

The 1995 Vermonter Poll Report: Use of Computers and Telecommunications Equipment

General Findings

A series of questions was asked of Vermonters concerning their use of computers and electronic telecommunications services. As advances in communications and computing technology encourage the use of the Internet and other online services, many rural residents are beginning to increase their access to educational, economic, and service resources.

Some significant trends were identified for Vermont, including:

- An increase in households having home computers from 42.8% in 1993 to 50.3% in 1995.
- An increase in modem use for households with computers from 35.2% in 1993 to 49.6% in 1995.
- An increase in the use of Internet or other service providers, from 50.0% of home computer users with modems in 1993 to 57.4% in 1995.

Computer Use at Home

The ownership and use of computers in Vermont households has grown in the last three years of the survey (Table 1). In 1995, 50.3% of households reported owning a personal computer, compared to 48.3% in 1994 and 42.8% in 1993. However, growth in household ownership of computers has slowed slightly from an increase of 5.5% from 1993 to 1994 to 2% from 1994 to 1995.

Table 1. Percent of Vermont Households with a Personal Computer

"Do you or does someone in your household have a personal computer at home?"

	1993	1994	1995
Yes	42.8	48.3	50.3
No	57.0	51.5	49.5
Don't Know	.2	0.0	.1

Source: 1995 Vermonter Poll, Center for Rural Studies, University of Vermont.

Telecommunications Modems

1995 saw a sharp increase in household ownership of PC modems (Table 2). In 1995, 49.6% of PC's had modems attached to them, compared to 34.5% in 1994. Comparatively, there was little change in modem ownership between 1993 and 1994. This growth may reflect the interest generated in online resources and the simultaneous explosion of information available through online services, especially the World Wide Web.

Table 2. Percent of Personal Computers in Vermont Households with Telecommunications Modems

"Is there a telecommunications modem with this computer?"
(Referring to question in Table 1)

	1993	1994	1995
Yes	35.2	34.5	49.6
No	60.6	63.4	46.1
Don't Know	4.2	2.1	4.3

Source: 1995 Vermonter Poll, Center for Rural Studies, University of Vermont.

Telecommunication Services

Respondents to the 1994 and 1995 surveys who reported using home computers and communications modems were asked what type of on-line service they accessed (Table 3). In 1995, the largest number of respondents (57.4%) used their modems to access commercial services such as America On-Line, Compuserve, or a local Internet service provider. This reflects a 7.4% increase in access over 1994. University or school access stayed roughly the same at approximately 15%, and other services saw decreases in access. Vermont Automated Library System (VALS) and Local Bulletin Board systems both showed a decrease in access from 1994 to 1995.

Table 3. Percent of Vermont Household with PC Modems Using Online Services, by Type of Service

"Which, if any of the following online services do you access from home?"

	1994	1995
Vermont Automated Library System	8.8	6.8
University/School System	15.0	15.3
Other Commercial Internet Access Provider (such as America On-Line, Compuserve, Prodigy, Delphi)	50.0	57.4
Local Bulletin Board System	17.5	14.2
None of the Above	2.5	5.7
Don't Access Any Services with this modem	15.0	12.5
Don't Know	11.3	6.3

Source: 1995 Vermonter Poll, Center for Rural Studies, University of Vermont.

We also asked respondents with modems who did not access any services why they did not access services. For the 24.5 percent of respondents in this category, a lack of interest or perceived benefit was the biggest reason. Other reasons included: cost; the respondents used work access; they didn't know; they did not have time; or they were self-described computer illiterates.

Finally, we asked those individuals who owned computers and used dial-up services what they did once they were on-line (Table 4). Electronic Mail was most popular, with 47.2% of respondents indicating use. World Wide Web or graphical data services were used by 27.3% of the respondents, compared to Gopher or text-based data services, which were used by 16% of the respondents. With the increase in data transmission speeds over modems, graphical information is within the grasp of more users.

