetlands



Chapter 6 Open Space

Program

The protection of open space must be tied to specific goals and selection criteria. For Columbia, these goals are:

1. Protect quantity and quality of drinking water supplies
2. Protect quality and accessibility of recreational waters
3. Protect the rural character of the town which includes scenic vistas and roads, agricultural uses and structures, and historic or cultural sites
4. Protect unique or sensitive environmental resources
5. Protect habitat areas for Columbia's game and non-game wildlife, including large unfragmented forest blocks
6. Protect wildlife corridors particularly those along perennial streams and water bodies
7. Protect sites that provide opportunities for passive recreation such as hiking, biking, nature study, cross country skiing, canoeing or kayaking, fishing, and hunting
8. Protect sites that abut or serve to connect existing dedicated open space
9. Protect sites suitable for active recreation as identified and prioritized by a Recreation Commission



Attributes of Priority Properties

It should be the town's policy to afford special protection to and/ or to acquire land and water that furthers the above goals. The special attributes of lands that meet these goals are described below. For each goal there is a limited description of some of the highest priority lands or waters, but the exact identification of these areas may be seen only on the the following maps: Prime and Important Agricultural Lands, Priority Wetlands and Priority Habitat Areas (see List of Maps and Charts in appendix for page numbers).

- 1. Protect quantity and quality of drinking water.**
Priority shall be given to:

Section II — Conservation Issues

Chapter 6 Open Space

- a. properties including large ground water recharge areas and/or stratified drift aquifers
- b. large wetland areas lying high in the watershed
- c. forested parcels abutting the above two types of land
- d. properties that include perennial springs
- e. watershed areas of community wells

These lands include those adjacent to Dam Brook, Giffords Brook, and the Ten Mile River. Some of the larger wetlands areas are: Utley Swamp, the Mint Brook/Wells Woods area, Brousseous Marsh, and lands in the Giffords Brook watershed.

2. Protect quality and accessibility of recreational waters

Priority shall be given to:

- a. undeveloped properties lying in the Columbia Lake Watershed
- b. developed properties in the Columbia Lake watershed with substandard or incompatible development that can be reclaimed for open space or park use
- c. properties lying in the Mono Pond watershed
- d. shoreline properties on Mono Pond, Columbia Lake, Giffords Brook, the Ten Mile River, Columbia Lake Brook, Mint Brook, Clark Brook, and the Hop River

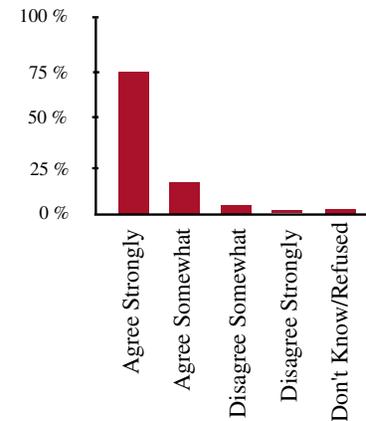
3. Protect scenic vistas

Priority shall be given to:

- a. lands overlooking view sheds, particularly those with public access
- b. high places and ridge lines, especially those visible from long distances
- c. view sheds, especially those visible for long distances
- d. views from the Airline and Charter Oak Rail Trails

Some scenic view sheds visible from roads include looking north to Coventry from the Brand Farm on Old Willimantic Road, the view towards Hebron from Skyline Farm on Rt. 66, views of Columbia Lake from Lake Road and Rt. 87, Columbia Green from the intersections of Rt. 87 and Route 66.

Having natural sites for recreational use is important to me.



Chapter 6
Open Space

4. Protect agricultural uses and structures

The town of Columbia should protect and encourage the opportunity to farm. Most prime farmland soils lie along Routes 66 and Rt. 87 and are currently in active or fallow farm use. Priority shall be given to:

- a. land with prime farm soils
- b. farms, crop fields, orchards, retail stands, timber forest, or horse farms
- c. farm structures such as barns, silos, and sheds

5. Protect historic and cultural sites

Priority shall be given to:

- a. historically significant properties that are endangered
- b. properties listed in the state or national registers of historic places
- c. properties within designated historic districts
- d. properties with cultural features such as museums, art galleries, or archaeological sites
- e. properties with historic industrial significance such as mill or factory sites
- f. stone walls , wells, cellar holes
- g. bridges
- h. properties with significance in past events such as the Revolutionary or Civil War

All above types of properties have higher priority if they can be publicly accessed. Many of Columbia's oldest homes and town buildings lie along Rt. 87. Most of the old mill structures and ruins of homes lie in the Wells Wood area, the Utley Brook area, and the Hop River Village.

6. Protect unique or sensitive environmental resources

Priority shall be given to:

- a. steep slopes
- b. wetlands with high ratings for ecological integrity



- c. floodplains
- d. mature forests and those forests on Productive Forest Soils
- e. land or water within a Critical Environmental Area
- f. lands or waters that provide habitat for state endangered or threatened species of plants and animals
- g. vernal pools

Some lands or waters identified as significant are: Columbia Brook Ravine, lower Gifford Brook Marshes, the sandy floodplains near the Charter Oak Rail Trail, the Mint Brook wetland system.

7. Protect habitat areas for Columbia’s game and non-game wildlife, including large unfragmented forest blocks

Priority shall be given to:

- a. unfragmented forest blocks of 200 acres or more
- b. wetlands with high ratings as wildlife habitat
- c. grasslands mown only once every 1-3 years
- d. floodplains
- e. shorelines of water bodies and watercourses

Six large undeveloped woodland areas with priority wetlands within them have been identified. They abut Utlely Swamp, Upper Giffords Brook, Mint Brook, Mono Pond, lower Giffords Brook, Clarks Brook and Brousseau Brook.

8. Protect wildlife corridors particularly those along perennial streams and water bodies

Priority shall be given to:

- a. land within 150 feet of streams which connect the six forest blocks described above
- b. lands within 100 feet of all perennial streams and water bodies

Eight corridors have been documented that connect the priority forest blocks described in Number 5.

Chapter 6
Open Space

9. Protect sites that provide opportunities for passive recreation such as hiking, biking, nature study, cross country skiing, canoeing or kayaking, fishing, and hunting.

Priority shall be given to:

- a. sites that provide opportunities for more than one of the above activities
- b. sites that will provide safe, public access
- c. sites which include a variety of topographies and habitats
- d. sites that abut quality finfish habitat

Most of these recreational activities can and should take place on lands already protected under the preceding attribute listings. However, public ownership of the land outright or access by conservation easement will be needed on those properties which have the highest recreational values.

10. Protect sites that abut or serve to connect existing dedicated or public open space

Priority shall be given to:

- a. sites connecting town properties: the Green, the school, the Lake, Recreation Park, the Senior Center, and Fireman’s Field, especially those providing safe, public access
- b. sites connecting land owned by the state or land trust to each other and to town owned lands
- c. lands abutting those lands named in a) and b)

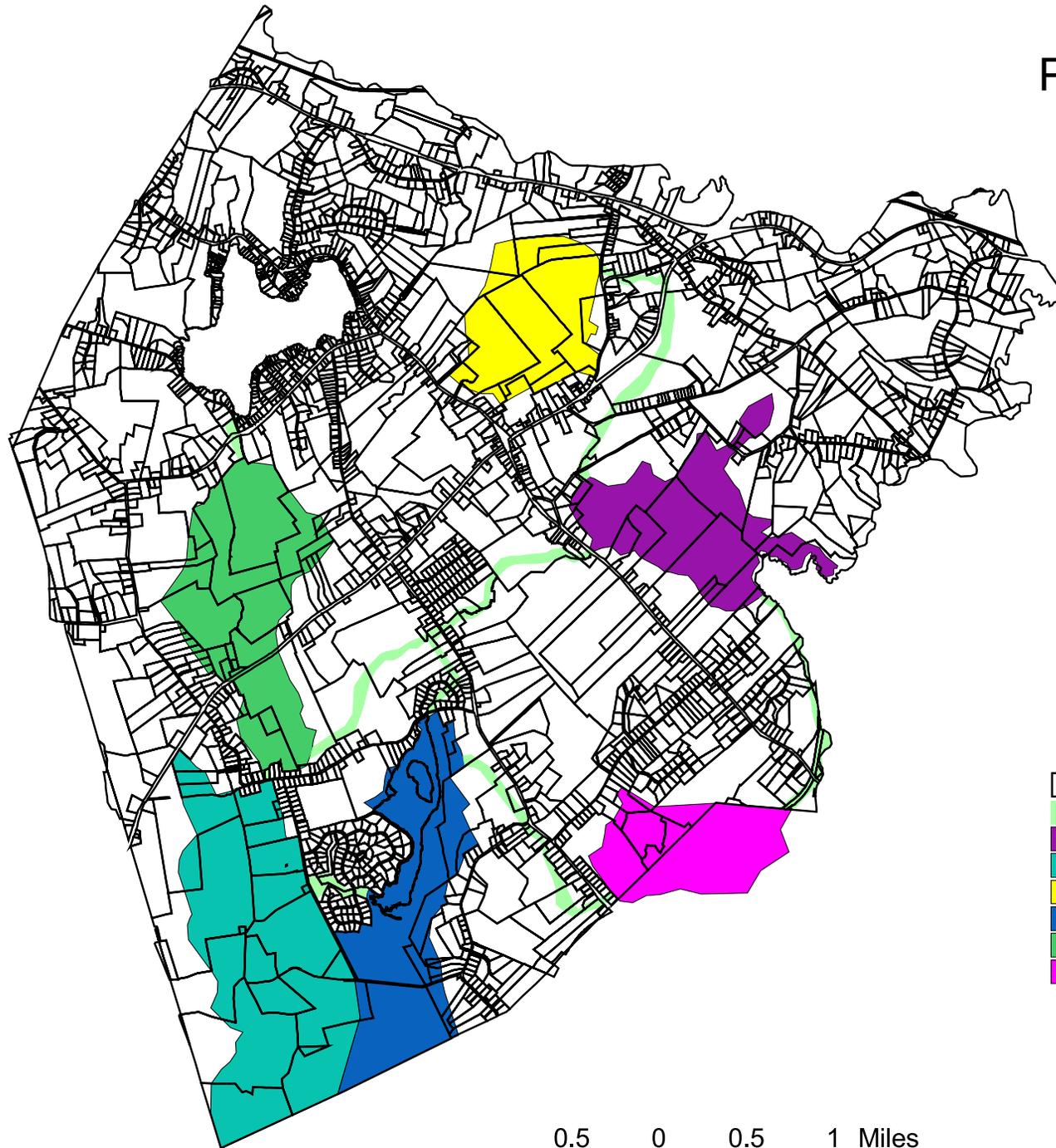
As with #7, ownership or easement may be needed to ensure public access where it is appropriate, as in a).

11. Protect sites suitable for active recreation as identified and prioritized by a Recreation Commission

Priority sites have yet to be identified.

The means to provide protection of the properties described above are addressed throughout the Plan of Conservation and Development. It is important to realize that the majority of protection can be achieved while the properties remain in private ownership. The chief goal remains: *to use a variety of methods to protect land identified under a strict set of criteria as needing to remain undeveloped in Columbia’s future.*

Priority Forest Habitat



- Property Lines
- Wildlife Corridors
- Giffords Brook Habitat Area
- Mint Brook Habitat Area
- Clarks Brook Habitat Area
- Mono Pond Habitat Area
- Utley Swamp Habitat Area
- Brousseous Brook Habitat Area



Chapter 6 Open Space

Section II — Conservation Issues

Program

Goal: Ensure adequate funding for open space protection				
*	Set a minimum annual amount to be contributed to the Open Space Fund		1	
	Explore the means of separating the Open Space Fund from the General Fund in order to attract donations and to build assets through accumulation of interest		2	1
	Actively participate in state and federal Open Space Grant Programs		1	1
*	Modify subdivision regulations to allow a fee to be assessed of developers of larger subdivisions where there is no appropriate open space to be set aside within the development	1		
Goal: Ensure that subdivision regulations protect priority open space areas				
*	Revise the subdivision regulations to provide for an open space set aside requirement or a fee in lieu of such a set aside in larger subdivisions	1		
	Revise the subdivision regulations to require an alternative conservation density plan to be submitted on all subdivisions of 3 lots or more that include or abut priority open space areas	1		
	Revise the subdivision regulations to require additional environmental review of subdivisions within priority water resource or priority habitat lands	1		
	Revise the subdivision regulations to require conservation easements be conveyed to the town on all priority water resource or priority habitat lands within a subdivision	2		
	Ensure that taxation policies support open space goals. Pursue town adoption of PA 490 assessment for all designated open space lands		1	
	Consider open space designation for PA 490 assessment, not only for identified Priority Areas, but for all lands over five acres not part of building lots and not zoned for Industrial or Commercial Use	2		

Section II — Conservation Issues

**Chapter 6
Open Space**

Goal: Coordinate with other governmental agencies and land trusts to support town open space goals				
	P&Z	BOS	IWC	CC
Aid in applications to the state Agricultural Development Rights program		1		1
Cooperate with adjoining towns in setting and carrying out open space goals	1	1		1
Cooperate in management of state lands within the town		1		1
Work to coordinate with regional and state plans of preservation	1	1		2
Work with Joshua’s Trust to facilitate gifts to the Trust, communicate town goal’s to the Trust, and to help monitor Trust lands within the town	1	1	1	1
Goal: Establish a reputation for active open space protection				
* Facilitate gifts of lands or funds for open space protection to the town	1	1		1
* Develop an active open space management program	1	1	1	1
Provide residents and developers with up to date information on protecting their land as open space	1	1		1

Chapter 7

Community Structure

Overview

Community structure is an important consideration in the Plan since it addresses how people, both residents and visitors, perceive and understand the community, its organization and its character. The establishment and maintenance of community structure are an important legacy of the planning process and are important concepts in the Plan.

Inventory

The traditional pattern that developed in most New England towns was a village center with a green and public buildings around it, surrounded by outlying farms. The town center area usually included housing placed close together and some small businesses such as inns and general stores. Often the greater the distance from the center the farther apart the houses, except where small hamlets developed around transportation hubs such as crossroads or railroads, or near older manufacturing businesses such as mills.

Columbia's pattern of development in many ways conforms to the above description. Some of Columbia's historic Green has been lost to expansion of the highways that pass through it, but it still is a focus for community services and activities. The stores and offices in the Landmark, Collins Garage, and the bank continue the small business tradition. Columbia's outlying hamlets have faded with the end of local mills and district schoolhouses, but clusters of historic houses still remain at many of these locations.

However, Columbia's pattern of development departed from the colonial one with the rise of the Lake Community in the early 20th century. Its focus was entirely residential and recreational, versus the older economic and religious reasons for town development. More recently, several large subdivisions (such as Island Woods and the Heritage Drive area) have also developed a community identity of their own. While the town center is still recognized as a traditional focal point, especially since its designation as an historic district, it would appear that the trend is toward multiple focal points with new ones centering on denser housing development.



The other obvious trend, fostered by the advent of zoning, has been for all new business activities to be located in the Rt. 6 corridor. Other than home businesses, there is no integration of business uses into the new residential nodes, as was the pattern in the historic past.

Assessment

The existing elements of Columbia's community structure should be enhanced in order to help define and preserve the town's character. Regulations can be designed and implemented to reinforce and enhance the community's structure. One need only look at communities with no discernible structure to realize that community character is adversely affected by random development without thought to overall community structure and organization.

Public Opinion

In surveys and at meetings conducted during the planning process, residents indicated that they were very supportive and protective of the town's past and current character. In the 2000 survey, 97% wanted to see town character protected.

With regard to the Town Green area, residents were strident about:

- preserving the Town Green since it is the heart of Columbia
- improving the character of the area through reducing large paved parking and driveway areas and adding creative plantings at the firehouse to give it more of a "village feel"
- making the center of town more walkable by encouraging pedestrian use and activity through the addition of walkways to connect public spaces and facilities
- re-using existing structures for new purposes while maintaining the scale of the buildings

Future Planning

During the next ten year planning period, detailed studies of the center of town, Columbia Lake and Island Woods and other areas of denser residential development should be undertaken in order to:

- reinforce the focal point characteristics unique to each area
- maintain an appropriate balance among the intended uses
- avoid strip-type development
- enhance the overall pedestrian and vehicular circulation pattern within and among the focal points
- address parking and circulation issues
- promote the compatible development of these areas

The studies should re-evaluate the current zoning regulations and consider alternative zoning patterns. Certain areas might be considered for rezoning based on the prevailing lot sizes. Adjustments to some zoning designations and/or boundaries should also be considered so that zoning boundaries follow property lines wherever possible. The studies should also review and take appropriate advantage of P.A. 00-145 authorizing the creation of Village Districts.

A Village District would restore the town center's earlier mix of residential, public institutional, and commercial uses. Currently all business uses are grandfathered in, but no new uses of this type are allowed. A Village District would allow a limited list of business uses in the center. Such a list might include restaurants, bed and breakfasts, antiques stores, and professional offices. Such businesses would have to be housed in existing buildings, or in new buildings whose design makes them look like existing buildings. A Transition District should also be considered. This district would frame the Village District, and would allow some higher density residential and community uses such as senior and assisted living housing.

