

June 25, 2001

Maine Audubon Society
Conservation Works!

Rangeley Region's Economy: Current Situation and Future Outlook



Resource Document

The Irland Group
Winthrop, Maine



MAINE AUDUBON SOCIETY

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The responsible voice for Maine's environment.

June 25, 2001

Dear Reader,

This report is one of several documents to come out of the Rangeley Region *Conservation Works!* project. The idea for *Conservation Works!* was initially conceived by a Maine Audubon staff member Sandy Neily who lived and worked in Greenville for 15 years. She cared deeply about the natural resources upon which her rafting business and soul depended. She wanted to help rural Maine communities secure a healthy economic future amidst a tide of monumental change in the surrounding forestland.

After two difficult years of rejections from funders, we secured our first grant to support this new approach to conservation in the north woods. The approach was risky. Maine Audubon put its faith in the local citizens to come up with their own vision. The approach required a lot of people power with an uncertain result. Not only would Maine Audubon staff be needed to gather and assist a local committee. A professional economist and land use planner would be needed, and local citizens would have to participate. Would it work?

I'm happy to report that a hardy group of about 20 individuals from diverse backgrounds came together nearly monthly over the course of two years. They took a hard look at what drives their current economy, and what opportunities there might be for economic growth over the next 50 years. They examined opportunities to help provide them with economic stability, while respecting the sense of place, quality of life, and beauty so integral to their community.

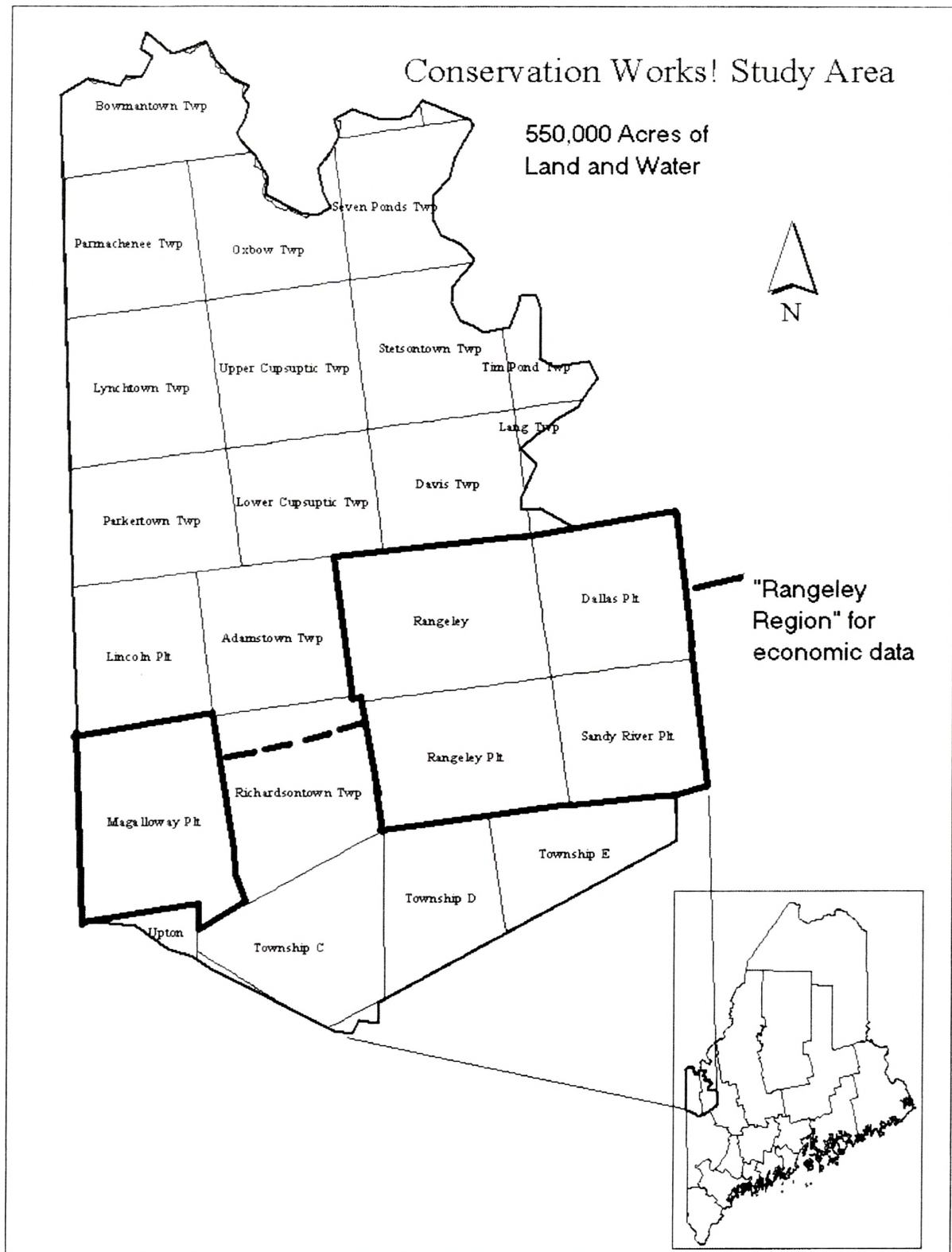
We are happy to present this resource document from Lloyd Irland, a natural resource economist with vast knowledge of the timber industry in Maine, to you, the people of the Rangeley region, for review and discussion.

Funds for the economic analysis presented in this report came principally from the Surdna Foundation, with additional support for the *Conservation Works!* project provided by Conservation Technology Support Program, Davis Conservation Fund, The Dolphin Trust, Fund for Preservation of Wildlife and Natural Areas, SFC Charitable Foundation, Inc., Sudbury Foundation, W. Alton Jones and Western Mountains Foundation. We thank them all for their faith in this unique approach to building connections between economy and conservation, and hope the report will serve the people of the Rangeley region for years to come.

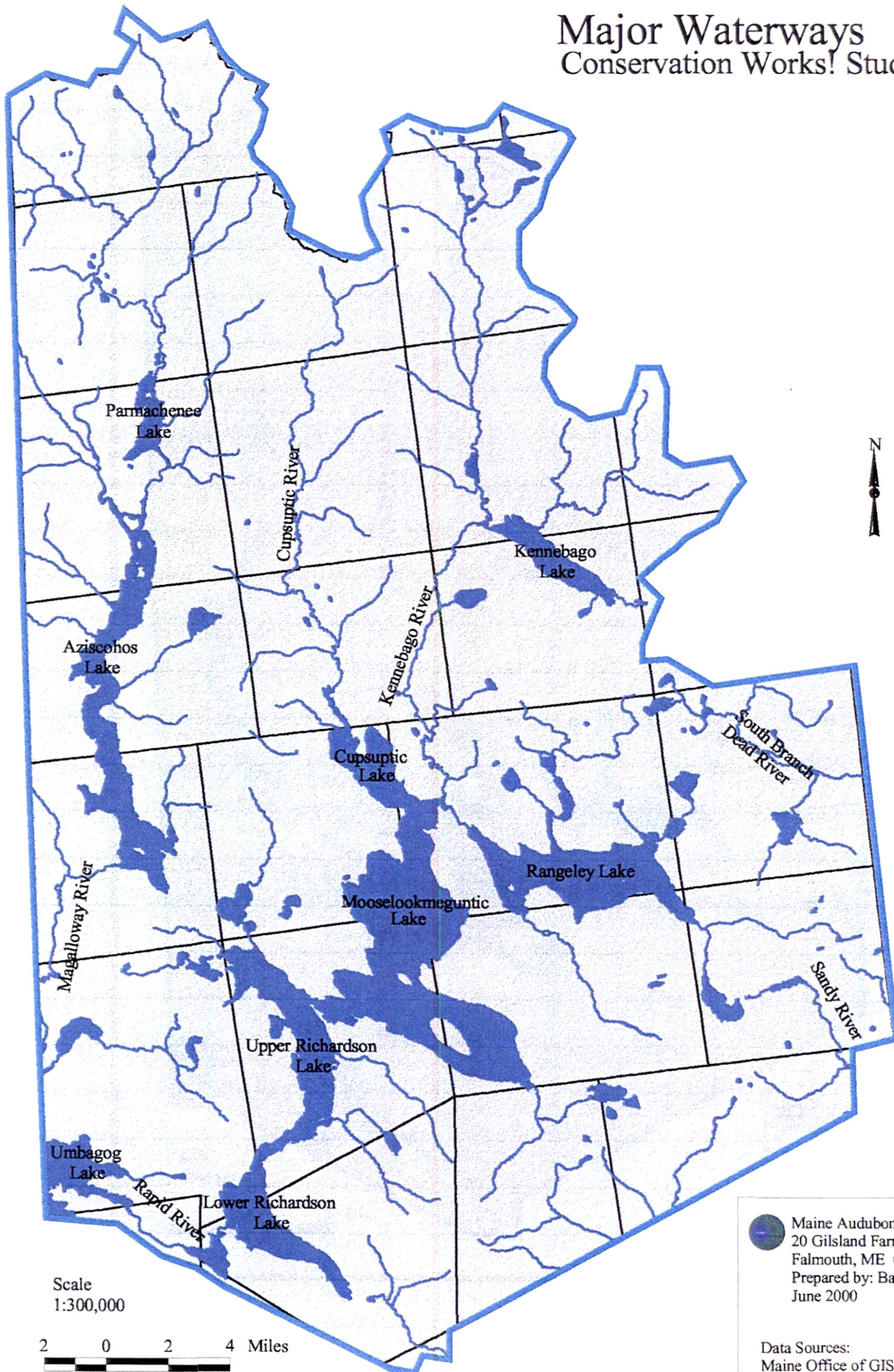
Sincerely,


Kevin Carley
Executive Director





Major Waterways Conservation Works! Study Area



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June 2000

Data Sources:
Maine Office of GIS
Maine Audubon Society

HIGHLIGHTS

This report summarizes economic trends, summarizes the area's economic base, reviews and use issues, and offers scenarios for economic change for the coming half century. The Rangeley region, for this report, is defined as the region surrounding Rangeley and north to the Canadian border (see Map, p. 2). Economic data are examined including Rangeley, Rangeley Plantation, Magalloway, Dallas, and Sandy River Plantation. The overall region encompasses roughly 500,000 acres of land, of which 12,000 is currently developed. Key findings include:

- The Rangeley Region is in an area of the state -- "the Rim Counties" -- that have shown slow growth and are likely to continue to do so.
- Since 1981, the Rangeley Region's population has grown less than the State.
- The seasonal population peak is likely five times the estimated year-round population.
- Labor force and jobs data have many weaknesses, but official DOL data indicate a slight declining trend from 1990 to 1998.
- The Rangeley Region's economy depends almost entirely on its clean water, its forest and landscape, its sense of remoteness, and on tourism and forestry and wood products jobs.
- Employment and economic impacts of the tourism sector are difficult to document, but they are clearly large.
- The forest-based sector provides significant year-round employment.
- Considerable undeveloped subdivided acreage exists in the Rangeley Region. Extrapolating the recent pace of development for the coming 50 years, this would mean an additional 2,100 units. This would entail the conversion of between 2,100 and 8,400 acres of land.
- The region's landscape consists of these general areas:
 - Development potential lands, near developed areas and roads, where future development is likely to be concentrated;
 - The setting, generally the hillsides and lakefronts visible from the lakes and heavily used tourism areas;
 - The Backcountry, where hiking, fishing, hunting, snowmobiling, and other activities occur in a landscape owned and managed for commercial forestry.
- An intensive effort by *Conservation Works!* to identify local visitation patterns, expenditures, and opportunities suggests that an intensive effort to retain and expand selected recreation opportunities could boost visitor spending by 50%.

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INTRODUCTION AND ACKNOWLEDGMENTS

This report is a discussion document prepared to support the *Conservation Works!* project in Rangeley, Maine. It depicts current economic conditions, offers a general economic outlook, and poses scenarios for the coming 50 years. This is intended to serve three purposes:

- basis for discussion of economic conditions, issues, and opportunities;
- baseline for comparing impacts of possible conservation or development projects; and
- method of eliciting additional information.

Assessment of institutional capacity and planning for future projects and programs is not in the scope of this document.

Information on small local areas is surprisingly abundant, but it often takes time to dig out, and may have various limitations. State and federal economic data are often published by county, and these have many valuable uses. But for a town on the edge between two counties, the bulk of whose economic activity and population lie at a distance, the county data provide only the most general context for the town. Local government and private sources can also provide information that is useful in watching trends. In conducting research on small communities, it is necessary to use a variety of indicators, including trends for wider areas. Detailed occupational, housing, and economic information may only be available in decennial censuses. In drawing conclusions and making judgments about the future outlook, a variety of information about larger areas will necessarily be used.

Much of the report relies on charts to present data, which in most cases is shown in detail in Backup Tables collected at the end.

We would like to acknowledge the assistance from peer reviews of an earlier draft by Charles Colgan, Richard Barringer, David Vail, Kevin Boyle, and Galen Rose. Intensive data gathering by Land and Water Associates was critical in establishing recreation uses. The *Conservation Works!* Committee as a whole contributed extensively in both time and knowledge. Maps were done by Barbara Charry at Maine Audubon, and word processing, data analysis and graphs were done by Rondi Doiron. We would also like to acknowledge several rounds of editorial assistance by Sally Stockwell of the Maine Audubon Society.

This document has been reviewed and discussed by the *Conservation Works!* committee and outside reviewers, but opinions are those of the author.

SECTION A: RANGELEY REGION'S CURRENT ECONOMIC STATE

To introduce our review of the Rangeley area's economy, we open by describing its "economic base". This is what economists call the sectors of the economy that bring in dollars from outside an area's boundaries. The concept is that it is these dollars from elsewhere that provide the engine that runs an area's economy. For our purposes, this idea provides a useful descriptive way to look at Rangeley's economy. After describing the area's economic base, we note the area's relationship to the state and regional economies, and review a number of economic trends such as population, school enrollments and the labor force.

I. ECONOMIC BASE OF RANGELEY

For analyzing a local economy, a commonly used method is to identify its "economic base," which is the sum total of the economic activities that bring dollars into the area. A variety of other theoretical and descriptive methods have been employed, but few of them can be applied here because we lack the detailed data. Instead, we will take a more descriptive approach.

Briefly, the economic base concept assumes that the economic base, or sales to outsiders, provides the income that "drives" the economy. We need not enter the debate over the usefulness of this concept, but can accept it simply as an accepted and useful descriptive device. To analyze the economic base, however, requires an ability to determine which sectors represent "economic base" in terms of sales to outsiders and which are "residential" sectors that function by providing services to those "economic base" sectors. Complicating matters is the fact that many sectors serve both functions. Gas stations sell gas to tourist visitors as well as to residents. Only that part of their sales to nonresidents can be considered economic base. Sales to residents, while important to the business, do not represent new money coming into the town.

The concept can be simply illustrated (Fig. 1). The sectors defined as economic base bring in dollars to the area's economy. Those dollars are the "first round" impacts. The businesses receiving that revenue spend it within the community on payroll and supplies, producing "indirect" effects -- in effect the revenues of their local suppliers. The payrolls and incomes thus earned are spent at the grocery store, producing "induced" effects. As is well known, average annual wages vary from industry to industry. For the Rumford LMA, the data for 1998 are shown in Table 1. There are no wage data available for more local areas. See also, Vail and Kavanagh (2000).

Table 1
Annual Average Wages Paid in Covered Employment
Rumford Market Area, by Major Industry Division, 1998

Total -- All Industries	\$25,945
Agriculture, Forestry, and Fishing	18,787
Construction and Mining	20,586
Manufacturing (incl. logging)	41,232
Transportation and Public Utilities	24,875
Wholesale Trade	22,287
Retail Trade (incl. eating/drinking places)	12,174
Finance, Insurance, and Real Estate	39,674
Services (incl. hotels and lodging)	18,614
State Government	27,267
Local Government	22,405

Source: MDOL Stat. Handbook, 1998, p. 402.

At each stage there is "leakage," representing the portions of revenues that are spent outside the community. At the gas station, the owner retains the gross margin, which is spent on wages, maintenance, supplies, and owner incomes. But the delivered value of the fuel is remitted monthly to the fuel oil supplier in a nearby city. Typically, small communities have very high leakage rates. All the more so for communities unable to produce needed energy and food for residents, seasonal residents, and visitors.

Tourism

Tourism is customarily defined as any activity or spending that results in an overnight stay away from home. It thus includes business travel in addition to leisure travel. Tourism's economic development relationships are complex (Vail, et al., 1998). Examples from other areas illustrate the difficulties and supply ideas (Vogelsang and Graefe, 1999; Patterson, 1999).

Lodging and eating expenditures are commonly used as proxies for tourism. Yet in the Franklin County study, almost one-third of expenditure was by "cabin/condo/cottage borrowers" and "visiting friends and relatives," whose activities do not generate measured lodging revenues. (Statewide, according to the Longwood's surveys, "marketable trips" are 45% of all overnight trips in 1998.) According to Galen Rose of the State Planning Office, a common rule of thumb is that total tourism spending is eight to ten times lodging expenditures. This is roughly consistent with the Franklin County results. The County study estimated that in 1996 there were 273,962 overnight person-visits. This was developed from detailed surveys of lodging units and their occupancy.

ECONOMIC BASE CONCEPT

Economic Base is all activities bringing dollars into the Community

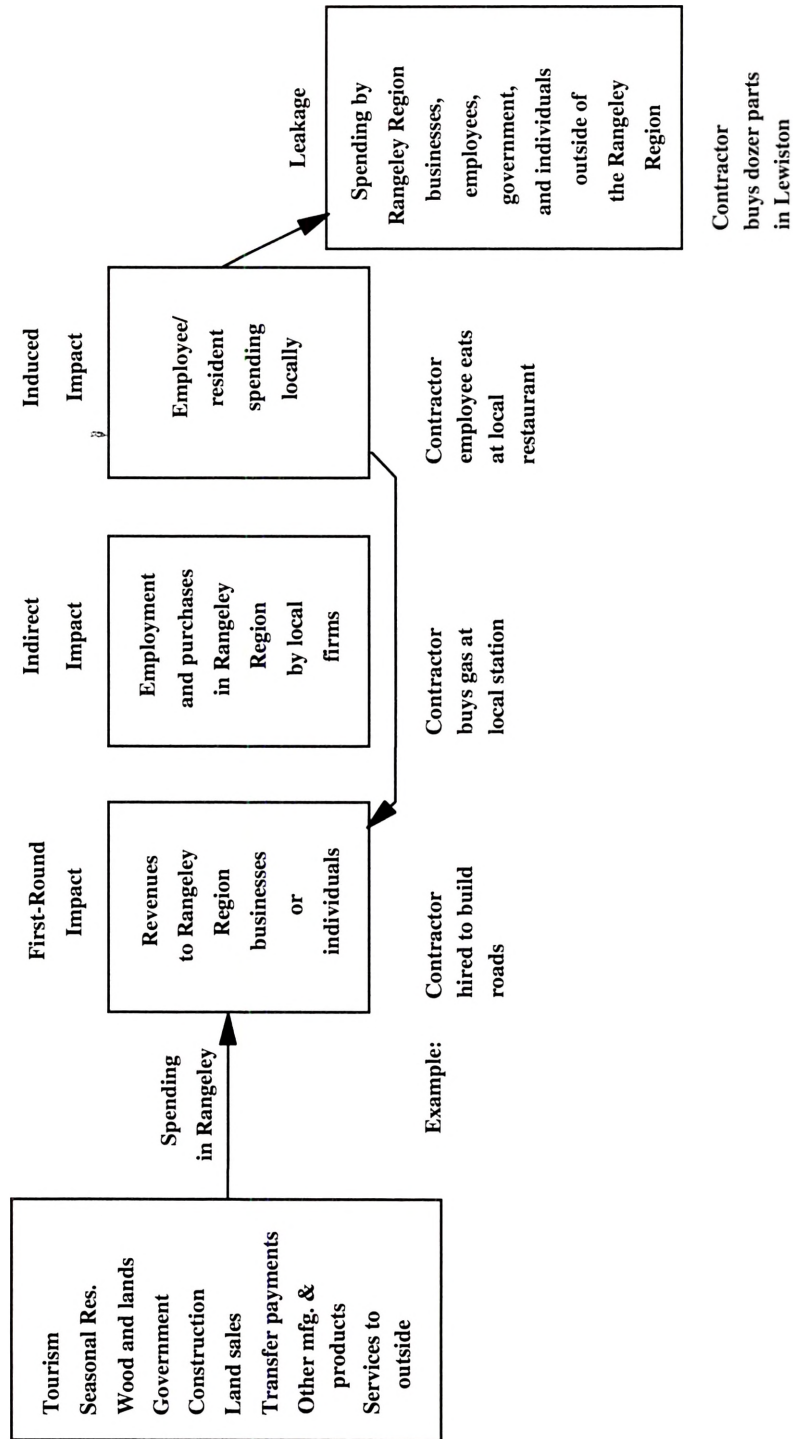


Figure 1

There is no current information available to enable us to do a similar estimate for the Rangeley Region.

In 1998, state tax data show restaurant and lodging sales for the Town of Rangeley at \$6.3 million. Based on the Franklin County work, the portion of this that is lodging would be 42%, or 2.6 million. It is estimated (E. McAlister, pers. comm.) that Rangeley accounts for 80% of the region's tourist spending, so the regional total for lodging would be \$3.25 million. Using a multiplier of 10, this would lead to an estimate of tourist expenditures in the region of \$32 million. This estimate should be used recognizing that it has a wide margin of error. To recap:

Rangeley (town) restaurant/lodging sales	\$ 6.3 MM
If 42% is lodging alone	2.6
If Town is 80% of Rangeley Region	3.25 for region
Using 10X multiplier, Total is	\$32 million

This would suggest that the Rangeley Region accounts for 36% of the estimated Franklin county spending as estimated by the Davidson - Peterson study. This seems a reasonable result.

Statewide, tourism spending is usually estimated at \$1.5-2 billion. This leaves the Rangeley Region with perhaps 2% of total. This is consistent with the 1998 Longwood survey showing the area with a 2% share of "marketable trips." The proportion of this spending total that becomes local income is the important question and we do not have good measures of this. The Davidson-Peterson study estimated that 31% of total spending became direct income to county residents. Given the high rate of leakage likely in a small area, this ratio seems high for Rangeley.

If \$45,000 of spending supports one full-time equivalent job, then the \$32 million Rangeley Region total would account for 711 jobs, which would include all part time, seasonal, and full-time jobs. This would exceed total employment based on DOL estimates. While the DOL estimates are clearly low, it seems likely that it would take a good deal more than \$45,000 of spending to support one job.

The surveys done for *Conservation Works!* developed estimates of visitor spending per party, but were not designed to estimate total numbers of visitors (Environmental Policy Options, 1998). So these do not enable us to develop an independent estimate of regional tourism spending. Still, the estimates are interesting (Table 2). A report by Duke Engineering and Services (1998) kindly shared by E-PRO, gives details on spending and activities in the Upper and Middle Dam areas.

Table 2
Average Amount Spent in the Rangeley Region Per Tourist

<u>Item</u>	<u>Summer</u>	<u>Percent of Total</u>	<u>Fall</u>	<u>Percent of Total</u>
Gasoline	\$24.57	3.6%	\$17.21	6.7%
Groceries	\$70.84	10.4%	\$30.34	11.7%
Restaurants	\$99.49	14.7%	\$57.68	22.3%
Lodging	\$310.39	45.8%	\$79.88	30.9%
Recreational rentals	\$27.50	4.1%	\$3.82	1.5%
Guide services	\$19.43	2.9%	\$17.66	6.8%
Retail	\$106.04	15.6%	\$44.26	17.1%
Miscellaneous	\$19.71	2.9%	\$7.62	2.9%
TOTAL	\$677.97	100.0%	\$258.47	100.0%

Source: Environmental Policy Options, n.d., p. 5.

(There is some question whether the data refer to persons or to parties. It seems unlikely that a family of 4 would spend \$1,000 in Rangeley for the average stay of somewhat longer than one day.)

A recent economic assessment estimates that the Saddleback ski area accounted for roughly \$2.5 million in visitor spending in the 1996/97 season, and that about \$1.5 million was spent outside the area. Area representatives suggest that the impacts today would be significantly higher, totaling \$5 million (50,000 visitors averaging \$100/day). The area's payroll was estimated at \$300,000 for five year-round and 60 seasonal employees (NPS, 1999, ch. 3). The same study estimated \$1.77 million in taxable retail sales impact for the ski area, which was 3.25% of the ESA total, but would be about 5.5% of the total of our estimated \$32 million annual tourism spending impact. During the winter season, the proportion of spending would be about 16%, assuming that winter accounts for about 1/3 of total annual spending.

Seasonal Residents

Tourist visitors often morph into seasonal residents or even year-round residents. The difficulty of estimating seasonal population has been noted. There is no basis for estimating their contribution to economic base, though it is probably very significant. It is possible that some of these seasonal residents earn some employment income while in the Rangeley Region. The *Conservation Works!* surveys did not estimate expenditures by these seasonal residents.

Forestry and Wood Products

Virtually the entire area is in forest production (see Map, p. 15). The forestry and wood sector includes land management, harvesting, and related jobs, estimated at 35-40 resident jobs. Annual incomes for these jobs cover quite a range, but if a rough average is accepted as \$25,000 per year, the total earnings in this sector would be \$1 million each year.

In some parts of the country, concerns have been raised by some that forest harvesting and trucking may negatively affect attractiveness of an area for fishing, hunting, and other recreational pursuits. In all of the discussions of with the *Conservation Works'* Committee and in our general familiarity with this region, there is no evidence that this has occurred or is likely in the Rangeley Region. In specific places, issues for management attention do arise, however.

Government

The economic impact of government is complex. Local tax payments are largely spent locally, and these are supplemented by complex flows of local dollars to state and federal governments and back again. Clearly, as a significant employer and provider of key infrastructure, government is a critical element in the economy. It is not clear whether or not the government sector represents economic base to the Rangeley Region.






