

# INFO-AGE

# PASSPORT

# PROJECT

## CANADIAN FREE-NETS: Surveying the Landscape on the Info Highway

In a prior report entitled **Canadian Free-Nets: At a Crossroad on the Information Highway**, Canada West Foundation (CWF) explored the challenges facing Canada's non-profit community networks or Free-Nets. This roadmap supplements this earlier report by introducing the results of a survey conducted by CWF in the Fall of 1996.

The **Info-Age Passport Project** is a three year joint initiative

of the Canada West

Foundation, the

University of Calgary

and the Calgary Public

Library. It is funded in

part by the Kahanoff and

Wild Rose Foundations.

The purpose of the

project is to enhance

public access to the

information highway, to

educate the non-profit

sector about the Internet

and to share the

experience of **Calgary**

**Free-Net** organizers

and volunteers with

communities across

Alberta and Canada.

**FIGURE 1: Profile of Networks**

Start-up Dates of Respondent Community Networks	
Prior to 1995	12
January - June of 1995	6
July - December of 1995	5
January - June of 1996	3
After July of 1996	3
Size of Local Population Served by Respondent Networks	
Under 50,000	6
50,000 to 100,000	3
100,000 to 200,000	8
200,000 to 500,000	5
500,000 to 1,000,000	3
Over 1,000,000	4
Total Users of Respondent Community Networks	
Under 250 Users	4
250 to 500 Users	3
501 to 1,000 Users	6
1,001 to 3,000 Users	6
3,001 to 6,500 Users	3
6,501 to 10,000 Users	3
Over 10,000 Users	4

**SOURCE:** Canada West Foundation Survey, 1996.

## INTRODUCTION

The purpose of the CWF survey was to uncover patterns of success as well as the problems that community networks face in their day to day operations. Detailed results of the 29 Free-Nets surveyed can be found in the matrix on pages two through four.

Respondents to the survey represent a good cross-section of existing community networks. **Figure 1** provides a profile of the survey respondents, revealing an even distribution of networks serving both smaller and larger communities, and with smaller and larger numbers of users. The sample contains both newer and older community networks, but there was a slight oversampling of the more established Free-Nets.

The survey sample includes community networks of almost every shape and size, but it is not perfectly representative of all Free-Nets in Canada. The survey did not question the entire population, nor was it conducted among a random sample. Thus, the survey results can only be applied to the respondents themselves. Nevertheless, the sample does provide us with a diverse group of Free-Nets, whose answers to the survey questions help us better understand the current status of community networking in Canada.

(Continued in the Supplement Page 5)

This report was authored by Shawn Henry, Research Associate with the Canada West Foundation and CWF Research Assistant Casey Vander Ploeg. Data for this report was collected by telephone, fax and electronic mail during the months of October and November of 1996 by Monica Gattinger, Research Associate with the Canada West Foundation.

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# A ROADMAP TO CANADIAN FREE