Studies should also consider:

1. Promoting growth policies to better enhance focal areas and preserve their historic character
2. Developing a dynamic town center with the appropriate use of historic buildings as the centerpiece of these efforts
3. Improving the town center's appearance by better integrating parking and developing a street plan
4. Increasing marketing and tourism for the town center area through public awareness, education, and the creation of tourism amenities
5. Enhancing recreational amenities in areas of more dense residential development



Chapter 7

Community Structure

Program

Goal: Reinforce the defining elements of Columbia’s community structure to maintain the prevailing pattern and Reinforce secondary focal points near areas of denser residential development							
		P&Z	BOS	IWC	CC	RC	AC
*	Undertake a detailed study of the town center to address land use, circulation, parking, and pedestrian issues	1	1				
	Consider zoning changes to enable creation of a Village District	2					
	Enhance the Town Green by border definition and reduction of paving	1	1				
	Consider establishing a Transition Zone between the Town center and outlying areas	2					
	Undertake a Secondary Focal Point Study	2					
Goal: Develop protected open space areas to connect and define the town’s focal area							
	Establish small <i>village green</i> type recreation or agricultural areas near secondary focal points	1			1	2	2
	Develop walking paths around and between developed areas	1			1	1	
Goal: Develop areas for business opportunities while avoiding strip type patterns							
*	Develop design requirements that create “rural village” feeling commercial developments		1				
*	Reduce driveway cuts onto State highways, while providing alternative road and pedestrian access	1					

Chapter 8

Housing & Residential Issues



Overview

13,263 acres or 94% of Columbia’s area is zoned for Residential Agricultural Use. As a result, residential housing patterns will have an overwhelming impact on the town’s character and quality of life in the coming years. It is important that many facets of residential housing issues be considered in this Plan. Identified housing needs must be met for all ages and income levels, but only in ways that protect rural character and natural resources. The effect of residential growth on the need for new services must also be considered.

Inventory¹

In 2000, Columbia had a total of 1,988 housing units. This is an increase of 13.9% or 234 units over the total in 1990. The vast majority (over 90%) of current units are single family, detached homes of 6-7 rooms and 3 bedrooms. 4.5% of current housing units are seasonal. 8.3% of the housing units are rental units, down from 10.8% in 1990.

Growth in Housing Units

Growth in Housing Units	1970	1980	1990	2000
Total Housing Units	1107	1262	1754	1988
Growth Rate in Last Decade		14%	39%	13%

Owner Occupied Units

In 2000, all housing units occupied by owners were single family homes. 97.8% were detached, and 2.2% were attached. 70% of the homes were owned with a mortgage, while the remainder were owned outright.

¹ All figures are from the 2000 Federal Census unless otherwise noted.

Chapter 8
Housing and Residential Issues

The average home has 6.5 rooms and 3 bedrooms. The median age of the house was 23 years. Only 10% of owners lived in a house built before 1939. The average tenure of owners living in homes is thirteen years. Less than one third of homeowners have lived in the same house more than 20 years.

About 80% of those living in their own homes were families.

Household Types

Household Types (Owner Occupied Housing)	Number	Percent
Total Owner Occupied Housing Units	1,709	100
Family Households	1,384	81
Householder 15-64 years	1,173	68.6
Householder 65 years and over	211	12.3
Married Couple Family	1, 221	71.4
Male householder, no wife present	50	2.9
Female householder, no husband present	113	6.6
Nonfamily Households	325	19
Householder 15-64 years	220	12.9
Householder 65 years and over	105	6.1
Male householder	149	8.7
Living alone	114	6.7
Householder 65 years and over	34	2
Not living alone	35	2
Female householder	176	10.3
Living alone	154	9
Householder 65 years and over	69	4
Not living alone	22	1.3

Renter Occupied Units

Rented units are on the whole smaller and older than owner occupied housing. However there is a considerable variety of rental types available. The average number of occupants in rented units is 2 people (compared to the 2.8 people in owner occupied units).

Size of Rental Units

Size of Rental Units	Number	Percent
Total Renter Occupied Housing Units	154	100
No Bedroom	6	3.9
1 Bedroom	24	15.6
2 Bedrooms	52	33.8
3 Bedrooms	53	34.4
4 Bedrooms	13	8.4
5 or more Bedrooms	6	3.9

Only 59% of rental units are in one family homes. 21.4% are in two family homes, and 20% in 3-4 family buildings. Such multifamily housing is no longer allowed under current zoning regulations, so it can be assumed that all this housing was built prior to 1980. These multi-family buildings are scattered throughout town.

The only stand alone rental units built since the inception of zoning are those at Dartmouth Village. This complex rents only to seniors, and has 22 one bedroom and 2 two bedroom units.

Rental units are occupied by more non-family and younger households than is found in Columbia’s owner occupied housing. Monthly rents in Columbia range from a low of \$200-249 a month to a high of \$1000-1499 a month. The median rent in Columbia is \$783 a month.

Chapter 8
Housing and Residential Issues

Renter-occupied Household Types

Household types (Renter-occupied Housing)	Number	Percent
Total Renter Occupied Housing Units	155	100
Family Households	79	51
Householder 15-64 years	72	46.5
Householder 65 years and over	7	4.5
Married Couple Family	48	31
Male householder, no wife present	6	3.9
Female householder, no husband present	25	16.1
Nonfamily Households	76	49
Householder 15-64 years	52	33.5
Householder 65 years and over	24	15.5
Male householder	33	21.3
Living alone	22	14.2
Householder 65 years and over	5	3.2
Not living alone	11	7.1
Female householder	43	27.7
Living alone	33	21.3
Householder 65 years and over	19	12.3
Not living alone	10	6.5



Housing Patterns

1. The Lake Community

The homes built around Columbia Lake lie in the area of greatest housing density in Columbia. Mostly built before zoning regulations came into play, the lots are small, most under a half acre. Before 1960, most homes in this area were seasonal. Today, most of the town’s seasonal housing is still in this area, but the total has fallen to less than 80 units. 70% of those seasonal units were built before 1960, and 40% before 1939.

Today the housing stock around Columbia Lake is strictly regulated in terms of the size of year round dwellings that are permitted on these undersized lots. Expansion and replacement of older homes is frequent due to the desirability of the location, but such changes are carefully reviewed to avoid environmental and aesthetic problems.

2. Island Woods

This is the only subdivision built to date under the town's Cluster Housing provision.

3. Condominiums

A new subdivision regulation passed in 2000 provides for the first condominiums to be permitted in Columbia. These are designed solely for active seniors. The units are to be detached homes of mostly two bedrooms, and because of their smaller size they are allowed to be spaced at twice the density allowed for other one family homes. While there is nothing to say where in the residential zone such housing must be built, the first 16 unit development has been appropriately located adjacent to the town's senior Center. The regulation makes no provision for affordable housing within such developments.

4. Newer Subdivisions

All subdivisions undertaken in the past ten years have been of the standard cookie-cutter variety (the entire parcel divided to provide the maximum number of permissible building lots). Between 1990 and 2000 (see map on next page), there have been 24 new subdivisions creating 150 new lots from 680 acres. The subdivisions ranged in size from two lots to as many as 33 lots. Their location is dispersed throughout town.

A major difference in newer subdivisions has been the increased number of cul de sac (dead end) roads, replacing the earlier pattern of multiple parallel driveways to back lots. This pattern has resulted from a subdivision regulation passed in the 1999 which permitted only one back lot to be created for every 6 front lots. The impacts are several. There will be more road mileage for the town to maintain, but greater safety due to reduced number of intersections and better accessibility for emergency vehicles. Homes sharing a cul de sac also share a greater sense of community than those on isolated back lots. The reduced number of long driveways also lessens the negative environmental impact of new development.

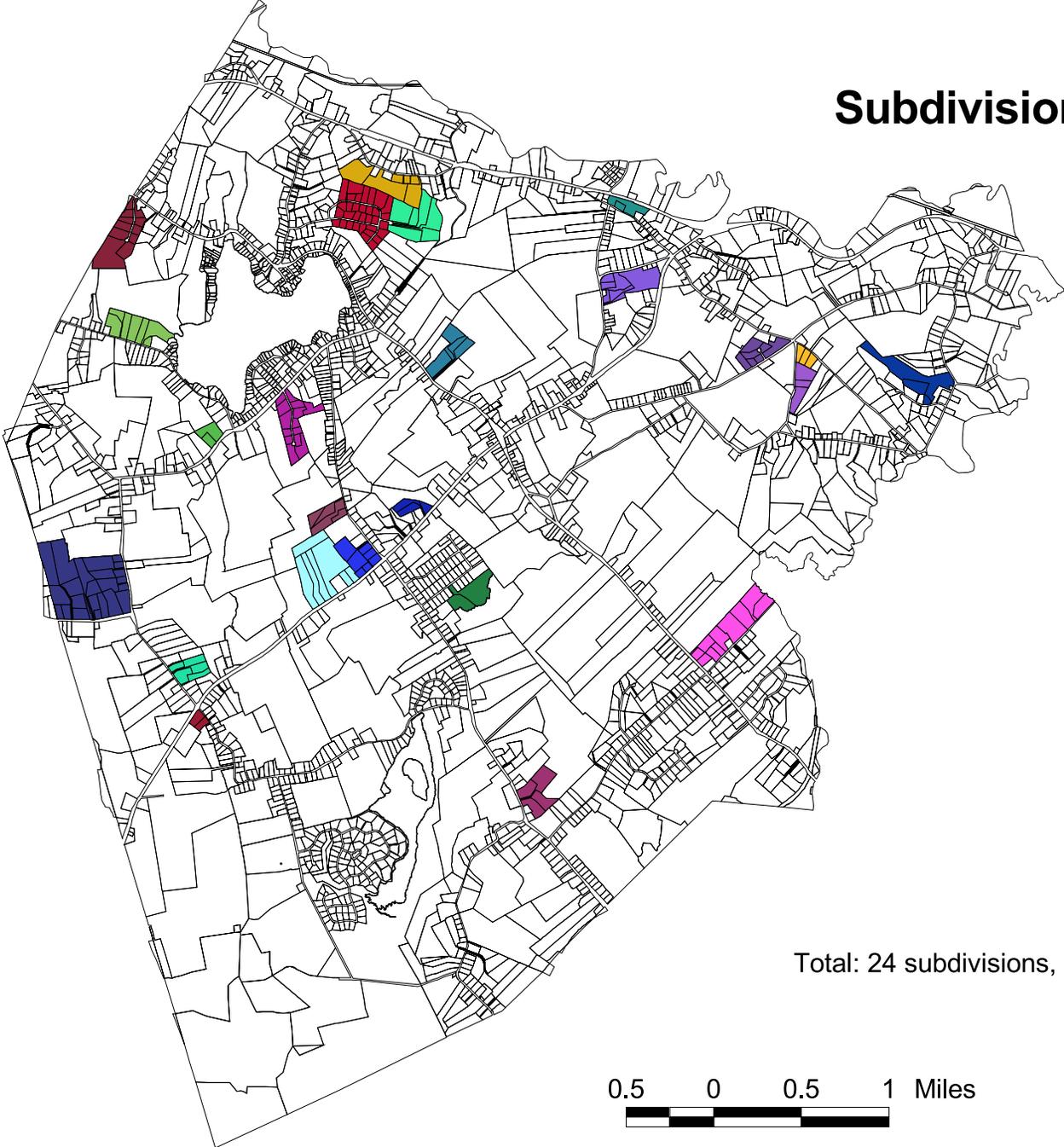
House Values and Affordability

The median sales price of houses in Columbia has risen from \$149,000 in 1990 to \$200,000 in 2004. This is an increase of 34%. Over the same period, the median household income has risen from \$53,744 to \$76,263, an increase of 42%. Using the accepted formula that a household can afford a house priced at 2.5 times its annual income, the median house is almost affordable to the median household.

However, there are those who are below the median income. If they are to buy a house today, they must look to the smaller homes typical of those built before 1960. The alternative is to live in the limited number of rental units. There is no government subsidized affordable housing in Columbia.

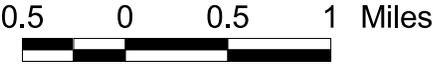


Subdivisions 1990-2000



- Starkel 99 (6 lots, 36 acres)
- Shady Glade 00 (3 lots, 13 acres)
- Pine Hill 95 (2 lots, 21 acres)
- Pheasant Run 95 (2 lots, 4.5 acres)
- Paradise 99 (3 lots, 6.5 acres)
- Olin Heights 00 (2 lots, 8 acres)
- Old West Farm 99 (5 lots, 16 acres)
- Nelson 99 (2 lots, 8.6 acres)
- Macht Pond 99 (6 lots, 28 acres)
- Homestead 00 (14 lots, 31 acres)
- Jones Estates 98 (4 lots, 21 acres)
- Holbrook Estates 99 (4 lots, 22.5 acres)
- Heritage Farms 90-5 (33 lots, 51 acres)
- Franklyn Farms 97 (23 lots, 109 acres)
- Foxboro 94 (10 lots, 48 acres)
- Farley 99 (3 lots, 8.5 acres)
- Fairview Farm 94 (7 lots, 20.5 acres)
- Erdoni 98 (7 lots, 30 acres)
- Devon Hill 00 (7 lots, 17 acres)
- Deer Hill 94 (3 lots, 30 acres)
- Benton Farm 95 (11 lots, 37 acres)
- Barrett 97 (6 lots, 40 acres)
- Axelrod 01 (4 lots, 15 acres)
- Ab Dev 00 (7 lots, 58 acres)
- Property Lines

Total: 24 subdivisions, 150 new lots, 680 acres divided



1. Housing & Seniors

92% of seniors are living in owner occupied housing. Other than Dartmouth Village the rental options are few. 7.1% of seniors are living without a vehicle available. 7.1% of seniors are in households with incomes below the poverty level.

2. Housing & Poverty

Of the 43 owner-occupied housing units with residents living in poverty, 63% are seniors, and 80% receive income from Social Security. The difference of 17% probably is made up of those living on survivor’s benefits or disability payments. It is a commentary on the lack of low income rental units, that no one in the 9 renter occupied households in poverty receive public assistance or Social Security income.

Assessment

Public Opinion

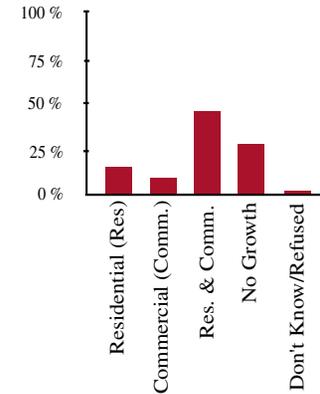
Issues relating to residential development were regular topics of discussion during the process of preparing the Plan. Two town wide surveys, one by phone and one by mail, provided guidance in developing the policies explained in this section.

Some of Columbia’s residents favored slowing the rate of growth or stopping development altogether. There are several reasons why these options are difficult or impossible to accomplish. First, our form of government and system of constitutional rights guarantee people a reasonable right to use and develop property. The Zoning Commission has an ability to regulate (but not prohibit) land use and development activities in order to protect the public health, safety, and general welfare.

Second, it was felt that most resistance to change reflected unhappiness with what often happens when development occurs. Sometimes residents did not anticipate development occurring at all on a particular property. In other cases, the development patterns that are occurring are not preserving Columbia’s character or protecting important features.

The challenge of the Plan is to identify the appropriate amount and patterns of residential development in Columbia to help address these issues.

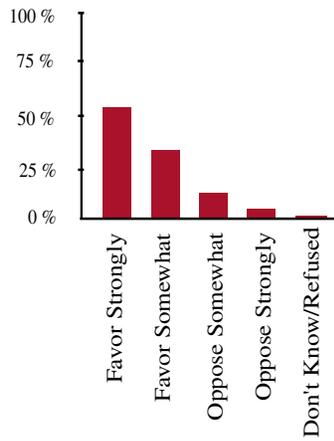
Over the next 10 years, which of the following types of development would you prefer take place in Columbia?



Chapter 8

Housing and Residential Issues

Do you favor or oppose single family home development in Columbia?



Types of Housing

In general, Columbia residents have indicated that the current mix of housing types was about right, but that there were too few elderly housing options. In the study conducted for the town in 2000 by the Center for Survey Research and Analysis at the University of Connecticut (see Appendix A), residents strongly supported single family homes and senior housing.

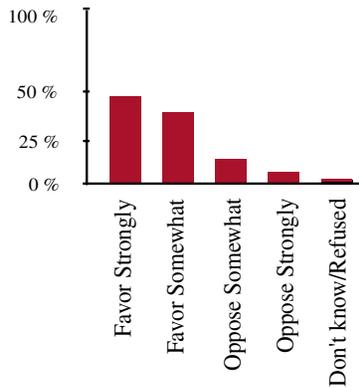
Survey Question: Do you favor or oppose single family home development in Columbia?

Percent	Answer
53	Favor strongly
34	Favor somewhat
9	Oppose somewhat
4	Oppose strongly
1	Don't know/Refused to answer

Survey Question: do you favor or oppose senior housing development in Columbia?

Percent	Answer
49	Favor strongly
35	Favor somewhat
9	Oppose somewhat
5	Oppose strongly
3	Don't know/Refused to answer

Do you favor or oppose senior housing development in Columbia?