Construction

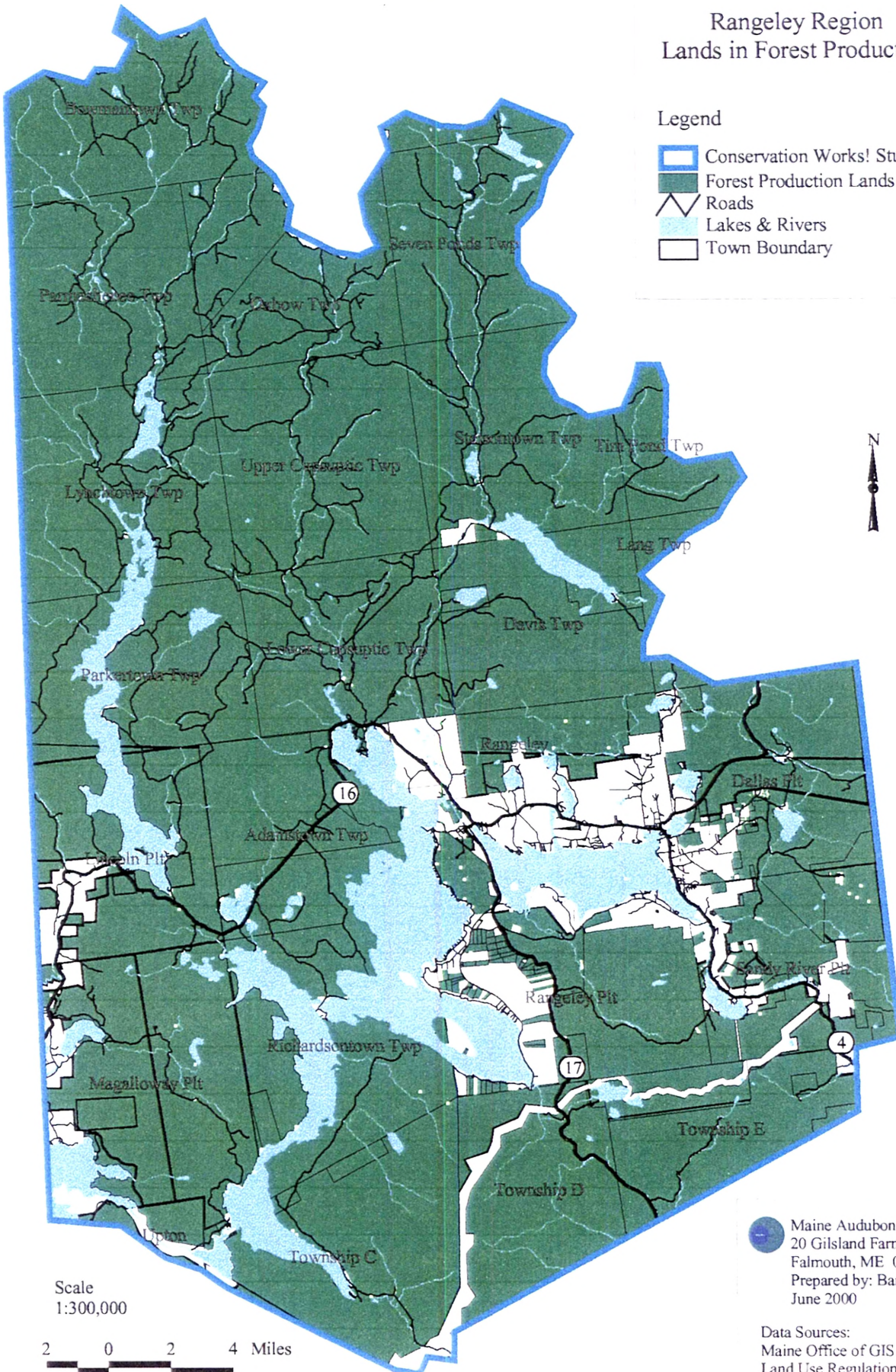
The construction business builds roads and buildings and maintains them. Some projects are conducted by nonresident firms, and undoubtedly local firms do work outside of the immediate area. Whenever a Rangeley firm builds a home for a seasonal resident, the resulting local income and spending flows (net of leakage) become economic base. Construction normally accounts for 4-5% of statewide covered employment, but the proportion could be larger in Rangeley.

According to building permit data, an estimated 42 units are built in the Rangeley Region each year, averaging from 1990 to 1999. Turning this into number of persons engaged involves very strong assumptions, as the structures involved vary widely in size and complexity, and at least some specialized subcontractors undoubtedly come into Rangeley from nearby areas. In addition, routine maintenance (such as opening and closing camps each year), repairs, and improvements undoubtedly account for considerable additional construction employment. But perhaps it would not be too far wrong to assume that a single unit can be built in three months by a crew of four. Assuming such a crew builds 3 a year, occupying remaining time with maintenance and other jobs, this would mean that area new construction would employ 56 workers. The area's average annual wage in construction is \$20,586, so this would translate to \$1.15 million/year in payroll. Work by *Conservation Works'* members shows that in recent years, construction cost of average new second homes in the area is about \$110,000.00.

Rangeley Region Lands in Forest Production


Legend

-  Conservation Works! Study Area
-  Forest Production Lands
-  Roads
-  Lakes & Rivers
-  Town Boundary



Scale
1:300,000

2 0 2 4 Miles

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Prepared by: Barbara Charry
June 2000

Data Sources:
Maine Office of GIS
Land Use Regulation Commission
Maine Audubon Society

Also in the construction industry would be sand and gravel operations and road building, for which we do not have estimates on employment.

Asset Sales

When assets owned by a resident are sold to an outsider, the net income would be economic base. Sales of assets within the Rangeley Region, but owned by nonresidents would not be economic base. Also, a given home or lot could be sold many times over the years. In time, the ability of residents to sell land ends when the stock has been completely sold to nonresidents; further turnover of those lots or buildings would not be economic base, except to the extent that local professional services were utilized.

Transfer Payments

Statewide, about one-third of all personal income is from transfer payments, which would include investment income, retirement income, and social assistance payments of many different kinds. Essentially, transfer payments are all personal income other than earned income from current employment. Transfer payments are probably quite significant to the Rangeley economy and would grow in importance to the extent that retirees may increase in importance in the future. Many seasonal residents may depend heavily on transfers of one kind or another as well.

Other Manufacturing and Products

There are a number of enterprises in the Rangeley Region that provide manufactured goods or other products to customers outside the area; these are also economic base to the Rangeley Region. In some instances they use raw materials from elsewhere, so their indirect linkages would be weak.

Services to Outside

There are instances of Rangeley residents providing seasonal or year-round services outside the area, that are not included in the tourism sector. We have no data on how significant this may be.

An overview of the sectors in Rangeley's economic base is provided in Table 3.

Table 3
Land Dependence of Rangeley Region Economic Base

Sector	Definition	Land Dependence
Tourism	Eating/hotels/lodging expenditures by visitors	Setting; developed
Seasonal residents	Expenditures by seasonal residents	Same
Wood products	Land management and operations, incl. roads	Backcountry
Government	State and local government	n/a
Construction	Building and maintenance, incl. roads and infrastructure	Development potential
Sales of assets	Lots, buildings, etc. sold to nonresidents	n/a
Transfer payments	Retirement, investment income, social programs	n/a
Other mfg & products	Small wood prods, wreaths, trout flies, etc.	n/a
Services to outside	Consultants, etc.	Developed; setting
Other (?)		

Backcountry, Developed and Setting defined below in “Values of the Forest Landscape” section.

Conjectural Economic Base for Rangeley

For purposes of discussion, a conjectural working estimate of the Region’s economic base was developed (Table 4). Aside from transfer payments, the leading four sectors, in order, are:

- Tourism
- Wood products
- Government
- Seasonal residents

The table is given as a breakdown of personal income, not of sales or jobs.

Table 4
Conjectural Working Estimate
Rangeley Region Economic Base, 1999

<u>Sector</u>	<u>Percent of Personal Income to Rangeley Residents</u>
Tourism	27%
Seasonal residents	8%
Wood products/forestry, incl. trucking	10%
Government	10%
Construction	5%
Sales of assets	2%
Transfer payments	30%
Other mfg & services	5%
Services to outside and other	<u>2%</u>
TOTAL	100%

The true breakdown of personal income in the area could be somewhat different from this estimate. Without intensive data gathering and analysis, far beyond the scope of this project, additional precision and detail cannot be obtained.

II. RANGELEY STUDY AREA'S RELATION TO STATE AND REGION

Relation to State Economy

The economy of any political subdivision may be linked only loosely to the larger region, the state, or even to nearby counties. The level of activity in wood-based industries depends on national and in some cases global cycles and trends. In the tourism sector, cycles and trends occur on a regional basis, and year-to-year conditions may depend on weather both in Rangeley and elsewhere.

Different geographic metaphors have been used to describe the differences within the State. In the early 1980's, attention was focused on "The Two Maines," with a dividing line drawn between northerly and southerly halves of the state. Many recognized that the line was arbitrary, but it was incontestable that growth prospects for the northerly areas were less than those of urban southern Maine.

During the same years, it became clear that the principal growth axis of the State was the "I-95 Corridor" consisting of the areas along the Interstate from Kittery to Bangor. Areas isolated from this corridor, including most prominently, Waldo County, were not participating in the growth that the Corridor enjoyed as a result of strong transportation connections. The clear evidence of the "Corridor" effect has led people in particular areas of the State to believe that four-lane connections to Calais, northern Aroostook, or across Maine to Gilead would unleash growth for them. It also increased, in a general way, pressure for the widening of the Turnpike.

More recently, the State Planning Office (SPO) has seen the issue in a different way. They identify three kinds of counties:

- "Rim counties," which border the Canadian border;
- "Central counties" in inland areas; and
- "Coastal counties."

Clearly the Coastal counties overlap with the lower end of the I-95 Corridor. The Rim counties have been experiencing slower growth, and in some instances declines in actual population. This slower growth is expected to continue.

The Rangeley Region was included in the northerly portion of the state expected to grow slowly in the SPO's 1982 report. Clearly, it is not on the I-95 Corridor. And at present, it is in one of the Rim counties (Franklin) expected to continue growing slowly. From 1990-98, an SPO comparison of counties showed that Oxford (just west of Rangeley) often ranked similarly to or higher than the state as a whole, while Franklin fell behind (Table 5). Clearly, these counties are affected by various influences that do not affect Rangeley (such as the Rumford mill), but the SPO's overall analysis offers a useful point of view.

Table 5
Economic Trends: Growth Rankings (among 16 counties) and Rates, 1990-98

	POPULATION GROWTH		FULL & PART-TIME EMPLOYMENT		TOTAL RETAIL SALES	
	<u>Rate</u>	<u>Rank</u>	<u>Rate</u>	<u>Rank</u>	<u>Rate</u>	<u>Rank</u>
Franklin	-0.1%	11	0.3%	11	1.8%	11
Oxford	0.2%	9	1.0%	8	3.4%	7
State	0.1%	n/a	0.8%	n/a	3.6%	n/a
	PERSONAL INCOME		PER CAPITA INCOME			
	<u>Rate</u>	<u>Rank</u>	<u>Rate</u>	<u>Rank</u>		
Franklin	3.2%	12	3.3%	8		
Oxford	3.8%	5	3.6%	4		
State	3.7%	n/a	3.6%	n/a		

Source: Maine State Planning Office, Maine County Economic Forecast, Dec. 1999.

In a statistical study of county-level economic growth, a USDA study (Kusmin, 1994) concluded that the following factors were associated with improved county-level earnings for residents:

- attractiveness to retirees;
- a right to work law;
- high rates of high school completion;
- high public education expenditure;
- access to transportation;
- industry mix; and
- growth of adjacent counties.

The implications of this list for Rangeley are mixed, with attractiveness to retirees being favorable and access to transportation and growth of adjacent counties being unfavorable.

Relation to Regional Economy

There are a number of interesting relationships between this area and the rest of the region. The Rangeley Region is affected by its location near New Hampshire, and its tourism market is widespread, principally southern New England and the northeastern seaboard. A notable regional connection is the fall color tour route from the White Mountains, through Rangeley, and down to the Coast. An important regional interdependence emerges from winter and spring weather. When southern New England and southern Maine lack snow, snowmobilers rush farther northward. When the Boston and Hartford areas have an early spring, skiers put up their skis and do not come north to enjoy what many people consider some of the best skiing of the season. In summer, rainy weekends produce cancellations for resort operators. Another seasonal connection is the prominence of Vermont deer hunters coming to Western Maine seeking larger deer. The amount and nature of tourism and other interactions with Canada are not well understood.

III. POPULATION AND EMPLOYMENT

Data Weaknesses

There are several difficulties with the data available to analyze the economy of a small local area. Major ones include:

- Because of the small area of the Rangeley Region, such economic data as we have are often not broken down into useful details. An example is the labor market information, which is only available in detail for the counties and Labor Market Areas (LMA's). The issue is, how do we allow for the differences we know exist, and how much weight do we place on information for wider areas. The reality is that virtually all of the data we can assemble have weaknesses. The issue is to understand those weaknesses and take advantage of whatever insight the information may provide.
- Tourism is a key sector, yet its expenditures flow into many different sectors. Analysts usually use hotels/motels and eating and drinking as a proxy, but this is imperfect because those sales include expenditures by residents and in activities not usually considered "tourism" in the common sense meaning of the term.
- Employment data are known to undercount the number of jobs. The Labor Department's employment estimates are based on the UI law, and refer only to jobs covered by that law (see definition in Backup Table 3). This has several effects.
 - a. Part-time jobs more than 12 hours/week are counted as well as full-time jobs or someone working 50 hours plus on overtime. The job counts are not Full Time Equivalents (FTE's). A large retail operation might show 100 on its payroll, of which only 8-12 are full time. Adjusting to FTE's is difficult without considerable primary work. (This is not to disparage the importance of part-time work at all, only to note a characteristic of the data.)
 - b. Covered employment does not include proprietors, family workers, or contractors, all of which can be important in the resort, retail, construction, and woods work fields. Since the firms are often very small, omission of any one of these categories of workers can result in severe undercounts in the statistics. Without a complete census of all locally based businesses in the region, there is no practical way to adjust for these limitations.
 - c. Many of the data sources are based on surveys, which probably have significant amounts of simple nonreporting, leading to further undercounts.

Seasonal population peaks and peaks in visitation are very important to the region's economy and swings in population generate demands on public services. Published estimates of resident population have their uses, but there is at present no solid basis for estimating seasonal populations.

Other more particular data issues are noted in the sectoral discussions below.

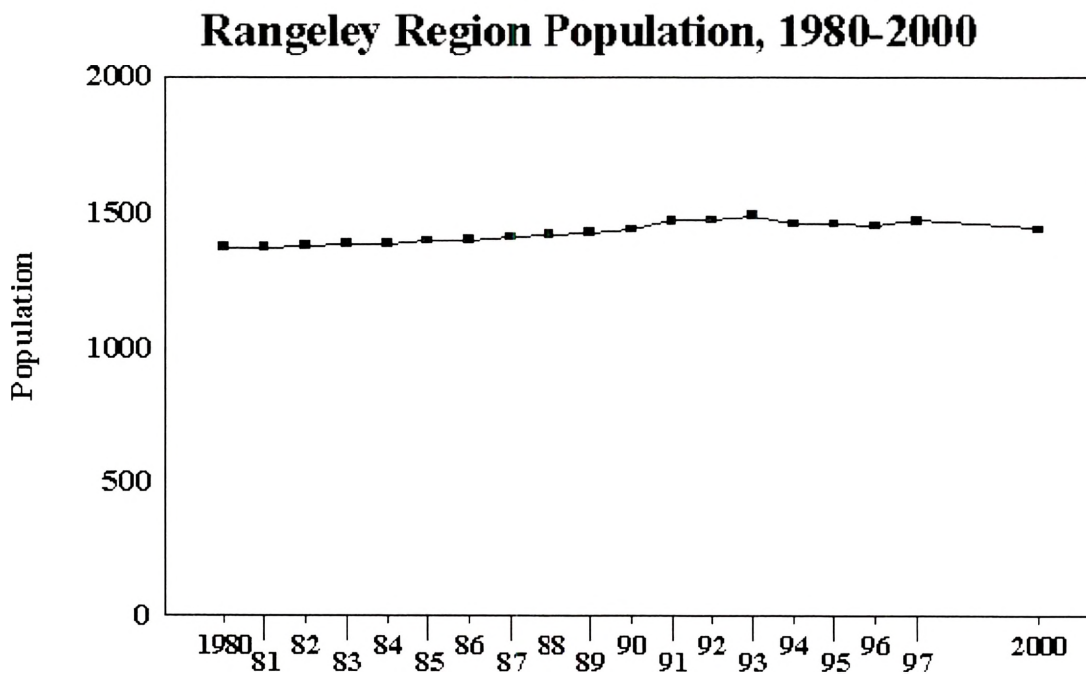
In a few years, more detailed results of the 2000 Census of Population will become available. Unfortunately, local area data takes time to become available, and in some respects could be somewhat dated as soon as it is available. Nonetheless, it will be carefully analyzed at the time and will provide valuable insight into many practical problems. As detailed as it is, the Census data will have its limitations as well.

Rangeley is not an island. The Rangeley economy is nested into larger regions, from adjacent counties, labor market areas, and Economic Summary Areas (ESA's), to the State, Region, and the nation. While any local area differs from these wider units, an area's differences do not exempt it from trends affecting these wider areas.

Resident Population

The first to consider is resident population. Rangeley's population has been slowly growing, but at a rate less than the state as a whole (Figs. 2-4).

Figure 2

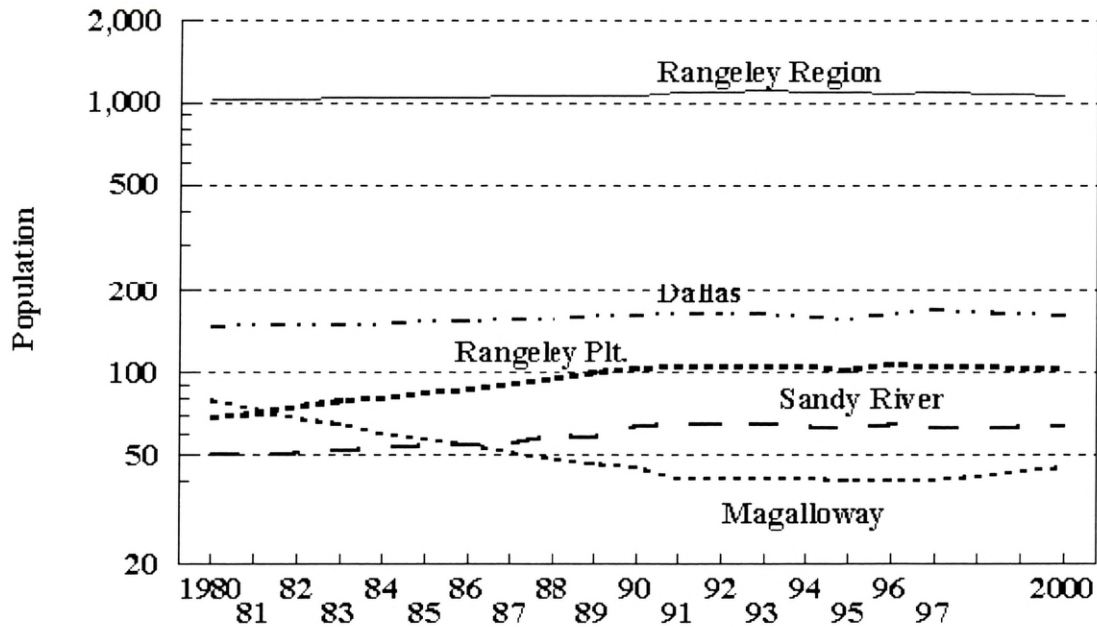


Source: Maine Dept. of Human Services, Office of Data, Research & Vital Statistics.

Rangeley Region: Rangeley, Rangeley Plt., Magalloway, Sandy River and Dallas.

Figure 3

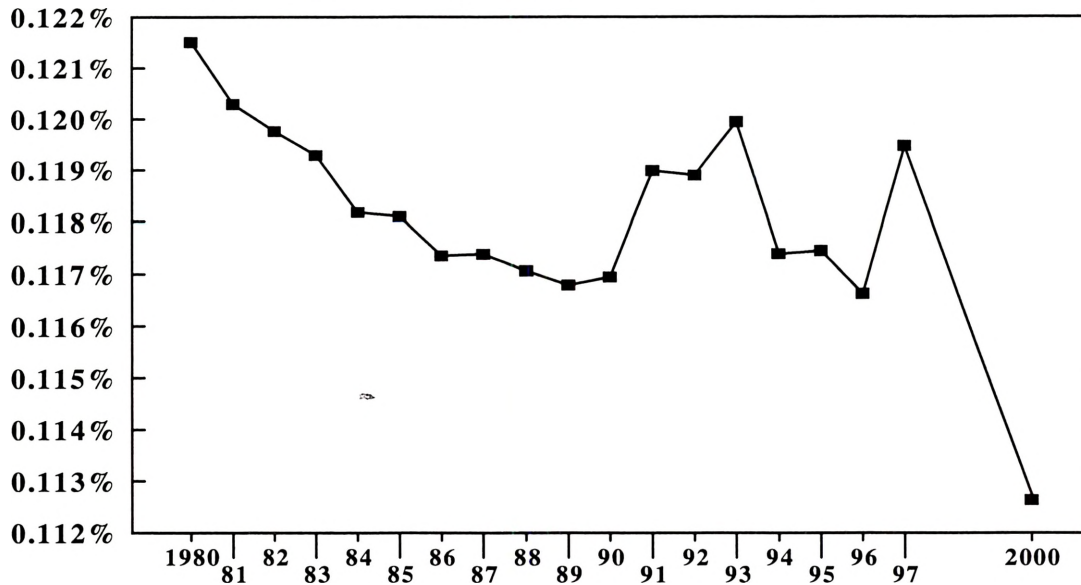
**Rangeley Region Population by Town
1980-2000 (log scale)**



Source: Maine Dept. of Human Services, Office of Data,
Research & Vital Statistics.

Figure 4

Rangeley Population as % of Maine



Source: Maine Dept. of Human Services, Office of Data, Research and Vital Statistics.

Seasonal Population

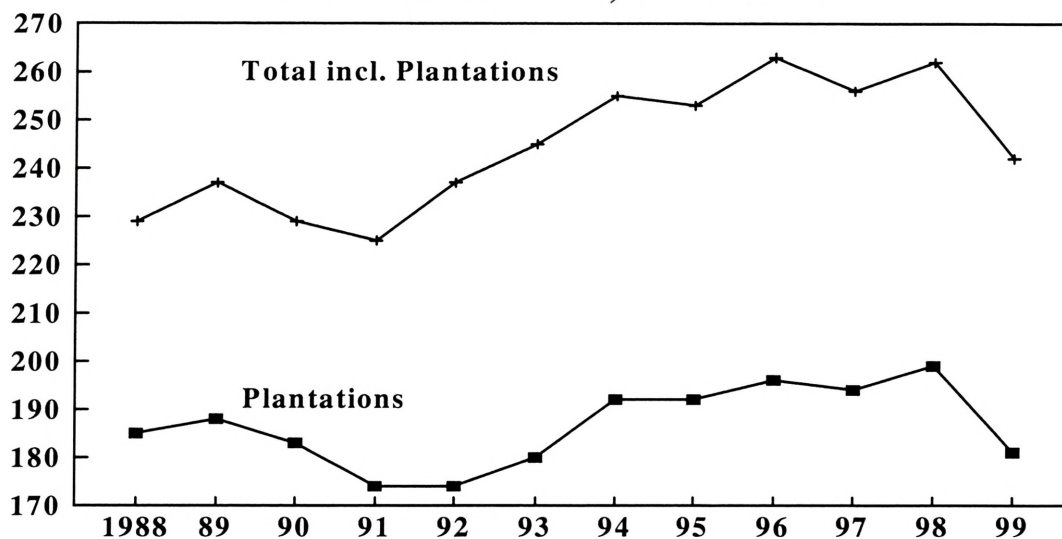
The area's population expands dramatically in the summer, with summer residents returning and with vacationers filling the camps and inns. The 1996 Rangeley Town Plan calculates that the Town's seasonal peak summer population could be as high as 5,240, compared to a 1995 estimated year round population of 1,140. For the Rangeley Region (including Dallas, Magalloway, Rangeley Plt, and Sandy River) the Plan estimated that the year-round population of 1,521 could theoretically increase to 9,170 at the peak. The estimated actual seasonal peak population for the region was 7,650. Seasonal peaks are important for many infrastructure and service needs. But there is no firm basis for these estimates or for updating or forecasting them. Surely, it would be quite possible for trends in seasonal population to diverge from resident population in the future.

School Enrollments

The trend in school enrollments is a sensitive indicator of the demographics of a community. Experience shows, however, that school populations are notoriously difficult to forecast. From 1988 to 1998, the growth in school enrollments was slow (Fig. 5), and enrollments then fell in 1999. The "Plantations" are contributing an increasing proportion of enrollments, having risen from 19% of the District's students in 1988 to 25% in 1999.

Figure 5

Rangeley School Department, Total K-12 School Enrollment, 1988-1999



Source: Rangeley Comp. Plan, 1996, p. 102; and
Rangeley School Dept. See Backup Table 2

MIGRATION

Migration data are available at the state and county level. From 1990-1998, Maine experienced net domestic outmigration while experiencing small international immigration. Franklin County saw net outmigration while Oxford had net immigration. (Table 6). As MaGeean, AvRuskin, and Sherwood (2000) indicate, migration will be important in shaping Maine's demographic outlook. Yet, it is sensitive to economic conditions and difficult to forecast.

Table 6
Population and Migration Trends

	Population July 1998	MIGRATION, 1990-1998	
		Net International	Net Domestic
Maine	1,244,250	3,484	-15,655
Franklin County	28,933	49	-727
Oxford County	53,673	12	669

Source: U.S. Bureau of the Census, per Maine SPO.