Background					Users				Info Providers
	Name	Location	Local Population	Start-Up Date	Members	Non Members	% Active	Fees (Range)	Non-Profit
1	Antigonish Community Network	Antigonish, Nova Scotia	Under 50,000	Before 1995	1,500	0	1% to 25%	Free to \$100 a year	1 to 50
2	Asquith Community Access Project	Asquith, Saskatchewan	100,000 - 200,000	January - June 1996	0	40	91% to 100%	Free to \$125 & up a year	0
3	Brant Free-Net	Brant, Ontario	100,000 - 200,000	Since June 1996	0	750	51% to 70%	Free to \$50 a year	1 to 50
4	Calgary Free-Net Association	Calgary, Alberta	500,000 - 1,000,000	Before 1995	1,306	3,282	81% to 90%	Free to \$95 a year	1 to 50
5	Campbell River Community Network	Campbell River, BC	100,000 - 200,000	January - June 1995	0	1,500	91% to 100%	Free to \$30 a year	1 to 50
6	Cape Breton Free-Net Society	Sydney, Nova Scotia	50,000 - 100,000	January - June 1995	0	680	91% to 100%	Free to \$125 & up a year	1 to 50
7	Central Alberta Free-Net Exchange	Red Deer, Alberta	50,000 - 100,000	January - June 1996	0	35	51% to 70%	Free to \$75 a year	1 to 50
8	Chebucto Community Net	Halifax, Nova Scotia	200,000 - 500,000	Before 1995	3,000	5,000 +	51% to 70%	Free	200 +
9	CIAO !	Trail, BC	Under 50,000	July - December 1995	450	3,150	51% to 70%	Free to \$100 a year	1 to 50
10	Durham Free-Net Inc.	Oshawa, Ontario	200,000 - 500,000	July - December 1995	2,500	0	51% to 70%	Free	51 to 100
11	Edmonton Free-Net	Edmonton, Alberta	500,000 - 1,000,000	Before 1995	9,000 +	0	71% to 80%	\$30 a year	101 to 200
12	Fredericton Area Network Inc.	Fredricton, New Brunswick	Under 50,000	July - December 1995	83	580	26% to 50%	Free to \$30 a year	1 to 50
13	Great Plains Free-Net	Regina, Saskatchewan	100,000 - 200,000	Since June 1996	80	220	81% to 90%	Free	1 to 50
14	Gull Lake Community Network	Gull Lake, Saskatchewan	Under 50,000	January - June 1996	49	0	91% to 100%	Free to \$125 & up a year	1 to 50
15	Halton Community Network	Milton, Ontario	1,000,000 +	Before 1995	500	0	26% to 50%	Free to \$30 a year	1 to 50
16	Hamilton-Wentworth Free-Net	Hamilton, Ontario	200,000 - 500,000	January - June 1995	11,158	3,907	51% to 70%	\$20 to \$50 a year	51 to 100
17	HOMEtown Community Network	Arva, Ontario	500,000 - 1,000,000	July - December 1995	1,000	0	51% to 70%	\$75 to \$125 & up a year	1 to 50
18	KawarthaNET	Peterborough, Ontario	100,000 - 200,000	July - December 1995	0	750	81% to 90%	\$75 to \$125 & up a year	1 to 50
19	Nanaimo SchoolsNET	Nanaimo, BC	100,000 - 200,000	Before 1995	2,500	0	51% to 70%	Free	1 to 50
20	National Capital Free-Net	Ottawa, Ontario	1,000,000 +	Before 1995	0	58,000	51% to 70%	Free	200 +
21	Niagara Peninsula Free-Net	Niagara Falls, Ontario	200,000 - 500,000	January - June 1995	6,000	0	71% to 80%	Free to \$125 a year	51 to 100
22	Prince George Free-Net	Prince George, BC	50,000 - 100,000	Before 1995	100	0	91% to 100%	Free	1 to 50
23	Toronto Free-Net Inc.	Toronto, Ontario	1,000,000 +	Before 1995	38,400	0	26% to 50%	Free	1 to 50
24	Saskatoon Free-Net Association Inc.	Saskatoon, Saskatchewan	100,000 - 200,000	January - June 1995	0	3,000	51% to 70%	Free to \$50 a year	101 to 200
25	Sea to Sky Free-Net Association	Squamish, BC	Under 50,000	Before 1995	70	500	N/A	Free	1 to 50
26	St. John's InfoNET	St. John's Newfoundland	Under 50,000	January - June 1995	0	1,535	N/A	Free	1 to 50
27	ValleyNet	Abbotsford, BC	100,000 - 200,000	Since June 1996	0	500	71% to 80%	Free	1 to 50
28	Vancouver Community Network Association	Vancouver, BC	1,000,000 +	Before 1995	2,300	6,700	91% to 100%	Free	101 to 200
29	Victoria Free-Net Association	Victoria, BC	200,000 - 500,000	Before 1995	492	17,500 +	N/A	Free	1 to 50