The same study found much less support for two family homes (35%) and condominiums (23%). While the majority of residents oppose such development, it is nevertheless clear that at least a quarter of the population feel a need for housing options that Columbia does not at present offer. Those with lower incomes, typically young families just starting out and older residents living on retirement funds, are attracted to rental units, smaller houses, and condominiums. Most such existing units are older and in poorer condition than most of the town's housing stock. Some provision for newer such units needs to be considered.

1. Housing Units

The number of housing units has diminished in the past ten years. Many houses for rent lie within the older lake community, and as real estate values rise in this area, they are being renovated or replaced by larger new residences that are no longer rented out. Most new housing units have come as accessory or in-law apartments associated with existing or new single family homes.

The trend toward accessory apartments is one that fits in well with the traditional town character. Columbia allows accessory apartments in residential zones with Special Exception approval. These provisions should be maintained, with appropriate controls, to help meet the housing needs of Columbia residents and provide housing opportunities with minimal community impact. The town should also explore allowing rental units in non-residential buildings, such as in the second story of a retail store.

The town should welcome development of affordable housing units by churches or other local organizations, and look into developing such housing opportunities with state and federal grants or subsidies.

2. Senior Housing

Provision needs to be made for our rapidly growing senior population. With the exception of the 24 rental units at Dartmouth Village and the 15 condominiums at Wickford Village, there are no alternatives at present in Columbia to staying in a one family home. The following are the commonly recognized options for senior citizens.

1. Remain in current home
2. Move to a smaller home
3. Move in with family; into their home or an accessory apartment
4. Move to a condominium with all exterior maintenance provided
5. Acquire daytime assistance
6. Remain in home and create an accessory apartment for a caregiver
7. Move to a congregate or assisted-living complex
8. Move into subsidized elderly housing
9. Move to a nursing or convalescent home

Chapter 8
Housing and
Residential Issues

Some senior and disabled persons will want to remain in their own homes as long as possible. This can be facilitated through such local policies as tax breaks and the availability of local assistance such as dial-a-ride, meals-on-wheels, senior activities, and home health services. Seniors are already making good use of the Beckish Senior Center for its daily programs and special events.

Also, in a single-family home, a homeowner may establish an accessory apartment (a secondary dwelling unit) located in the home to:

- accommodate an elderly or disabled family member
- allow an on-premises caretaker or caregiver for an elderly or disabled person
- or to generate additional rental income

Other senior or disabled persons will look forward to moving to retirement or congregate and assisted living developments that provide some services (such as meals, recreation, and minor assistance with daily living) that are developed within the area. In this manner they can remain in contact with family and friends. While some of these types of developments may be undertaken by the private sector, there is a critical need for housing developments for elderly and disabled persons of limited means.

Nursing and convalescent homes provide services for the elderly and disabled who need significant assistance with daily living. At this time, though needed, these types of developments are not being undertaken by anyone in the immediate area.

3. Multi-Family Development

While not popular in town surveys, there may be support for such developments that meet specific needs within town. In any discussion of such housing the following guidelines should be followed.

- a. For proposed multi-family developments, utilize the criteria discussed in the Plan to:
 - evaluate the proposed location
 - guide the proposed design
 - review the proposed density

- b. Encourage multi-family developments that:
- meet local housing needs
 - are compatible with town character and help maintain Columbia's single-family appearance
 - blend effectively with nearby single-family residential areas
 - are located on sites in or near the center of town or in the area between the center, the lake and Recreation Park area

Pattern of Residential Development

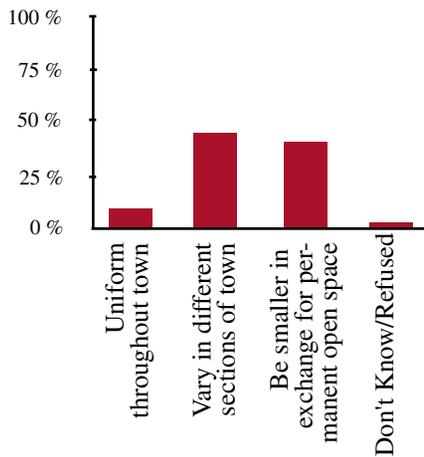
Much dissatisfaction relating to residential development in Columbia is associated with *patterns* of development. It is not so much that there are new homes, but it is the manner in which these homes are located that causes concern.¹ Unfortunately, current subdivision regulations are to a great degree responsible. They foster the *cookie-cutter* approach to subdivision, which maximizes equally spaced development along road frontage, and makes no provision at all for the use of protected open space to protect natural and scenic resources. In the 2001 town survey, 97% of town residents felt that protection of "town character" was important. 84% of residents wanted to see additional land set aside as permanent open space. The Town needs to ensure future patterns of development that carry out the public's wishes in this regard.

The present pattern of subdivision design results from regulations that place dimensional standards above natural and scenic features. All lots must have 200 feet of road frontage and contain a minimum of 50,000 square feet, of which 30,000 square feet must be "buildable". Columbia defines buildable land as "being free of water courses, lakes, ponds, swamps, marshes, wetlands, exposed ledge and slopes in excess of twenty (20) percent over more than ten (10) percent of the required contiguous area." While these regulations are designed to ensure that building lots contain adequate areas for the provision of well and septic systems and usable areas for home sites, they result in a mechanical approach to subdivision design. Rear lots only need 30 feet of road frontage, but are permitted only at a ratio of one for every six front lots. Back lots are generally designed to "use up" the least buildable land and that which is furthest from any existing road. The current regulations thus guarantee that any undeveloped land will be farthest from the road and thus least seen by the passer-by. There is no open space provision in the current regulations. Every part of a lot to be subdivided becomes part of a new house lot.

Chapter 8

Housing and Residential Issues

When purchasing land for residential development, do you think that lot sizes should be:



1. Conservation Subdivision Design

Columbia needs to modify its regulations to foster subdivisions which will not result in the endless line of houses facing the road. A newer style of subdivision known alternately as the Open Space Subdivision or Conservation Subdivision can do a far better job of preserving the town’s character than those built under the regulations we have now. A Conservation Subdivision first identifies and sets aside the natural and historic features of a property so that its unique character will remain. House lots and roads are laid out around these protected features. The developer gets to build the same number of houses as in a standard subdivision, but they are placed closer together on the most buildable land. Standards are still used that ensure safe wells and septic systems. The preserved open space enhances the entire development, increasing the value of the individual house lots, so that they bring a sales price equal or greater to a similar house on a standard sized lot.

The table below illustrates the resultant difference between *conventional* development patterns and *conservation* development patterns.

Conventional vs. Conservation Subdivisions

CONVENTIONAL SUBDIVISION	CONSERVATION SUBDIVISION
32 Homes on an 82 acre parcel. 82 acres devoted to the 32 house lots	32 homes concentrated on 29 acres of the 82 acre parcel, with 53 acres (65%) preserved as open space area

The two plans that appear on the next two facing pages illustrates how the same site might be developed first with a standard subdivision plan and then with a Conservation Subdivision.

The major advantages of the open space development are:

- Public open space with greater potential for trails and greenbelt establishment,
- Preservation of open fields and rural character along the roads,
- New homes nestled in the trees with scenic vistas across fields,
- Preservation of stone walls and significant vegetation and living space for animals,
- Fewer wetland crossings and impacts and
- Less pavement (roads and driveways)

¹ The larger issues of overall pattern have been addressed in the Community Structure chapter of this Plan. This section will address primarily the patterns created by new residential subdivision.

The open space is located to conserve sensitive natural resources, buffer adjacent uses, protect scenic views, and contribute to the overall open space pattern.

2. Amount of Open Space Protected

There are many different opinions on the appropriate amount of open space to be protected. The state goal is 21%. Many towns have a minimum of 15%. Here are a few alternatives that bear consideration:

Maximum:

A subdivision regulation that requires that any land within a subdivision not part of a required minimum lot size be preserved as open space.

Flexible:

Open space protected in proportion to the reduction of the minimum lot area and/or minimum lot frontage requirements within a subdivision. For example, the required lot size is reduced 20% in exchange for an open space dedication of 30%.

Minimum:

A minimum of 15 % of a lot be dedicated to open space. Another variation is having open space requirements only apply to subdivisions of a certain size.

3. Residential Driveways

Driveways raise issues of safety, traffic, and appearance. Residents trying to enter an arterial or collector road from their own driveways or, on the return trip, trying to turn into that driveway may be risking their life. When they do make a safe exit or entry, they may still be creating traffic problems for others. Children waiting for the bus or arriving home from school at such driveways are also at risk.

Multiple curb cuts close together also provide for an unpleasant appearance. Driveways to back lots detract from the lots they pass, and for that reason are usually placed at the extreme end of a subdivision, often making for larger and more environmentally negative impacts.



Sample Conventional Subdivision Design

Source: Arendt, Randall G., *Conservation Design for Subdivisions: A Practical Guide to Creating Open Space Networks*, Island Press, 1996



Sample Conservation Subdivision Design

Chapter 8
Housing and
Residential Issues

There are a number of actions that could lessen the above problems:

- Consider prohibiting rear lots on arterial roads and requiring a special permit for rear lots on collector roads.
- Consider increasing frontage requirements on existing streets, especially arterial and collector streets. Not only would the number of driveways be reduced, but community character would be preserved. Such a requirement would also foster increased development on new roads.

4. First Cuts

Currently, any landowner may divide off one new lot from an existing lot, that has unchanged boundaries since July, 1957, without undergoing the same scrutiny given to subdivisions of three lots or more. While this practice may not seem to have much impact, as subdivisions involve such small amounts of land on an annual basis, cumulatively the impact is great. As new subdivision regulations are developed that address the issues raised above, the town would benefit greatly from allowing greater review of first cuts as well. If community character is to be protected, measures must apply to all lots, not just the largest subdivisions.

Program

Goal: Provide a diversity of housing options appropriate to all segments of Columbia's population					
		P&Z	BOS	IWC	CC
*	Allow for and encourage development of congregate and assisted living facilities for seniors and the disabled	1	1		
	Maintain programs that allow elderly and disabled persons to remain in their own homes as long as possible		1		
	Develop more rental options	2	2		
Goal: Encourage a pattern of development that preserves rural character and natural resources					
*	Require conservation (open space) subdivision plans	1			
*	Modify regulations to permit subdivisions that create clustered housing with large contiguous areas of permanently preserved open (undeveloped) space	1			
*	Develop a standard for quantity of open space protection in new subdivisions	1			1
		P&Z	BOS	IWC	CC
*	Reduce driveway cuts onto State highways, while providing alternative road and pedestrian access	1			
	Allow review of "divisions" of property (also known as the "first cut" of a subdivision)	1			
	Consider prohibiting rear lots on arterial roads and requiring a special permit for rear lots on collector roads	2			
	Consider increasing frontage requirements on existing streets, especially arterial and collector streets	2			

Chapter 9 Business & Economic Development Issues

Overview

Business uses serve three main purposes in any town – they provide jobs, expand the grand list, and provide services needed by residents. As a rule, they are a favored use in that they bring in more revenue to the town than they require in services. However, they may have effects that are less than desirable – more advanced infrastructure such as sewers, public water, and links to larger transportation systems. They may generate traffic, noise, and pollution, and thus their location and characteristics need to be carefully planned and monitored.

Inventory¹

Commercial and manufacturing uses make up a small part of the town today, both in terms of acres used and income generated.

Location

The Manufacturing and Commercial Zones lie in several areas along Rt. 6 and the northern portion of Rt. 66. However, there are considerable business uses existing within the Residential Zone either by being grandfathered in, by special exception, or as a Home Business.

- **Manufacturing Use**

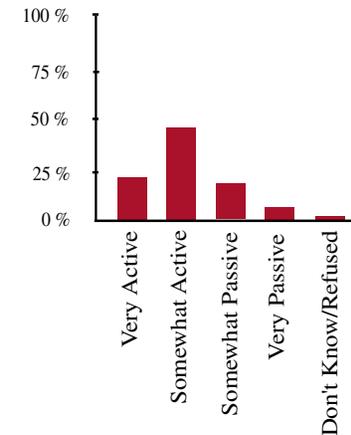
Existing land use within in the Manufacturing Zone (MZ) does not reflect its preferred use. While 363 Acres (2.6% of the town) are zoned Manufacturing, only 9.64 acres (3 lots) of land in the manufacturing zone are in actual manufacturing use. There are 112 acres (5 lots) of land in manufacturing use outside of the manufacturing zone. The majority of developed land in the MZ is in commercial or residential use.

- **Commercial Use**

Existing land use within in the Commercial Zone (CZ) does not reflect its preferred use. While 474 acres (3.4% of the town) are zoned Commercial, only 70.6 acres (11 lots) of land in the CZ are actually in commercial use. There are 93.67 acres (34 lots) of land in commercial use outside of the CZ. Town wide there are 164.43 acres or 1.2% of the town in commercial use. The 58 acres in 9 lots or 12% of the CZ that remains undeveloped give the misleading impression that there is quite a lot of land available for future commercial use.

9 CHAPTER

In general, how active do you think the town should be in working to encourage business development?



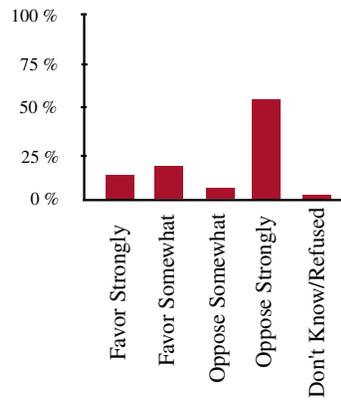
¹ All figures are from the Columbia Assessor's Records for 2000.

Chapter 9

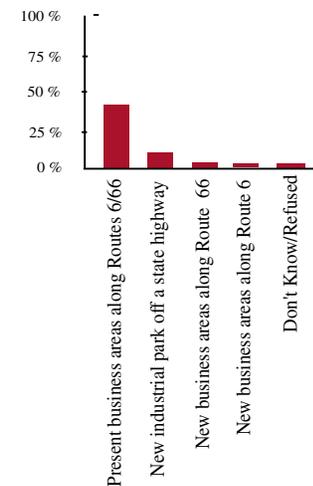
Business & Economic Development

Section III — Development Issues

Do you favor or oppose the expansion of the center of town at the Routes 66/87 for more commercial use?



Where do you think would be the best place for future business development?



- Home Businesses**

There are 131 home businesses located as an adjunct to residences in town. These are located based on permits approved by the Town Zoning Enforcement Agent.

Financial Benefit to the Town of Columbia

In 1990, commercial and manufacturing properties contributed 7% of the grand list. In 2000, they contributed 5%, and in 2003 they contributed 6%.

Home businesses are assessed separately based on the value of the property used in the business. The 131 home businesses in Columbia contributed a total of \$794, 723 in 2003, less than .3% of the grand list.

Assessment

Location

- Town Center**

Currently, the center of town contains a variety of municipal functions, a post office and a few scattered businesses. The zoning throughout the central area of town is residential. Under the residential zoning regulations, the post office and municipal functions are allowed and could be expanded in the future. However, commercial services are considered non-conforming uses and cannot be expanded, under the current regulations. New locations for commercial services within the current residential zone are strictly prohibited. As the town has grown, many new municipal service locations have been added and the need for certain convenient, limited commercial services has also grown. It is generally believed that a growing town should encourage commercial development along with residential development, in order to maintain a reasonable taxing level. While the opportunity for additional commercial services exists in other parts of town, there is a need for limited commercial services in the center of town, that could cater not only to the general population of the town, but also to those persons that staff the many current municipal and other functions that already exist in this area.

Route 6 and 66 East

The land available and the uses permitted in the existing Manufacturing and Commercial Zones are limited and confusing in their current configuration. Several existing uses are non-conforming. The list of permitted uses should be expanded, but only with regulations that provide additional controls for potential negative impacts.

The current zones for commercial and manufacturing uses are scattered along Routes 6 and 66, in a non-continuous pattern. Since both zones are adjacent to the same highway path and since the level of manufacturing in Connecticut has been dwindling over the past several decades, the need for two distinct zones is no longer clear. Additionally, some of the currently permitted uses in the Manufacturing Zone don't relate to the common definition of the word, creating a certain level of confusion and misunderstanding by potential applicants. Not all lots in these current zones are capable of development, owing to the presence of wetlands, ledge and steep slopes. Consequently, these zones should be re-defined into a more cohesive plan that provides additional space for new business development.

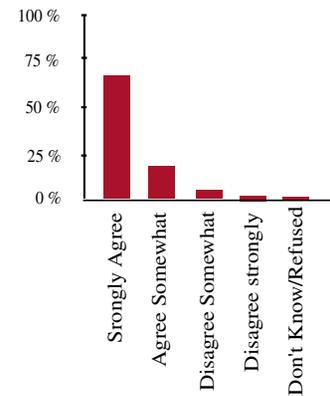
It is proposed that the Route 6/66 corridor, from the Andover town line on the west, to the Windham town line on the east be zoned for "Business" on both sides of the corridor, to a depth consistent with the rear lot lines of most of the affected properties. This zone should also extend westward on Route 66 from the connection with the Route 6 bypass, toward the center of town, ending at the current location of the existing "Commercial Zone". Again, the width of the zone on each side of Route 66 would be determined by the best fit with rear lot lines. While this plan can anticipate the needs for the foreseeable future, it is also recognized that future changes in office, retail, service and manufacturing business trends may result in other needs that this plan does not anticipate. Such a business zone should have adequate controls to ensure that each permitted use includes appropriate controls to ensure that it will not intrude on the town's current rural community character.