Retirement Situation and Outlook

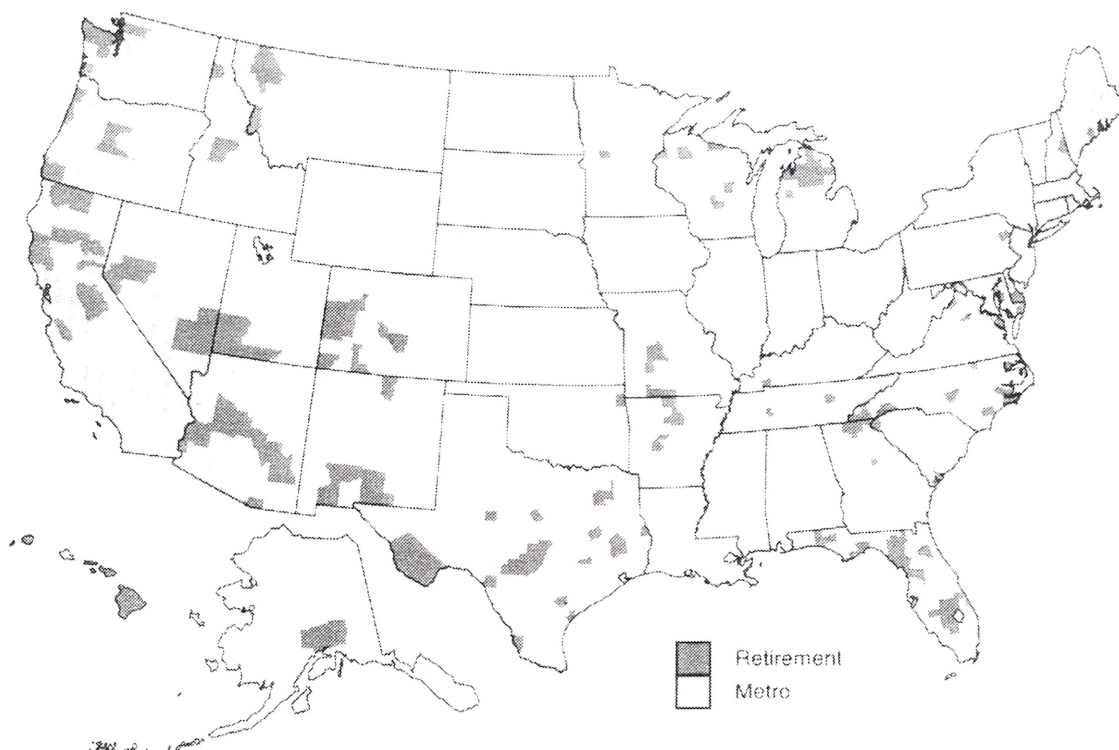
Recent immigration to Rangeley has been noted to consist primarily of retirees building retirement homes there. This has been a significant part of the demand for new houses in the area. Maine has established a large Retirement Industry Advisory Council, reflecting its interest in this subject. According to the Council's recent report, 29% of Maine's 1998 population was age 50 or older. The state's total population grew by only 1% from 1990 to 1998, but the number older than age 50 increased by 10%, and older than 65 increased by 7%. Detailed data more recent than the 1990 Census are not yet available (R. Sherwood, SPO, 1999). A valuable statewide overview is given in MaGeean, AvRuskin, and Sherwood (2000).

Maine has been paying more attention to retirement households as a source of immigration and economic activity for the State. Such households bring in incomes higher than the state average, without service costs for schools. They frequently build new homes, or remodel existing ones, to standards of space and amenity that are equal to or greater than any previously owned home.

There is considerable competition for retirement immigrants. The SPO report notes a number of "retirement magnets" such as the Carolinas and Florida, which are also eager to attract retirees. The U.S. Department of Agriculture has identified a large number of "retirement" counties, of which two are nearby, one in the White Mountains and the other along the Maine Coast (Fig. 6).

Figure 6

Nonmetro Retirement-Destination Counties, 1990*



* Counties with 15 percent or more immigration of persons aged 60 and over, 1980-90.

Source: Cook, 1994, p. 18.

The underlying demographics, and the Rangeley Region's attractiveness, suggest that the trend of retired immigrants will remain steady or even increase. The trend may even be recession-proof. An important point is that retirement immigration is not linked to local job creation. This creates the potential for population and housing construction to grow faster than does job creation. How effectively Rangeley can compete as a retirement magnet is unclear, but future attraction of some retirees seems likely. Many observers believe that places like Rangeley will be transitional retirement destinations and that people will leave as they need more regular or complex medical care (J. Noyes, pers. comm.).

The Labor Force

The DOL data enable us to characterize the labor force in the Rangeley Region (Table 7). Given that people commute to work, the labor market balance for the town

alone is not the full picture. Basically, the picture is one of a modest decline in labor force over the 1990-98 period, as defined by DOL (Fig. 7).

Table 7
Labor Force, Employment, and Unemployment

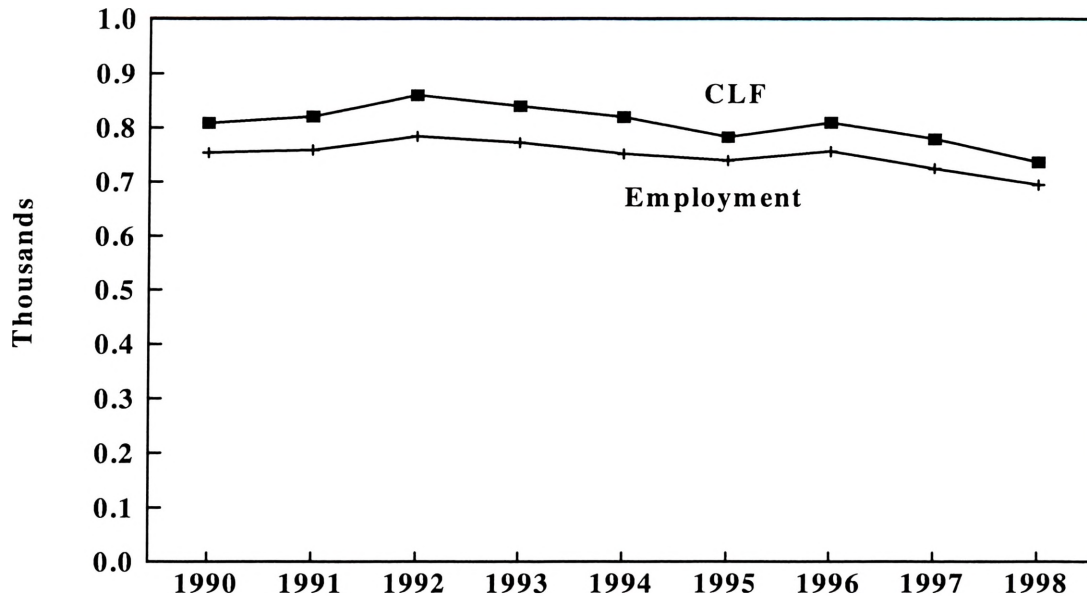
	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>
Rangeley									
CLF	548	562	594	581	563	515	533	514	481
Employment	497	504	524	517	505	474	482	462	441
Rangeley Plantation									
CLF	37	36	38	36	33	37	38	36	35
Employment	35	35	35	35	33	37	38	36	35
Dallas Plantation									
CLF	97	98	98	97	93	103	107	103	98
Employment	96	96	97	96	92	102	106	102	97
Magalloway Plantation									
CLF	14	14	14	14	13	15	16	15	16
Employment	14	14	14	14	13	15	16	15	16
Sandy River Plantation									
CLF	39	37	39	37	39	41	42	40	39
Employment	39	37	39	37	39	41	42	40	39
TOTAL AREA									
CLF	735	747	783	765	741	711	736	708	669
Employment	681	686	709	699	682	669	684	655	628

Source: Maine Dept. of Labor.

CLF = Civilian Labor Force. For full definition of CLF, see Backup Table 3.

Figure 7

Civilian Labor Force & Employment Rangeley Area, 1990-1998



Source: MDOL, Table 7 above.

Labor force data from different sources, provide different results. For 1990, for example, these two different estimates were made:

Census of Population	484
Maine Dept. of Labor	543

Also, business owners, family workers, and “subcontractors” are often not counted in the data, which leads to undercounts.

The Maine DOL prepares detailed estimates of jobs by industry for Labor Market Areas (LMA's) around the state (see Backup Figure 1). Rangeley is part -- only 7% or so -- of the Rumford LMA. Commuting to Rumford is probably limited, while commuting to Farmington seems to be more common. Still, this information gives us a general regional picture of the regional setting (Table 8).

Table 8
Rumford Labor Market Area Employment
1998 Annual Average

	<u>Average</u>	<u>Hi Month</u>	<u>Lo Month</u>
Total Nonfarm Wage and Salary	8,050	8,630 (Feb)	7,660 (Jul)
Manufacturing	2,340	2,470 (Jun)	2,050 (Dec)
Lumber & Wood	760	810 (Oct, Nov)	600 (Dec)
Nondurable*	1,560	1,670 (Jun)	1,430 (Dec)
Nonmanufacturing	5,700	6,260 (Feb)	5,240 (May)
Eating & Drinking Places	400	440 (Aug)	350 (Oct)
Hotels & Lodging Places	210	260 (Jul)	140 (Apr)

* Mostly paper.

Summary

Published data have many weaknesses, but can offer a starting point for understanding the Region's economy. Population growth has been slow, and the reported labor force and employment have declined. School enrollments rose until 1996-98, but fell in 1999; it is not clear if this sets a new trend. Generally, then, reported statistics reflect a slow growth area, consistent with the SPO's analysis of this area as a "Rim County."

SECTION B: ECONOMIC TRENDS AND OUTLOOKS **AFFECTING THE RANGELEY REGION**

This section builds upon the previous descriptions to review additional indicators of economic trends and conditions, to indicate major forces affecting the region's outlook, and to focus more specifically on land use and development trends. It then reviews four development trends that were considered potentially important by the *Conservation Works!* committee: expanded snowmobiling, expanded cross-country skiing, a yurt-to-yurt program, and improving the fishery.

IV. INDICATORS OF ECONOMIC TRENDS

A number of other indicators of recent trends are available.

Retail Sales

For perspective, we discuss both the Rangeley "Economic Summary Area" (ESA) and the Town here. The trend in retail sales displays two notable points (Figs. 8 and 9). First is the falloff in sales after the late 1980's real estate bust, which was clearly related to other parts of the economy than the meals and lodging sector. The other is the high degree of seasonality in retail sales, of which restaurants and lodging are the primary cause. For a map of the Rangeley ESA see Backup Figure 2. The ESA includes the Carrabasset Valley area. Rangeley itself (Town) accounts for about 1/3 of the taxable retail sales of the ESA.

Figure 8

**Rangeley ESA Taxable Retail Sales
Monthly, Jan. 1986 to Sep. 1999**

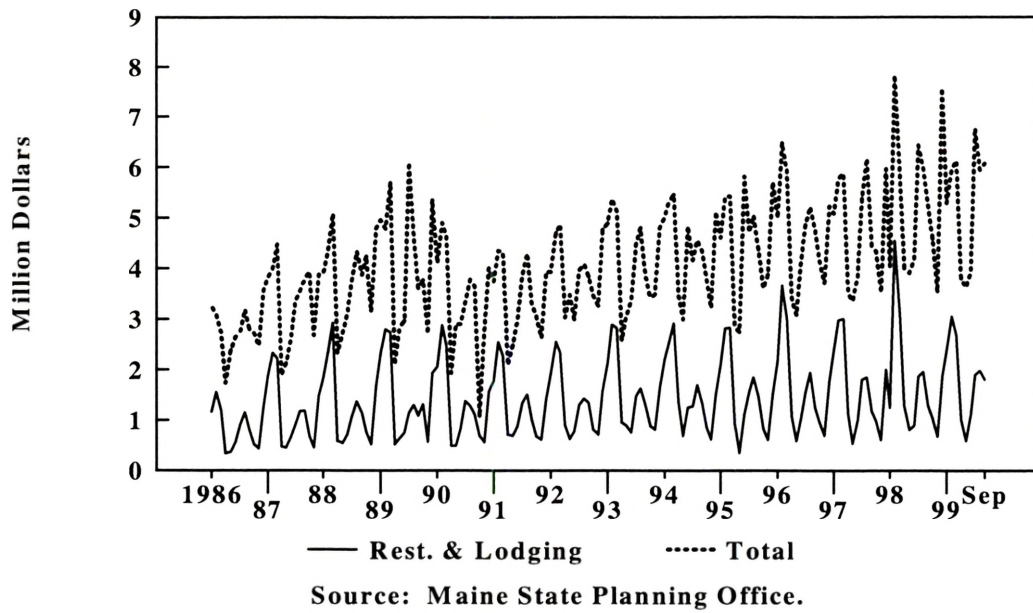
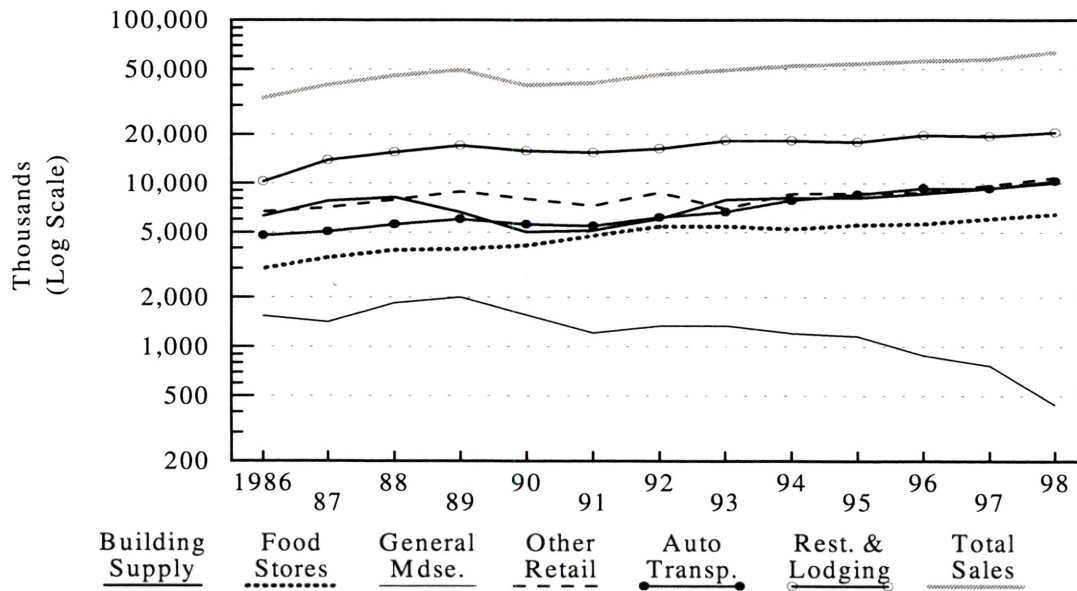


Figure 9

**Rangeley ESA Taxable Retail Sales
Annual, 1986-1999**



Source: State Planning Office. See Backup Table 4.

The sales tax data permit some contrasts between the state and the Rangeley ESA (key data for the Town alone are withheld). Briefly, the Rangeley ESA is far less dependent on autos and general merchandise, and more dependent on restaurant and lodging and building supplies than the state as a whole (Table 9). The decline in general merchandise sales could reflect increasing leakage of consumer spending to the Farmington area.

Total taxable sales for the Town of Rangeley alone have grown strongly since the 1980's, and have become somewhat less dependent on restaurant and lodging sales (Fig. 10). In a few years, however, sales increases barely exceeded inflation (1993, 1997, for example). Rangeley has grown faster than both the ESA and the State (Table 10), though the difference between the town and the ESA is not large.

Table 9
Rangeley ESA Taxable Retail Sales,
Four Quarters, QIV '98 - QIII '99

	Raw \$MM	Adjusted \$MM	Adjusted % of Total	State \$MM	State % of Total	Rangeley ESA % minus State
Restaurant & Lodging	20.1	20.1	25.9%	1,850.8	12.2%	13.8%
Automotive	9.5	9.5	12.3%	3,053.2	20.1%	-7.8%
Other Retail	10.1	10.1	13.0%	1,380.8	9.1%	4.0%
General Merchandise	0.6	0.6	0.8%	2,397.8	15.8%	-15.0%
Food Store Sales*	6.5	26.0	33.5%	5,055.6 **	33.2%	0.3%
Building Supply	11.2	11.2	14.5%	1,485.4	9.8%	4.7%
Total	57.9	77.5	100.0%	15,223.6 **	100.0%	-0.0%

MM = Million

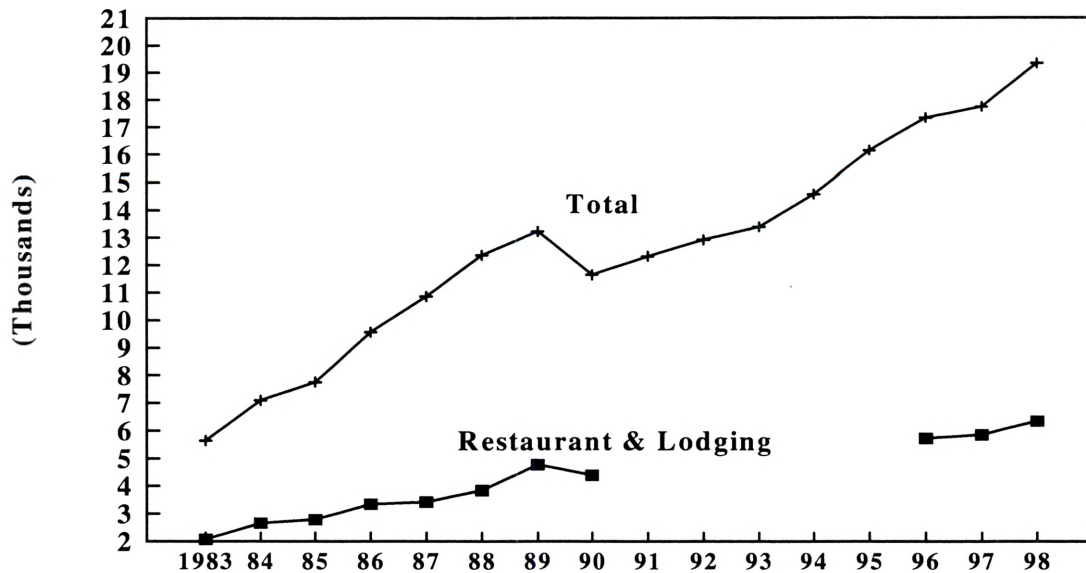
* Represents about 25% of total sales due to tax exemptions.

** Adjusted to estimate total food sales.

Note: For the ESA, lodging is exactly half of restaurant & lodging total.

Figure 10

Town of Rangeley Taxable Sales, 1983 to 1999



Source: Backup Table 5.

Note: 1991-95 not disclosed.

Table 10
Taxable Retail Sales Comparisons
 (\$1,000)

	<u>1986</u>	<u>1998</u>	<u>Percent Change</u>
Town of Rangeley	9,568	19,333	+ 102
Rangeley ESA	33,276	63,151	+ 90
State Total	7,485,000	13,453,400	+ 80
Memo: Town as % of ESA	29%	31%	

Source: Maine State Planning Office.

Traffic Counts

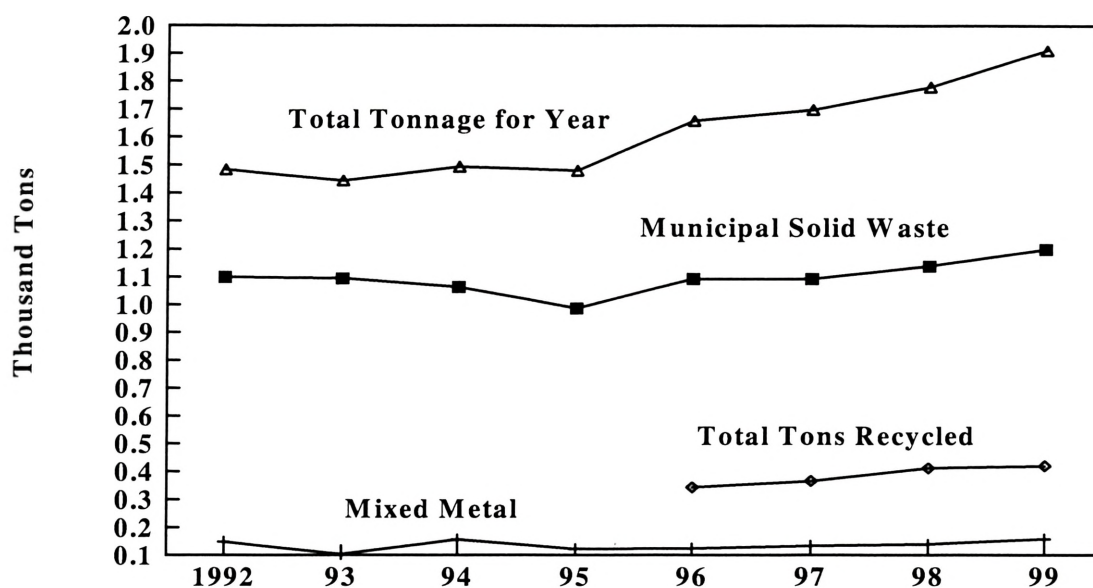
Information useful for watching seasonal trends is not regularly measured by the Dept. of Transportation in the Rangeley Region.

Solid Waste Tonnage

Solid waste tonnage at the Rangeley Solid Waste Department reflects increased activity by both residents and visitors to the area. Total tonnage is up significantly since the mid 1990's (Fig. 11).

Figure 11

Annual Solid Waste Tonnage



Source: Rangeley Solid Waste Dept., Backup Table 6.

Telephone Connections

With more households and businesses using multiple phone lines, there may no longer be a one-to-one correspondence between phone connections and households or businesses. Yet the pace of phone connections is available and tells a story about change in a local area. From mid 1995 to mid 1999, Rangeley gained almost 500 connections. The rate of increase in both business and residential connections far exceed the increase for the State (Table 11).

Table 11
Telephone Connections, 1995-1999

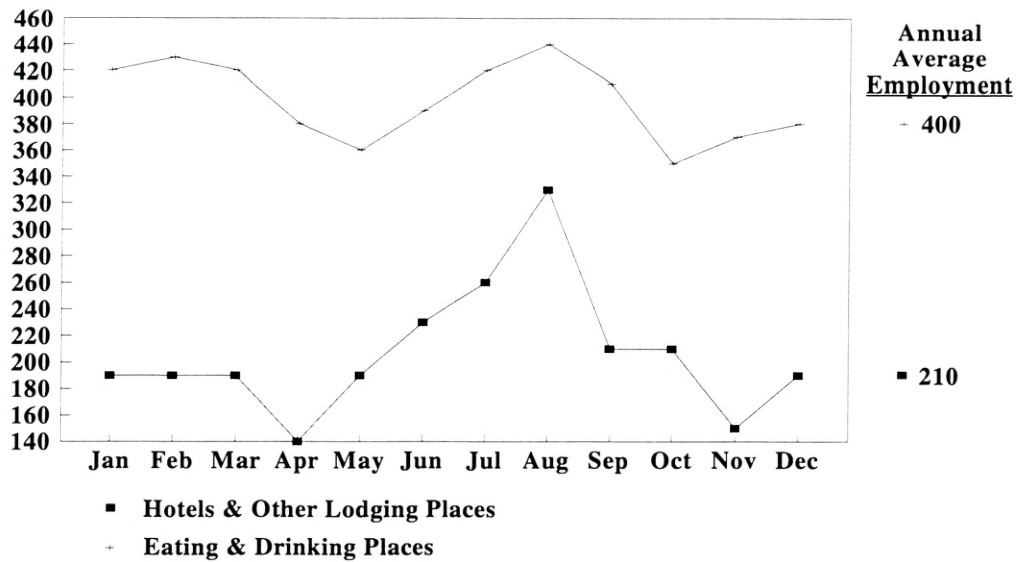
	RANGELEY, MAINE			STATE OF MAINE		
	<u>Total</u>	<u>Residential</u>	<u>Business</u>	<u>Total</u>	<u>Residential</u>	<u>Business</u>
June 1999	2,539	2,209	330	712,986	509,063	203,923
June 1998	2,412	2,098	314	684,950	493,502	191,448
June 1997	2,256	1,954	302	671,832	479,536	192,296
June 1996	2,126	1,850	276	644,377	466,954	177,423
June 1995	2,082	1,834	248	624,210	459,333	164,877
Increase 95-99	457	375	82	88,776	49,730	39,046
% Increase 95-99	22.0	20.4	33.1	14.2	10.8	23.7
Annual Average	114.25	93.75	20.50	22,194.00	12,432.50	9,761.50
Source: Bell Atlantic, Claudia Stagg.						

Seasonality

Monthly employment data by sector are not available for Rangeley. Data on employment show typical seasonal patterns in the LMA's economy. Due to limitations on the State employment data, it is likely that true employment levels in both hotels and in eating and drinking places are significantly undercounted. The hotel/lodging counts display the expected summer peak (Fig. 12).

Figure 12

Rumford LMA Wage and Salary Employment by Month, 1998



Source: Maine Dept. of Labor.

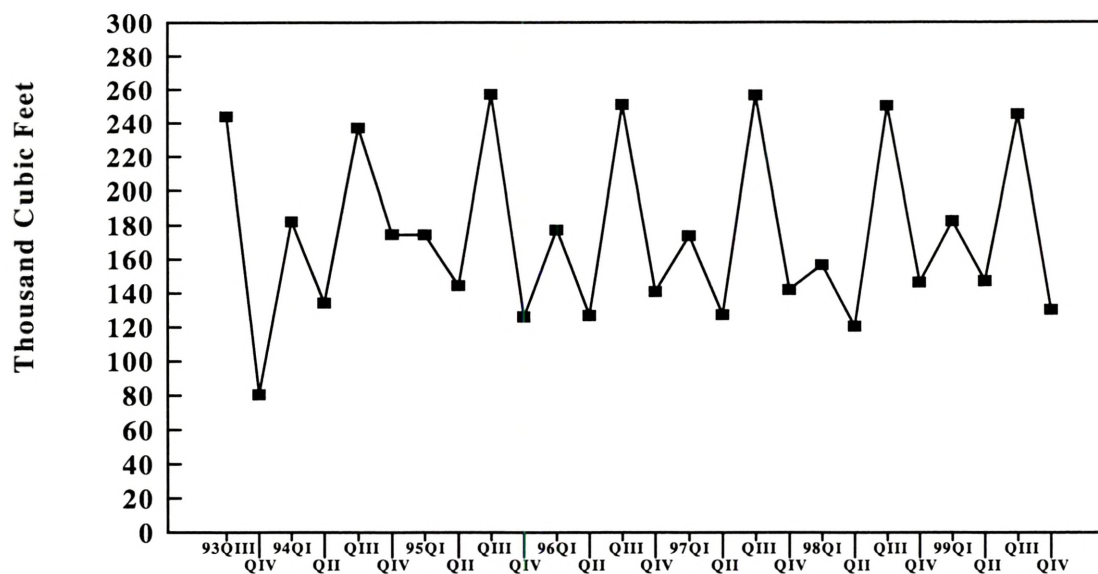
Using information kindly provided by the Rangeley Water District, we can depict seasonal trends as indicated by water usage. We have arbitrarily selected the largest 17 commercial water users, a selection of hotels, motels, and restaurants. Their water usage shows a strong third-quarter peak, coinciding with the June-July-August summer season (Fig. 13). In 1999, this quarter accounted for more than a third of the annual usage. A secondary first quarter peak reflects winter sports activities.