# ADMAP TO CANADIAN FREE-NETS

Info Providers		User Interface and Modem Lines				Public Access Terminals		Personnel	
Non-Profit	Business	User Interface	Dial-Up Lines	PAT Lines	Administration Lines	Locations	Terminals	Volunteers	Paid Staff
1 to 50	1 to 50	Text and Graphical	No Access Provided			3 to 5	6 to 10	26 to 50	1.5 to 2.0
0	1 to 50	Text and Graphical	48	4	0	3 to 5	1 to 5	1 to 25	0.5 - 1.0
1 to 50	1 to 50	Graphical	30	0	2	6 to 10	6 to 10	26 to 50	0
1 to 50	1 to 50	Text and Graphical	49	4	2	3 to 5	11 to 20	51 to 75	1.5 to 2.0
1 to 50	0	Text and Graphical	18	4	2	3 to 5	6 to 10	1 to 25	0
1 to 50	1 to 50	Graphical	49	0	0	6 to 10	100 +	1 to 25	1.5 to 2.0
1 to 50	0	Text	3	0	0	0	0	1 to 25	0
200 +	1 to 50	Text	72	0	0	6 to 10	51 to 100	51 to 75	1.5 to 2.0
1 to 50	0	Text and Graphical	36	0	0	0	0	1 to 25	0
51 to 100	0	Text	32	0	2	6 to 10	6 to 10	1 to 25	1.5 to 2.0
101 to 200	1 to 50	Text	106	0	0	20 +	21 to 50	126 to 150	2.5 to 3.0
1 to 50	0	Text	12	0	0	3 to 5	1 to 5	1 to 25	0
1 to 50	0	Text	4	0	0	6 to 10	6 to 10	1 to 25	0
1 to 50	101 to 200	Text and Graphical	6	0	0	3 to 5	11 to 20	1 to 25	0
1 to 50	0	Text	7	0	0	0	0	101 to 125	0
51 to 100	0	Text	60	0	3	1 to 2	1 to 5	101 to 125	1.5 to 2.0
1 to 50	1 to 50	Text and Graphical	70	0	0	20 +	51 to 100	1 to 25	3 or More
1 to 50	1 to 50	Text and Graphical	32	0	0	1 to 2	1 to 5	1 to 25	1.5 to 2.0
1 to 50	0	Text	36	0	0	0	0	1 to 25	0.5 - 1.0
200 +	1 to 50	Text	170	15	0	11 to 20	21 to 50	76 to 100	3 or More
51 to 100	1 to 50	Text and Graphical	95	11	5	6 to 10	11 to 20	1 to 25	3 or More
1 to 50	1 to 50	Text	12	0	0	1 to 2	6 to 10	1 to 25	0
1 to 50	1 to 50	Text	172	10	10	11 to 20	21 to 50	26 to 50	2.5 to 3.0
101 to 200	0	Text	15	0	1	3 to 5	1 to 5	51 to 75	1.5 to 2.0
1 to 50	0	Text	4	1	1	1 to 2	1 to 5	1 to 25	0
1 to 50	1 to 50	Text	6	0	0	1 to 2	6 to 10	26 to 50	0
1 to 50	0	Text	5	1	1	1 to 2	1 to 5	26 to 50	0
101 to 200	0	Text	42	8	1	20 +	51 to 100	26 to 50	1.5 to 2.0
1 to 50	0	Text and Graphical	40	14	2	11 to 20	21 to 50	26 to 50	1.5 to 2.0

(Continued on Page 4)