The town should consider prohibiting new residential construction in the proposed Business Zone as a means to maximize availability of land for the preferred use – business. PZC should review and update where appropriate commercial uses allowed in this Business District and promote streamlined zoning regulations for review and approval by site plan review or by special permit.

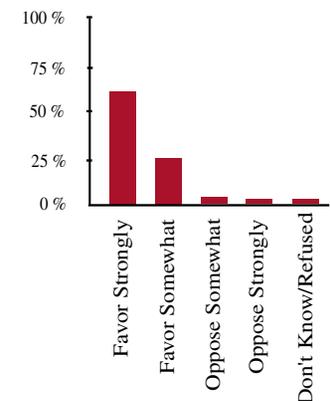
Rt. 66 West

The potential for limited commercial use along Route 66 west of the town center towards Hebron also needs to be considered. Recent indications show a demand for professional and artisan office space along Route 66 in existing residential buildings. Such use might include offices for attorneys, engineers, dentist, physicians, land surveyors, veterinarians, nursing agencies, physical therapy offices, photography/framing studios, accountants, and shops for furniture makers and other artisans. Current regulations might allow some of these uses as home businesses, but require that the owner live on site. Changing this area to allow limited commercial uses would no longer require the owner to live on site. Such a new zone would also have to include provisions to protect any neighboring residential use. It might require that the exterior of the buildings remain unaltered architecturally, thus maintaining

Having active farmland in Columbia is important to me.



Do you favor or oppose agriculture as a potential economic development project?



the residential appearance. Landscaped buffers, parking areas shielded from sight, and other provisions would also be required. Hours of operation, traffic issues, and more require careful review before a permit would be approved.

Infrastructure

The current and proposed future business zones are in an area with severe natural limitations – wetland and floodplain soils, steep slopes, and overlie a stratified drift aquifer. For such an area to be used for business purposes, it may be necessary to engineer solutions to these limitations.

Promote business while maintaining town character

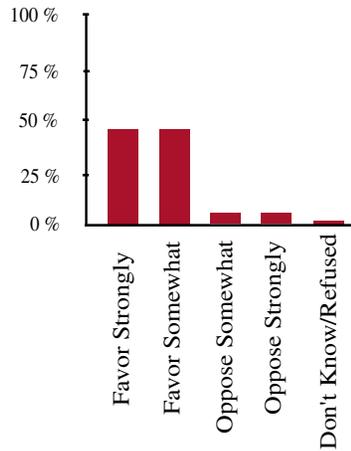
Regulations concerning non-residential uses need to be reviewed and strengthened to enhance the site designs so that the impact of non-residential development does not intrude on the town’s current rural community character. Items to be addressed and included are such things as: building placement, architectural features, fewer curb cuts, more cross-connections between separate lots, shared parking and parking which is located out of the view from main thoroughfares.

Tax incentives should be considered as a means of encouraging update of existing, non-conforming buildings to bring them into compliance with current requirements.

Home Businesses

Home occupations are a growing trend throughout the country and many such uses have been developed and are currently permitted in Columbia. As home occupations evolve, regulations regarding them should be reviewed and modified as necessary.

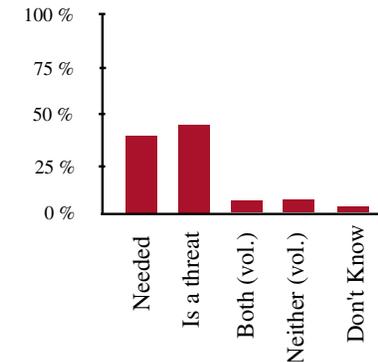
Do you favor or oppose home businesses as a potential economic development project?



Program

Goal: Provide for additional areas allowing commercial use				
	P&Z	BOS	IWC	CC
Establish a Village District zone in the town center, that would permit limited and carefully regulated commercial uses	2			
* Combine and expand existing commercial and manufacturing zones along the Routes 6 and 66 corridors in to a single Business Zone.	1			
Goal: Expand opportunities for Economic Developments				
Broaden the uses permitted in the Business Zone	2			
Goal: Foster infrastructure to promote use of business-zoned lands				
Seek grants, such as STEAP, which would aid in developing the needed infrastructure	1	2		
Goal: Promote business while maintaining town character				
Strengthen zoning regulations to provide tighter, specific controls on non-residential uses throughout town	2			
Continue to allow home businesses with strict regulation	1	1		

Do you feel that the town needs economic development in order to survive or that economic dev. is a threat to the character of the town?

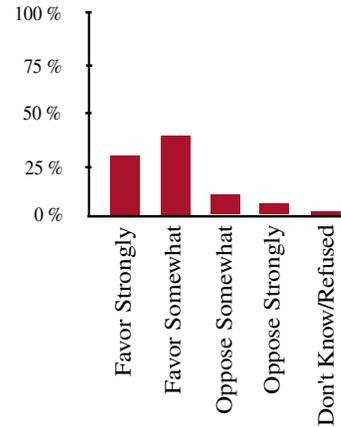


Chapter 9

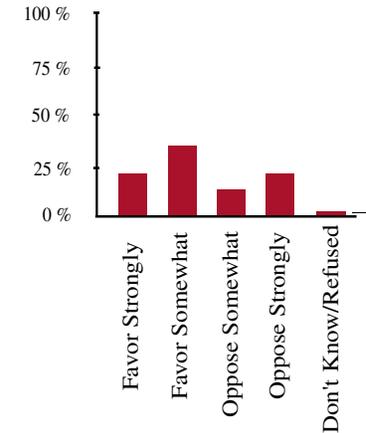
Business & Economic Development

Section III — Development Issues

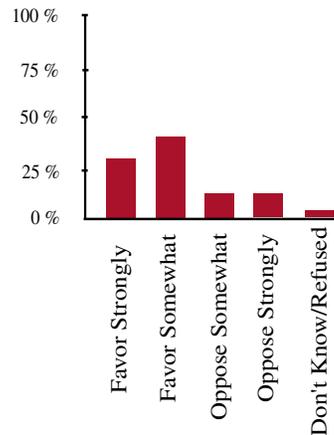
Do you favor or oppose retirement services and residential retirement communities as a potential economic development project?



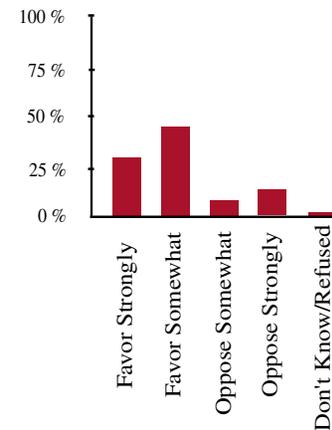
Do you favor or oppose retail/service businesses as a potential economic development project?



Do you favor or oppose tourism/heritage businesses as a potential economic development project?



Do you favor or oppose professional offices as a potential economic development project?



Chapter 10 Agriculture

Chapter 10 Agriculture

10 CHAPTER

Overview

Agriculture was the economic base for the residents of Columbia from its first settlement in 1700 until WW II. Since then, agricultural land use has declined while residential land use has soared. Today, agriculture plays only a small economic role in Columbia, but it still plays a large role in the town's historic and rural character, highly prized by Columbia's residents.

Inventory

Residents Engaged in Agriculture

In the 2000 federal census, only 12 residents reported agriculture or forestry as their full time occupation. However, there clearly is a much larger number of residents who engage in agriculture as a part time business or hobby. These include those engaged in "pick your own" or farm stand produce operations, small scale maple syrup operations, livestock raising, and equestrian training or boarding facilities. Horse related operations have grown especially in recent years.

Prime and Important Farmland Soils

The US Soil Service rates land as prime, or important, for agricultural use based on its fertility, depth, drainage qualities, and slope. Prime agricultural soils in Columbia lie for the most part along state Routes 66 and 87 with another substantial cluster along West Street, and total 1925 acres or 14% of the town's area (see "Prime Farm Soils Map". Check List of Maps and Charts in index for page number). Many of the town's current farming operations remain on these preferred soils. Important farmland soils are located mostly on the steeper edges of the prime farm soil areas, or lie in the floodplain areas along Rt. 6 and 66 and Gifford's Brook. Much of this floodplain land is not in active agricultural use.

Agricultural Land Use

There is currently no good measure of agricultural land use in Columbia. The assessor's records show properties that are assessed under the state statute (PA 490) that allows lower assessments for agricultural uses. However, not

**Chapter 10
Agriculture**

all those engaged in agriculture choose to take part in this program. In addition, only when agricultural use is the primary use of a parcel, does the whole parcel appears in the GIS map database as under 490. When the primary use is residential, the agricultural part is not reflected in the mapping. In addition, some of the PA 490 farmland is no longer in that use but this is not yet reflected in the mapping. Right now the best we can get from the assessor’s data is the following:

2000 Assessor’s 490 Farmland

Type of Farmland	Number of Parcels	Acres
Woodland	1	36
Tillable D	1	48
Tillable C	22	1016
Pasture	5	171

The Assessor’s PA 490 data shows a total of 1240 acres, or 9%. of the town to be in agricultural use. If it were possible to count all farm uses, such as a person with one horse and a five acre pasture, the figure might be considerably higher.

Agricultural Preservation

The state has an Agricultural Preservation program in place that allows the state to buy up development rights on farms, allowing the farmer to realize much of the financial gain that s/he might realize if the property was sold for development, yet requiring that the land remain forever in agricultural use. Not only can the farmer reinvest that money in his or her farm operation, but the reduced value of the land after the development rights are gone may make it possible for entry level farmers to find land they can afford. While farmers in Columbia could theoretically take part in this program, in reality it will be of little help in preserving agricultural land use in town. To qualify for inclusion in the program, the land needs to be in active use, preferably in row crops. It also needs to be within a certain radius of other operating farms and farm service businesses. Only that farm land in Columbia that lies along its southernmost edge, bordering Hebron and Lebanon can meet these locational requirements. One parcel of 37 acres in Columbia has been preserved under this program.



1995 Agriculture Survey

The Conservation Commission carried out a survey of those known to be engaged in agricultural practices in 1995. The responses showed most farmers to be part time, with farm income under \$10,000. Most produced products to be

consumed locally, and operated farm stands to retail their goods. While they felt regulations and taxes to be fair over all, they felt that the town could do more to foster farming through lower assessments and relaxation of regulations. Quite a few were interested in selling development rights as a way of guaranteeing continued agricultural use. They felt that both the town and state should do more to foster agriculture.

While these findings probably had considerable validity, this survey may not have reached many of those engaged in part time agriculture. In addition, the findings are now outdated.

Agricultural Committee

While the 1990 Plan of Development called for the formation of an agricultural committee, this recommendation was only carried out in 2001. With the formation of this committee, the town is now in the position of doing a more definitive inventory of agriculture in town. This committee should also serve as an advocacy group for that support of farming in Columbia.

Forestry

While many think of forestry as an integral farming operation, both the assessors and state law look it as somewhat differently. State law (PA 490) does allow for lower assessment of forests if they are 25 acres or over and have been certified by a forester. To reduce the possibility of such land being held under PA 490 for speculative purposes, there is a penalty for selling such land after only a short holding period. 43 parcels totaling 1,729 acres of forest land in Columbia are involved in this reduced tax program. Obviously, there may be those who chose not to take part, as well as many who do not meet the 25 acre qualification yet still use their wood lot for firewood or sell forestry products. Again, we do not have a really accurate measure of those actively engaged in part time forestry activities.

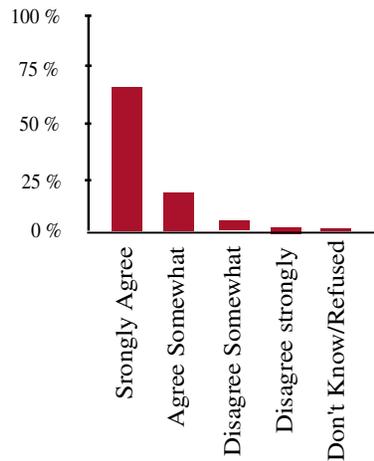
Assessment

While farming as a full time occupation is nearly extinct in Columbia, its pursuit as a part-time occupation is still viable and desirable. The town's farming heritage is certainly a major draw when residents are asked what attracted them to Columbia. However, without a strong plan to support agricultural uses, much of that activity will disappear as it becomes incompatible with real estate prices and increasingly dense residential areas.



**Chapter 10
Agriculture**

Having active farmland in Columbia is important to me.



Profitable farming is difficult in Connecticut on anything but the best soils. As prime agricultural soils are limited in Columbia, it is expected that farming will be equally limited. Agricultural practices that do not rely on farm soils, such as horse operations where the animals are fed entirely on imported feed, may be more viable. Profitable farming is also endangered by competition with residential real estate development. The factors that make them best for farming, also make them best for dense residential development. While agriculture should be the favored use on such lands, the town must also look to site desirable denser uses on them. However, such seeming opposed forces may be made compatible where the buildings in such developments are sited on the perimeters of the prime land, with their septic systems placed under the prime soils. The adjoining septic fields can then be preserved as dedicated open space with agriculture as a desired use – pasture, hayfield, tree farm, etc.

As has been found in nearby towns, farming side effects – noise, odors, manure on the road, flies- can all be considered as nuisances when they occur too close to a residential neighborhood. The answer lies in careful regulation of both agricultural uses and the development of new subdivisions. Potential agricultural pollution – run off of excess nutrients from manure and chemical fertilizers, damage to water quality through infiltration of toxic substances such as in some herbicides, pesticides, and additives to fuels, etc.- also need to be carefully monitored and controlled. The financial benefits of various operation for farmers must be carefully balanced to protect the community's natural resources.

Forestry activities allow residents some fuel self-sufficiency, plus produce supplemental income, which allows many to continue keeping their land in an undeveloped state. Almost all private wooded lots in town are commercially logged on a twenty year or so cycle. These forestry activities are well regulated by the state and the Inland Wetlands Commission (IWC). IWC requires best management practices to protect the natural resources within our woodlands. There has been some question about whether processing of forestry products falls into the category of agricultural activities. This question needs to be resolved to protect both agricultural and residential interests.

Program

Goal: Support agriculture as a beneficial land use in Columbia					
	P&Z	BOS	IWC	CC	AC
* Develop a database of agricultural locations and uses within town					1
Support events that demonstrate the value of agriculture		1			1
Revise regulations to address need for buffers agricultural and residential uses	2				
Promote agriculture as a preferred use on dedicated open space with suitable soils	1	1		1	
Goal: Support economic and regulatory practices that make agricultural operations a viable business in Columbia					
* Survey those engaged in agriculture as to needs to remain viable					1
Review zoning policies regarding retail farm businesses to make them more viable	2				
Review tax policies to lessen assessments on agricultural land and equipment		2			
Review signage regulations to allow promotion of retail farm businesses	1				
Review accessory use regulations on farms to allow more flexibility	2				

Note that other strategies regarding agricultural soils and farm land as a priority open space use are addressed in the Chapter 5 - Natural Resources and Chapter 6 - Open Space of this POCD.

Chapter 11

Community Facilities & Services

11

CHAPTER

Overview

Because of its long history, Columbia has many historic buildings located in a designated Historic Town Green District. These include Yeomans Hall, Town Hall, Chapel on the Green, the Saxton B. Little Library, Moor's Charity School, and the Meeting Place. This designation brings with it many challenges in terms of facilities maintenance and renovations as well as increased costs. However, these facilities represent the rural character of Columbia, which, by all accounts, is what draws the citizens to this historic community. Other facilities, which are scattered throughout the town, represent a wide range of architectural style from historic to modern prefab.

Inventory

Town Hall

The Town Hall, which is connected to Yeomans, was constructed in 1972. Located on Route 87, the Town Hall provides office space for the town government and provides safe storage of town and public records. There is also one large meeting room used by various commissions and committees.

Yeomans Hall

Mary B. Yeomans provided the resources for the first town hall in 1900. That hall burned in 1940 and was rebuilt in 1941. Mrs. Yeomans left \$1500 to the town so that the interest could be used to paint the hall every four years as long as it retains the Yeoman name. Yeomans Hall provides a convenient meeting room for many town boards and functions including the traditional New England town meetings held there for the purpose of conducting town business. Yeomans also houses the office of the Resident State Trooper and the building department.

The Meeting Place

The Meeting Place, located across Rt. 87 from the Town Green, was built in 1903 as the town library on a 45 ft. square plot of land that Joseph Hutchins gave to the town. It served as the Saxton B. Little Library until 1985. When the library was relocated, it became known as the Meeting Place. It has a lower level meeting room and a main level meeting room, which are available to town organizations and committees.

Moor's Charity School

Built in 1755 on the Columbia Green, it was the original site of Dartmouth College founded by Dr. Eleazar Wheelock. When Wheelock moved his college to Dartmouth, the one room building became part of the elementary school system. It has been moved from its original location to make room for Yeomans Hall and then again in 1948 to make room for Porter School. The one room facility (no heat, no plumbing) is now located between Porter School and the First Congregational Church. It received a face-lift in 1994. Although it is a town facility, the Columbia Historical Society oversees it. It is opened by the Society for historical exhibits on special occasions.