Interestingly, the peak has barely changed over the 1993-1999 period.

Solid waste tonnage data support the strong summer peak (Fig. 14).

Figure 13

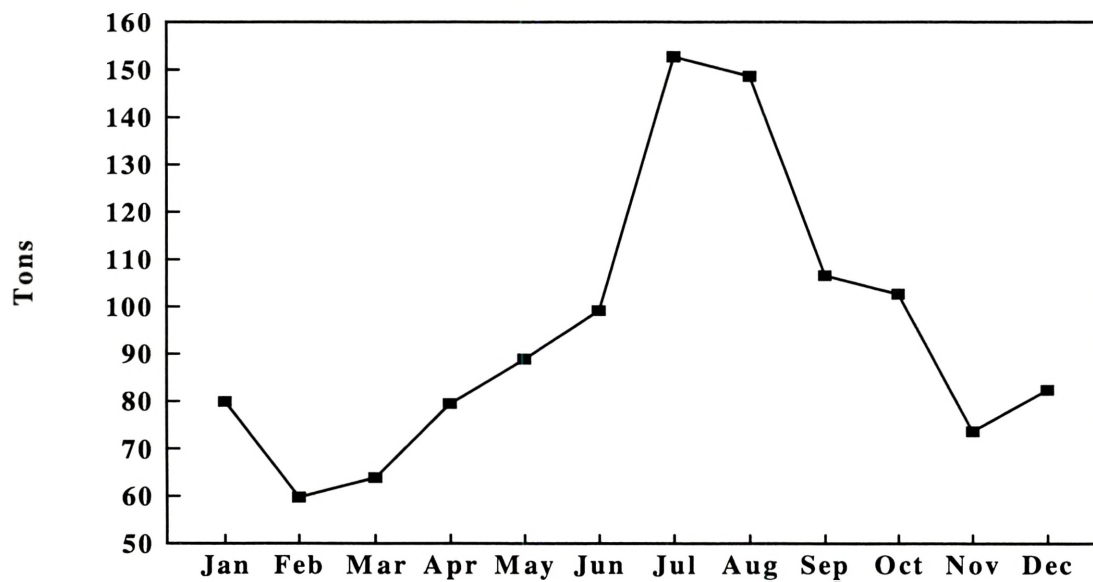
Rangeley Water District, 1997-1999 Total of Thirteen Largest Users



Source: Rangeley Water District, Backup Table 7.

Figure 14

1998 Rangeley Solid Waste Tonnage by Month



Source: Rangeley Solid Waste Dept.

Construction and Development

Assembling a picture of building trends in the area has been difficult because of irregular treatment in Town reports, and lack of time to conduct a thorough file search of Town and LURC records. Further, subdividing activity can be markedly cyclical. This region is well positioned relative to population centers for future demand for lots and new homes. For example, the Western mountains and Moosehead region received a significant share of dwellings permitted by LURC during the late 1980's landboom.

For Rangeley itself, an average of 9.4 new dwellings per year were permitted in the five years 1994-1998. The peak was 18 in 1996 (Table 12).

Table 12
Rangeley Building Permits
Town Annual Reports

	<u>New</u> <u>Homes</u>	<u>Additions</u>	<u>Accessory</u> <u>Buildings</u>	<u>Docks/</u> <u>Ramps</u>	<u>Attractions</u>	<u>Misc.</u>	<u>Total</u>	<u>Struct. "after the fact"</u>
1987	41		149	5				41" prin. structures", p. 35
1994	5							No data in report.
1995	8		69				275	18, p. 42 of 1996-7
1996	18		64				248	9, p. 42 of 1996-7
1997	7		36				215	5, p. 42 of 1996-7
1998	9	39	36	24	39	17	164	p. 41 of 97-8

Source: Town reports.

Note: an intensive effort in primary files would be needed to fill gaps in these reports.

In 1996, the Town Comp. Plan reported that there existed 250 unbuilt lots in existing approved subdivisions at that time. At the recent average rate, then, there would seem to be a 25-year supply of lots already available within the town. Certainly there are existing lots nearby as well, but equally certainly, all of these lots may not have high market appeal, so additional subdivisions are likely to be created. Little desirable shorefront remains available on Rangeley Lake.

The Rangeley Comprehensive Plan also projected "demand for" 18 new dwelling units a year for the "coming decade" (at p. 21). Permits for the mid 1980's fell well below this rate.

Rangeley Lake State Park

Rangeley Lake State Park has 50 overnight units, and is filled to capacity on weekends throughout the season. Of campers, 67% are Maine residents, while 60% of day-users are Mainers. Camping was unusually high in 1999. According to the Bureau's data, day uses have risen significantly since 1995, while camping numbers followed a stable trend after an unusually high year in 1995 (Table 13).

Table 13
Rangeley Lake State Park Day Use and Camping

	<u>Day Users</u>	<u>No. Campers</u>
1995	3,874	16,460
1996	6,578	12,662
1997	5,279	12,526
1998	5,871	12,296
1999	7,391	13,267

Source: Maine Bureau of Parks and Lands, Annual summaries.

Summary

Economic indicators reviewed here indicate growth in economic activity despite a decline in reported employment. They show the seasonality of the area's economy. While it is difficult to document precisely, the construction sector is important to the area.

V. FORCES AFFECTING RANGELEY'S OUTLOOK

This section presents more detailed data on various aspects of the area's economy. A later section supplies recent activity and expenditure estimates done for this project.

SPO Forecasts

A context for the outlook can be established by the recent SPO forecasts for counties (Table 14). These suggest continued slower growth than for the state, especially for Franklin County.

Table 14
SPO Forecasts -- Percent per Year Growth, 1997-2010

	Population <u>Growth</u>	Full and Part-Time <u>Employment</u>	Per Capita <u>Income</u>
Maine	0.6%	1.3%	3.8%
Oxford	0.8%	1.2%	3.7%
Franklin	0.4%	0.5%	3.5%

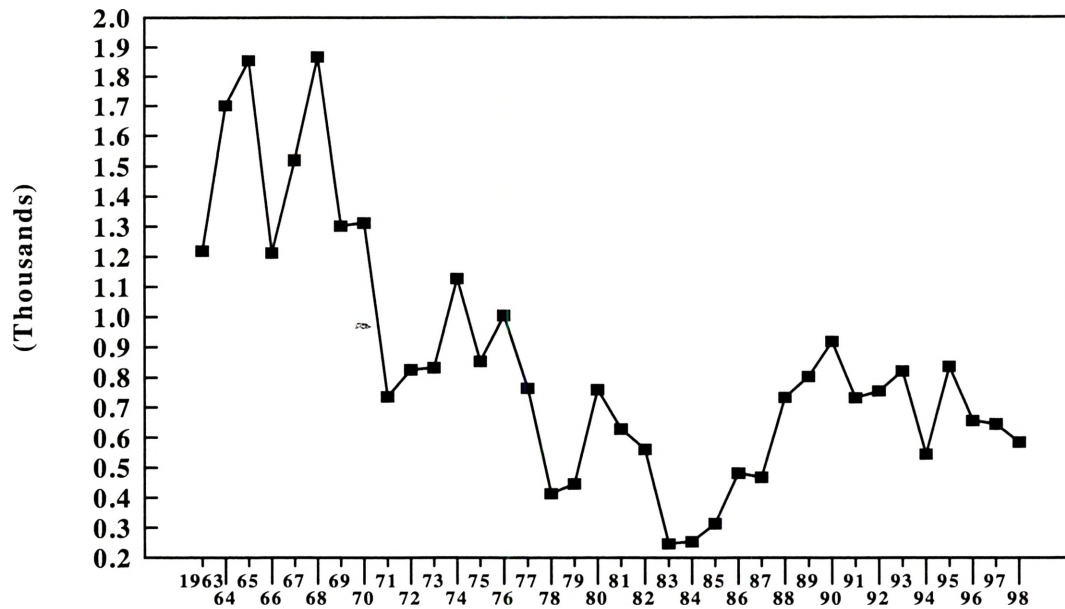
Source: SPO, Maine County Economic Forecast, Dec. 1999.

Changes in Hunting and Fishing

Outdoor activities of hunting and fishing have been stable statewide for some time, and hunting license sales statewide are slowly declining. Hunting season business provides an important bridge between the busy summer and the winter snow season. The deer harvest for all of District 7 is well below the levels seen in the mid 1960's (Fig. 15). This has been reflected in less hunting season business activity in the Rangeley Region since the 1960's. Franklin County deer registrations declined sharply after 1995, while the moose harvest has risen (Tables 15 and 16).

Figure 15

**Deer Harvest in Maine for Wildlife
Management District 7, 1963-1998**



Source: See Backup Table 8.

**Table 15
Deer Registrations**

	<u>Franklin County</u>	<u>Oxford County</u>	<u>State Total</u>
1994	1,073	1,923	24,683
1995	1,415	2,399	27,384
1996	1,196	2,172	28,375
1997	1,276	2,204	31,152
1998	1,219	1,931	28,241
Ave. 94-98	1,235.8	2,125.8	27,967.0

Source: Maine Dept. of Inland Fisheries & Wildlife datasheets.

Table 16
Moose Harvest

	Rangeley	Southwest District	State Total
1994	2	246	1,130
1995	3	348	1,304
1996	6	344	1,384
1997	3	322	1,374
1998	6	360	2,000
Ave. 94-98	4.0	324.0	1,438.4

Source: Maine Dept. of Inland Fisheries & Wildlife datasheets.

Potential for Wood Products, Etc.

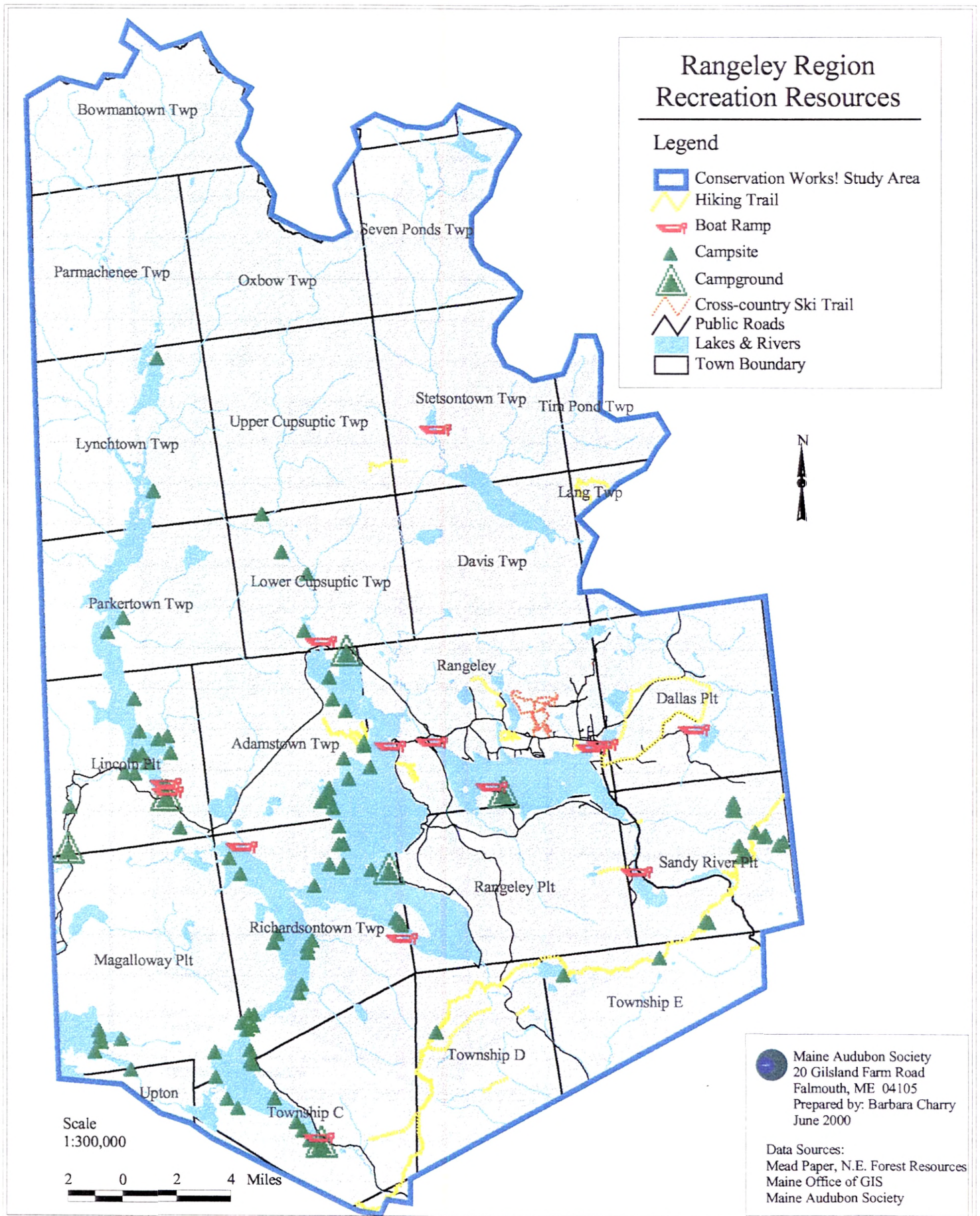
The wood products economy of Rangeley has always been based primarily on moving logs to mills elsewhere. In the past, small mills primarily served local markets, with only a few exceptions. The reason was that it was better to run logs by water down to large mills that had better access to rail and water transportation. Once that pattern had been set, it remained largely in place. Today, a large hardwood sawmill might employ 40-50 workers, and a softwood mill even more than that. Given the size of the Town's workforce, it is uncertain whether a workforce for such a plant could be recruited. Presently, logging, trucking, and land management work do contribute significantly to employment in the Town and nearby.

Yet, small wood-based or nontimber-based forest product businesses do exist in the area. The potential exists for more, but these are dependent primarily on the actions of individual business owners and founders, and are not readily converted into any kind of projections. A limitation is that for many small value added businesses, locations in urban areas close to customers are preferred. For example, in New York City, there are more wood-based value added jobs than in the entire state of Maine. A project called "Woodnet" is trying to pursue web-based marketing for small wood products firms in Western Maine (Jespersion, 2000).

Informal estimates are that some 35-40 area residents work in land management, mills, or the woods.

The Tourism Situation and Outlook

Rangeley is basically a mature tourism region -- its share of the State market is about 2%. A range of recreation and lodging opportunities exists (see Map, p. 46). Its hunting and fishing appeal is strong yet forecasts for those markets are for slow growth (see below). There are arguments both ways as to the long-term outlook. As hunting and



fishing opportunities will decline elsewhere in the Northeast with subdividing, sprawl, and posting, areas like Rangeley could serve some participants displaced by those trends. No current census exists of tourism jobs in the area.

Compared to areas based on ski resorts, or to the summer-oriented Coast, Rangeley has a favorable seasonal distribution of activities. This is a significant advantage. Yet, its tourism image remains largely dominated by summer trade. Despite the apparent advantages, it is noteworthy that there has been no new construction of a substantial year-round lodging property for many years. Gaining a better understanding of why this is so would yield valuable insights on the future of Rangeley's tourism economy.

There has been considerable discussion of the inland-coast issue in tourism promotion and marketing. It has long been a desire of the state to promote inland tourism, since the Coast is filled to overflowing on peak weekends. Yet, tourism experts interviewed for this project believe that the Mountains and the Coast are not really in competition. They do not believe that simply more promotion, by itself, will lure coastal visitors to the Mountains.

Rising labor costs and declining supply of workers has strongly affected the resort industry statewide and Rangeley is not immune from these effects. In other areas, these trends have led to the "condo-ization" and subdivision of camps and campgrounds, with resulting reductions in visitation and visitor spending. This does not seem to have occurred in Rangeley. In some instances, these changes have been accompanied by upgrades in the properties.

Winter sports potential, based on regional demand projections (below) seems good but depend on trails and facilities being made available.

The outlook for skiing depends on two things: the future of Saddleback, which is at present uncertain, and the potential for expanding opportunities for Nordic skiing and snowshoeing at the local cross-country center.

Overall, on the basis of existing trends, as best we can foresee them, it appears that tourism growth for Rangeley will be slow, and it is not clear how much can be done about this. Given the large areas of available land, it would be possible for the area to accommodate considerably more resort, service, and leisure home development, but only if the development is done wisely. Yet, the way real estate markets and local zoning have worked in the past, the development has all too often been of a character that compromises scenic values to the maximum extent, increases congestion, and yields minimum long-term stability for the local economy.

According to the Davidson-Peterson survey, a total of \$88 million was spent in Franklin County by tourists in 1996. Of this amount, the following activity breakdown was found:

Recreation	
Fees (lift tickets, etc.)	31%
Food	25%
Shopping	21%
Lodging	18%
Ground transportation	5%

These expenditures were estimated to generate:

1,949 FTE jobs
\$36 MM in resident incomes

The visitors from out of state origins varied by category of activity:

Hotel/motel/resort	53%
Cabin/cottage/condo	58%
Campgrounds	33%

(sum above 100% due to multiple activities)

Downscaling these estimates to the Rangeley Region is difficult. There are no benchmarks readily available to use. The report indicates that the county had 273,000 person-visits in 1996.

Measures of Outdoor Recreation Economic Impacts

Numerous studies have measured the spending made by different kinds of tourists and recreationists in Maine (Tables 17 and 18). All of these show that the impact is large. Impacts per visitor or per visitor night are available. These are difficult to use, however, since *we have no data on the number of visitors involved*. Still, they document economic impact in a general way. This section reviews existing data. In a later section, we present new estimates developed by *Conservation Works!*

Table 17
Mean Recreation Values Per Person Day in the Northeast, 1997

	<u>Dollars</u>
Camping	\$27.70
Snowmobiling	69.97 (Intermountain region)
Small game hunting	36.73
Big game hunting	42.18
Fishing	23.33
Average of all types*	15.21

Source: Rosenberger, et. al. 1999.

* Incl. those not listed here.

Table 18
Available Estimates on Maine Spending on Selected Activities, 1980's and 1990's

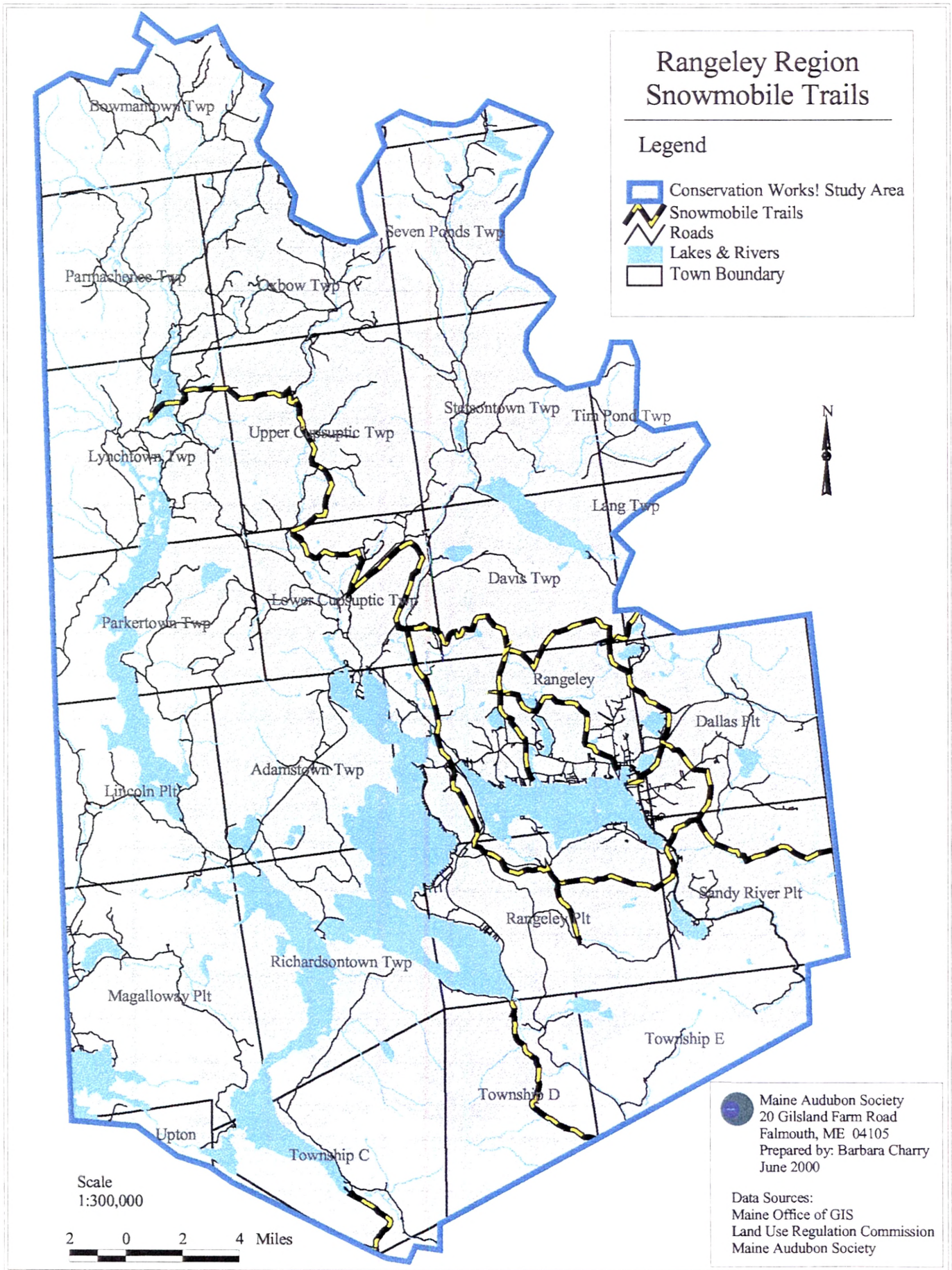
<u>Activity and Years</u>	<u>Spending, \$Million</u>	
Nonconsumptive use of wildlife (1980's)	\$ 50.0	p. 51
Trapping (1980's)	1.5	p. 43
Hunting (1980's)	84-92	p. 39
Inland fishing (1980's)	158-352	p. 21
Snowmobiling (1996-97)	176	
Hunting (1996)	284	
Fishing (1996)	348	
Wildlife Watching (1996)	220	

Source: Boyle, et al., 1990; Reiling, 1999; U.S. Fish & Wildlife Service and Bureau of Census, 1997.

Note: The 1996 USFWS survey generated total expenditure estimates that are far higher than previous surveys, which estimate that Maine tourism spending is \$1.5 to 2.0 billion annually. It is not clear that hunting, fishing and wildlife watching could account for half of all tourism spending in the states.

Note: Because of difference in method, time trends cannot be inferred from differences in estimates.

Because of its reliance on trails on private land, and its obvious importance, snowmobiling has received extensive discussion (see Map, p. 49). Informal estimates suggest that snowmobiling probably brings total spending into the area of some \$5 to 7 million each season. This spending flow supports 20 to 25 direct jobs in sales, service, and direct business with snowmobilers. Spending impacts are large at area restaurants, motels, and stores. In at least a few instances, snowmobile business in winter is what enables the year-round presence of the entire business. It is increasingly difficult to support a skilled staff and a capital investment on just a single season's trade, as was common in the past.



Northern U.S. Projections of Recreational Activities to 2050

The USDA Forest Service projects future outdoor recreation demand for its periodic assessments (Cordell, et al., 1999). While these are done for all the northern states (New England to Minnesota), they give an indication of future demand pressures. Long range projections are only rough indicators of the future.

Generally, these projections view traditional Backcountry activities (hiking, motorboating, hunting) as “mature” markets, likely to grow slowly in the future. Activities such as snowmobiling, biking, and traditional tourism activities are expected to grow (Table 19). Notably, many of the Rangeley Region’s traditional activities are not projected to grow rapidly.

Tourism markets are in reality highly fragmented, by region, by destination, by season, and by different kinds of activity. The activity “fishing” for example, includes a number of types of fishing pursued at different times of year, in different places, and by very different people.

Table 19
Northern U.S.: Projected Increases in Recreation Demand, 1995-2050

<u>Activity</u>	<u>Annual Days</u>	<u>Source Page</u>
<u>Recreation - Developed</u>		
Developed camping	+ 32%	344
Family gathering	+ 34%	345
Picnicking	+ 23%	346
Sightseeing	+ 80%	347
Visit historic places	+ 79%	348
<u>Trail and Related</u>		
Biking	+ 55%	343
Horseback riding	+ 103%	339
Rockclimbing	+ 34%	342
Walking	+ 52%	348
<u>Traditional Backcountry</u>		
Backpacking	+ 8%	337
Crosscountry skiing	+ 10%	326
Fishing	+ 15%	334
Hiking	+ 23%	338
Hunting	+ 12%	335
Motorboating	+ 20%	330
Nonconsumptive wildlife activity	+ 76%	336
Off-road driving	- 34%	340
Primitive camping	- 25%	341
<u>Water-Oriented</u>		
Rafting/Floating	+ 43%	331
Visiting beach/waterside	+ 36%	333
<u>Winter - Growth</u>		
Downhill skiing	+ 86%	327
Snowmobiling	+ 121%	328
<u>US Economic Drivers:</u>		
Population	+ 44%	324
Real income	+ 89%	324
Age	+ 13%	324

Source: Cordell, et al., 1999.