## ROADMAP (Continued)

	Finances			Revenue Sources	Chance of Survival
	1995 Revenue	1995 Expenses	1996 Expenses	Individuals, Corporate, Government, Public Institutions and Other	
1	Under \$50,000	Under \$50,000	Under \$50,000	100% Individuals	75% Plus
2	N/A	N/A	Under \$50,000	95% Individuals and 5% Government	75% Plus
3	N/A	N/A	\$75,000 - \$100,000	75% individuals, 12.5% Corporate and 12.5% Government	75% Plus
4	\$75,000 - \$100,000	\$75,000 - \$100,000	\$100,000 - \$150,000	90% Individuals and 10% Public Institutions	75% Plus
5	\$50,000 - \$75,000	\$50,000 - \$75,000	\$100,000 - \$150,000	Unavailable	75% Plus
6	\$150,000 - \$200,000	\$150,000 - \$200,000	\$150,000 - \$200,000	80% to 90% Individuals and 10% to 20% Government	75% Plus
7	N/A	N/A	Under \$50,000	100% Individuals	75% Plus
8	Unavailable			Unavailable	Unavailable
9	Under \$50,000	Under \$50,000	Under \$50,000	80% Individuals and 20% Government	75% Plus
10	\$150,000 - \$200,000	\$150,000 - \$200,000	\$150,000 - \$200,000	10% Individuals, 20% Corporate 60% Government and 10% Other	25% or Less
11	\$200,000 - \$300,000	\$200,000 - \$300,000	\$200,000 - \$300,000	80% Individuals, 12% Corporate and 8% Public Institutions	75% Plus
12	\$50,000 - \$75,000	Under \$50,000	Under \$50,000	5% Individuals and 95% Public Institutions	75% Plus
13	Under \$50,000	Under \$50,000	Under \$50,000	40% Individuals, 5% Government and 55% Public Institutions	75% Plus
14	N/A	N/A	Under \$50,000	66% Individuals, 15% Corporate, 2% Government and 17% Public Institutions	75% Plus
15	Unavailable			Unavailable	25% or Less
16	\$300,000 +	\$300,000 +	\$300,000 +	45% Individuals, 16% Corporate, 35% Government and 4% Public Institutions	50% to 75%
17	Unavailable			Unavailable	Unavailable
18	Unavailable			85% Individuals and 15% Public Institutions	75% Plus
19	All in Kind Donations			100% Public Institutions	75% Plus
20	\$300,000 +	\$300,000 +	\$200,000 - \$300,000	69% Individuals, 5.5% Corporate, 18.5% Government and 7% Other Sources	50% to 75%
21	\$200,000 - \$300,000	\$200,000 - \$300,000	\$200,000 - \$300,000	25% Individuals, 15% Corporate, 35% Government and 25% Public Institutions	75% Plus
22	Under \$50,000	Under \$50,000	Under \$50,000	80% Individuals, 15% Corporate and 5% Public Institutions	75% Plus
23	\$100,000 - \$150,000	\$150,000 - \$200,000	\$150,000 - \$200,000	90% Individuals and 10% Corporate	25% or Less
24	Under \$50,000	Under \$50,000	Under \$50,000	50% Individuals, 10% Corporate, 20% Government and 20% Public Institutions	25% to 50%
25	Under \$50,000	Under \$50,000	\$50,000 - \$75,000	33% Individuals, 33% Corporate, and 33% Government	25% or Less
26	Unavailable			Unavailable	Unavailable
27	Under \$50,000	Under \$50,000	\$50,000 - \$75,000	10% Individuals, 20% Corporate, and 70% Government	75% Plus
28	\$150,000 - \$200,000	\$150,000 - \$200,000	\$100,000 - \$150,000	27% Individuals, 60% Government, 5% Public Institutions and 8% Other Sources	25% or Less
29	\$50,000 - \$75,000	\$50,000 - \$75,000	\$75,000 - \$100,000	40% Individuals, 5% Corporate, 40% Government and 15% Other	75% Plus

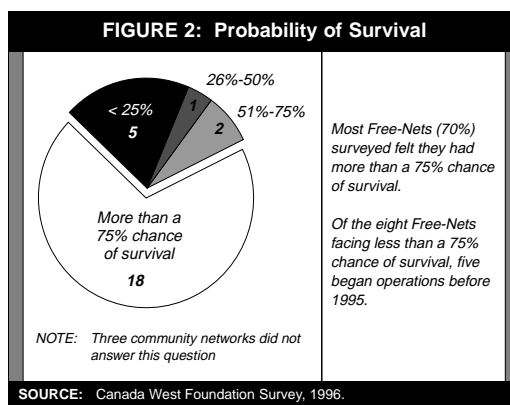
# INFO-AGE PASSPORT PROJECT

## SUPPLEMENT: Surveying the Landscape on the Info Highway

### THE KEY VARIABLE: Probability of Survival

The earlier Canada West study identified a number of challenges facing Canadian Free-Nets such as high start up and maintenance costs, keeping up with technology, denial of charitable status and competition with for-profit Internet providers. This survey questioned Free-Nets about the first two challenges and the funding model each uses. Answers to these questions were then assessed in light of their relationship to a **key dependent variable** of this study – the extent to which each Free-Net believes they will “survive” the next year.

When asked about the likelihood of their organization's survival, eight of the 29 Free-Nets said they had less than a 75% chance of surviving the next year (**Figure 2**). These community networks are below what we consider to be a *critical survival threshold*. Interestingly, five of these eight began operations before 1995. Almost half of the 12 community networks which began before 1995 are below the critical survival threshold, and four of them also serve communities with populations in excess of one million. These are some of the largest and longest running Free-Nets in Canada. If they fold, community networking will be dealt a serious blow.