Chapel on the Green

The Chapel is an 1870 Greek revival structure on a 50 X 50 plot located in the Historic District between Town Hall and Rt. 87. It was originally owned and used by the Congregational Church but stood vacant for many years. In 1996 sills and clapboards were replaced at a cost of \$10,000. It has electric heat but no plumbing. In 2003, the Congregational Church offered the Chapel to the town at no cost. At a town meeting on November 18, 2003 the citizens approved taking ownership of the chapel.

The Town Green

This is the picturesque center of the town bounded by the Columbia Congregational Church, Yeomans Hall, Town Hall and the Chapel on the Green. It is a grassy area serving to remind all of our New England heritage.

Town Annex

In 2002 the town finance department and the school finance department were merged into one. Where to house this new department became a problem since neither Town Hall nor the school had appropriate space. After much discussion, a 1600sq. ft. modular building was placed between Town Hall and Porter School. The \$150,000 facility houses the finance department and the office of the Columbia Superintendent of Schools. It is a self-contained modular with heating, plumbing, and is ADA compliant.

Horace Porter School

The Horace Porter School serves Columbia's children from pre-k to eighth grade. The 100,000 square foot facility is located on 24.65 acres in the center of town. The school was built in 1948 and was last expanded and renovated in 1995 at a cost of twelve million dollars. The 1995 expansion included twenty classrooms and computer lab rooms, and enhancement of science, life skills, art, music and band rooms. A large gymnasium and library/media center were also added for school and community use. As of October 1, 2005, the Horace Porter School had an enrollment of 648 students.



Columbia Lake

Columbia Lake is a man-made lake located approximately one mile from the center of town. It occupies 300 acres and is approximately five miles around. The town citizens voted to purchase the lake from the American Thread Company on May 7, 1932 for \$25,000. There is a beach and boat launch area just off of Lake Road. The property surrounding the lake contains both seasonal and year-round private dwellings. There is also a children’s camp, Camp Asto Wamah, owned and operated by the First Church of Christ in Hartford, CT.

Murphy House

In the most recent past, the property bordering the north side of the beach was known as the Murphy property. It consisted of land, a small boathouse and a Victorian home. The town purchased this property in 1990 for \$315,000 enabling expansion of the town beach and parking area. The house now serves as the office for the lifeguards and marine patrol in the summer, storage for recreation equipment and has one small meeting room.

Beckish Senior Center

The Beckish Senior Center is located off Route 66 not far from the center of town on land donated by Peter Beckish in 1994. It was built with a \$500,000 Small Cities Block Grant, a town appropriation of \$240,000 and donations. The 4,000 sq. ft. one story building was opened in 1997 at a final cost of \$822,800. The center is fully ADA compliant and serves as the hub of most activities for Columbia’s older citizens.

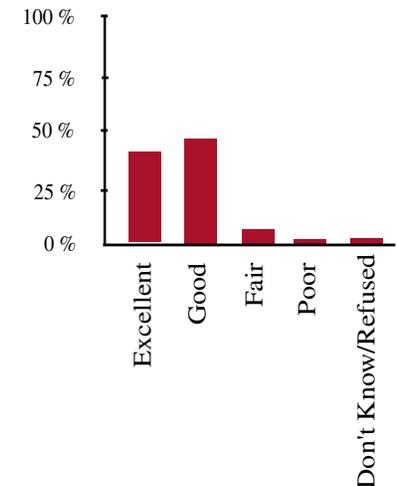
Old Firehouse

This cinderblock facility located on Route 66 in front of Horace Porter School and adjacent to the post office served as the home of the Columbia Volunteer Fire Department from August 1947 until 2002 when the department moved to a new facility. The land was originally deeded to the Fire Association by Horace W. Porter. The Fire Department deeded this property to the town as part of the arrangement when the town paid for construction of the new firehouse. The facility consists of a first floor area where fire equipment was housed and an upstairs, which housed offices, a kitchen, and a large meeting room. The building is currently being used for equipment storage.

Emergency Services

The Columbia firehouse is a state of the art emergency facility located on Rt. 66 near the center of town. Built with a brick facade, it is in keeping with the historic character of the town. At a cost of 2.3 million dollars, it has 10 bays, offices, two bunkrooms, a kitchen, a large meeting room, lavatory facilities and equipment storage. The Columbia

How would you rate the public safety services, like fire and police, in Columbia?



volunteers provide all fire and EMT services. The operating budget for the facility is a combination of state and federal grants and town appropriations. The firehouse also serves as the town-polling place for all elections.

Police Protection

Like many small towns, Columbia contracts with the State Police to have a Resident State Trooper assigned to Columbia. The office for the trooper is in Yeomans Hall.

Town Garage

The town garage consists of one enclosed facility for equipment storage and an office. It has a gasoline/diesel pump and serves as the parking area for school buses owned by a private transportation company. The town garage is located on Route 6 adjacent to the town transfer station.

Transfer Station

Waste disposal was originally in the town landfill on Route 6. However, in 1994 the landfill was converted into a transfer station. Residents now deposit their waste into designated dumpsters, which are then carted to disposal and recycling plants. What was once a rather inexpensive service provided to residents is now much more expensive as tipping fees continue to climb.

Saxton B. Little Free Library

The present Saxton B. Little Library, Inc. was created within the historic Rice-Sorachi building on Rt. 87 adjacent to Town Hall in 1985. It measures 4800 square feet, cost \$500,000 to build and houses over 36,000 items. Although a relatively new facility, the design is in keeping with the historic character of the surrounding facilities. Library operations are fully automated. The library is governed by the Saxton B. Little Library Association, a 501©(3) non-profit corporation. About 85-90% of the operating budget each year is paid by a town grant.

Traversing dirt roads to digital highways to get there, townspeople in Columbia have supported a free public library since 1883. In that year, the first Columbia Free Library was built at a cost of \$315. It measured 320 square feet, and served a population of about 757 town residents. In the next twenty years, lack of book storage space became critical, and in 1903, a new post and beam library was built measuring 2,025 square feet, costing \$2800, and serving a town population of about 655 residents. It was re-named the Saxton B. Little Free Library in honor of the prominent educator and benefactor, Saxton Bailey Little.



Eighty years after its beginnings and in the same small space, with no plumbing or parking facilities, the staff managed to circulate 30,000 items to a town population of 3,300 people. However, all acknowledged that the old building could no longer adequately meet the town's needs. To accommodate modern library services and ADA requirements, the present Saxton B. Little Free Library, Inc. was created within the historic Rice-Soracchi building on the other side of Rt. 87 and opened to the public in November of 1985. It measures 4,800 square feet, cost about \$500,000 to build, and houses over 36,000 items including books, periodicals, newspapers, large print books, videos, dvd's, audio tapes and computer databases. In the fiscal year ending June 30, 2003, a total of 59,288 items were circulated. Library operations are completely automated. Patrons can view the online catalog of SBL's holdings, renew and reserve books online, and access valuable databases for research and information from home computers! The library maintains a network of 15 computers, six of which provide free public access to the Internet. SBL offers home delivery to people who are temporarily or permanently homebound. The town library now serves a resident population of 5100 people.

The library is governed by the Saxton B. Little Library Association, a 501(c)(3) nonprofit corporation with a voluntary Board of Directors. This is similar to the Columbia Volunteer Fire Department. About 85-90% of operating expenses each year are paid by a town grant. Other revenues are provided by Friends of the Saxton B. Little Free Library who raise money through book sales and memberships. The Annual Holiday Fund Raiser, gifts and grants, memorial donations, investment income, and fines and fees comprise the remaining 10-15% of operating income each year. The library building is a town owned facility leased to the Library Board for 50 years ending in the year 2035.

Assessment

Yeomans Hall/Town Hall

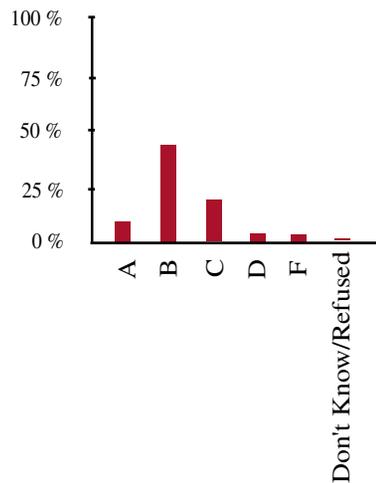
Both of these facilities are in need of major renovations. First and foremost is the need to make them ADA compliant. Also there is a need for additional office space and vault space, as well as electrical upgrading. Parking and traffic flow around Town Hall need significant changes for improved safety.

The Meeting Place

The Meeting Place can continue in its present status for the foreseeable future. It is not adaptable to any significant changes due to lack of surrounding property.



If you had to grade the school system in Columbia, what grade would you give?



Moor’s Charity School

Because of its age and historic significance the charity school needs to be maintained. Currently there is water damage to the windowsill and paint is needed.

Chapel on the Green

When the town accepted the Chapel, it was aware that foundation and floor work would be necessary if the facility was to be used for occasional events.

The Town Green

Over the years, the Green has lost some of its distinct character and blends into the background. The Town Green needs to be modified so that the overall character as a “green area” is restored. Elimination of unnecessary paved areas such as the driveway directly in front of Town Hall is required, to expand the actual Town Green area. The existing memorials could be grouped in a single area and appropriate stone walls and tree lines could be used to better define the borders of the Green, separating it from its surroundings. The overhead utility lines that cross through the Green area should be relocated underground, vastly improving its aesthetic appeal. All of these improvements to the Green can be accomplished over the course of three to five years.

Town Annex

This facility was purchased with the intent of being a temporary solution to a space problem. The ideal situation is to have the town finance department and the Superintendent’s office located in Town Hall if and when that facility is expanded. Because it is new, the building is in excellent shape and handicap accessible.

Horace Porter School

Current projections show a decline in grammar school students over the next ten years, negating the need for any additional facilities. However, if a significant increase in the number of students were to occur, a split-up of upper and lower grades would be appropriate so that no grammar school facility contain more than 700 students. While it would be desirable to locate any additional facilities adjacent to the existing H.W. Porter School on Schoolhouse Lane, it may not be possible and may even require a new location, remote from the center of town.

Columbia Lake

The Lake Management Committee continues to be a good steward of Columbia Lake. The Watershed Management Plan and the Nutrient Allocation Regulation recently adopted by the town will help insure the continued high quality of the lake water. Strict enforcement of zoning regulations for lake property is important to prevent overbuilding, septic problems, and lake pollution.

Murphy House

When the town acquired the Murphy House, it was in need of major repair. The outside, although ultimately sided, is very attractive and Victorian in appearance. The inside however was only partly repaired. The upstairs, because it is used only for recreation equipment storage, has not been completed. The boathouse is in need of great repair.

Beckish Senior Center

The Beckish Senior Center on Route 66 was only opened a few years ago. Although it is one of the newer facilities in town, the Senior Center and the associated parking need to be expanded, to accommodate an increasing elder population. In 2003 the Columbia Seniors' Organization began requesting an addition to the senior center. They are looking for an additional 1000 sq. ft. expansion on the back as well as improvements to the heating and ventilation system, and additional storage space. The existing facility remains in good condition.

Emergency Services

With a new fire-fighting and ambulance facility having just been completed on Route 66 in October 2002, no further facilities are anticipated for the foreseeable future. Also, because of the limited size of the town and the historical response times, satellite facilities appear to be unnecessary. Future use, etc., needs to be considered. However, staffing on a strictly volunteer basis, may present problems for timely daytime response.

Old Firehouse

A committee was appointed to look at possible uses for this facility. However, no real conclusion was reached. The presence of hazardous material is unknown, the need to make the facility ADA compliant, and no consensus on what it should become have resulted in non-action. Currently it is serving to alleviate overcrowding at the town garage by providing equipment storage close to the center of town.

Police Protection

With growth comes an increase in crime. The debate continues as to how best to provide police coverage for the town. It has been suggested that an additional trooper is needed, however, there is no consensus on this. The difficulty is that the trooper reports to the barracks in Colchester and must respond as assigned by them, which means that he is not always available in Columbia.

Town Garage

The current Town Garage on Rt 6 is at maximum usage. The continued addition of new town roads will require additional road maintenance equipment (trucks/plows), which will need to be garaged. The old firehouse is currently being used for vehicle storage but that may not be a permanent solution. There is room to expand at the current Town Garage.

Transfer Station

The current transfer station appears to be adequate. There is room for additional expansion should that be necessary as the town grows. The major issue facing this service is how to fund the continuing increase in costs associated with waste disposal. This issue is covered more fully in Chapter 14 - Utilities.

Town Library

Public needs and demands have always shaped library services in Columbia. These needs, the staff and board's experience, and state standards for library space needs, together make it clear that the present library facility is nearing full capacity both for the space needed for its collections and for the services it can provide to its users. When the present building was designed in 1983, it was planned to meet needs for twenty years. We have reached the end of that period, and there needs to be serious consideration of what to do to meet needs for the next twenty years. In those past twenty years, the town population has grown 50% from about 3,400 to 5,100 residents. Soaring circulation rates, a 22% increase just in the year 2003, make it clear that those new residents are using the library's services and will be looking for the town to keep the facility up to date and responsive to their needs.

Currently, there is no room for growth of collections. Nonfiction books for children are shelved with adult and young adult books. In a public library adequately meeting the needs of children, all children's materials would be housed in the Children's Department. The Young Adult section of the library is very limited. There is no room for the historical archives. There is no meeting room for the public. Parking and access to the building are limited. With an increasing population of retired people, the library may be asked to provide meeting room space for lectures and seminars, a quiet room for historical research, space for expanded large print and audio collections, and facilities for teaching about computers.

The library’s mission is *to provide excellence in library services to Columbia residents and citizens of Connecticut.* This includes provision of current popular library collections and electronic databases, and activities to promote the library as an educational and recreational resource.” The challenge of the 19th century public library ---to connect people to ideas and to each other — is also the challenge of the 21st century. A free public library for all people is *still* an exciting and energizing ideal.

Program

General

Goal: Restructure Public Works Department				
	P&Z	BOS	IWC	CC
Incorporate facilities maintenance program for town and school buildings as one focus of public works		1		
Develop a comprehensive database of facility maintenance projects as a basis for preventive maintenance program for all facilities		1		

Yeomans Hall, Town Hall, The Meeting Place, and the Town Green

Goal: Renovate Yeomans Hall/Town Hall				
	P&Z	BOS	IWC	CC
Modify existing facility to Town Hall to ensure adequate office space, safe record storage and ADA compliance.		1		
Revise traffic flow and parking in town green area to improve safety		1		
Goal: Enhance the Town Green area				
Provide for modifications to the Town Green that improve its appeal as a contiguous green area		2		

Moor's Charity School/Chapel on the Green

Goal: Maintain these two buildings as valued historic properties

	P&Z	BOS	IWC	CC
Provide yearly maintenance to prevent deterioration		1		

Town Annex

Goal: Remove this building from the town center

	P&Z	BOS	IWC	CC
Incorporate finance offices and school superintendent's office in a renovated town hall		3		

Schools

Goal: Develop a contingency plan for school expansions

	P&Z	BOS	IWC	CC
Develop plans that include the identification of property that could be used for future school expansions that may be required		3		

Columbia Lake

Goal: Preserve the quality of the water and surrounding properties for future generations

	P&Z	BOS	IWC	CC
Continue to implement water management plan in zoning and inland wetlands decisions	1		1	
Monitor rules and regulations on a yearly basis		1		

Section III — Development Issues

Chapter 11 Community Facilities & Services

Murphy House

Goal: Maintain the facility and its adjoining boathouse in good condition

	P&Z	BOS	IWC	CC
Determine exact repairs needed and use volunteers, if necessary, to complete repairs		2		

Senior Center

Goal: Review and modify the Senior Center to provide a full range of services to the town's aging population

	P&Z	BOS	IWC	CC
Monitor the uses of the Senior Center and provide for expansion of the facility if required, to provide a full range of services and programs for the town's senior citizens		1		

Old Firehouse

Goal: Make a decision on future use of the facility

	P&Z	BOS	IWC	CC
Gather cost estimates for proposed usages from a qualified builder or architect		1		

Emergency Services

Goal: Monitor response times and provide for the availability of response personnel at all times

	P&Z	BOS	IWC	CC
Carefully monitor the town's emergency services and take appropriate action to ensure the continuous availability of response personnel		1		

Town Garage

Goal: Provide appropriate and adequate facilities for the town's public works activities				
	P&Z	BOS	IWC	CC
Project the future equipment needs of the Public Works department and provide for timely financing and adequate storage for additional equipment		2		

Transfer Station

Goal: Meet the waste removal needs of the community in as cost effective manner as possible				
	P&Z	BOS	IWC	CC
Track cost and usage and institute appropriate changes as necessary		1		

Saxton B. Little Library

Goal: Provide for additional library facilities to meet projected needs for the next 20 years				
	P&Z	BOS	IWC	CC
Review the adequacy of the current library facilities and develop plans for future financing and facilities		2		

Chapter 12 Recreation

Overview

Recreational facilities and opportunities for residents of all ages are a major factor in measuring any town's quality of life. Organized programs facilitate new relationships while providing for physical fitness and/or the acquisition of useful skills. Walking trails, public access to water bodies, historical, and scenic sites provide for relaxation and educational opportunities. Parks such as Recreation Park and Mono Pond Receptions Area provide group and family meeting places that through both passive and active recreation encourage community identity and new friendships.