Summary

Tourism is clearly important to this area, yet documenting the numbers of visitors is difficult. Also, tourism-based spending is difficult to separate from spending by seasonal residents and business travelers. The important point, however, is that the seasonal activities are all important to the survival of many area businesses. It is increasingly difficult for many businesses to service on a single season's activity. Many of the area's traditionally important activities are not expected to grow rapidly in the future. For statewide trends in recreation, Maine Bureau of Parks and Recreation (1994) is useful though not up-to-date.

VI. LAND DEVELOPMENT OUTLOOK

Land Ownership and Uses

The total *Conservation Works!* study area is 550,000 acres. According to the analysis using the Maine Audubon Society Conservation Works GIS database, only 12,000 acres of this total has yet been developed (Table 20). Approximately 100,000 acres is covered by the Pingree Heirs Conservation Easement.

The area is predominantly commercial forestland. Much of the area in public conservation ownership is managed for timber as well. From most heavily used viewing areas, timber harvesting has produced little noticeable modification to the landscape's appearance. Likewise, the small area that is developed is only visually prominent in limited areas (see Map, p. 55). As indicated below, enough land has already been divided into lots smaller than 100 acres to more than double the current developed area.

Building Permit Trends – Overall Rangeley Region

According to LURC data, the nearby towns adjacent to Rangeley experienced considerable development during the years 1990-1999. The permits issued totaled 320, or 32 per year:

Permits, 1990-1999

Dallas	79
Rangeley Plt.	103
Magalloway	13
Sandy River	46

Added to the estimated annual average in Rangeley itself of 10 per year, yields an estimate for the Region of 42 units.

In nine nearby unorganized towns, a total of 60 units were permitted over the decade (the most in Lincoln Plt.), or 6 per year. Details by area, year, and permit type are included as Backup Tables 9, 10 and 11. So the average has been less than one per year for that list of outlying unorganized towns.

This analysis assumes that all permits led to construction, which may not be true.

Sketch-Level “Buildout” Scenarios

If this average pace of development were to continue for 50 years, it would amount to 2,100 units. This would result in the need for a corresponding amount of land. Effective densities of development will vary from more than one unit per acre to large-lot subdivisions which may have five to ten acres, or even more, per unit. Additional lands

Table 20
Land Ownership and Use Details of the Rangeley Region

<u>Owner or Use</u>	<u>Acres</u>	<u>Percent</u>
Private commercial forest land	435,000	79.1%
Private conservation groups	7,800	1.4%
Public conservation ownerships	39,000	7.1%
Currently developed	12,000 *	2.2%
Wetlands	19,300	3.5%
 Total land and water area	 550,000 (approx)	 100.0%

* not including area of roads

Calculated using Maine Audubon's computer GIS from the following data sources:

Total land and water area: area defined by CW! Committee

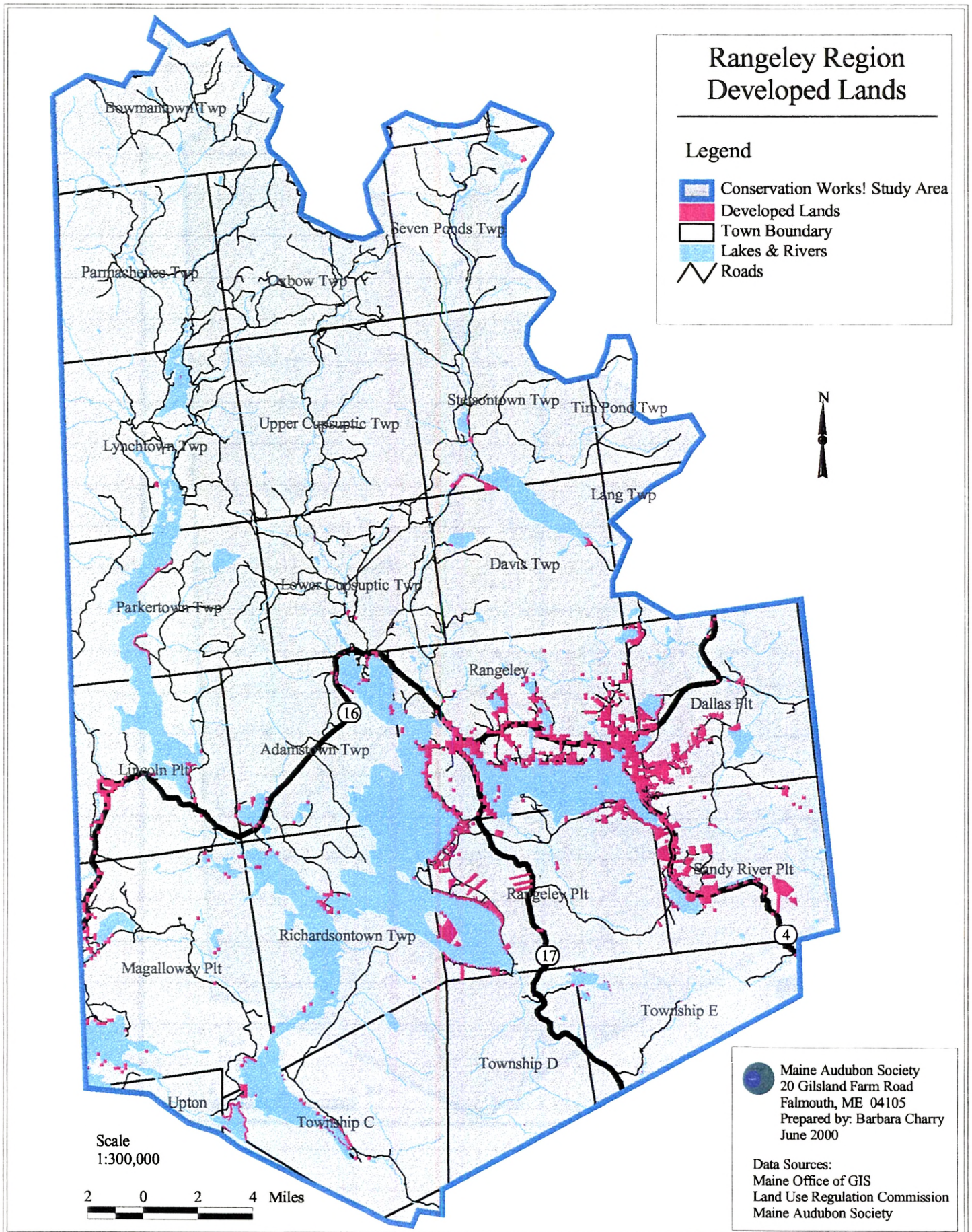
Private commercial forestland: Maine Office of GIS's woodlot ownership data layer (MEOWN250).

Private conservation groups: Maine Office of GIS's public ownership data layer (MEPUB100) plus additional updated information for the CW! Region collected by Maine Audubon.

Public conservation ownerships: Maine Office of GIS's public ownership data layer (MEPUB100) plus additional updated information for the CW! Region collected by Maine Audubon.

Current development: 1) LURC's TAXLOT GIS database for their ten town Rangeley project area (for lots over 50 acres where development occurred, only an area of 10 acres around the structure was considered developed), 2) LURC's development zones for townships outside LURC's Rangeley project area, 3) Maine Audubon's Rangeley structures data layer (CWRANGST) (which included 10 acres around each structure), and 4) Androscoggin Valley Council of Governments' Rangeley subdivision data layer (SUBDIV).

Wetlands: US Fish & Wildlife Service's National Wetland Inventory data layer.



would be used for roads, and public access might well be affected on dedicated open space or undeveloped inclusions in the developed areas. The land involved would vary as follows according to different effective densities:

one unit per acre	2,100 acres
one unit per two acres	4,200 acres
one unit per four acres	8,400 acres

Higher average densities than one-fourth unit per acre of total land affected might be unlikely for the Region as a whole. On the other end of the range, it seems unlikely in a region like this (depending on onsite septic, etc.) that the effective density would average out to be much higher than one per acre.

At the lowest effective density examined, the area “developed” would almost double from the present estimated level of 12,000 acres. The implications of such a level of change in land use would depend on many factors. If well planned and managed, this much development could probably be accomplished with minimal loss of recreational and visual values. This analysis does not include the construction of units on 41 acre lots in more remote areas. This is difficult to predict, and the land areas involved would not generally be perceived as “developed.”

This amount of development is likely to be spread fairly widely, governed by future market demands, likely extensions of roads, and landowner policies, as modified or nudged one way or another by state and local land use policies, incentives, and regulations. Impacts on snowmobile trails, other access issues, views, and habitats would be highly place-specific and difficult to discuss specifically without much more in-place analysis. In other regions, large mid-slope “viewlot” are becoming popular. Development on such lots would have the potential to make major changes in the area’s sense of remoteness if even a tiny area were to be developed.

In a summary from state data on land parcels in the ten-town LURC study area (see Table 21 and Backup Table 12) we have identified existing land parcels in the Rangeley Region, ten acres and smaller. This would approximate the near-term working inventory of land available for development. There are about 2,000 such lots, totaling 3,400 acres. In addition, there are 12,000 acres of land in parcels 10 to 100 acres in size, many of which have potential for subdivision and development, depending on their location, views, other amenities, access to roads, soils and slopes, markets, and landowner objectives. All of the small parcels now existing may not be considered desirable according to present market needs, and it is not certain that each and every one of these lots could obtain all needed development approvals. The effective land supply of subdivided land, then, may be a good deal smaller than this. But speaking very generally, it does not appear that land supply alone is likely to constrain development or population growth in the area.

Table 21
Rangeley Region Total Lot Data, 1998
(Ten-town LURC study area only)

<u>Number of Acres</u>	<u>Region No. Lots Identified (No. Lots)</u>	<u>Average Parcel Within Class (Acres)</u>	<u>Acreage by Size Class (Acres)</u>
0 - 1.0	972	0.5	486.0
1.1 - 2.0	528	1.5	792.0
2.1 - 3.0	195	2.5	487.5
3.1 - 4.0	114	3.5	399.0
4.1 - 5.0	73	4.5	328.5
5.1 - 10.0	<u>117</u>	7.5	<u>877.5</u>
Subtotal 0 - 10	1,999		3,370.5
10.1 - 20.0	94	15	1,410.0
20.1 - 50.0	204	35	7,140.0
51.1 - 100.0	<u>45</u>	75	<u>3,375.0</u>
Subtotal 10.1 - 100	343		11,925.0
100.1 - 250.0	23	175	4,025.0
250.0 - 500.1	13	325	4,225.0
500.1 - 1,000.0	<u>8</u>	750	<u>6,000.0</u>
Subtotal 100.1 - 1,000	44		14,250.0
1,000.1 - 5,000.0	12		
5,000.1 - 10,000.0	4		
10,000.1 +	<u>8</u>		
Subtotal 1,000.1 - 10,000+	24		

Source: Based on LURC and other sources. See Backup Table 11.

Note: Coverage of this database is about one-half of the Study Region's area.

Tree Growth Acres and Tax Bills

A large portion of the total area of the Study Region is currently in Tree Growth (Table 22). An effort to elicit trends in number of tax bills sent each year yielded mixed results. Probably visits to the offices to review files would be needed to develop a complete statistical record.

Table 22
Tree Growth Acres and Tax Bills Sent, 1999

	Acres in <u>TGT 5/1/99</u>	Tax Bills <u>Sent, 1999</u>
Dallas	19,631	677 (1999)
Rangeley	9,105	1,900
Rangeley Plantation	20,000 (est.)	n/a
Sandy River	15,126	385
Magalloway	28,170	119
Lincoln	"About all of it"	134

Source: Town Assessor interviews.

* A tax bill is sent to every parcel; some owners have multiple parcels.

Summary

Of the 550,000 acre study area, only a tiny portion is currently developed. The developed area is less than the area of wetlands, and is highly concentrated at present. During the 1990's, an average of 42 new units per year was built in the 5 study towns. Projected over a 50-year period, this would be 2,100 units, probably far in excess of the current year-round housing stock. In the area, there have already been subdivided a total of about 15,000 acres in parcels 100 acres and smaller. Allowing for location, soils, and other factors, land supply does not seem to pose a constraint on development. Desirable shore lots on Rangeley Lake, however, are very scarce (J. Noyes, pers. comm.).

VII. WORKING NOTES ON FOUR ECONOMIC OPPORTUNITIES FOR RANGELEY

During the discussions of *Conservation Works!* we encountered significant interest in learning more about the economic development potential of recreational activities using the area's forest lands. Four have been selected for a quick review:

- expanded snowmobiling opportunities
- greatly expanded x-c skiing facilities
- "yurt-to-yurt" programs of trails and lodgings
- improved fishery

This section summarizes a brief inquiry into these possibilities. Implementing any one of these entails consideration of many administrative and planning details, which are not our concern here. Prior to making further decisions, these ideas would have to be subjected to thorough, multi-stakeholder assessment of feasibility and impacts.

It is not a coincidence that all are exclusively or partially winter activities. This seems to reflect a sense that Rangeley is running at capacity in the summertime. Thus far, no appealing suggestions have emerged for the fall. Mud season is a traditional shutdown and vacation period and business is not being sought for this period.

Expanded Snowmobiling

The Rangeley snowmobiling system is very large, with 129.5 miles of trail, of which 121.7 are on private lands. About 3 miles are relocated every year, and 80 miles are considered in need of improvement. The level of activity on these trails is high.

We have no good information on the total amount of visitation to the Rangeley area for snowmobiling, or its direct financial impact. Many area businesses are looking at ways to increase length of stay during the week, and some would welcome expanded activity on weekends. On the basis of very general factors, we have estimated that a total of \$5-7 million is probably spent in the area by snowmobilers. Taking \$6 million for discussion purposes, this would account for almost one quarter of all area tourism expenditures. The bulk of this amount is undoubtedly spent on no more than 3 days a week. If the average visitor could be induced to add a single day to each stay, it could mean a potential of \$2.3 million additional spending per season. This would be an upper limit, only to be reached after some time and considerable effort. This amount may not seem large compared to the total amount of tourism spending. But it would supply incremental revenues for businesses operating below capacity during the week, and thus could be very important for both employment and profitability. Also, extending stays would have far lower impacts on traffic and the capacity of other facilities. The *Conservation Works!* group estimated an average spending of \$101/person day, and 60,000 snowmobiling visitors (see spending sections below).

A package of measures to lengthen stays would entail a range of activities, perhaps including additional trail maintenance and improvements, improved promotion, and additional events. It should be noted that competing areas are undoubtedly very interested in the same opportunity.

An approach of substantially increasing capacity of the system also deserves consideration. This would allow increased usage on the busy weekends and higher attendance at major events. A major system expansion could be built around development of a true loop trail, suitably designed to access new terrain and new vistas, and give riders an appealing alternative to a point to point ride. Congestion would be reduced and safety would be much improved. Creating a loop might turn out to be the best single way to induce snowmobilers to extend their stays. A larger trail system with loop capabilities might also boost return business as well.

Certainly a major increase in system capacity offers the potential for increases in visitor spending of similar magnitude as the effort to lengthen stays. A quantum leap in peak capacity for the system as a whole involves many issues. These would include detailed trail corridor location and design, provisions for parking and other support, and impacts on existing services on peak weekends.

Any program to expand snowmobiling activity in the Rangeley area also must consider that the existing volunteer-based program is overstretched at the present level of activity. It could be that the best way to motivate the area snowmobile community to develop long-term solutions to this problem is to be presented with a major challenge, which offers the prospect of major benefits. Given the competitive aspect of this business, it is likely that some other area will develop expanded capacity and services if Rangeley doesn't do it first.

The *Conservation Works!* group agreed that an aggressive long-term program could double current spending in the area by snowmobilers.

Expanded Cross-Country Skiing

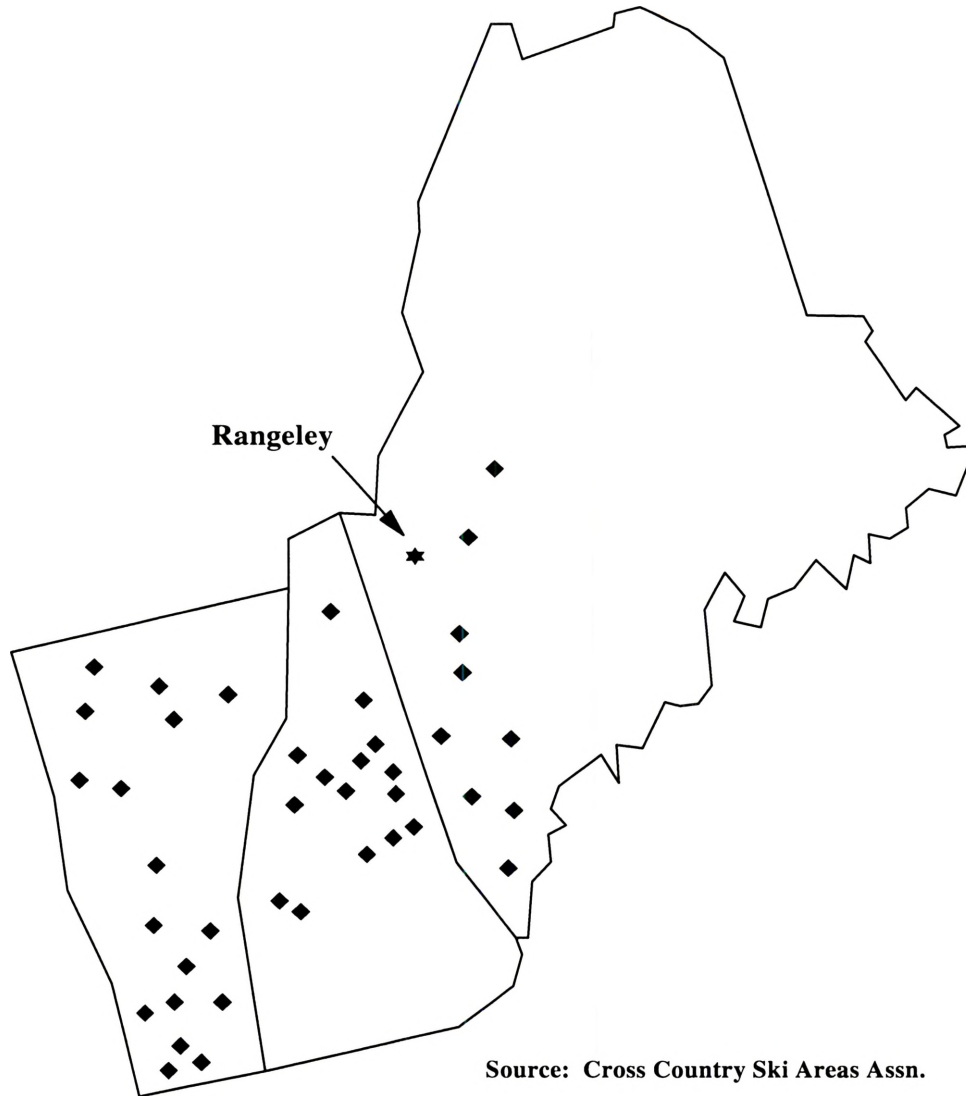
At present the Rangeley cross-country ski area employs 7 people substantially full time during the season to maintain a trail system of about 75 km. This area currently uses about 3,500 acres of land, and last year provided 4,000 skier days. Admissions fees are \$10 per day, \$7 per half day, and \$3 for kids. The revenues do not cover the maintenance budget at the moment, so fund-raising is necessary. The area is run by the Rangeley cross-country ski club, a group of 256 members. The trail system runs on a number of landownerships using short term agreements. A lodge is rented from one of the landowners.

Last year, the Club hosted a regional New England Junior Championship that brought in 190 skiers and coaches and 500 spectators. They are looking at three major events for this coming winter with very large potential attendance. One is a New England Marathon, which could grow to very large attendance over five years.

The Club is planning a large marketing mailing and is planning a capital development program to fund a new lodge, a full-time administration, and other improvements. The concept of a trail connection over the old Narrow gauge right of way to Sugarloaf has been discussed.

Cross-country skiing has become a major activity at many resorts around the region (Map). Many of the areas are adjacent to major resorts or to downhill areas. Most offer a range of activities including skating, dogsled trails, sledding, and snowshoeing. Ski shops, light meals, and instruction are commonly included in the system.

Cross Country Ski Areas Northern New England



We interviewed managers at three leading cross-country areas in northern New England, one each in Vermont, New Hampshire, and Maine. Sue Foster at Sugarloaf has had Rangeley people to visit the Sugarloaf area, and sees an opportunity for an expanded Rangeley area to benefit Sugarloaf as well by broadening the choice of trails and potentially broadening the market. A few highlights from these interviews:

- Cross-country ski areas can break even financially. Visitor fees range from \$10 to \$16 per day.
- Most successful areas seem to be associated with well-known major winter resort areas or individual properties that are widely known.
- Cross-country skiers, while often drawn from affluent groups, are not big spenders in the local area.
- Cross-country visits are heavy on weekends, and so do not offer very much potential for expanding weekday visitation.
- It has proven difficult to find effective marketing ideas for expanding the market for cross-country skiing. In the US Forest Service projections, cross-country skiing showed one of the slowest projected growth rates of any major activity.
- One respondent noted that "a cross-country operation is so cheap to start that you almost have to try it."
- Operating a large cross-country area can require up to 10 to 15 employees, some of whom are part time or part week employees.
- The average area listed in the Cross Country Ski Areas Association directory is about 40 km of trails in these 3 states (Attachment A).
- To be competitive as to size with major areas around the region, though, an area would have to be considering an ultimate size on the order of 100 km of trails. This can be done in a land area, depending on topography and other factors, of 2,000 to 4,000 acres. The Rangeley trail system is already in this range.

Clearly cross-country skiing visitation is in its infancy in the immediate Rangeley area. Any effort to build a substantial program would require addressing many issues simultaneously. The economic potential is difficult to estimate, given the uncertainties, the risks, and the long time that it would take to reach full utilization for a large area. A ramp-up period as long as five to ten years should be considered realistic.

At full development, an area that could bring in 100,000 visitor days over a season at \$15 per skier, would see annual revenues of \$150,000. Much of this would be for wages and would be respent in the community. Additional visitor spending on lodging and meals in the area could be substantial, but would depend on the day/overnight mix and other factors.

It is reported that events can be major visitation boosters. Sugarloaf, for example, hosts high school cross-country championships, which bring visitors and families from all over the state. The Birkebeiner event at Cable, Wisconsin is said to bring in 8,000 skiers who spend \$4 million in the area at that one event. This of course is a regional classic that took many years to reach this size.

To reach the capacity to host an event of this size, extensive planning and probably additional management would be needed.

From a community standpoint, a competitive, region-class cross-country area would offer an amenity for area residents and visitors, and provide potential for a more diverse range of winter activities for visitors. Whether a cross-country area would induce many existing visitors to extend their stay is not known, but it seems possible. It would

appear that an expanded cross-country activity should be viewed as a strategic investment in diversifying the Rangeley area's underlying appeal, and not as a stand-alone near-term profit generator.

The concept of a long-distance trail connecting the Rangeley area, along the Dead River, to Stratton and Sugarloaf and Bigelow going down the old railroad grade deserves a full and early feasibility study.

Yurt-to-Yurt Program

There has been considerable interest in what has been called "yurt-to-yurt" programs. The model before us is the pioneering effort underway by Mountain Recreation, Inc. at Phillips Brook, New Hampshire, on International Paper Company lands there. The fact that I-P also owns land in the Rangeley area has piqued interest in this concept here.

A few highlights from interviews on this project:

- The 24,000 acre Phillips Brook Township has had limited access in the past and only one snowmobile trail. Existing buildings were used for key office and lodging functions. A trail net of 170 miles relies mostly on old logging roads.
- Use of a yurt costs the visitor \$26-28 per night, for a party of up to six.
- A significant capital investment is needed to start.
- Weekends are usually full; the 7-yurt system is being expanded by an additional 5 yurts. The return rate is very high.
- The operation employs a minimum of three full-time employees over the year.
- The operation takes reservations through a website.
- Most use is in the winter, but kayaking and mountain biking are growing.
- An estimated \$100,000 to \$200,000 from operating budgets could be expected to be spent in the local area at full development. Capital spending would depend on the development scheme adopted. Visitor spending in the area would be significant as visitors to this area might also stay overnight at a n area motel.
- Assuming conservatively a small area with 5 yurts, and full occupancy on 10 weekends, would yield revenue to cover an operating budget of about \$150,000.00, and could yield visitor spending for the season in the range of \$60,000 to \$100,000 or more.
- Assumption of responsibility for recreation management by a separate organization with people on the ground is a major landowner benefit. It is hoped that significant landowner revenues can result in the future.
- Rangeley's distance from market would be a factor in feasibility.
- There seems to be significant LURC resistance to this idea in Maine.
- A hut system is being considered in the Sugarloaf area.

Improved Fishery

The roots of Rangeley's development as a resort lie in the area's reputation for a superb wild fishery. Generations of development, fishery management, and fishing pressure have changed the fish populations. There are many ideas on how to improve the quality of the area's recreational fisheries. Quality might be measured by the abundance of fish, the species mix, or size of fish. The management actions involved are quite complex, involve many factors, and could take a good deal of time to yield results.

Assessing the economic benefits of an improved fishery would be very complex. A variety of assessment methods could be imagined, but they would all hinge on having good estimates of exactly how the improved fishery would affect the number of visitors, their length of stay, and their expenditures. Possibly there are analogies that could be drawn from similar actions elsewhere. It seems best to not venture wild guesses for potential impacts of improved fishery quality on spending. A program to improve the fishery probably ought to be supported on its merits as a means of maintaining a quality experience for the area, and not on the basis of supposed measurable impacts on the tourist economy.

Recreational Opportunities: Relation to Land Conservation

The activities examined here offer the potential for some diversification and strengthening of the area's tourism economy, for expansion of tourism businesses, and for new entrepreneurship. They offer a chance to build upon an area of unusual scenic features -- mountains adjacent to large lakes -- that is uncommon in New England. A distinctive destination image can be built around this, the remoteness, and the forest and recreation history of the area.