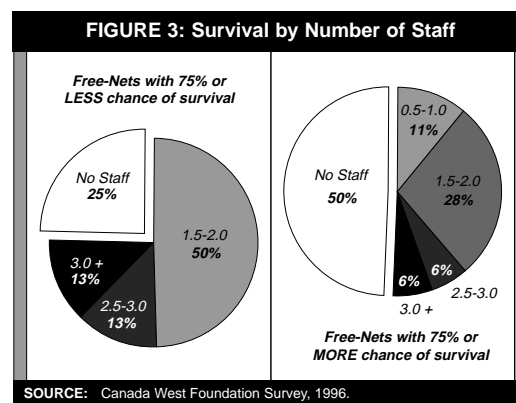


The rest of this study will focus on other factors associated with a low probability of survival.

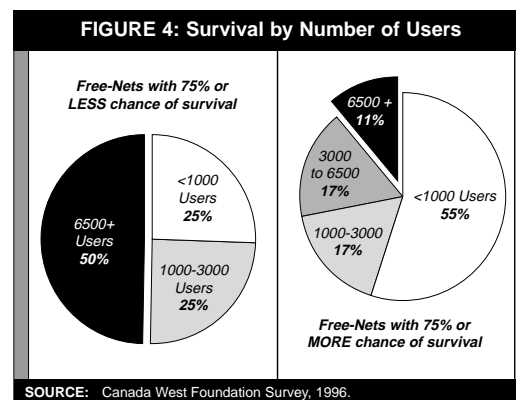
### 1. High Operating Costs

A number of expenses contribute to the daunting task of starting and maintaining a Free-Net, not the least of which is the huge cost of modem lines. Of the nine Free-Nets with more than 50 lines, four are below the critical survival threshold. In fact, two of these four have over 100 lines. In our survey only one Free-Net with 100 or more lines is above the critical survival threshold of 75%.

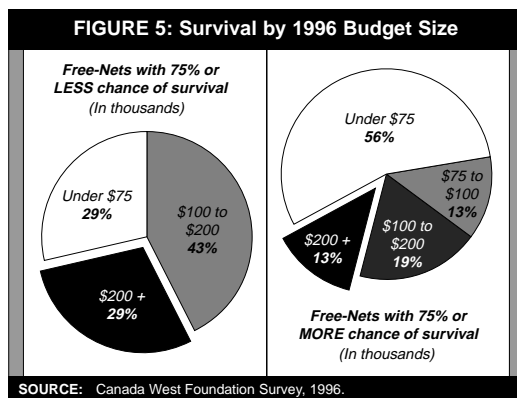
The cost of human resources also presents a challenge to community networks. As **Figure 3** shows, most of those below the survival threshold (75% of them) have more than 1.5 full-time staff positions. In comparison, half of those community networks above the survival threshold have no staff, and only 39% have more than 1.5 full-time staff members.



The correlation between the size of a Free-Net and its probability of survival is seen again when we consider the numbers using a Free-Net system. As shown in **Figure 4**, half of those Free-Nets below the survival threshold have more than 6,500 total users, with three exceeding 10,000 users. Supporting such a large group takes enormous resources. Only two Free-Nets with more than 6,500 users were above the survival threshold.

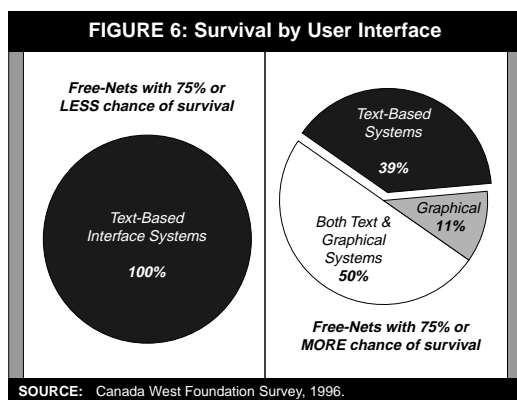


The relationship between large Free-Nets and a lower probability of survival strengthens even more when we look at finances. **Figure 5** shows the respondent Free-Nets according to their 1996 expenses and their probability of survival. About 70% of those below the survival threshold spent over \$100,000 in 1996. By comparison, only 32% of those above the survival threshold spent that much.