Currently, there are numerous opportunities for recreation within the town of Columbia. However, planning for recreational activities and facilities are spread among a number of private and governmental groups. Some focus on use of certain facilities, while others focus on specific age groups. One group oversees activities and facilities at Recreation Park. Several are in charge of Columbia Lake's recreational opportunities. Yet another focuses on interests of the senior population. Scouting focuses on the needs of the elementary and secondary school age population. There is no organization that specifically addresses the recreational needs of those in the most numerous group in town — those ages 24 to 55.

This plan addresses the need for effectively integrating the use and development of all recreational facilities within town as well as the need to provide opportunities for those of all ages and varying physical abilities. Information and recommendations within this Plan are designed to assist town officials and residents in planning to meet those needs

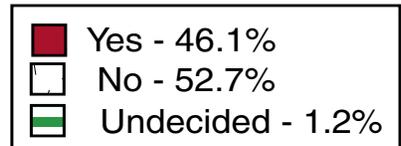
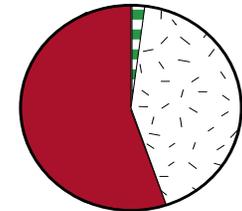
Inventory

Existing Recreational Facilities

Most of Columbia's current recreational programs utilize town-owned facilities and property. However, State, Land Trust, and privately owned lands also play an important role in providing recreational opportunities for town residents.

12 CHAPTER

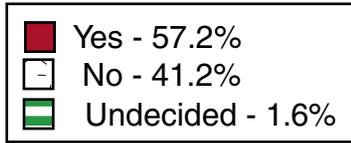
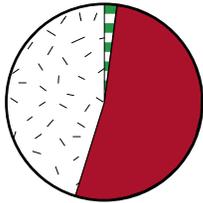
Would you favor
additional recreational
opportunities in town?
Ballfields Yes or No



Chapter 12 Recreation

Would you favor additional recreational opportunities in town?

Biking Trails Yes or No



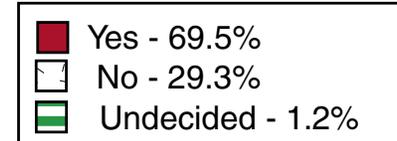
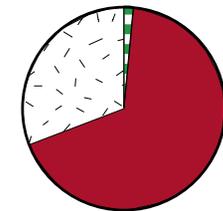
Municipal-owned Recreational Facilities		
Site	Location	Facilities
Recreation Park	Hennequin Road	5 multi-use playing fields 1 tennis court 1 basketball court playscape pavilion with barbecue facilities
Horace W. Porter School	Schoolhouse Road	indoor gymnasium indoor auditorium outdoor basketball court outdoor track three multipurpose playing fields lower elementary playground nature trail
Town Beach	Lake Road, Erdoni Road,	water skiing wind surfing & sailing canoeing & kayaking supervised & unsupervised swimming pleasure motor boating
Yeoman's Hall	Route 87	Auditorium with stage
Senior Center	Route 66	Multipurpose space with kitchen
Unimproved Open Space: Fireman's Field	Route 66	Hiking & Nature Study
Utley Swamp Tract	Lake Road/Rec Park	Hiking & Nature Study
Ten Mile River	Samuel Hill	Hiking, Nature Study, Fishing

Section III — Development Issues

Chapter 12 Recreation

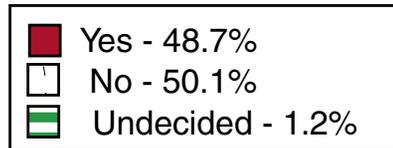
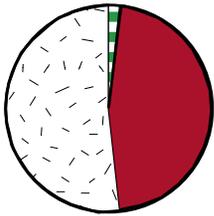
State-owned Facilities		
Mono Pond Natural Heritage and Recreation Area	Hunt Road/Lake Ridge Drive	Boat Launch and Trailer Parking Fishing Deer & Turkey Hunting by permit Hiking Trails (3 miles)
Charter Oak Greenway / Rail Trail	Parallels Route 6	6 Miles Walking/Biking/ Bridle Trail Rail Trail Hop and Willimantic River Access for fishing & boating
Airline Rail Trail	Parallels Lebanon border	8 miles walking/biking/bridle trail
Land Trust-owned Facilities		
Potter's Meadow	Commerce Drive	Hiking (1.5 miles), nature study
Utley Swamp	Recreation Park/Erdoni Road	Hiking (2.5 miles), nature study
Hop River	Route 6/66 junction	Hop River Access
Privately-owned Facilities		
Camp Astowamah	Route 87	Private Residential Camp for Children
Millstream Preserve	Route 66 South	Fee- based Hunting
EastConn Pre-School	Commerce Drive	Outdoor playground Multi-purpose space
EastConn High School	Route 66	Gymnasium, meeting space
The Batting Cage	Route 6	Batting Cages
Center Sports	Orlando Drive	Indoor Archery

Would you favor additional recreational opportunities in town?
Hiking Trails Yes or No



**Chapter 12
Recreation**

Would you favor additional recreational opportunities in town?
Tennis Courts - Yes or No



Assessment

An Open Space survey undertaken in 1995 identified the following recreational activities as ones residents would like to see supported by the town. They are listed in order of importance to those who took part in the survey.

Active Recreation	Passive Recreation
Bicycling	Hiking
Swimming	Nature study
Tennis	Bird-watching
Boating	Horseback riding
Golf	Cross-country skiing
Field Sports	

While facilities for most of the above activities do exist in town, the following needs have been identified as ones that need attention in the near future.

1. Additional playing fields. The facilities at Recreation Park are well-used.
2. More tennis courts. The town has only one and it is in poor repair. The one at Recreation Park should be repaired or replaced and perhaps a second one added there. Tennis court/ basketball court combinations can be placed in various locations town-wide as they do not involve large groups or demand large parking areas.
3. Trails throughout town to accommodate walking, jogging, bicycles, x-country skiing, horse-back riding. Some trails may be multi-use, but others will need to be built to fill the special requirements of different users.

The existing town beaches are able to adequately serve the town’s current needs and are only crowded on a few unusually hot days. If future town growth requires additional beach space, it will most likely be achieved through purchase of lakeside property in a new location and development of appropriate building facilities, through renovation or new construction.

Many Columbia families are traveling long distances for use of ice skating and indoor soccer and other athletic facilities. A privately owned facility that could offer some of these indoor activities would not only benefit the immediate users, but be an economic boon to the town’s tax base. Private development of a golf course may also be an asset to the town if careful controls are put in place prior to that time to ensure an appropriate location and environmental safeguards.

Program

Goal: Plan for and provide active and passive recreational opportunities for Columbia residents of all age groups

	P&Z	BOS	IWC	CC	RC
* Create a recreation commission to plan and co-ordinate town-wide recreation		1			
Survey the town to identify recreational needs					1
Inventory sites suitable for desired recreational uses	2			1	1
Recommend town acquisition of appropriate sites	2				2
Recommend development and maintenance of existing facilities	1	1			1
Offer recreational programs suitable for all ages		1			1
* Guide recreational open space acquisition within new subdivisions	1				1
Provide greater recreational access to town water courses				1	1
Provide canoe access to the Hop River and Willimantic River	2	2			2
Provide fishing access to the Ten Mile and Hop Rivers	2	1			1
Create a town wide system of trails to serve a variety of different users		1		2	1
* Create trails that connect dedicated open space and public lands	1			1	1
* Create trails to provide safe alternatives to use of roads or walking, jogging, bicycling, horseback riding, cross-country skiing	2			1	1
* Promote privately developed recreational facilities	1		1		
Modify zoning regulations to allow athletic facilities in appropriate locations	1				

Chapter 13 Transportation

13

CHAPTER

Overview

Columbia's transportation system has been and will be an important factor in its growth and development. As a bedroom community, ease and safety of the daily commute to work is paramount. At the same time, accommodation must be made to make a variety of travel methods within town – car, bus, bicycle, and pedestrian – equally efficient, safe, and in keeping with the town's historic character. With increasing residential development, planning must assure development of new roads and transportation services that will serve the town's residents while protecting the town's scenic qualities and natural resources.

Inventory

State Roads

Arterial roads, which are owned and maintained by the CT DOT, are intended to move a large number of vehicles from town to town and provide good accessibility to surrounding communities. In Columbia, these include:

- Route 6 (Hartford Road)
- Route 66 (Middletown Road)
- Route 87 (Jonathan Trumbull Highway)

Route 6 on the north edge of town carries the bulk of Columbia's through traffic. Average Daily Trips (ADT) ¹ range on Rt. 6 range from 11,200 at its intersection with Rt. 66 and 16,400 at its intersection with Rt. 87 and reduces traffic congestion in the center of town. Route 66 also carries heavy through-traffic (10,900 ADT's) in a East-West direction through the center of town. Route 87, which carries North-South traffic through the Town Center has up to 4,200 ADT's.

Town Roads

Currently the town owns and maintains 42 miles of public roadway. These roads fall into two main categories collector roads and local roads.

¹ State of Connecticut Department of Transportation 2001 Traffic Studies

**Chapter 13
Transportation**

1. Collector Roads

Collector roads, owned and maintained by the town, are intended to gather traffic from local streets and direct it to arterial roads. Main collector roads are:

Baker Hill	Edgerton Road	Lake Road	Pine Street
Cards Mill Road	Hennequin Road	Latham Hill	Thompson Hill Road.
Cherry Valley Road	Hunt Road	Macht Road	West Street
Doubleday Road	Johnson Road	Old Willimantic Road	Whitney Road

2. Local Roads

All of the other streets in Columbia fall into the categories of local roads and limited local roads. Local roads are intended to provide access to abutting properties with access to collector roads. These local roads carry only minor through traffic. Limited local roads (dead end streets) are essentially dedicated to property access. There has been a significant increase in the number of such limited local roads with passage in 1999 of the subdivision regulation that limits the numbers of new back lots.

Transit Services

Except for commuter buses to Hartford, Columbia is not served by regular scheduled bus services. Weekday door-to-door services for the elderly and disabled are provided by a senior Dial-a-Ride carrier from a neighboring community.

Walkways

There are virtually no paved sidewalks in Columbia, other than immediately adjacent to public facilities in the town center, and in Columbia Shopping Center. Subdivision regulations provide the Planning & Zoning Commission with the right to require sidewalks in subdivisions where pedestrian traffic is expected to be high, but to date this provision has not been used.

There are two state greenways currently being improved to provide access for pedestrian, bicycle and equestrian use. The Charter Oak Greenway parallels the Hop River along the town’s northern edge, sometimes in Columbia sometimes in Coventry. Although it does extend as far as Manchester, its expected use will be primarily recreational. Parking access is being developed at all roads intersections. As it reaches the Willimantic River it is being augmented to connect to the Airline Greenway. The Airline Greenway follows the old Airline railroad bed and currently connects Pomfret to East Hampton. An unimproved section runs south from the Willimantic River to Lebanon and Hebron.



At this point and continuing on to Middletown, the path has been improved. Little of this greenway actually lies in Columbia, but there are convenient access points off Rt. 87 and Pine Street.

The town has a number of walking trails on town, state, and land trust properties. These trails total about six miles in length. These trails have been created and are maintained by volunteers.

Bicycles

Bicycles routes in Columbia at the present time rely predominately on roads and streets. There are no marked bike routes at the moment, although the state has designated the entire length of Rt. 87 as a recommended bike route. With the exception of the two greenways mentioned above, there are no separate bike paths.

Bridges

Because the town is bounded on two sides by perennial streams, the Hop River and the Ten Mile River, there are a number of substantial bridges at the town's boundaries with Coventry, Willimantic, and Lebanon. Those on state highways are the concern of the DOT. Those on town roads are reviewed for both safety and structural soundness as needed. In the past ten years, new bridges have been constructed on Jones Road and Cards Mill Road. The former bridge was constructed in the typical modern concrete slab mode, while that on Cards Mill strove to maintain the historic feel of the early one lane fieldstone arched bridge already there. Design work for a new bridge on Parker Bridge Road is currently underway under the leadership of Coventry.

Assessment

Traffic volumes in Columbia are growing faster than the population of the town, the region or the state. In fact, area research as part of the Plan found that traffic volumes on some major roads had increased by approximately 40 percent between 1985 and 1996. As a result, road capacity, congestion and safety issues have become more prominent. Rapidly increasing traffic volumes especially on Route 66 and somewhat on Route 87 are creating periods of congestion, which raises such issues as driver frustration and safety, as well as difficulty for emergency responders such as fire fighting vehicles and ambulances.

In order to maximize the capacity and the efficiency of the existing circulation system, the Town should continue to implement access management techniques along arterial and collector roads. Such strategies include minimizing curb cuts, spacing road and driveway intersections, interconnecting commercial developments, and other techniques that minimize access locations on major roads.



Chapter 13

Transportation

Town Roads

1. Arterial Roads

a. Routes 6 and 66E

Growing traffic loads on Routes 6 and 66E make use of these highways increasingly hazardous. Local users of these roads (school buses, mail delivery, visitors to the Transfer Station, local shoppers) find driving here hazardous due to the presence of heavy commercial and interstate traffic not prepared to stop suddenly for those entering and leaving these highways for local uses. The state DOT has attempted to improve the safety of those using Rt. 6 by widening the paved roadway and providing some turning lanes. Addition of signs for local roads has also promoted fewer sudden turns with little warning. Still, it appears that a separate, limited access portion of Route 6 between Bolton and Willimantic is needed to separate the through traffic from the local traffic. This new highway should utilize a corridor, which balances the need for the highway with the environmental and economic impacts on the town.

In the mean time, there is a need for the DOT to improve the intersection of Cards Mill Road and Rt. 66E. A turn lane at the Columbia Shopping Center is also needed. Additional and larger commuter lots and frequency of transit service would also serve to reduce traffic on these roads.

b. Route 66 West

The portion of Rt. 66 south of the intersection with Route 6 has many of the same problems. Local users frequent businesses and town facilities in the commercial zone and in the town center at the crossroads with Rt. 87. Turning into and leaving the Porter School access road and the post office are particular problem areas. A professional review of traffic patterns in the town center would be a big help in directing the town and state on how to address these problems without having a negative effect on the character of the Historic District. South of the town center, there are a growing number of residential developments with direct or indirect entrance onto Rt. 66. Consideration of expanding limited commercial uses into this section would increase the number of turns being made onto and off of this section of highway. Additional commuter facilities along this section might help counteract the expected increase in ADTs.

c. Route 87

If constructed, a Rt. 6 limited access highway would also carry some of the traffic now using Rt. 87 to bypass Willimantic. Rt. 87 is a historic highway with many scenic qualities. A number of the most historic buildings are very close to the current paved surface, as are stonewalls and mature trees. The town needs to adopt a plan which will protect and offer greater appreciation of this historic highway's assets. Such a



plan would include a pedestrian walkway along most frequently walked sections, traffic calming features, and opportunities to leave the road to enjoy scenic and historic features. Securing approval of the DOT to designate Rt. 87 a Scenic Highway would be a first step in such a plan. It would allow safety issues to be addressed but only with strong emphasis on preserving scenic and historic character. Continuing to restrict commercial development along this highway would also serve this purpose.

2. Collector Roads

a. Existing

Collector roads in Columbia consist entirely of those existing since the colonial era. They developed to connect major residential areas and the town centers in Columbia and surrounding communities. Their layout was based on existing property lines and natural features. Limited engineering abilities meant they wound around wetlands, ledges, and steep slopes. Today these historic roads are seen as scenic, and most residents want to keep them narrow, winding, and tree-lined. However, safety issues have arisen where these collector roads meet the arterial roads. There is increasing difficulty moving to and between collector roads and arterial roads as traffic levels on both systems increase.

Because the arterial roads are state owned and the collector roads town owned, the two need to work closely together to make needed improvements. One problem intersection noted in the 1991 regional transportation plan was that where Old Willimantic Road meets Rt. 66. A knoll in Rt. 66 west of the intersection as well as the alignment of Old Willimantic Road make for an insufficient sight line to the west for those entering Route 66.

There are also areas on town collector roads that have proven so unsafe that scenic character should not be the overriding interest. Locations with accident concentrations throughout Columbia should be addressed. While CTDOT monitors accident concentrations on State highways, there is no corresponding information available for town roads. Locations with noticeable accident concentrations should be reviewed for desirable improvements.

b. Future

The town itself has built no new roads in the past century. Two unmaintained roads, Gaulin Road and Chowanec Road, were recently improved, and now serve as through roads. New roads come into creation only as a result of new subdivisions, and subdivision developers only build through (collector) roads when economic considerations and subdivision regulations make it inevitable. With three exceptions, subdivisions in Columbia have been on lots small enough to be fully developed through the use of loop or cul de sac (dead end) roads. The exceptions are the Heritage Farms subdivision, Island Woods, and Trumbull Estates.

These three all were approved based on future completion of a through road, and for this reason were allowed to far exceed the density allowed on non-through roads. Yet, none of these subdivisions have yet created that through section, as the developer didn't own the needed land or didn't have the economic means to complete the final section.