These activities, properly planned, can be highly compatible with all environmental values, assuming that any commercial development and other related land use changes are well managed. Not only that, but these opportunities are also totally compatible with well-managed timber production. They do not require significant areas of public land acquisition or of single-use land. They do require sound, voluntary arrangements for managed use of private lands, however. The opportunities represented by these options can be lost or compromised by further unguided sprawl and subdividing.

In a modest way, successful enterprises of this sort promise an opportunity to supply additional income for private or public landowners. Yet in view of the uncertainties, it would be rash to predict that this would be a significant benefit in the short run.

To the extent that these opportunities support economic development and diversification within the tourism economy, and are also compatible with land conservation, there ought to be available grants and assistance from a variety of agencies to conduct market studies, planning and design, and even initial investment in buildings and facilities.

A major challenge is institutional capacity. At present, the volunteer systems running snowmobiling and the cross-country area are overburdened and cannot undertake major initiatives either in terms of dollars or management capacity. This should not be

viewed as a barrier but an opportunity. The overload problems must be solved in time, or the existing experience will suffer declines in quality. The opportunity to develop some bold new initiatives with significant benefits ought to create the motivation to invest in creating the management capability to develop expanded systems and to manage and promote them at a high standard.

Can Rangeley afford it? For the future of Rangeley's young people, for the land, and the community, the area can afford no less.

SECTION C: FUTURE ECONOMIC SCENARIOS FOR THE RANGELEY REGION

This final section describes some general scenarios for population and land development over a fifty year future, and reviews the differing values of different parts of the study area's landscape. It then summarizes detailed estimates of use levels and spending impacts for selected recreation activities that were developed by the *Conservation Works!* committee with assistance from consultants. In addition, estimates of likely future recreation activity and spending levels were made for a Preferred Future that includes active efforts to retain key landscape features and make investments to support expanded use levels.

VIII. GENERAL SCENARIOS FOR FIFTY YEARS OF CHANGE

Outlook Scenarios

Economic forecasting for a small area is risky at best. But looking at potential "scenarios" can be useful (Table 23). Here, we pose three resident population scenarios over the next 50 years. Assuming the same number of people keep adding to the population as 1990-97 (4 people/yr), yields an increase of 250 by 2047. This roughly equals what would occur if the SPO's Franklin County projection to 2010 continues to 2047. Finally, if the recent rate of construction continues (42/yr) and 30% of new units become residences, this could add 1,260 to the region's population, assuming an average household size of 2. This would roughly double the Region's resident population.

Table 23
Scenarios for Fifty Years of Change in the Rangeley Region

	<u>1997</u>	<u>2047</u>
<u>Resident Population</u>		
a) Grows by 4 people per year, as in 1990's	1,300	1,550
b) Projected at Franklin County SPO forecast to 2010	1,300	1,586
c) 42 dwelling units built per year *	1,300	2,560
<u>Employment</u>		
Projected at State's projection for Franklin County	655 *	838

* Average of 1994-98

Area includes Rangeley, Rangeley Plantation, Magalloway Plantation, Sandy River Plantation, and Dallas.

Employment forecasts are no less uncertain. But assuming the SPO's forecast rate to 2010 continues, jobs could grow from an estimated 655 (1994-98 average) to 838 by 2047. Assuming much of the area's growth is from retirees, it would take very little job growth to support population growth, which is the basis of a lower employment growth scenario.

In the 1996 Rangeley Town Comprehensive Plan, a projection for the town's resident population to 2005 was given. It showed an increase as follows:

1990	1,063
2005	1,200

(Comp. Plan, p. 11)

By 1997, population had reached 1,090. This was an increase of 27, well below the 64 required to stay on track with the Plan's projection.

Whether commercial tourism units would increase apace with residences is imponderable. Even if there is only slow growth in leisure visits and seasonal peak population, there will be implications for needs to serve these visitors -- many have already been identified in previous surveys.

No other population projections for the Rangeley Region are available.

Analysis of outlooks involves assumptions and approximations. Any projection made today, no matter how much data is available, will be wrong. We see this all the time, for example, in the projections of school populations that regularly go awry. Yet communities have to make decisions about whether or not to expand schools. All too often, they just wait till the school is 50% overcrowded before doing anything. Even then, the issue of forecasting does not go away. Fortunately, few specific actions to be taken today hinge critically on any number projected 50 years into the future. Instead, such projections should be viewed more as narrative "stories" about the future that could shape people's perceptions about the consequences of action or inaction. This is especially important for actions involving "nibbling" phenomena, where changes in any one year or even decade are barely noticeable, but over five to ten decades can be catastrophic.

IX. VALUES OF THE FOREST LANDSCAPE

Clearly, much of the Region's economy depends on the surrounding landscape (Fig. 16). One useful way to look at forest values is to see how they vary across the landscape. The Rangeley region's forest can be considered in three broad landscape categories:

Development Potential lands, which are near existing development and along roads and some lakes.

The **Setting** for the Lakes, which includes the area that can be seen from the lakes and lakeshores that confers a sense of remoteness on the area.

The **Backcountry** -- the more remote forested areas beyond the Setting.

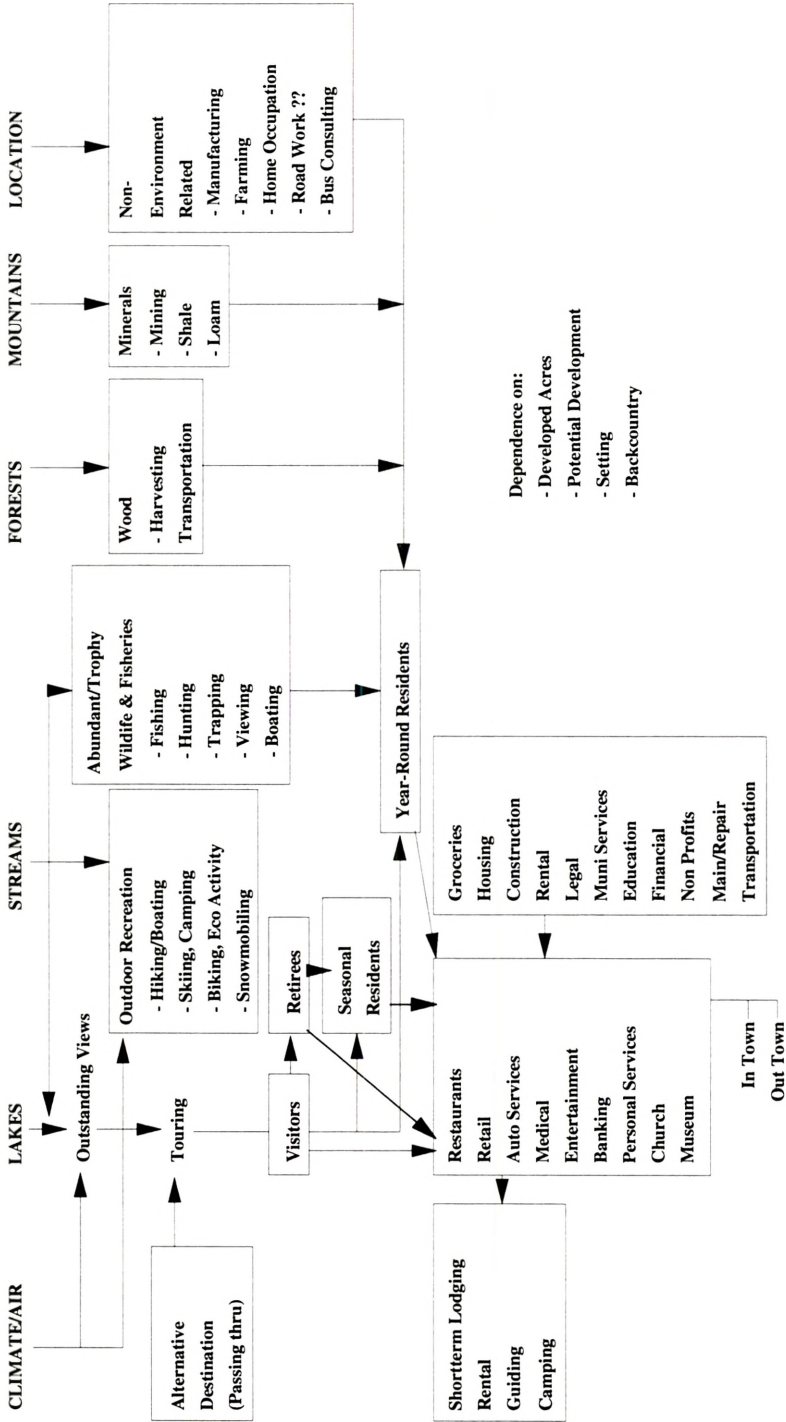
These different areas of lands are being defined schematically with maps and could be measured much more rigorously with the GIS if they seem useful. Recreational uses vary significantly between these areas (Table 24).

Table 24
Illustrative Recreational Uses by Forest Landscape Categories

	Wildlife <u>Viewing</u>	Relaxing	Snow- mobiling, X-C <u>Skiing</u>	Hiking	Non- Motor <u>Boating</u>	Hunting, <u>Fishing</u>	Motor <u>Biking</u>	Motor <u>Boating</u>
Development Potential	XXX	XXX	XXX	XXX			XXX	
Setting	XXX		XXX	XXX	XXX	XXX	XXX	XXX
Backcountry			XXX		XXX	XXX		

Figure 16

Rangeley Economic Flow Chart
for "Conservation Works!" by Don Palmer



Development Potential Lands

These are the lands largely in small holdings (below 200 A.) usually along roads and near existing settlements or developed areas. Continued development in these areas is likely because of the existing roads and ready availability of utility connections. Over longer periods, this area spreads. Mostly during land booms, larger projects leapfrog the zone of existing subdivisions and new roads are built farther out to create more secluded or exclusive subdivisions, or to take advantage of especially striking view lots. Projected increases in housing units will largely occur in and near these areas.

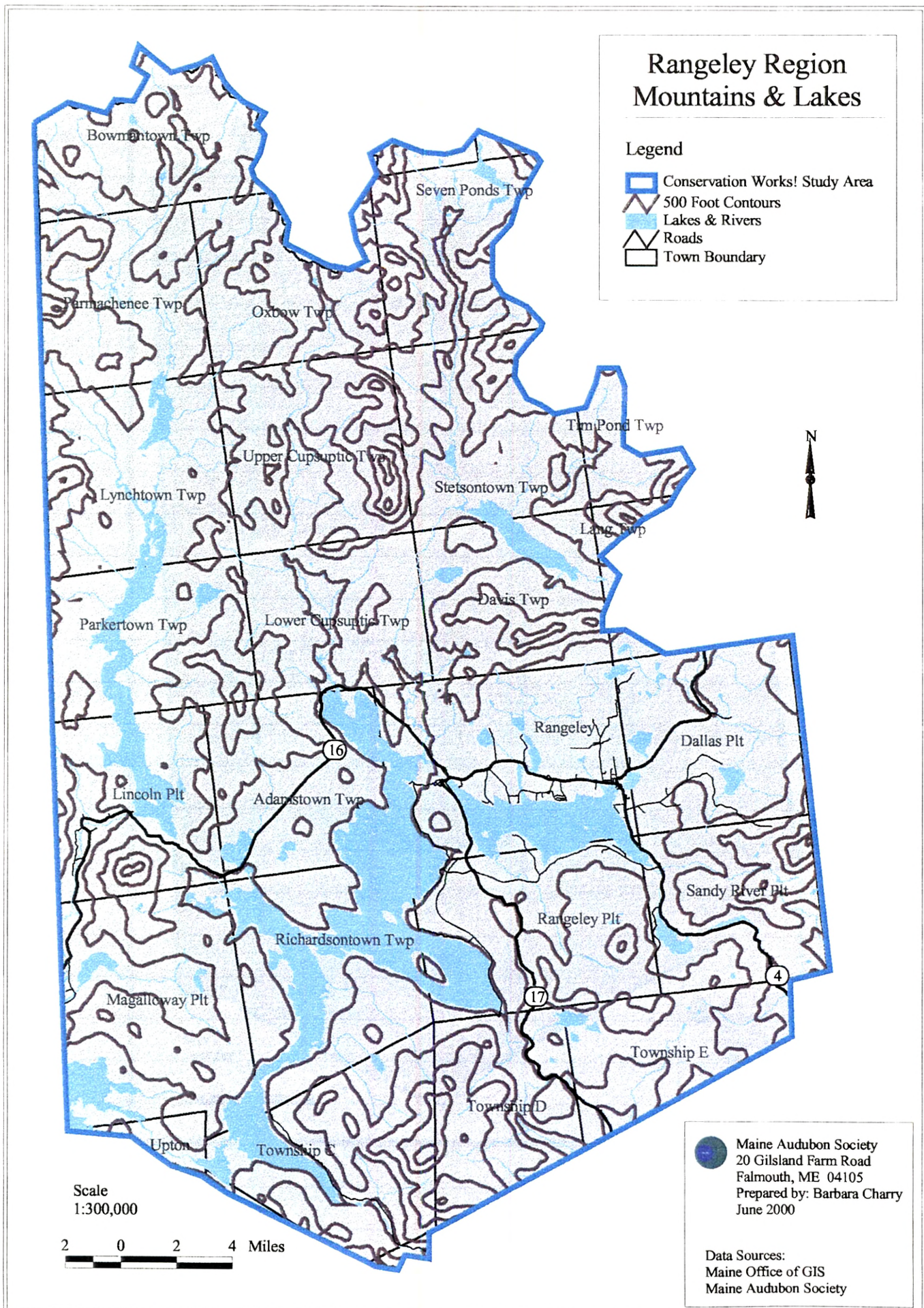
If development is badly managed in the Development Potential areas, the area's attractiveness for certain recreationists and shoppers will decline. Traffic jams will be difficult to manage and offset and could discourage some visitors. Whether this would discourage retirees from relocating here is problematic -- most of the rapidly growing retirement magnets elsewhere are traffic nightmares and little is being done about it. These issues may be more quality of life concerns for existing residents and visitors than determinants of the economic future in any major sense.

Based on the *Conservation Works!* surveys, it appears that much of the visitor activity occurs in these close-in areas, from wildlife viewing to walking and shopping. Further, these lands provide access to the wider trail systems for snowmobiling and other activities. Changes in ownership and uses create continued trail management and relocation challenges. Year to year these are manageable, but how 25 to 50 years of incremental sprawl would affect the situation is easy to see.

The Setting

There is clearly considerable value to the town's current atmosphere and sense of remoteness. The combination of striking mountains and large lakes is unusual in New England (see Map, p. 71). Would Saddleback's appeal increase if its skiers looked out over an endless expanse of subdivisions? I doubt it. Would the area's appeal to visitors increase if all hillsides viewable from the Oquossoc boat landing or the Rangeley town dock were covered with glittering lights at night? Not very likely. Converting these notions to precise numerical estimates of possible impacts is probably impossible. But Rangeley's sense of remoteness is clearly a critical part of what makes it different. Many other places will go the way of the Sebagos, the North Conways, and the Ogunquits. As this occurs, areas that retain something special will be at a premium.

The Setting is an integral part of the resort, retirement, and water-oriented sports experiences important to both residents and to visitors. It is also the location for much of the near-in snowmobiling and day uses important to visitors and residents alike. If growing tourism demand ramps up the flow of dollars into town, sooner or later the dollars will attract subdividers and mall developers who in a very short time will change the place dramatically. Some people may oppose these changes, but it's hard to fight a landboom with rearguard actions. This is not perceived as a threat today, so little action is being taken in advance.



The Rangeley Region could absorb a considerable amount of development if it is done intelligently, but under current policy it won't be. It will sprawl along Main Street, engulf any remaining lakefront and scenic roads, and destroy the finest vistas -- it always does. The "view lots" are where the real money is, and their lights will destroy the remoteness for everybody else. It's unlikely that LURC could get away with any material constraints on this. In major land booms, large developments will obtain rezonings and cumulatively change the character of the setting as well.

The cumulative effect of unplanned sprawl on the landscape is the real issue here. Simply gaining an increased recognition of the issue would be a great success. Dramatic planning initiatives always go down in defeat because they precede general acceptance of the problem and fail to develop any shared recognition that there is a better way. Too often, they pose the problem as "all-or-nothing" which need not be so in Rangeley.

Once the threat is real, the stakes are too high, things are moving too fast, and it's impossible to "get ahead of the bulldozer."

Rangeley's landscape quality is unusual and could be a major long-term economic asset if it can be retained. This is not a matter of land acquisitions in the Backcountry. It's a matter of focus on the Development Potential areas and of retaining the visual quality of the Setting. It's a matter of sensible land use management of the growth along roads, alertness to visual quality, and the subdivisions. Possibly also, of avoiding too much degradation of the building fronts in the existing commercial areas.

The short term dollar economics almost always favor the sprawl and fast growth approach. The longer term economics may be less favorable for the community based on infrastructure costs and adverse cost/revenue situations (see, for analogous situations, Ad Hoc Associates, 1997 and the large literature on the cost-revenue impacts of development). But if much of the growth is in retirees and seasonal units, especially at the high-end, it's hard to make a case that the municipal cost-revenue impact is unfavorable.

Development, regulation and the low income issues often come up. Landbooms always gentrify places. The new lots, resorts, retirement homes, and condos are not for low income people. The boom drives up land values and taxes. Development restrictions can cause land prices and building costs to increase too. Boom construction always creates temporary jobs for equipment operators and construction workers. There is much to discuss in this area.

The Backcountry

Beyond the Setting, the Backcountry supports woods jobs, and provides the hunting and remote fishing experiences, snowmobiling, and some amount of day hiking and through hiking (AT). The Backcountry provides the more diffuse sense of wildness and remoteness surrounding the area. The backcountry is the most likely location for much of what is termed "ecotourism" (see Twynam and Robinson, 1997).

What happens in the Backcountry may not have very direct connections to economic activity in the developed portions of the area. Many of the area's visitors rarely visit the Backcountry but spend their time on or near the lakes and close-in trails.

If one were to designate a large Wilderness Area there, it is not clear that any large increase in number of visitors or economic activity would result. On the other hand, if the timberland were to be divided into large private “kingdoms” or if access were to be lost for other reasons, the economic impact of associated public recreation uses would be lost as those areas are “privatized.”

Options for improving the recreation economic impact based on increasing Backcountry uses do exist. Managed trail and hut systems are being tried (Richard, n.d.; Austin, 1999). These are worth pursuing but at present do not appear to promise large additions to landowner income or to local tourist spending flows.

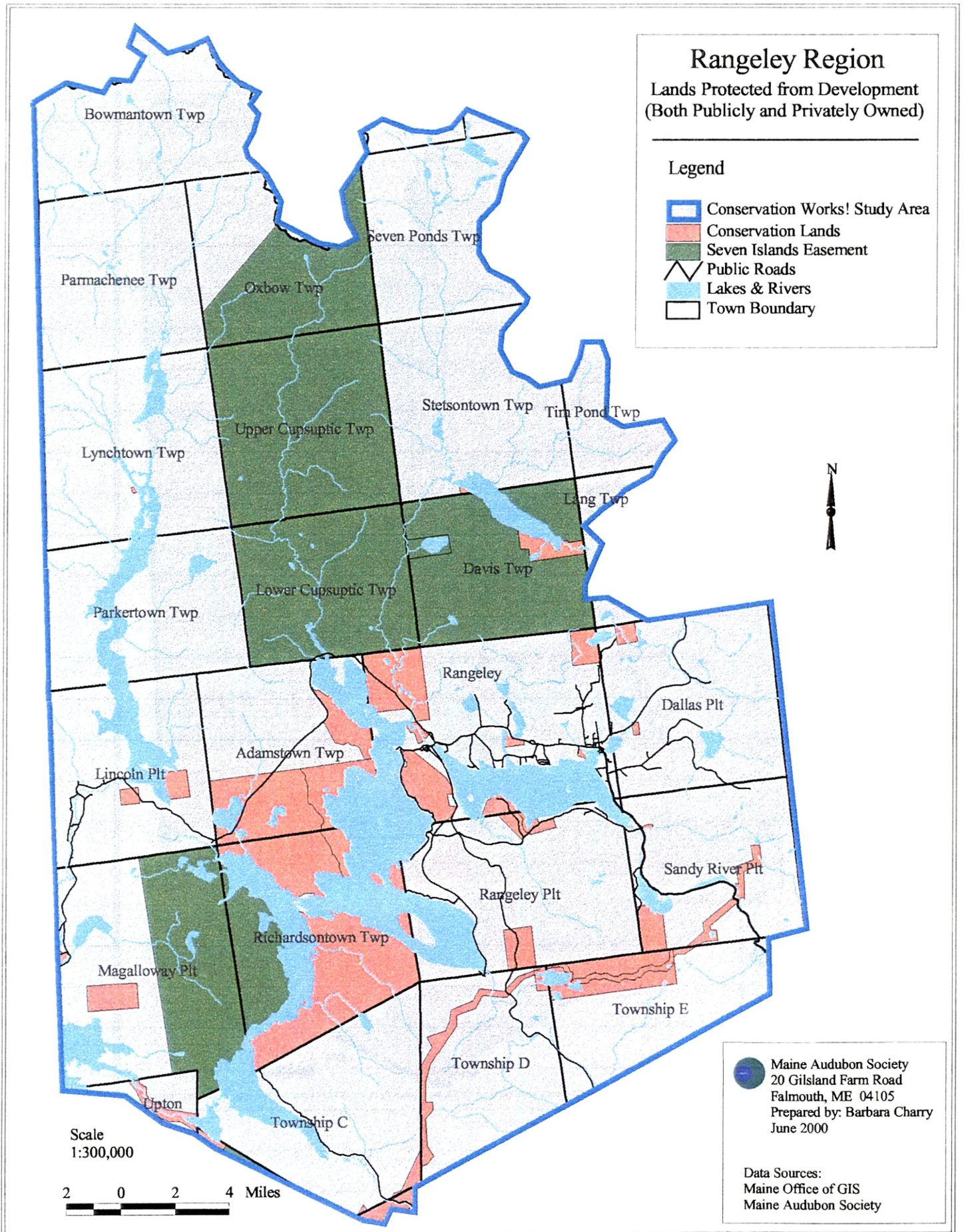
Retaining land in timber use is important, what I call “immunizing lands against subdivisions.” If we assume, per our discussion, 35-40 jobs supported by timberland, we could work with some ratio of logging and management jobs per acre of timberland to illustrate the employment impact if lands were taken out of production. Presumably the second homes put on the land would yield some local spending and we could find some numbers for that. A minor problem is that some of these woods jobs are supported by lands outside the project area. Any plausible threat scenario for the forest would not seem to produce very impressive numbers for jobs or incomes at risk. What is threatened in the region’s sense of place and its economic diversity. The Pingree Easement is intended to address this; part of the Easement is in this area. In particular, the Easement protects important shoreline and the “setting” of Mooselookmeguntic and Kennebago Lakes.

Importance of Access

Evidence above suggests that likely development needs in the Region can be accommodated without subdividing more land. Yet it will not work this way. Private lands (outside the Pingree Easement) are likely to change in ownership and management priorities in the coming half century. Retaining widespread access to those lands for a full range of recreational activities is not necessarily a sure thing. At worst, it is highly likely that over the 50 years a material reduction in access will occur, if nothing is done to secure access.

Identifying Specific Economic Impacts of “Conservation”

With the amount of “conservation” we now have (see Map, p.75), Rangeley is attracting tourists and immigrants. Would more Public, The Nature Conservancy, or Audubon land ownership attract more visitors? By itself, probably not. At the same time, there has certainly been no detectable adverse effect on visitation and economic growth from the level of conservation land acquisition and regulation in place to date. Our question is, are there ways in which additional conservation lands could provide enhanced economic benefits? Very likely there are, but these are probably fairly site-specific, and would involve management actions or projects that would enhance visitation levels or length of stays. Many of these have been discussed in *Conservation Works!* meetings. Probably the key is management and marketing -- if nobody knows about an opportunity to watch loons, or cannot get there, it won’t increase visitation.



There are certainly situations where steps to retain access or to enhance a managed recreation experience could improve the tourism experience and increase tourism activity and spending. For example, a hut-to-hut system which is discussed on page 65. Within the confines of this study, we are not in a position to identify all of these on maps, or to say whether the need would best be met by a right of way, an easement, or acquisition -- or who should manage the project. However, it could be a fruitful project for the *Conservation Works!* committee, Chamber of Commerce or another group to explore next.

Summary

The Rangeley Region's landscape can be viewed as three general areas: Development Potential lands, the Setting, and the Backcountry. Each of these areas has distinctive use patterns. In each area, the opportunities for retaining access and expanding tourism activities vary. The likely impact of future land use change varies widely. A key issue will be how to secure public access. This is a critical element in implementing the "preferred" future identified by the *Conservation Works!* Committee. In turn, it is critical to achieving the increases in tourism spending projected in this report.

X. CURRENT AND FUTURE SPENDING IMPACTS OF RECREATION AND FOREST-BASED ACTIVITIES: ILLUSTRATIVE ESTIMATES FOR RANGELEY REGION

We have prepared a series of illustrative economic scenarios as background for *Conservation Works!* The activities chosen are not intended to be comprehensive; they focus on sectors in which the *Conservation Works!* group perceived some opportunity for joint action related to conservation and promotion. Thus, significant sectors are not discussed. These spending estimates rely on intensive consultation with Rangeley area businesses, and on extensive interviewing to determine use patterns.

In the nature of things, local area economic impact studies suffer from serious data deficiencies. We have already seen that for our area county data are not locally specific enough. While we have considerable anecdotal and survey data on various activities, there is always something missing. We may have percent participation but not total number of visitors or visitor days. We may have user days, but not know how many are local residents, day visitors, or overnight visitors. We may have spending, but it is usually a state average. We do not know how much of that spending is in Rangeley, how much at home, how much on the road, or how much for groceries in Farmington.