Table 4. Percent of Vermont Households with PC Modems Using General Telecommunication Services, by Type of Service

"Do you use these services to access:"

Electronic Mail	47.2
Gopher Services	16.0
World Wide Web Services	27.3
None of the Above	27.3

Source: 1995 Vermonter Poll, Center for Rural Studies, University of Vermont.

1995 Vermonter Poll - Introduction and Methodology

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Introduction:

The 1995 Vermonter Poll is a unique opportunity for researchers, policy makers, social advocates, and citizens to examine changes in public opinion regarding contemporary, and often controversial, issues in the public arena. Since 1990, the Center for Rural Studies at the University of Vermont has conducted four, state-wide polls of registered Vermonters (1990, 1993, 1994, and 1995). Results of these studies help document evolving public attitudes toward a variety of concerns with implications for public policy, programming development, and the allocation of shrinking public resources. Specific issues addressed in the Vermonter Poll Series include: favorability toward political figures; agriculture and the environment; community growth and economic development; satisfaction with community services; property tax reform; and the use of computers and communications technology. Additional questions are added to, or deleted from, the Vermonter Poll as issues become more or less timely.

The first report of the 1995 polling results focuses specifically on Vermonters' support of the "Contract with America" and favorability toward a number of state and national political figures. Political figure favorability responses are first compared to Vermonter's responses to similar questions in the 1993 Vermonter Opinion Poll. Additional comparisons are made according to whether respondents live in Chittenden County or Vermont's Northeast Kingdom. Finally, responses are analyzed according to selected respondent demographics including age, education, income, and gender.

Additional reports will be produced as analysis of the Vermonter Poll data progresses and issues become more timely. Future reports will focus on bovine somatotropin, the quality of Vermont's natural environment, community growth and development, public transportation, and electronic communications--computer use and Internet access.

Methodology

The 1995 Vermonter Poll was conducted and sponsored by the Center for Rural Studies, College of Agriculture and Life Sciences, University of Vermont. This is the fourth in a series of state wide polls assessing the attitudes and orientations of voting Vermonters. This survey was conducted from December 4th to 7th, 1995, during the evening hours of 4 p.m. and 9 p.m.. Vermont households were contacted at random and survey respondents were selected randomly within participating households.

The 1995 survey was expanded to include specific survey samples for Chittenden County and the Northeast Kingdom (Caledonia, Essex, and Orleans Counties). While 400 surveys initially were needed to permit a statewide analysis of sufficient statistical confidence and precision (95%, +/- 5%), both Chittenden County and Vermont's Northeast Kingdom (Essex, Orleans, and Caledonia

Counties) were over-sampled to allow for separate and comparative analyses of these distinct regions. In total, 702 registered Vermont voters completed the survey. To compensate for over sampling in certain parts of the state, different weights were assigned to data depending on the analysis required (See Table A). Weights were determined using the proportion of Vermont's total households found in these regions during the 1990 U.S. Census of Population and Housing. The results of the weighting process yielded a representative statewide sample population of 705 cases.

Table A.		Survey weights.		
Region	Households NEK in 1990* Comparison	Total Responses (N=702)	Assigned Weights	
			Statewide Analysis	Chittenden County Comparison
Chittenden County	48,439 0.531515	281	0.573016	1.000000
Northeast Kingdom	21,855 1.000000	118	0.632668	0.488113
Remaining 10 Counties	140,356 1.195300	303	1.549295	1.195300
Confidence/Precision 90%, +/-5%			95%, +/-5%	90%, +/-5%

* Source: U.S. Census of Population and Housing, Summary Tape File 1A: Vermont.

A conservative estimate of the margin of error associated with the statewide analysis is +/- 5.0% with a confidence interval of 95.0%. This means that if the survey were to be redone, 95 percent of the time the results would be the same within +/-5.0 percentage points for each particular question. The margin of error for the Chittenden County and Northeast Kingdom analyses is +/- 5.0% with a confidence interval of 90.0%. The margin of error associated with any given item in the survey increases as the sample size for individual questions are examined in greater detail such as in cross-tabulations.