The town needs to take the lead in planning future through roads. If the roads continue to develop only to meet the developer's financial needs, they may not serve the town and its residents well both in terms of safety and convenience. All future subdivision plans need to provide that outlet for roads with houses whose numbers exceed the number allowed on local roads. Some desirable connections to be implemented as part of future development plans in specific areas are shown on the Transportation map.

3. Local Roads

Most of the town's local roads have been built since WWII. With the institution of zoning and subdivision review, these roads have been built to higher standards than the town's collector roads. They avoid the steep slopes, poor drainage, and narrowness of older roads. Still, new local roads are largely built to meet needs of the subdivision that creates them. In the future, they need to be carefully reviewed not just for their engineered features, but for their place in the town's overall transportation picture. The number of such local roads, particularly cul de sacs, will play an ever growing place in the towns transportation system as the reduced number of back lots with individual driveways comes into play.

Road Standards

Road standards in Columbia are reasonable, but perhaps need to allow a little more flexibility in order to reflect variations in actual use and in the fragility of the environment in which they are located.

1. Paved Surfaces

The amount of impervious surface in town will have a direct effect on the longevity of the town's drinking water supply. Proposed roads that limit paved surface should be given approval where the issues of safe passage and adequate maintenance are adequately addressed. Preference should be given to new subdivisions that minimize impervious surface and linear feet of town roads. Width standards should be allowed to be reduced where limited use would make a narrower paved surface feasible. Such changes would not only protect our environment but also keep down the town's expenses for maintenance.

2. Drainage issues

Technology and design innovations are making the drainage issues of road design an ever-changing area. Policy regarding this subject should be constantly reviewed so that safety, health, and environmental benefits can be secured. There are drainage problems on existing town roads that need to have more long term and up-to-date answers applied to them than just having a backhoe appear to clear any blockage or correct flooding. These older roads and their drainage solutions were created when the philosophy was to move the water into a perennial stream as fast as possible. Today this is no longer the desirable approach.

Transit Services

Projected growth in the total town population and in the senior population will require more such services. Both more frequent commuter bus service, and more commuter parking lots should be planned for. More seniors mean a greater need for such services as Dial-A-Ride, perhaps private as well as public. All land use applications to the town should address the need for access points for such future service.

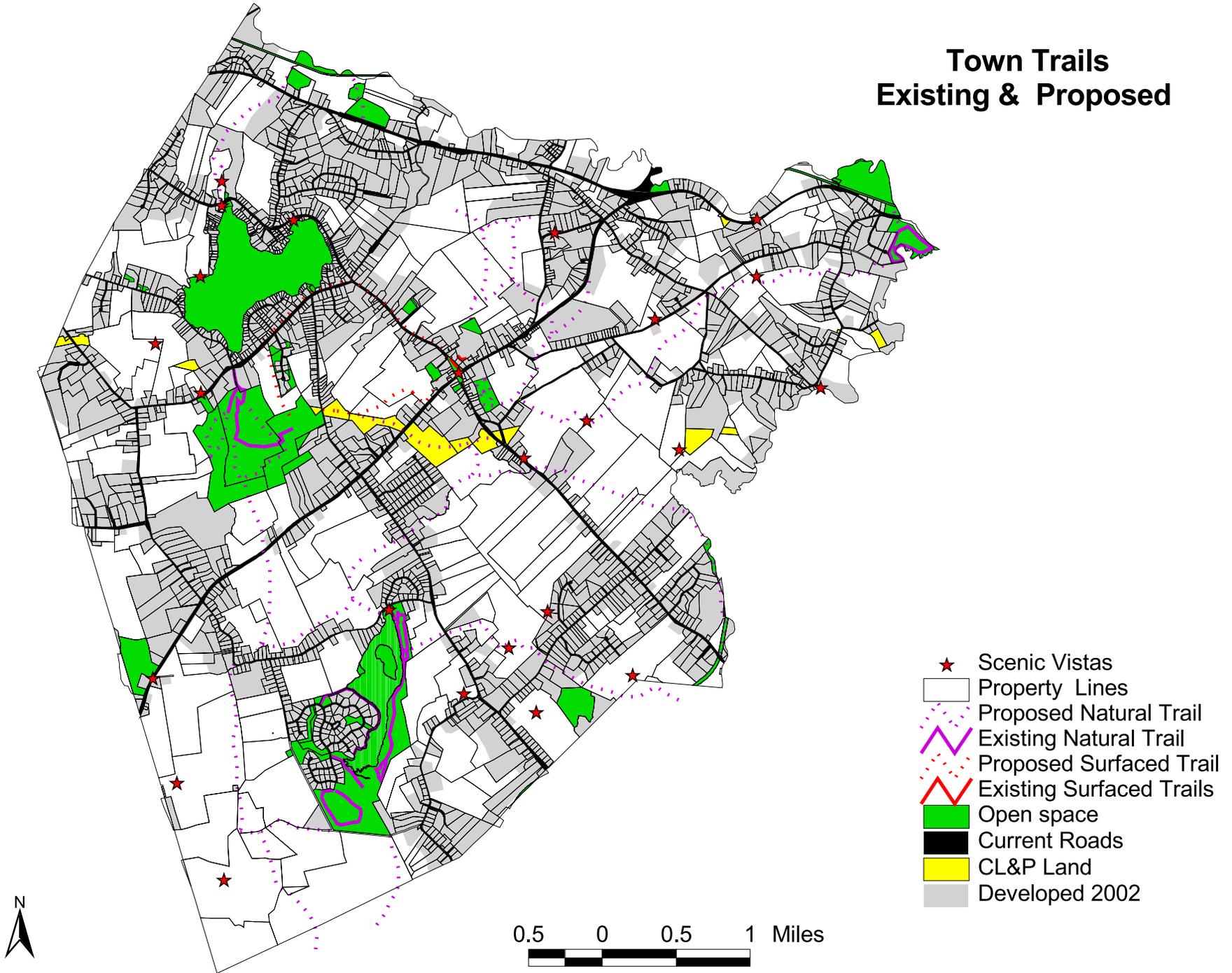
Walkways

Residents at public forums have stressed their desire to see existing town open space and public facilities connected by walkways. Concerns have also been raised about the safety of residents jogging and bicycling on the state highways in the center of town. The recent Bicentennial Walking Weekend brought more comments about the need for more information about existing off road walking opportunities, and the need for the creation of more such opportunities.

The town explored a walkway along Rt. 87 from the town green to Lake Road in the 1990s. Because federal funds would have been used, a wide and hard surfaced path would have been required. Local residents did not approve of such a path. The town did approve a Heritage Walkway system for the center of town in 1997. However, progress on the design and construction of this pathway was put on hold until after the Firehouse and Post Office projects were completed. Funding for this project allows for completion by 2005. This walkway would connect the school, post office, town offices, library, and perhaps the senior center.

The Conservation Commission has developed a preliminary map, shown on the following page, of a future town-wide trail system. While a trail is proposed to connect the town center to Recreation Park and to the Town Beach which would serve largely transportation safety issues, other trails are proposed entirely for recreational use. As additional land is subdivided, the Planning & Zoning Commission has the right to see that these trails are included in those development plans.

Town Trails Existing & Proposed



Bikeways

The eventual development of a system of bicycle routes appropriately designed and marked to ensure the safety and enjoyment of Columbia residents should be facilitated by the preparation of an overall plan in the near future. These should include marked lanes on paved roadways, as well as paths away from motorized traffic such as on the two existing state greenways.

Program

Goal: Improve roadway circulation and safety through transportation planning and access management. Provide alternatives to private passenger car transportation						
		P&Z	BOS	IWC	CC	RC
* Encourage development of a limited-access highway for through traffic along the Rt. 6 corridor		1	1	1	1	
Improve commuter services through expansion of commuter lots and transit services		1	1			
Encourage development of new collector roads to prevent congestion and safety issues		2	2			
Identify and repair flaws in existing roads			1	1		
Maintain flexible and up to date standards for new road construction		1		1	1	
Develop & implement a master plan for pedestrian, bicycle, and equestrian transportation		2	2		1	1
Build into new subdivisions and public facilities access to alternative transportation modes		2	2			
Minimize road cuts on arterial and collector roads		1				
* Include traffic engineering studies with the goal of separating town hall and school traffic from through commuter traffic		1	1			

Chapter 14 Utilities

Overview

Up to date and cost effective utilities are an important element in what make a town livable for both its residents and businesses. The town's utilities are adequate to the present population and land use but must be carefully monitored as population growth continues. Public sewers and public water support urban scale development, and are not compatible with the Plan's overall goal to protect rural character, except where necessary to promote economic development

Inventory

Sanitary Waste Disposal

Columbia does not have a public sewer system. Its homes and businesses rely on individual septic systems to treat waste. Systems with a design capacity under 2,000 gallons per day or less are regulated by the town Sanitarian. Larger systems, such as for Porter School, are regulated by the state.

Septic systems in areas of dense development, especially around Columbia Lake have been of special concern. Many systems there pre-date modern standards. In addition, they were designed for seasonal homes. As houses are converted for year round use, their septic system may no longer be adequate. Another densely developed area, that of Island Woods, has raised some concern about septic system adequacy on the small lots located so close to wetlands.

Solid Waste Disposal

Solid waste is currently disposed of at the town-owned and operated Transfer Station on Route 6. This transfer station replaced an earlier sanitary landfill at the same location. The old landfill has since been capped and is monitored by the DEP. The transfer station accepts materials that are recycled for component materials and others that are disposed of by incineration at a "trash to power" plant in Preston. The town is a member of MidNEROC, the Mid-Northeast Recycling Operating Committee, a consortium which negotiates competitive contracts for recycling processing as well as operating the household hazardous waste facility in Willington.

The transfer station accommodates a wide variety of recycled materials: co-mingled containers, corrugated cardboard, newsprint, and scrap metal. For a fee, it provides for disposal of appliances and other bulky items such

14 CHAPTER

Chapter 14

Utilities

Section IV — Infrastructure

as tires and propane tanks. With the exception of used motor oil, antifreeze, Freon, and car batteries, hazardous wastes are not handled at the Transfer Station, but must be brought by individuals to the Hazardous Waste Disposal Facility in Willington which is only open seasonally. Organic wastes – trees, brush, leaves and grass clippings are still disposed of on site. There is no composting operation in effect to recycle these organic wastes.

Delivery of waste to the Transfer Station is by private vehicle. The fact that town residents bring their own waste to the Transfer Station has probably been a big factor in the high rate of recycling in town. People’s awareness of resource recycling and the need to dispose of hazardous waste in an appropriate manner is raised by seeing the system in action at the Transfer Station. They also appreciate the opportunity to recycle goods such as clothing, books, and items with plenty of use left at the Swap Table and in the charitable donation containers at the Transfer Station.

While Columbia continues to rank high in recycling statewide, its ratio of material recycled to that disposed of by incineration has fallen in recent years. In 1999/2000, 639 tons were recycled and 780 tons incinerated, meaning 45% of the waste stream was recycled. In 2002/2003, 646 tons were recycled while 999 tons were incinerated. The percent recycled had fallen to 39%. In addition, the total amount of solid waste that must be disposed of has grown considerably. In just 3 years, between 1999 and 2002, the solid waste brought to Columbia’s transfer station grew by 28%. Over that same period, the growth in recycled tonnage only grew by only 1%. The increases cannot be accounted for by increase in town population, which only grew by about 2.5% in the same period.

Water

Columbia’s residents rely on private wells for all their drinking and household water needs. While there remain some older and shallow dug wells, the majority of wells are drilled and provide an adequate supply of potable water. New wells must meet state standards, and are tested for both quality and yield before approval by the Town Sanitarian. There are three small community well systems¹ that provide for a total of about 152 individuals in residential households. These wells and the number of individuals served are monitored annually by the Department of Health. Finally, there are several water systems categorized as “transient public water supply” such as those for the public school and Dartmouth Village. These also are approved and monitored by the state Department of Health.

Communications

The town is served by up to date wired communications services providing cable television and high speed internet access as well as standard telephone service. Many wires remain above ground, and are subject to temporary outages due to accidents or weather related damage. All new developments provide these services entirely through underground wires.

(Footnotes)

¹ Woodland Terrace Association (52), Colonial Drive (30), and Columbia Heights (88).

Wireless telecommunications services are now provided by towers located at 14 Thompson Hill Road and 330 Rt. 66S. These towers provide a primary axis for a town wireless telecommunications system, but seamless coverage for areas more removed from state highways is a long way off.

Assessment

Sanitary Waste Disposal

Private septic systems are adequate and appropriate to the types of land use proposed in this Plan of Conservation & Development. Care in placement, sizing and engineering of such systems should make them safe and practical as long as development density remains at the level espoused by the current Zoning and Subdivision Regulations.

Nevertheless, the town needs to actively implement a sewer avoidance policy in order to ensure the longevity of private systems. Few towns choose to install sewers. Most often they are required to remediate widespread septic system failures. In this region, such failures have most commonly occurred in densely settled lake communities similar to that around Columbia Lake. A key element to sewer avoidance are stringent inspection criteria and regulations for the operation and maintenance of existing systems. Mandatory pump-out at certain intervals should be established by ordinance, and the town should be prepared to see that there is sufficient staff to oversee and enforce these regulations. Location of houses on lots where a pumped system would be required should also be strongly discouraged.

There has been discussion of extending Windham's sewer system along manufacturing/commercial zone along Route 6. Such an extension should be considered only after a cost/benefit analysis has been conducted.

Solid Waste Disposal

The increase in the overall and proportionate amount of material that is not recycled is of considerable concern, both because of the expense to the town and because of potential environmental impact. Proper disposal of waste and stringent recycling is not only crucial for our environment, but reducing the amount of material entering the waste stream will reduce the rising costs of waste disposal. Projections estimate that in as few as five years, the skyrocketing cost for disposal of non-recyclable materials will equal the current cost of all processing at the transfer station.

The town needs to research all available convenient, cost-effective recycling programs. Increased efforts to provide information, education, and incentive to recycle would most likely more than offset any cost. Helping residents understand recycling not only helps them to conform to legal requirements, but is advantageous to the entire town.

Water

To date, the town has had few problems regarding quality or quantity of water supply. With proposed changes in zoning and subdivision regulations, which will allow greater housing densities and an expanded Business Zone, care must be taken to see that continued use of private wells may remain the norm.

With residential development, clustering of residential buildings may mean more community wells. It will be important to see that preserved open space is used to ensure a reasonable recharge area for these wells.

With commercial development, expanded uses and larger areas of impervious surface, bring the need for additional vigilance in protecting water quality near these areas. As the proposed Business Zone lies over an important aquifer, drinking water aquifer standards should be followed in this area so that this aquifer may remain a resource for water of drinking quality.

The creation of a public water service would probably be carried out by a private concern and thus would not have a negative financial impact on the town budget.

Communications

Economics may dictate that older wired communication systems remain above ground for the near future, but the town should foster any plans to bury such wired services, both for improved appearance (especially in the Historic District) and for greater reliability.

Wireless phone or data service is an important present and future infrastructure for Columbia citizens especially for those who may desire to work in home offices. Unfortunately, the existing telecommunications towers are not being fully utilized with line of sight antennae. Even when these poles are full, there will be a need for more towers to provide seamless coverage as mandated by the federal government. How and where that infrastructure will be developed is primarily controlled at the federal and state levels. The traditional control regarding such systems has been taken out of the hands of local zoning agencies and given to the Connecticut Siting Council.

There is continuing debate over what role local zoning agencies and Inland Wetland Commissions will have over the nature of and location of future telecommunication towers. While these jurisdictional issues are being settled through court action and legislation, it is important the town play as strong a role as possible in the siting and appearance of such facilities to protect the visual and natural environment where they are placed. The town should prepare a list of objectives for siting such facilities which might include:

1. Maximize use of existing telecommunication towers and other existing structures to minimize the total number of sites in the community
2. Encourage co-location of such facilities
3. Site facilities below prominent hill tops
4. Protect historic and residential areas from adverse impact
5. Establish a list of preferences for siting of new facilities, including ones that foster open space goals
6. Require all towers to be of monopole design
7. Require all towers to maximize camouflage elements

Chapter 14 Utilities

Section IV — Infrastructure

Program

Sanitary Waste

Goal: Develop and implement a residential district sewer avoidance policy						
		P&Z	BOS	IWC	CC	SAN
*	Create an ordinance and support staffing to require pump out of private septic systems at mandated intervals		1			1
*	Approve only uses that will be able to depend on private on site septic systems for the long term	1				1

Solid Waste

Goal: Pursue cost effective and environmentally friendly disposal policies						
		P&Z	BOS	IWC	CC	SAN
	Foster increased recycling & proper disposal of hazardous waste especially through education		1		1	
		P&Z	BOS	IWC	CC	SAN
	Implement a composting program at the Transfer Station or other appropriate location		1		1	
	Track cost and usage and institute appropriate fees as necessary		3			

Water

Goal: Protect the quality and quantity of groundwater supplies

	P&Z	BOS	IWC	CC	SAN
* Modify regulations to balance increased residential density with permanent protection of groundwater recharge areas	1				
Carefully regulate & monitor all uses that might pollute or diminish quantity of drinking water available for residential use	1				1
Implement water quality controls in the commercial/manufacturing zones to protect the underlying aquifer as a potential public drinking water supply	1				1

Communications

Goal: Promote modern communications systems while protecting Community character

	P&Z	BOS	IWC	CC	SAN
Promote burial of all utility lines	1	2			
* Permit commercial wireless telecommunication sites while protecting neighborhoods and minimizing adverse effects	1				
Work for a regional policy to incorporate underground placement of utility lines in all state projects	1				
Incorporate into the zoning regulations, a set of objectives to be met in the siting of telecommunication facilities	1				
Work with the Connecticut Siting Council to develop a Master Telecommunication Plan for the Town	1				

Chapter 15

Future Land Use

Overview

The Future Land Use Map, shown on opposite page, gives a picture of what the Columbia of the future should look like. It reflects all the goals and strategies explained in the preceding sections of this Plan. A brief re-cap of those goals and strategies are included here in an expanded map legend.