By working with many people, we have pieced together estimates of user days and amount spent per day for a range of recreation activities including snowmobiling, cross-country skiing, hiking, angling, deer hunting and alpine skiing. In general, annual visitor days were estimated for each activity by conducting phone surveys of local experts and determining total numbers of people participating in each recreational activity (done by Land and Water Associates, Maine Audubon and Rangeley Chamber of Commerce). Three people were contacted to verify results whenever possible. The *Conservation Works!* Committee then used those numbers to estimate percent of visitors falling into one of four basic categories: residents, day-trippers (people drive up for one day and a meal), overnights (three meals and stays overnight) and high-end overnights (e.g. spends the night with meals but also rents snowmobiles, fishing guide etc). Not all categories were appropriate for all activities.

Estimates for daily expenditures for each activity were arrived at by using both local knowledge and survey results if available (see Notes section below for more detail). We then merged these with expectations for the change in user days under two future scenarios:

- no action, basically business as usual; and
- preferred future, based on positive actions to increase visits.

These scenarios were developed by the *Conservation Works!* group.

We have also estimated spending by second homeowners, and shown the potential local impact of a small wood products operation being established in Rangeley (see wood products plants section of this document).

For each item, a short note is attached giving details of assumptions used to

develop the factors shown in the spreadsheet summary. All estimates were then sent to 15 businesses in the Rangeley region for review and comment.

The estimates developed here for current expenditures yield a total spending of \$27 million annually, which is consistent with the aggregate estimate developed in a preceding section. The preferred outcome, if implemented, could result in a 49% increase in spending over the current level. Much of this increase is in snowmobiling.

Notes on Estimates

Cross-Country Skiing

Estimates for user days were made using two sources (Jeff Foltz and Tom McAllister). Based on these conversations, an estimate of 4,500 visitor-days was developed as a base for X-Country skiing. The *Conservation Works!* committee estimated the following percentage of visitor in each category:

- 55% are residents--minimum amount of spending \$10/day
- 15% are day-trippers who travel up here ~ \$10/day
- 30% are overnigheters spending ~ \$100/day
- Average total spending = \$38/day

The committee lumped together residents and day-trippers for the purposes of money spent and did not designate "high end overnigheters." Based on an assumed ratio of 55% residents, 15% day-trippers traveling up to the region, and 30% overnigheters, we estimated spending per person at \$38.00.

Alpine Skiing

There are four types of alpine skiers in the Rangeley region:

- Residents
- Vacation homeowners
- Day-trippers
- Overnigheters

The Rangeley Chamber of Commerce, with assistance from Tom McAllister, estimates an average expenditure of \$100/day.

Discussions with the Saddleback Ski Area indicated that the total number of skiers per day, multiplied by the number of days in the season yielded 50,000 total skier days. This suggests a total spending impact of \$5 million per year.

Hiking

A study by Land and Water Associates estimated the number of hikers on 13 major trails in the region during three seasons (July-August, September-October, and December-March). Averages during the week, weekend and peak day were all estimated

for each season on each trail. These numbers were totaled to estimate the hiking visitor days in the area. This method resulted in an estimate of 15,000 visitor days for hiking. In addition, the Rangeley Chamber of Commerce received 3000 inquiries on where to hike. If you assume that 80% of the people who hike the region do not stop at the Chamber because they are return visitors, and that each inquiry represented one day of hiking, then you again come up with 15,000 visitor days.

To make estimates on money spent by hikers (using estimates for gas, food and lodging), visitors were separated into the following categories:

- 50% are day-trippers and residents ~\$8.40/day
- 50% are overnigheters ~ \$75/day
- Average total spending = \$42/day

Snowmobiling

We previously estimated spending by snowmobilers at \$5-7 million per year, but we wanted to know how many visitors were represented in that spending. Estimates of visitor-days are elusive and the committee approached this problem in a variety of ways.

The first estimate was arrived at using a winter recreation survey conducted by CMP (Central Maine Power) during the relicensing of Middle and Upper dams. That survey estimated 43,000 snowmobile visitor days for the areas near Mooselookmeguntic and Richardson lakes during January-March, which is a small portion of the study area. If we assume that the snowmobile visitors for the entire study area was 30-40% more than that 43,000, then we can calculate visitor days for the entire study area to be between 55,900 and 60,200.

A second method for estimating snowmobile user days was calculated by taking estimates of total spending by snowmobilers of \$5-7 million (see Irland's "Rangeley's Economic Outlook") and dividing by average spending per day by snowmobilers. On average, snowmobilers spend \$101 per visitor day (see below). Using this method, the range falls between 50,000 to 69,000 snowmobile visitor days, which is in the same ballpark as the first estimate.

A third estimate was calculated by committee members (particularly members of the snowmobile club) estimating use by snowmobilers during the week and on weekends. Committee members assumed 10 Saturday's per season and estimated 4,500 snowmobile visitors per Saturday and 1000 per Sunday. This resulted in total weekend visitors of 55,000. Assuming 100-200 per day during the week would add an additional 5-10,000 or 60,000 to 65,000 total visitor days for snowmobilers.

Using these three methods, the *Conservation Works!* Committee decided that there were approximately 60,000 snowmobile visitor days per season.

During the busy season, the average spent by snowmobilers per day was estimated and used for the second estimate above as follows:

- 75 snowmobile renters—(75 sleds available for rent) --\$265/day 2%
- 2000 can ride to town on snowmobile -- \$40/day 48%
- 2000 sleeping in town -- \$150/day 48%
- 100 day-tripper on trailer -- \$5/day 2%
- **Average** total spending -- \$101/day

Angling

Maine Department of Inland Fisheries and Wildlife reports estimated annual angler days as follows:

Aziscohos L.	5,025
Mooselookmeguntic L.	8,965
Rangeley L.	14,160
Richardson L.	7,739
Magalloway R.	1,392
Cupsuptic R.	484
Rapid R.	<u>1,285</u>
Total	39,050

The *Conservation Works!* committee estimates another 10,000 or more angler days of angling in the surrounding brooks and streams, plus lakes and streams not listed here. Let's say the total is 50,000 angler days. We estimated spending average for angling at \$112 per visitor day as broken down into the following categories by the *Conservation Works!* Committee:

- 50% are day-trippers who bring supplies and local fishers spending \$22/day
- 40% are overnighers spending \$69/day
- 10% are high-end overnighers spending \$319/day (guide-limited?)
- Average total spending \$112/day

The average total spending does not include income from family members who accompany an angler to the region. This is a very common scenario for angling visitors. When this source of income is taken into consideration this average total spending rises to \$130 per day. We did not include this income since we did not include it in the other activities, though it is a much more common occurrence with angling visitors.

Hunting

Here, we consider deer, bear, moose, and bird hunting. Deer accounts for about ½ of total hunting days. Based on Maine Department of Inland Fisheries and Wildlife data (G. Lavigne, pers. comm.), we estimate 48,920 hunter days per year in the 22-town area. We do not have reliable data on hunting expenditures. State averages cover a great deal of hunting, for a variety of species. Much is dominated by day trips, as is true of much bird hunting. The 1996 U.S. Fish & Wildlife Service Survey had average daily spending by hunters at only \$27.50. This estimate is less than the estimate of \$81 developed by the *Conservation Works!* Committee in the following categories:

For all hunting activities,

- 50% are locals @ \$20/day;
- 35% overnight @ \$120/day;
- 14% are guided @ \$220/day

Total visitors: 48,900

Average total spending \$81/day

Second Homes

A summary of dwelling units in the area (*Conservation Works!* “Activities that Contribute to the Rangeley Region Economy Now and in the Future”) indicates a total of 2,438 units in the area.

The breakdown for seasonal and year-round is not available. So, we will estimate that there are 1,800 seasonal units in the area. Based on unpublished data from the Duke (1998) study, supplied by David Dominie of E-Pro, we estimate that annual spending in the area by second homeowners is \$2,900 per year. This would be \$5.2 million per year. (These figures are believed to be low). Annual property taxes per unit are probably \$1,500 in addition. Some significant portion of this is by seasonal residents, and not by visitors who would be considered tourists. On the other hand, the amount probably does not include spending by the campowners’ guests.

Eight to ten new second homes are built in the area annually, at a construction cost averaging about \$110,000 each. Property tax on such a unit (in Town of Rangeley) would average \$2,400, and annual visitor expenditures for new units are probably well above \$3,000.

Wood Products Plants

As discussed in chapter V, there seems to be an open opportunity for building and operating one or more wood products plants in the study area. Assume a small plant, of average traits for lumber and wood products value added industries. Some examples:

Table 25
1996 Maine Census of Manufactures

<u>SIC</u>	<u>Product</u>	Value of Product \$MM	Wages \$MM (average)	<u>Jobs</u>	Value of Product/Job (\$1,000)
243	Millwork	86.1	22.0 (22,180)	1,041	83
244	Wood Containers	23.7	5.7 (18,837)	303	78
2499	Misc. Wood	167.9	55.2 (19,701)	2,804	60
25	Furniture	127.0	34.1 (25,891)	1,319	96

By inspection, let us say that the following averages are reasonable:

Value product per worker:	\$80,000
Average annual wages	\$20,000

Then a firm with 5 employees will have sales of \$400,000, and an annual wage bill of \$100,000. This firm might spend half its sales on wood, or \$200,000/year. If this wood could be bought locally (not likely at present) this would mean that much local spending. So the options are:

	<u>Local Spending</u>
Buys wood outside	\$100,000
Buys wood in Rangeley*	\$300,000

* Assumes a local sawmill comes into existence to supply this wood.
Optimistic.

Tourism Economic Impacts: General Observations

Estimating spending flows and economic impacts of tourism is always difficult, never more so than for small geographic areas. This section provides a number of points to be remembered on this topic. First, Table 26 shows the many weaknesses in existing tourism data.

Table 26
Factors in Estimating Local Spending Impacts of Tourism

Survey Weaknesses	<p>Visitor/visitor day counts rarely available</p> <p>Inaccurate respondent recall</p> <p>Key details lacking</p> <p>Old information</p> <p>Numbers often high</p>
Using State Averages	<p>Rangeley use patterns differ widely from the average</p>
Apportioning Spending to Rangeley	<p>Some (not all) surveys distinguish resident/nonresidents</p> <p>Split between residents/day/overnight rarely available</p> <p>Many weekenders bring groceries from home; seasonal residents may shop at Farmington</p>
Identifying "Leakage"	<p>Economic impact depends on how much stays in town -- leakage may be underestimated if county/state models used.</p>

An indication of the relative impact of tourism spending by sector can be obtained from Teisl and Boyle's (1998) study. The results refer to total impacts, as processed through the IMPLAN model. Clearly, the benefits are widely distributed in the economy. Admittedly the high profile of "professional services" seems high.

Table 27
Fifteen Sectors of Maine's Economy Most Affected by Tourism Spending During 1996

	Wages (Millions)	Percent Distribution
Food stores	\$62.3	19.6%
Auto dealers/service stations	\$57.0	17.9%
Other retail	\$41.8	13.2%
Professional services	\$33.3	10.5%
Other services (no auto, film)	\$23.0	7.2%
Local/state government	\$17.9	5.6%
Finance, insurance, real estate	\$16.8	5.3%
Lodging	\$15.0	4.7%
Building, gardening materials	\$11.3	3.6%
Transportation services	\$9.7	3.1%
Wholesale trade	\$9.7	3.1%
Utilities	\$5.4	1.7%
Agriculture, fish, forest, landscape services	\$5.2	1.6%
Eating & drinking	\$5.2	1.6%
Maintenance -- industrial	\$4.0	1.3%
TOTAL	\$317.6	100.0%

Source: Teisl and Boyle, 1998, Table 11.

The Duke Engineering Study (1998) showed that for a subset of this area, total visitor use was very high, and that fishing was one of the largest uses. But, it did not estimate visitor days by activity.

Table 28
Recreation Visitor Days, 1996-97,
Richardson-Mooselookmeguntic-Rapid River Study Area

By Type:

Day users	12,906
Campgrounds	27,600
Campowners/property owners	<u>244,728</u>
TOTAL	285,234

By Season:

Fall	64,386
Winter	44,028
Spring/Summer	<u>176,820</u>
TOTAL	285,234

Source: Duke Energy Services, 1998, p. 28.

Note: In this area, only 11% of overnights stayed at rental accommodations.

Summary

We believe our effort to elicit local knowledge of visitation rates and spending levels enables us to develop a credible picture of how the Rangeley area's economy is affected by this set of outdoor recreation activities. There exist no known data sources for most of this information. What is most important is that these estimates have credibility with informed local people.

Table 29 summarizes the spending estimates for the natural resource based activities discussed and researched by the *Conservation Works!* committee. Current conditions and two possible future conditions were estimated. The estimated total dollars spent direct impact under current conditions is \$26.6 million. Under the vision for the preferred future the estimated total dollars spent direct impact would be \$39.8 million or a 49% increase from current conditions.

Our estimates show a major economic impacts, and they match fairly closely with the overall estimates developed earlier in this report based on other sources. They suggest that a program designed to support the retention of recreation opportunities, and their selective and managed expansion, could result in a very large increase in tourism spending in this area.

Table 29 (Cont'd)					
Estimated Expenditures by Visitors and Percentage of Visitor Type					
Activity	Average Money Spent/Day used	Overnight High end Visitor	Overnight Visitors	Day Visitor	Local Resident
XC Skiing	\$38	0%	30% \$100	15% \$10	55% \$10
Alpine Skiing	\$100	No breakdown attempted			
Hiking	\$42	50% \$75		50% \$8	
Snowmobiling	\$101	2% \$265	48% \$150	48% \$40 (rides in)	2% \$5 (trailers in)
Angling	\$112	10% \$319 (guide)	40% \$69	50% \$22	(local/day not sep. est.)
Hunting	\$81	14% \$220	35% \$120		51% (details below) \$20

Hunting Days				
	Local	Overnight	Guided	Total
Deer	14,200	11,400	2,800	28,400
Moose	1,300	650	650	2,600
Bear	275	675	1,750	2,700
Birds	9,100	4,600	1,500	15,200
Total	24,875	17,325	6,700	48,900
Percent of Total	51%	35%	14%	
Spent per day	\$20	\$120	\$220	

Note: estimates used for no. of visits and spending per visitor are based on surveys where available, and on extensive discussion with Rangeley business people. We believe these estimates are suited to the descriptive purposes for which we are using them.

XI. REFERENCES

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Galen Rose, Maine State Planning Office
Richard Sherwood, Maine State Planning Office
Wilfred E. Richard, Consultant in Tourism
Evelyn McAllister, Rangeley Chamber of Commerce
Tom McAllister, Saddleback Mountain
Bob Griscom, Town Code Enforcement Officer
Don Palmer, Rangeley Regional Guide and Sportsman Association
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Andrew Fisk, Land Use Regulation Commission
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Kirk Ellis, Rangeley Snowmobile Club
Bob Meyers, Maine Snowmobile Association
Sue Foster, Sugarloaf
Johannes von Trapp, Trapp Family Lodge
Steve Barba, the Balsams
Duane Nadeau, I-P
Bill Altenburgh, Mountain Recreation.
(See www.phillipsbrook.org.)
Jeff Foltz, Rangeley Cross-Country Club
Jean Noyes, S. C. Noyes and Co., Rangeley

XIII. BACKUP

Backup Table 1
Maine Minor Civil Division Population Estimates
(from Spring 1999)

	Maine	Rangeley	Rangeley Plt.	Magall- oway Plt.	Sandy River Plt.	Dallas Plt.	Rangeley Area Total	Town of Rangeley as % of Area	Area as % of Maine
1980	1,125,043	1,023	69	79	50	146	1,367	74.8%	0.122%
81	1,138,086	1,027	71	73	50	148	1,369	75.0%	0.120%
82	1,148,947	1,032	76	68	51	149	1,376	75.0%	0.120%
83	1,159,410	1,037	79	65	52	150	1,383	75.0%	0.119%
84	1,169,470	1,039	80	60	53	150	1,382	75.2%	0.118%
85	1,179,569	1,045	84	57	54	153	1,393	75.0%	0.118%
86	1,189,590	1,048	87	54	54	153	1,396	75.1%	0.117%
87	1,199,480	1,054	92	51	55	156	1,408	74.9%	0.117%
88	1,209,560	1,057	95	48	59	157	1,416	74.6%	0.117%
89	1,220,174	1,060	100	46	58	161	1,425	74.4%	0.117%
90	1,227,928	1,063	103	45	64	161	1,436	74.0%	0.117%
91	1,234,597	1,093	105	41	65	165	1,469	74.4%	0.119%
92	1,236,348	1,094	105	41	65	165	1,470	74.4%	0.119%
93	1,239,779	1,110	106	41	65	165	1,487	74.6%	0.120%
94	1,240,280	1,087	105	41	64	159	1,456	74.7%	0.117%
95	1,241,382	1,096	102	40	63	157	1,458	75.2%	0.117%
96	1,243,316	1,073	107	40	65	165	1,450	74.0%	0.117%
97	1,227,960	1,090	105	40	63	169	1,467	74.3%	0.119%
98									
99									
2000	1,274,923	1,063	103	45	64	161	1,436	74.0%	0.113%

Source: Maine Department of Human Services, Office of Data, Research & Vital Statistics (Rhonda 624-5466); and 2000 Census summaries provided by Galen Rose, State Planning Office.

Backup Table 2
School Enrollment, 1988-1999

<u>Year</u>	<u>K-8</u>	<u>9-12</u>	<u>Total</u> <u>K-12</u>	<u>Total</u> <u>Including</u> <u>Plantations</u>	<u>%</u> <u>Rangeley</u>	<u>%</u> <u>Plantations</u>
1988	132	53	185	229	0.808	0.192
1989	136	52	188	237	0.793	0.207
1990	124	59	183	229	0.799	0.021
1991	117	57	174	225	0.773	0.227
1992	118	56	174	237	0.734	0.266
1993	127	53	180	245	0.735	0.265
1994	143	49	192	255	0.753	0.247
1995	142	50	192	253	0.759	0.241
1996	148	48	196	263	0.745	0.255
1997	146	48	194	256	0.758	0.242
1998	140	59	199	262	0.760	0.240
1999	127	54	181	242	0.748	0.252

Source: Rangeley School Dept., K. Coville, Supt.

Backup Table 3
Definition of Covered Employment

The nonfarm wage and salary employment figures, except those for the federal government, refer to people on nonfarm establishment payrolls who received pay for any part of the pay period which includes the 12th of the month. For federal government establishments, employment figures represent the number of people who occupied positions on the last day of the calendar month. Intermittent workers are counted if they performed any service during the month.

Nonfarm wage and salary employment data exclude proprietors, the self-employed, unpaid family workers, farm workers, and domestic workers in households. Salaried officers of corporations are included. Government employment covers only civilian employees; military personnel and employees of the Central Intelligence and National Security Agencies are excluded.

People on establishment payrolls who are on paid sick leave (when pay is received directly from the firm), on paid holiday, on paid vacation, or who work during a part of the pay period even though they are unemployed or on strike during the rest of the period are counted as employed. Not counted as employed are people who are on layoff, on leave without pay, on strike for the entire period, or who were hired but have not yet reported during the period.

Source: Maine DOL, Handbook of Employment Statistics, 1998.

Backup Table 4
Rangeley ESA Taxable Retail Sales
 (all values in \$1,000's)

	<u>Building Supply</u>	<u>Food Stores</u>	<u>General Mdse.</u>	<u>Other Retail</u>	<u>Auto Transp.</u>	<u>Rest. & Lodging</u>	<u>Total Sales</u>
1986	6,267	2,996	1,540	6,673	4,761	10,229	33,276
87	7,772	3,489	1,411	7,088	5,016	13,847	40,082
88	8,183	3,882	1,844	7,899	5,589	15,488	45,636
89	6,624	3,933	1,997	8,864	5,992	17,092	49,455
90	5,009	4,151	1,557	8,011	5,583	15,797	39,935
91	5,108	4,743	1,208	7,247	5,447	15,449	41,085
92	6,058	5,425	1,336	8,781	6,168	16,311	46,371
93	7,917	5,444	1,342	6,974	6,656	18,231	49,270
94	8,120	5,219	1,205	8,595	7,833	18,246	52,247
95	8,096	5,547	1,157	8,674	8,541	17,923	54,135
96	8,610	5,619	888	8,741	9,308	19,656	55,908
97	9,316	6,050	764	9,714	9,262	19,459	57,259
98	10,086	6,427	443	10,845	10,324	20,532	63,151

Source: Maine State Planning Office.

Backup Table 5
Rangeley Taxable Sales, 1983 to 1999

	Restaurant & Lodging	Total	Restaurant & Lodging % of Total	Total % Ch. from prev. year	CPI Inflation
1983	2,079.5	5,634.1	36.9%		3.2
84	2,650.7	7,099.8	37.3%	26.0	4.3
85	2,789.9	7,757.3	36.0%	9.3	3.6
86	3,341.6	9,567.6	34.9%	23.3	1.9
87	3,416.3	10,863.9	31.4%	13.5	3.6
88	3,836.2	12,361.8	31.0%	13.8	4.1
89	4,774.5	13,222.5	36.1%	7.0	4.8
90	4,390.6	11,644.1	37.7%	-11.9	5.4
91		12,320.0	0.0%	5.8	4.2
92		12,920.0	0.0%	4.9	3.0
93		13,400.0	0.0%	3.7	3.0
94		14,570.0	0.0%	8.7	2.6
95		16,130.0	0.0%	10.7	2.8
96	5,721.2	17,336.4	33.0%	7.5	3.0
97	5,844.4	17,745.0	32.9%	2.4	2.3
98	6,344.2	19,333.4	32.8%	9.0	1.6

Source: Maine SPO; and Econ. Rept. of President, 1999, p. 399.

Backup Table 6
Annual Solid Waste Tonnage

	<u>1992</u>	<u>93</u>	<u>94</u>	<u>95</u>	<u>96</u>	<u>97</u>	<u>98</u>	<u>99</u>
Municipal Solid Waste	1,098.45	1,093.89	1,064.09	985.90	1,092.92	1,093.73	1,138.19	1,198.50
Mixed Metal	147.91	102.19	156.17	120.76	124.42	132.78	137.99	156.85
Total Tons Recycled					341.57	365.34	411.79	419.42
Total Tonnage for Year	1,483.49	1,443.54	1,493.12	1,479.43	1,657.89	1,696.09	1,778.63	1,909.04

Source: Rangeley Solid Waste Dept.

Backup Table 7

**Rangeley Water District Usage, Thirteen Largest Users
Quarterly Data, 1997-1999 (cubic feet)**

<u>Customer</u>	1993		1994			1995				
	<u>QIII</u>	<u>QIV</u>	<u>QI</u>	<u>QII</u>	<u>QIII</u>	<u>QIV</u>	<u>QI</u>	<u>QII</u>	<u>QIII</u>	<u>QIV</u>
Rangeley Housing Dev. Corp.	17,880	7,900	12,530	24,850	15,420	17,890	14,300	13,060	13,640	11,410
People's Choice Rest., Bar	13,900	8,000	11,100	9,300	15,500	10,500	12,200	9,300	15,200	9,800
Town & Lake #2 (Cabins)	18,600	3,700	12,100	8,700	16,800	9,500	11,200	7,800	15,800	6,100
Town & Lake Motel & Laundry	25,400	8,500	22,400	14,700	27,600	13,300	19,800	15,800	28,700	12,900
Stubby's Market Store/Ice	12,837	2,162	3,251	5,545	11,980	3,615	3,800	7,800	14,600	3,400
Parkside/Frog Rock/Roadkill Rest.	7,796	577	7,428	0	162	3,451	10,062	8,000	17,400	7,500
Red Onion Rest., Bar & Apt.	22,209	6,709	13,501	10,177	23,227	11,376	10,000	11,436	21,102	10,349
Doc Grants					3,300	1,900	2,700	3,000	4,000	3,000
Mike's	19,350	13,854	11,175	9,513	10,785	48,051	17,395	14,253	14,709	8,755
Saddleback Motor Inn	25,310	6,120	21,700	10,480	27,190	14,080	17,340	11,330	22,310	13,340
Rangeley Inn	15,484	2,798	14,890	8,985	18,291	8,229	14,401	11,284	18,081	8,021
Rangeley Inn Hotel	41,020	6,070	38,840	17,750	35,890	19,660	28,440	18,340	40,520	18,590
Village Scruboard	24,390	14,300	13,440	14,300	31,120	13,100	12,840	12,990	31,140	12,890
GRAND TOTAL	244,176	80,690	182,355	134,300	237,265	174,652	174,478	144,393	257,202	126,055
<u>Customer</u>	1996				1997				1998	
	<u>QI</u>	<u>QII</u>	<u>QIII</u>	<u>QIV</u>	<u>QI</u>	<u>QII</u>	<u>QIII</u>	<u>QIV</u>	<u>QI</u>	<u>QII</u>
Rangeley Housing Dev. Corp.	11,140	10,490	12,550	12,040	13,440	13,500	13,950	13,670	14,890	15,020
People's Choice Rest., Bar	12,400	11,600	14,500	14,900	14,100	7,800	12,800	8,800	9,600	9,000
Town & Lake #2 (Cabins)	10,800	7,400	15,800	6,900	13,300	8,100	15,500	3,600	7,560	6,000
Town & Lake Motel & Laundry	22,400	13,600	24,300	14,500	22,600	15,600	31,400	14,800	21,200	16,100
Stubby's Market Store/Ice	3,300	5,100	10,900	4,800	3,700	3,188	10,300	4,800	3,800	6,500
Parkside/Frog Rock/Roadkill Rest.	9,300	8,100	19,200	9,900	9,800	10,300	29,300	18,600	10,400	3,700
Red Onion Rest., Bar & Apt.	12,209	13,665	25,464	13,224	12,788	11,082	23,172	11,332	9,428	11,386
Doc Grants	3,400	3,300	5,400	3,300	3,400	3,400	4,800	3,200	3,300	2,900
Mike's	8,069	8,683	8,544	6,437	6,895	5,955	8,416	6,202	6,864	4,415
Saddleback Motor Inn	24,840	8,820	21,480	11,990	17,560	8,470	19,960	13,890	17,560	11,790
Rangeley Inn	13,736	6,257	16,373	9,853	15,360	17,681	18,457	10,269	14,237	7,940
Rangeley Inn Hotel	34,350	16,950	44,890	19,500	30,550	8,990	38,150	18,350	26,850	11,670
Village Scruboard	11,420	12,890	31,810	13,450	10,360	13,320	30,580	14,510	11,070	14,020
GRAND TOTAL	177,364	126,855	251,211	140,794	173,853	127,386	256,785	142,023	156,759	120,441

Backup Table 7 (cont.)
Rangeley Water District Usage, Thirteen Largest Users
Quarterly Data, 1997-1999 (cubic feet)

Customer	1998	1999					Total
	<u>QIII</u>	<u>QIV</u>	<u>QI</u>	<u>QII</u>	<u>QIII</u>	<u>QIV</u>	<u>1999</u>
Rangeley Housing Dev. Corp.	13,200	13,830	13,650	15,310	16,550	14,530	60,040
People's Choice Rest., Bar	12,600	9,900	10,400	8,200	12,000	8,800	39,400
Town & Lake #2 (Cabins)	15,200	7,700	12,200	8,100	14,400	6,500	41,200
Town & Lake Motel & Laundry	27,500	16,700	20,100	14,700	28,100	19,100	82,000
Stubby's Market Store/Ice	11,200	4,600	4,200	6,300	12,500	4,300	27,300
Parkside/Frog Rock/Roadkill Rest.	7,500	2,500	3,400	2,800	8,400	3,700	18,300
Red Onion Rest., Bar & Apt.	25,108	12,470	9,203	8,100	12,100	6,100	35,503
Doc Grants	6,100	5,200	9,900	10,000	10,700	6,200	36,800
Mike's	7,648	5,992	8,883	9,766	11,298	8,723	38,670
Saddleback Motor Inn	30,630	16,640	22,510	21,960	20,580	8,640	73,690
Rangeley Inn	23,607	21,689	26,472	10,500	21,800	12,000	70,772
Rangeley Inn Hotel	38,150	15,660	30,050	17,300	46,600	20,950	114,900
Village Scruboard	32,070	13,520	11,500	14,220	30,390	10,770	66,880
GRAND TOTAL	250,513	146,401	182,468	147,256	245,418	130,313	705,455

Source: Rangeley Water District.