## 2. Keeping Up With Technology

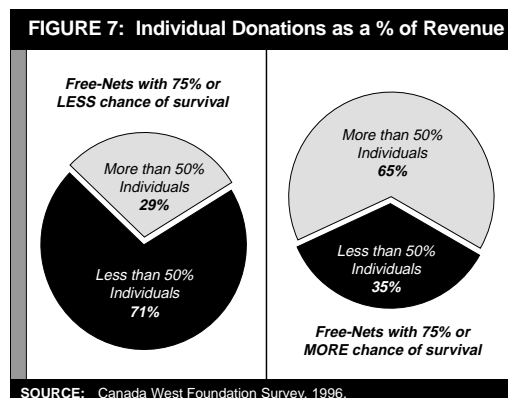
Keeping up with the rapidly evolving Internet world is difficult for even the most avid enthusiast. No one understands this more than Canada's Free-Nets, who were operating long before the arrival of multi-media on the Internet. Today, many Free-Nets are in a position where they must decide whether to move from a *text-based system* to a *graphical user interface*. The costs of such a move are overwhelming, but not doing so can make a Free-Net obsolete. All of the Free-Nets under the survival threshold offer only a text-based interface (**Figure 6**). Alternatively, all of those which have moved to a graphical user interface are above the critical survival threshold.



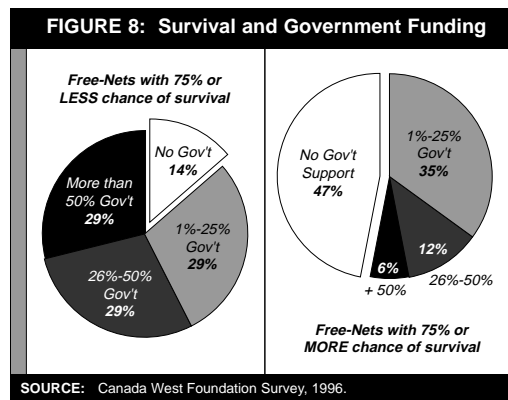
A defining feature of Free-Nets is their desire to expand access to more and more people, particularly by providing *Public Access Terminals* or *PATs* – computers in public places with Internet access. Of the 29 networks surveyed, only 4 did not provide *PATs*. There is no correlation between maintaining *PATs* and the probability of survival, but three of the eight troubled community networks do have more than 10 public access terminal locations.

## 3. Funding Models

Free-Nets were originally designed to provide free modem access, but the costs have risen to where this is a difficult goal to sustain. While 12 of the community networks surveyed still offer absolutely free access, most levy a fee along with limited free access. Of the 12 offering completely free access, five were below the critical survival threshold. Drawing on a solid base of individual supporters is important to the survival of a Free-Net (**Figure 7**). Of the eight in trouble, only 30% receive more than half of their revenue from individuals. On the other hand, 65% of those above the survival threshold receive more than half of their revenue from individual supporters.



Some Free-Nets have accessed other funding sources, but they have proved somewhat unreliable. This is especially true of government funding. In Ontario, for example, the *Networking Infrastructure Program (ONIP)* was recently cut by the provincial government. The impacts of lost government funding are shown in **Figure 8**. Almost half of the networks above the critical survival threshold receive no government funding, and thus have not been hurt when such funding disappears. On the other hand, almost 85% of those networks below the survival threshold have received government funding. In fact, two of the three Free-Nets which received more than half of their funding from government have less than a 25% chance of survival.



## CONCLUSIONS

- 1) Eight of the 29 Free-Nets in the survey said they face an uncertain future. This is a wake up call to the Free-Net community, governments and Canadians;
- 2) The Free-nets most in danger of collapsing are the more established and larger networks;
- 3) The need to expand services and keep up with technology is a burden for some Free-Nets. All of those with less than a 75% chance of survival have yet to move to a graphical user interface;
- 4) Providing free access to the Internet is becoming an impossible mission. As community networks grow, so do the operating expenses and the need to develop a stable funding base; and
- 5) Some of the most stable Free-Nets are those whose primary source of income are individual users of the community network. Those more dependent on government funding are more likely to express a lower chance of surviving.