Residential

The overall Residential Zone boundaries will remain as they are now. However, different types of development are recommended. The white areas show where residential growth may continue with only the standard considerations for natural limitations and health and safety concerns. Adoption of new regulations fostering conservation subdivisions should protect some open space in the white area (to preserve historic character, agricultural use, and provide recreational opportunities), but the majority of such lands will be elsewhere.

Public Facilities

The map only reflects existing public uses as no effort has been made to actually locate and or acquire land for future public use at this time. Common sense would locate future such facilities in the Village District or along one of the arterial highways.

Churches

The map only reflects existing locations of churches. Common sense would locate future such facilities on one of the arterial highways as they are at present.

Cemeteries

Columbia's cemeteries were located in the 18th and 19th centuries. The Old Yard is no longer used. The Center Cemetery has limited future space, while the West Street Cemetery has more extensive space for future use. A reserve area off Rt. 6 owned by the Columbia Burying Association could be used in the future if the need arises.

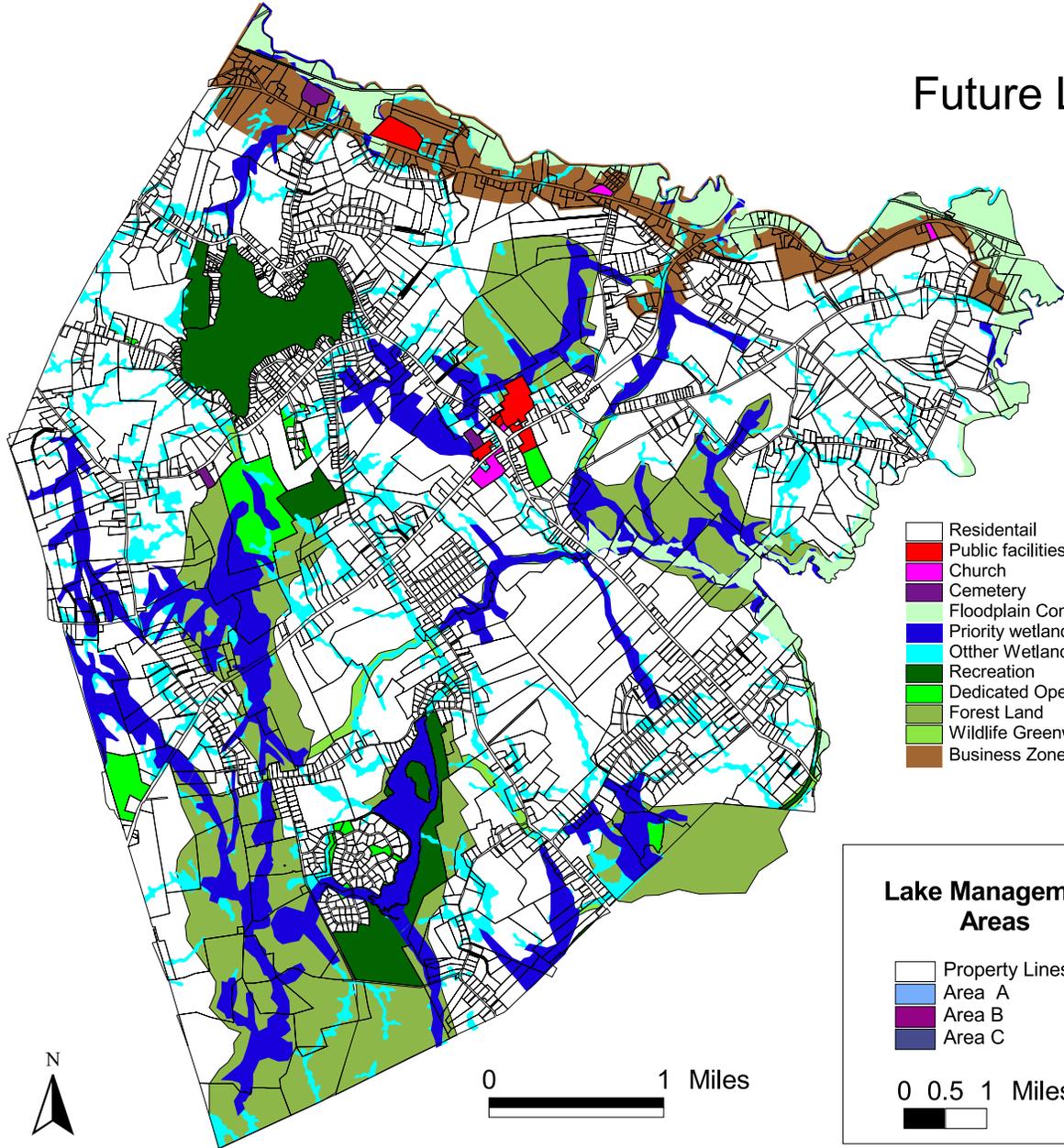
Recreation

The areas in dark green reflect existing use. All are publicly owned except Camp Astowamah. The latter is an area the town should strongly pursue for future public recreational use. The state "rest area" off Rt. 6 at the town line by the Willimantic River is currently being refurbished to make it a recreational hub that integrates the recreational river use with the two rail trails that meet in Willimantic.

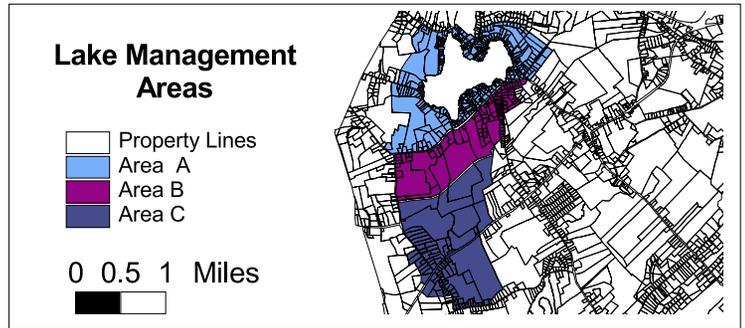
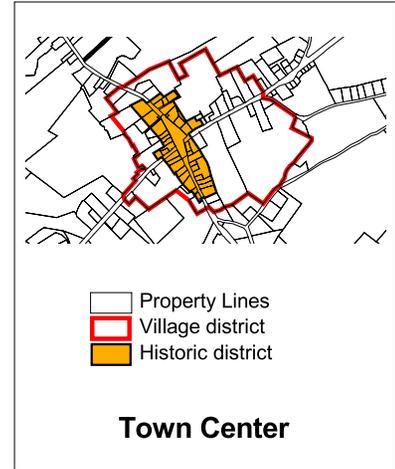
15

CHAPTER

Future Land Use



- Residential
- Public facilities
- Church
- Cemetery
- Floodplain Conservation
- Priority wetlands
- Other Wetlands
- Recreation
- Dedicated Open Space
- Forest Land
- Wildlife Greenways
- Business Zone



Dedicated Open Space

This area on the map, shown on the opposite page, reflects only existing dedicated space. Future dedicated space should be primarily in the areas of the forest lands, greenways, floodplains, and priority wetland areas as explained below.

Priority Wetlands

The mapped area includes wetlands defined by soil type and a 75-foot regulated area on either side of those wetlands. These areas were identified in a professional study of all town wetlands carried out in 2000. Priority wetlands demonstrate the highest scores for such characteristics as wildlife habitat, ecological integrity (unspoiled), and ability to recharge groundwater supplies. They should be protected in a more stringent manner than wetlands over all.

Forest Land

These areas represent Priority Habitat Areas. They are currently wooded and undeveloped. Each consists of a contiguous area of 200 acres or more and encloses a Priority Wetland Area. These areas should remain in a forested condition in the future to serve as reservoir areas for the town's ground water and to provide preserve areas for wildlife that require larger unbroken forest habitat territories. Protection would be afforded by a combination of means – conservation subdivisions that place houses on the periphery of such areas, conservation easements that require forest to be retained, and outright acquisition by the town. The latter would be most appropriate in the Columbia Lake Watershed where there is already a nucleus of protected land, and where future subdivision would have the greatest negative impact on one of the town's star resources — Columbia Lake.

Greenways

These long and narrow areas serve to connect the Forest Land areas described above. They allow the movement of wildlife between these areas in order to avoid isolation of small breeding populations. They will also provide greater protection for the wetlands they include. The Greenways follow natural pathways along perennial streams. Most will remain in private ownership but may be protected through easements and set asides in future subdivisions. Some, along the Ten Mile and Hop Rivers may also be developed for public recreational uses — fishing, hiking, etc . as in the linear parks of the Airline and Charter Oak Greenways.

Floodplain Conservation Areas

These areas fall within the limit of the potential hundred year flood. Because of the associated perennial streams and wetlands, floodplains provide unique and important wildlife habitat. They also provide an essential form of flood

Chapter 15

Future Land Use

control. Because it makes no sense to place structures in such areas, they see less development than other natural areas. However, since those along the Hop River lie over a stratified drift aquifer and abut the Business Zone, they still need sensitive protection. These types of protection include: limitations on neighboring uses that involve potential pollutants, prevention of filling or excavating that would alter the topography and/or hydrology of the area or destroy habitat of a state listed species.

Wetlands

These areas include all wetlands in town not designated priority wetlands. They are defined by soil type. Even if not priority areas, they serve many important functions for the town, primary being the cleansing and recharge of the towns groundwater drinking supplies. They and their 75 foot regulated buffer area needs to be carefully protected through exclusion from disturbance during subdivision, and through review by the Inland Wetlands Commission.

Business Zone

This area reflects the recommended combination of the existing Manufacturing and Commercial Zones, as well as their expansion to include frontage along the entire length of Route 6 and Route 66 East of its junction with Route 6. Modifications were also made to conform more to existing lot lines. The Business Zone would have a somewhat expanded list of uses allowed, but at the same time add stricter design and environmental standards. New residential development in the zone would not be permitted.

Town Center

This inset shows the existing historic district in gold, and the proposed Village District with a red outline. While the Historic District places no requirements on the owners of such designated properties, it does heighten awareness of the area as one to be protected. The Village District is a zoning designation that would carry on the traditional mix of residential, business, and public uses in the town center by once more allowing limited new business use in this area. At present, such uses occur only where they existed prior to current zoning .

Lake Management Overlay Zones

The three zones represent different levels of management requirements, becoming less stringent with greater distance from the lake itself. The Lake Management Plan was adopted in 2003, and is aimed at the long term preservation of water quality in the Lake. The greatest impact will be seen in smaller areas of impervious surface (pavement, roof, etc.) and larger non-lawn green areas. Steps will also be taken to prevent potential pollutants from entering the Lake through drainage systems, non-point run off, and septic system failure.

Chapter 16

Plan Coordination & Implementation

16

CHAPTER

Much work has gone into the creation of this Plan. However, it is the next step, the implementation of the Plan, that will really determine whether that work has been worthwhile. While the Planning and Zoning Commission bears the largest burden of seeing the Plan put into action, it will require the effort of all town agencies in coordination with regional and state agencies to see that this vision for Columbia's future is realized. In addition, the Plan must serve as a guide for all residents, applicants, agencies, and individuals interested in the orderly growth of Columbia.

The Goals

The goals of the plan were derived from public opinion surveys in conjunction with the committee's assessment of current conditions and trends. The goals appear in the Program at the end of each chapter, and are summarized in the Executive Summary in the first chapter. These goals need to be the basic guide for all community activities until the Plan is again updated.

The Action Plan

Responsibility

Each chapter ends with a list of recommended actions to be carried out by various town agencies. In many cases, the responsibilities are shared by a number of entities.

Timing

The recommendations have each been given a priority level number. The lower the number the sooner that recommendation should be put into effect. Where responsibility for carrying out a recommendation is given to several agencies, different numbers indicate the stages in which implementation may occur. A lower number for one agency as compared to another means that the former takes the lead, and the latter builds on the actions of that first agency.

Implementation of the Plan is a gradual and continual process. While some recommendations can be carried out in a relatively short period of time, others may only be realized towards the end of the planning period, and some may be even more long-term in nature.

Plan Coordination & Implementation

Tools

Regulatory Framework

Local land use regulations are the primary tool for implementing the recommendations of the Plan. These regulations must be revised to enable the goals of this Plan. Revisions should also seek to make the regulations easy to understand and use, yet effective in guiding development.

Application Review & Permit Enforcement

All land use proposals should be measured and evaluated in terms of the Plan and its various goals and recommendations. On a day to day basis, it is at this level that the Plan may have its greatest effect.

Professional Land Use Staff

Because so many of our review commissions are made up of volunteers who may only have limited experience or may only serve on their commission for a limited period, it is essential that the Town ensure adequate staffing of paid professionals. They are the ones who provide the lead in the critical function of application review and permit enforcement. Town employees must be aware of and committed to the POCD, and have the expertise and hours to see it implemented on a daily basis.

Referral of Municipal Improvements

Section 8-24 of the Connecticut General Statutes requires that municipal improvements (defined in the statute) be referred to the Planning & Zoning Commission for a report before any local action is taken. A proposal disapproved by the Commission can only be implemented after a two-thirds vote by Town Meeting. All local boards and agencies should be notified of Section 8-24 and its mandatory nature so that proposals can be considered and prepared in compliance with its requirements.

Budget and Capital Improvements

The town budget needs to reflect the goals and recommendation of the Plan. It must assure the staffing levels and equipment needed to implement the POCD.

The Capital Improvement Program is a tool for planning major expenditures of a municipality. It identifies future needs and prioritizes them within fiscal constraints that may exist.

The Plan contains several proposals (such as land acquisition or community facility development) whose implementation may require the expenditure of town funds. The Plan recommends that these (and other) items be included in the town's Capital Improvements Program and that funding for them be included as part of the Capital Budget.

Assessment and Taxation Policy

Several recommendations call for changes in assessment that would give an economic incentive (or disincentive) to various kinds of land use and economic development.

Regional and State Coordination

Policies with regard to transportation and utilities are those with the most obvious connection to agencies outside the town. However, use of information, expertise, and funding from regional and state agencies are all avenues which need to be pursued to make the Plan effective.

The Plan needs to be shared with abutting towns to make sure that we aren't working at cross purposes. The same applies to coordination with regional plans. Our representative to WINCOG needs to be very familiar with the POCD and keep it at the forefront of discussion of regional plans.

Future Plan Updates

The Plan of Conservation & Development must be revised at a minimum of ten year intervals as mandated by the State. Even though this current Plan has been prepared to meet the challenges that will confront Columbia in the foreseeable future, some circumstances will undoubtedly change, and some conditions will certainly arise that will suggest that it is time to reconsider the Plan or some of its elements.

Such revisions within the ten year planning period are to be welcomed since it will mean that the Plan is being used as a set of guiding principles by residents. Programs that help achieve community consensus and unity, establish community goals, and promote community welfare will all turn out to be positive steps in the history of Columbia.

**Town of Columbia
Plan of Conservation and Development 2006
List of Maps and Charts**

<i>Item</i>	<i>Page</i>
Maps	
Scenic Vistas	19
Columbia Center Historic District	21
Historic Sites	22
Prime Important Agricultural Soils	27
Land With Severe Development Limitations	30
Open Space	43
Priority Wetlands	46
Priority Forest Habitat	52
Subdivisions	65
Sample Conventional Subdivision Design	73
Sample Conservation Subdivision Design	74
Town Trails, Existing and Proposed	116
Future Land Use	127

<i>Item</i>	<i>Page</i>
Charts	
Sample Chart	4
Total Population, Windham Region	12
Percentage Change in Population by Decade, Windham Region	12
Age Distribution Within the Columbia Population in 2000	12
Population Under Age 5, Columbia	13
Population Over 55 Years of Age, Columbia	13
Projected Age Distribution in 2020	14
Employment	14
Median Household Income	15
Community Character Program, including Scenic, Cultural, Community Spirit and Pride Resources	23
Natural Resources Program, including Soils, Water and Wetlands, and Living Resources	36
Open Space Program	53
Community Structure Program	59
Growth in Housing Units	60
Household Types	61
Size of Rental Units	62
Renter-occupied Housing Types	63
Conventional vs. Conservation Subdivisions	71
Housing and Residential Issues Program	76
Business and Economic Development Program	82
2000 Assessor's 490 Farmland	85
Agriculture Program	88
Community Facilities and Services Program	98
Existing Recreational Services Inventory	103
Active and Passive Recreation Supported by Town's Residents	105
Recreation Program	106
Transportation Program	116
Utilities Program	123