Backup Table 8
Sex/Age Composition of the Deer Harvest in Maine,
for Wildlife Management District 7, 1963-1998

Year	Sex/Age Class				Unknown	Total
	Adult		Fawn		Sex/Age	
	Buck	Doe	Buck	Doe	Class	
1963	499	396	163	161	0	1,219
1964	756	545	191	206	3	1,701
1965	782	692	179	201	0	1,854
1966	608	393	96	116	0	1,213
1967	659	541	157	163	0	1,520
1968	713	727	179	238	0	1,867
1969	635	408	137	122	0	1,302
1970	653	412	116	141	0	1,312
1971	354	244	74	63	0	735
1972	356	282	97	90	0	825
1973	365	259	109	97	1	831
1974	498	356	129	144	0	1,127
1975	442	255	73	80	3	853
1976	502	341	74	86	2	1,005
1977	357	255	77	71	4	764
1978	229	116	37	28	4	414
1979	206	153	48	39	0	446
1980	335	266	85	72	1	759
1981	308	191	69	58	2	628
1982	284	194	41	41	1	561
1983	244	0	1	0	2	247
1984	246	3	0	2	3	254
1985	312	1	1	0	0	314
1986	414	50	11	6	0	481
1987	372	67	19	9	1	468
1988	542	123	45	19	3	732
1989	522	182	58	35	5	802
1990	610	209	46	50	4	919
1991	583	106	28	9	5	731
1992	487	166	72	25	4	754
1993	557	184	46	32	2	821
1994	451	69	16	8	0	544
1995	719	85	17	13	1	835
1996	558	72	14	8	4	656
1997 a	533	64	33	14	0	644
1998	474	73	21	16	0	584

^a Prior to 1997, harvest was not corrected for sex/age classification errors at time of registration by hunters.

Backup Table 9
New Building Permits Issued by Year by Town

<u>Town Name</u>	<u>Total</u>	<u>1990</u>	<u>91</u>	<u>92</u>	<u>93</u>	<u>94</u>	<u>95</u>	<u>96</u>	<u>97</u>	<u>98</u>	<u>99</u>
Adamstown Twp.	11	2	1		1		2	2		2	1
Dallas Plt.	79	12	5	5	6	9	8	9	6	8	11
Davis Twp.	1										1
Lincoln Plt.	18	2	4	2	2		1	1	2	3	1
Lower Cupsuptic Twp	5	1	1			1	1				1
Magalloway Plt.	13			2	1	2	1	4		1	2
Oxbow Twp.	2								1		1
Rangeley Plt.	103	10	8	14	10	6	11	9	12	14	9
Richardsontown Twp.	5		1	3				1			
Sandy River Plt.	46	7	6	3	3	6	4	4	1	9	3
T 4 R 3 WBKP	1								1		
T 4 R 5 WBKP	2			2							
Township C	4	1			1		2				
Township E	2				1					1	

Does not include amendments to permits.

Source: LURC, Andrew Fisk.

Backup Table 10
All Permits Issued by Type Since 1990

<u>Town Name</u>	<u>Total</u>	<u>AR</u>	<u>BP</u>	<u>DP</u>	<u>FOP</u>	<u>GP</u>	<u>LDP</u>	<u>LOE</u>	<u>RP</u>	<u>SA</u>	<u>SD</u>	<u>SP</u>	<u>ULP</u>	<u>WL</u>	<u>ZP</u>
Adamstown Twp.	45	16	11	1		6		5		1	1		3		1
Dallas Plt.	161	40	79	9		4	1	13			1	8	2		4
Davis Twp.	14	5	1		2	4		1	1						
Lincoln Plt.	59	24	18	5	3	7							2		
Lower Cupsuptic Twp.	12	3	5		1	1				1				1	
Magalloway Plt.	30	8	13	5	1	1		2							
Oxbow Twp.	4		2		2										
Rangeley Plt.	257	107	103	5	7	10		12	1			5	2		5
Richardsontown Twp	15	3	5	3		3				1					
Sandy River Plt.	98	31	46	5		1		5	1		2	1	3	1	2
T 3 R 3 WBKP	1				1										
T 4 R 1 WBKP	1	1													
T 4 R 3 WBKP	1		1												
T 4 R 5 WBKP	2		2												
Township C	14	3	4	1	2	2			2						
Township D	1	1													
Township E	12	3	2	1	5	1									

AR = Advisory Ruling

BP = Building Permit

DP = Development Permit

FOP = Forestry Permit

GP = Great Ponds Permit

LDP

LOE = Letter of Exemption
(Service Drop)

RP = Road Permit

SA = Shoreland Permit

SD = Service Drop

SP = Subdivision

ULP = Utility Line Permit

WL = Wetland

ZP = Zoning Permit

Includes advisory rulings. Does not include amendments.

Source: LURC, Andrew Fisk.

Backup Table 11
All Permits (including Advisory Rulings)
Issued by Year by Town

<u>Town Name</u>	<u>Total</u>	<u>1990</u>	<u>91</u>	<u>92</u>	<u>93</u>	<u>94</u>	<u>95</u>	<u>96</u>	<u>97</u>	<u>98</u>	<u>99</u>	<u>2000</u>
Adamstown Twp.	45	4	11	3	2	3	7	3	3	3	6	
Dallas Plt.	161	24	12	16	13	19	14	18	10	14	21	
Davis Twp.	14	1	1	1	2	1	1	1	1	4	1	
Lincoln Plt.	59	5	11	7	10	3	4	4	6	5	3	1
Lower Cupsuptic Twp	12	2	1	3		2	1	1	1		1	
Magalloway Plt.	30	2	4	2	5	5	1	5	1	2	3	
Oxbow Twp.	4						1		2		1	
Rangeley Plt.	257	37	30	30	24	24	24	23	29	21	13	2
Richardsontown Twp	15	2	2	5	1	1		2			2	
Sandy River Plt.	98	13	9	8	7	9	17	8	8	13	6	
T 3 R 3 WBKP	1								1			
T 4 R 1 WBKP	1		1									
T 4 R 3 WBKP	1								1			
T 4 R 5 WBKP	2			2								
Township C	14	1			2	2	5		2	1	1	
Township D	1										1	
Township E	12	4	2		4	1				1		

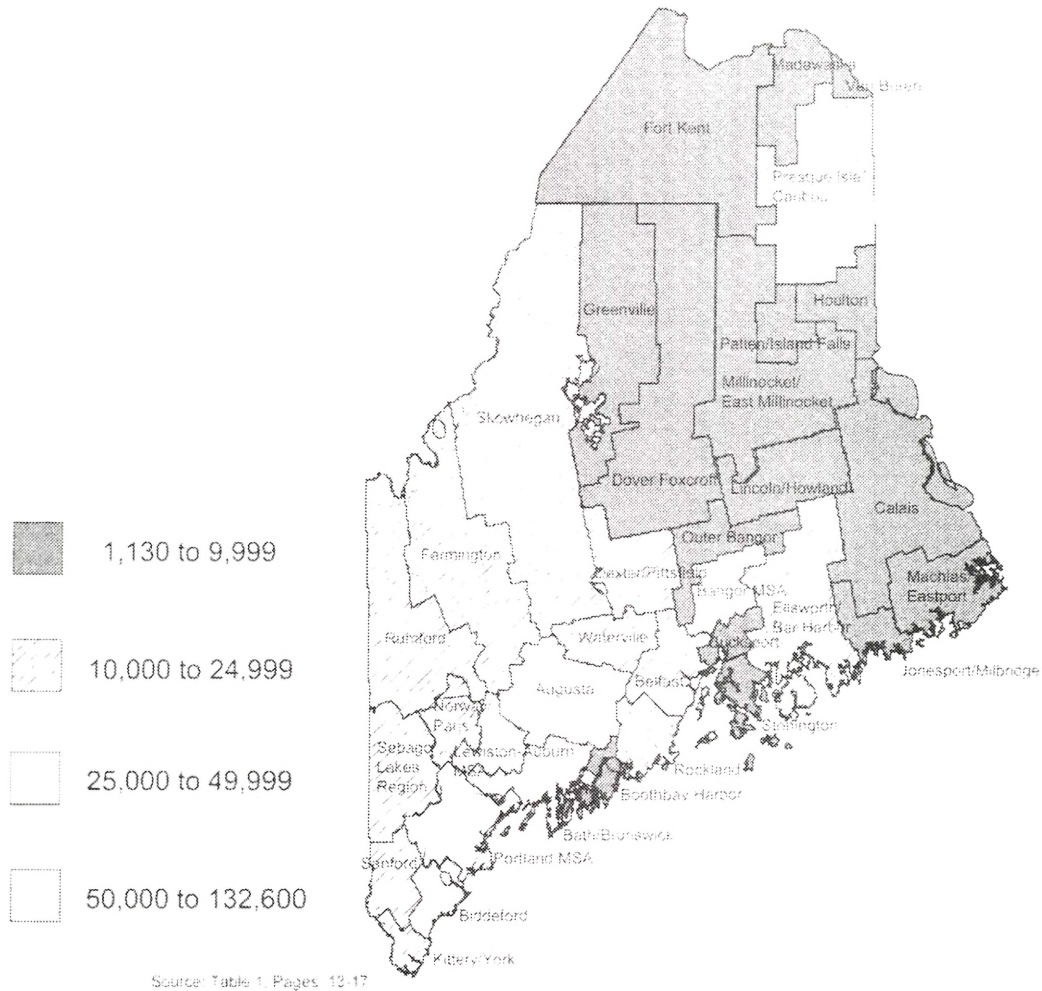
No amendments included.

Source: LURC, Andrew Fisk.

Backup Table 12 MCD Summary

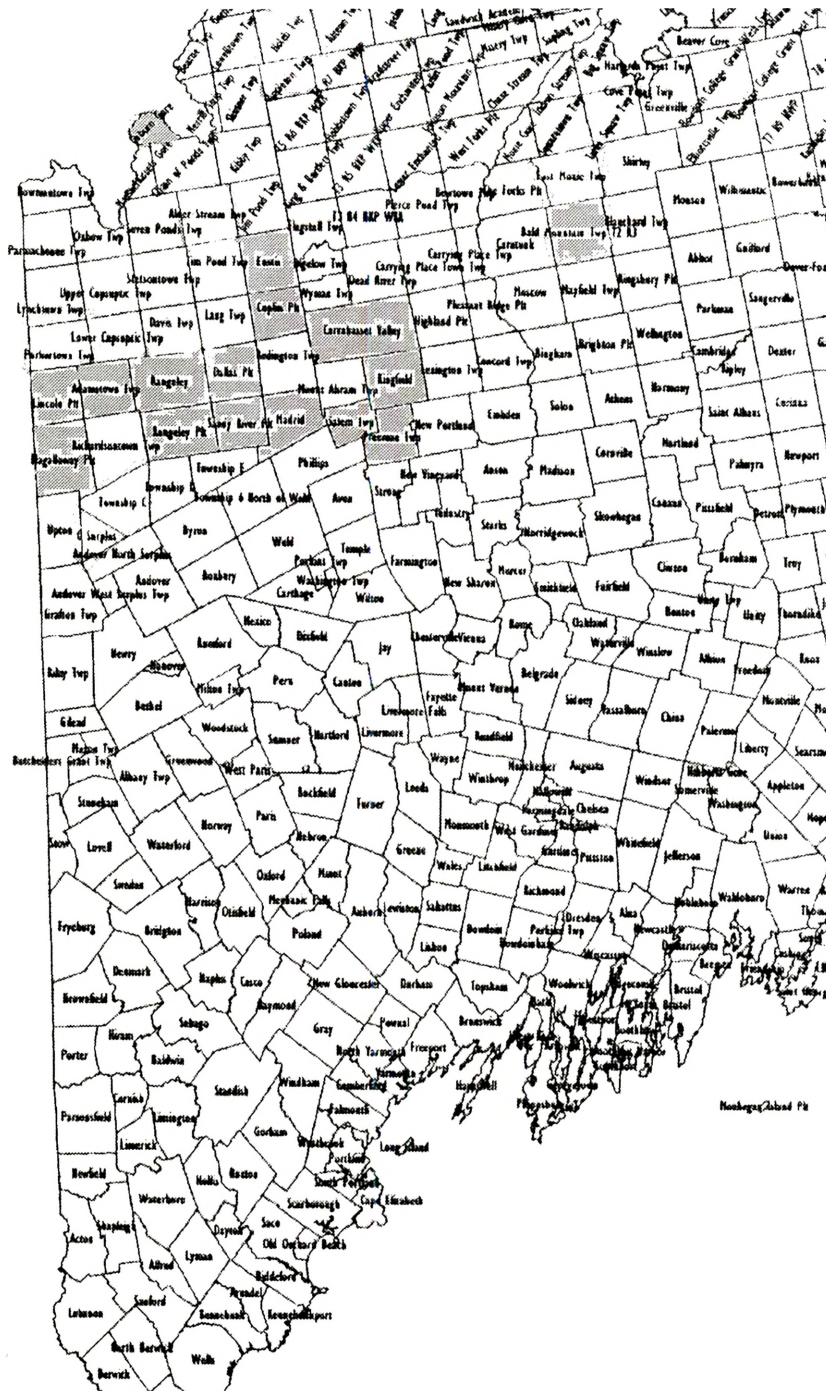
NUMBER OF TRACTS									
	Adams	Dallas	Rangeley Plt.	Richards- town TWP	Sandy River TWP	Town C	Town D	Town E	REGION TOTAL
<u>Number of Acres</u>									
0 - 1.0	27	296	365	0	249	4	5	26	972
1.1 - 2.0	16	134	280	0	94	4	0	0	528
2.1 - 3.0	6	45	104	1	39	0	0	0	195
3.1 - 4.0	4	37	53	0	19	1	0	0	114
4.1 - 5.0	1	26	36	0	10	0	0	0	73
5.1 - 10.0	8	37	52	0	18	2	0	0	117
10.1 - 20.0	2	30	37	0	24	0	0	1	94
20.1 - 50.0	3	35	100	0	63	3	0	0	204
51.1 - 100.0	1	13	17	2	11	0	0	1	45
100.1 - 250.0	1	4	8	0	8	1	1	0	23
250.0 - 500.1	1	2	3	0	2	2	0	3	13
500.1 - 1,000.0	0	1	2	1	2	1	0	1	8
1,000.1 - 5,000.0	2	0	1	0	6	0	2	1	12
5,000.1 - 10,000.0	2	1	0	1	0	0	0	0	4
10,000.1 +	2	1	1	0	0	2	1	1	8
<u>Exempt</u>									
Unidentified	62	629	993	2	515	12	7	33	2253
E	0	5	2	0	4	0	0	0	11
F	0	2	0	0	0	0	0	0	2
OS	0	3	1	0	0	0	0	0	4
T	13	15	58	3	18	8	2	1	118
T/O	0	1	1	0	0	0	0	0	2
T/V	0	0	4	0	0	0	0	0	4
V	1	7	0	0	7	0	0	0	15
V?	0	0	0	0	1	0	0	0	1
<u>Land Use</u>									
Unidentified	0	2	42	0	0	0	0	0	44
1C1C*	0	0	0	0	1	0	0	0	1
2R1C	0	0	0	0	1	0	0	0	1
1 HO/1R	0	0	1	0	0	0	0	0	1
AG	0	1	0	0	0	0	0	0	1
C	0	3	3	0	5	0	0	0	11
CF	1	8	0	3	7	6	0	4	29
CF/CRR	0	1	0	0	0	0	0	0	1
CF/ME	6	0	1	0	3	2	2	0	14
C*	0	0	3	0	1	0	0	0	4
HO	0	2	2	0	7	0	0	0	11
I	0	1	0	0	0	0	0	0	1
ME	0	0	3	0	0	0	0	0	3
ME*	0	0	1	0	0	0	0	0	1
OS	3	1	0	0	0	0	0	0	4
PB	0	3	1	0	2	0	0	0	6
PL	0	4	3	0	34	2	2	3	48
PL/ME	4	0	0	1	0	0	0	0	5
R	33	277	428	1	173	5	5	26	948
R - CONDO	0	0	0	0	1	0	0	0	1
R/C	0	2	0	0	0	0	0	0	2
R, C, ME	0	0	1	0	0	0	0	0	1
U	0	0	4	0	1	4	0	0	9
UT	0	0	1	0	309	0	0	0	310
V	25	356	563	0	0	1	0	0	945
V, ME	0	0	2	0	0	0	0	1	3
=	4	0	0	0	0	0	0	0	4
<u>Utility</u>									
0	76	662	1059	5	545	5	9	34	2395
Nonzero	0	0	0	0	0	0	0	0	0
<u>Number of Entries</u>	76	662	1059	5	545	5	9	34	2395
<u>Total No. of Acres</u>	44092.1	25602.4	27715.33	5874.6	20896.9	54107.4	22763	19038.8	220090.53

Backup Figure 1
MDOL Labor Market Areas

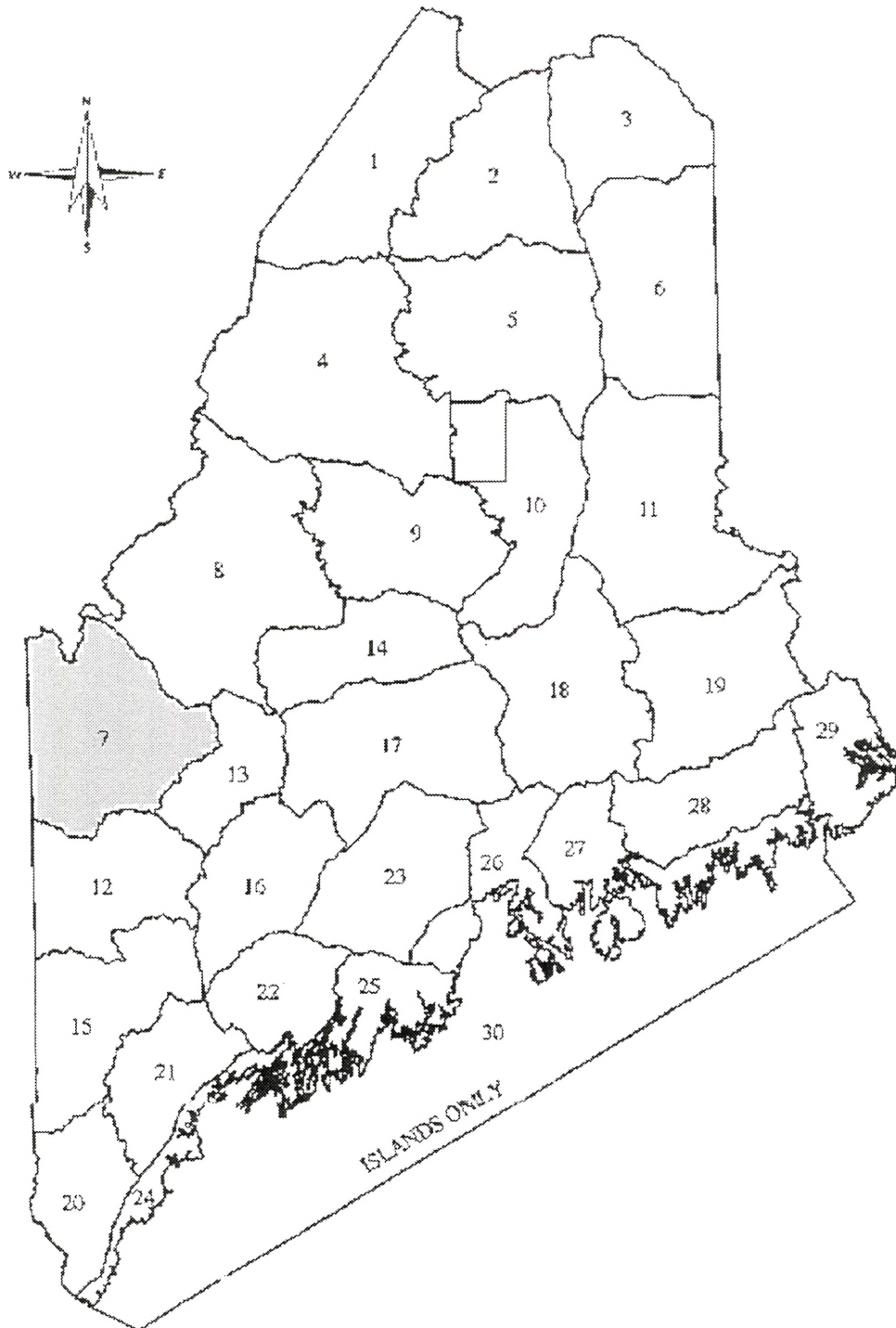


Source: Maine Dept. of Labor, 1999, p. 11.

Backup Figure 2
Rangeley Economic Summary Area



Backup Figure 3
Maine's Wildlife Management Divisions



ATTACHMENT A

CROSS COUNTRY SKI RESORTS

MAINE

<u>Area</u>	<u>Location</u>	<u>State</u>	km of <u>Trails</u>	km of <u>Dog Trails</u>
A Fierce Chase Cross Country Ski Trails	Monson	ME	10	
Bethel Inn	Bethel	ME	35	
Black Mountain Touring Center	Rumford	ME	13	
Carter's SC Ski Center	Oxford	ME	85	35
Five Fields Farm	Bridgton	ME	27	15
Harris Farm XC Ski Center	Dayton	ME	40	
Smiling Farm XC Ski Center	Westbrook	ME	35	
Sugarloaf/USA Outdoor Center	Carrabassett Valley	ME	101	18
Sunday River XC Ski Center	Newry	ME	40	5
Average			42.9	18.3
High			101	35
Low			10	5

CROSS COUNTRY SKI RESORTS

NEW HAMPSHIRE

<u>Area</u>	<u>Location</u>	<u>State</u>	km of <u>Trails</u>	km of <u>Dog Trails</u>
Balsams-Wilderness XC	Dixville Notch	NH	80	
Bear Notch Ski Touring Center	Bartlett	NH	70	30
Bretton Woods Cross Country	Bretton Woods	NH	95	
Darby Field Inn	Albany	NH	18	
Eastman Cross Country	Grantham	NH	36	
Great Glen Trails Outdoor Center	Gorham	NH	40	5
Gunstock Cross Country and Snowshoe Center	Laconia	NH	37	
Jackson Ski Touring Foundation	Jackson	NH	96	
King Pine Ski Touring Center	Madison	NH	15	
Loon Mountain Cross Country	Lincoln	NH	35	
Nordic Enter at Waterville Valley	Waterville Valley	NH	66	
Nordic Skier/Wolfeboro X-C	Wolfeboro	NH	20	20
Norsk XC	New London	NH	60	4
Timberland Trails	Conway	NH	20	
Average			49.1	14.8
High			96	30
Low			15	4

CROSS COUNTRY SKI RESORTS**VERMONT**

<u>Area</u>	<u>Location</u>	<u>State</u>	km of <u>Trails</u>	km of <u>Dog Trails</u>
Blueberry Lake XC	Warren	VT	30	30
Bolton Valley Holiday Resort	Bolton Valley	VT	30	10
Burke Cross Country Ski Area	E. Burke	VT	70	
Catamount Family Center	Williston	VT	20	
Craftsbury Outdoor Center	Craftsbury Common	VT	85	7
Grafton Ponds Nordic Ski	Grafton	VT	30	
Hazens Notch XC Ski Center	Montgomery Center	VT	30	
Hermitage Cross Country Ski Touring Center	Mount Snow Valley	VT	35	
Highland Lodge	Greensboro	VT	65	
Hildene XC Ski Center	Manchester	VT	22	
Mountain Top XC Ski Resort	Chittenden	VT	70	
Okemo Valley Nordic Center	Ludlow	VT	28	
Olels Cross Country Center	Warren	VT	50	
Prospect Mountain SC Ski Center	Woodford	VT	35	
Smugglers' Notch Nordic Center	Jeffersonville	VT	25	
Stowe Mountain Rd.	Stowe	VT	35	
The Equinox	Manchester Village	VT	38	15
The Viking Nordic Center	Londonderry	VT	30	
Timber Creek SC Ski Area	Wilmington	VT	14	
Trapp Family Lodge	Stowe	VT	55	
Wild Wings Ski Touring Center	Peru	VT	25	
Woodstock Touring Center	Woodstock	VT	60	
Average			40.1	15.5
High			85	30
Low			14	7

