

YUKON 2000

COMMUNICATIONS

BROADCASTING AND
TELECOMMUNICATIONS

Draft Discussion Paper

Prepared for the

Yukon Economic Development Strategy

Fall Conference

Stephen Armstrong
Stratavision Inc.
On Behalf of
Community & Transportation Services
October 21, 1986

1.0 INTRODUCTION

This paper examines communications in the Yukon from the perspective of economic development. It begins with an overview of the Yukon communications environment, identifying each component and its economic impact. A framework for assessing the potential for economic development is then developed, based on recent literature on the subject. Finally, opportunities for the continuing development of communications in the Yukon are identified.

2.0 The Yukon Communications Environment

The communications environment in the Yukon contains two key components: broadcasting and telecommunications. These two components are discussed separately in this section.

2.1 Broadcasting

Broadcasting may be examined from three viewpoints. These are: services; programming; production facilities.

2.1.1 Services

There are three radio services originated in the territory: CBC radio; CKRW; and CHON-FM. In addition, the CBC Northern Television Service is available throughout the territory and, in communities served by cable, a wide variety of both Canadian and U.S. television

services are available. Together, these services generate approximately \$3 million in revenues and employ approximately seventy people.

Table I provides a detailed overview of the availability of broadcast services in the Yukon.

Table I: Availability of Broadcast Services in the Yukon

Table VII: Availability of Off-Air Television and Radio Services and Cable Television

Location	Classification*	C B C		Private Radio (CKRW)	Non-Commercial Radio (NNBY) (CHON-FM)	Community Radio	Cable or Rebroadcast Systems	DI Dishes
		Radio	TV					
Beaver Creek	UI	X	X (YTG)					YTG-TVRO
Burwash Landing	UI	X	X (YTG)	X**	X			NNBY-TVRO
Carcross	UI	X	X (YTG)	X**	X		X	NNBY-TVRO
Carmacks	V	X	X (YTG)	X**	X	X	X	YTG-TVRO
Dawson	T	X	X	X		X	X	CBC/ / DAWSON CITY-T
Destruction Bay	UI	X	X (YTG)					NNBY-TVRO(via Burwash)
Eisa	H	X	X					CBC
Faro	T	X	X				X	CBC/WHTV-TVRO
Haines Junction	V	X	X (YTG)	X**	X			YTG-TVRO
Kenc	UI	X	X					CBC
Marsh Lake	RA	X	X					No TVRO
Mayo	V	X	X	X**	X		X	CBC-NNBY-TVRO
Old Crow	UI	X(YTG)	X (YTG)	X**	X	X		YTG-TVRO
Pelly Crossing	UI	X(YTG)	X (YTG)	X**	X	X		YTG-TVRO
Ross River	UI	X	X (YTG)	X**	X			NNBY-TVRO
Stewart Crossing	UI	X(YTG)	X (YTG)					YTG-TVRO
Tagish	RA	X	X (YTG)				X	No-TVRO
Teslin	V	X	X (YTG)	X**	X			YTG-TVRO
Upper Liard	UI	X	X	X**	X			NNBY-TVRO
Watson Lake	T	X	X	X**	X		X	CBC/NNBY/WHTV-TVRO
Whitehorse	C	X	X	X	X		X	CBC/WHTV-TVRO
White River	RA	X	X (YTG)					No TVRO
		22	22	13	13	4	8	

* UI - unincorporated community; T - town; V - village; RA - rural area; C - city; H - hamlet

** Available in communities via satellite; the CKRW service is substituted for the the CHON-FM service whenever CHON-FM is not broadcasting -- i.e. 7 p.m. - 7 a.m.

As Table I illustrates, there are significant disparities in the availability of broadcast services in the Yukon.

Eleven recognized Yukon communities have access only to the CBC television and radio services, while those communities with cable and rebroadcast systems have access in varying degrees to all local services plus the CANCOM package, which includes four Canadian and four US television services as well as a number of Canadian radio services. Communities with cable may also have access to such discretionary services as pay television depending on the uncertain quality of the signal received from the Anik C satellite.

2.1.2 Programming

CKRW provides 23 hours of local programming each weekday, with another 46 hours on the weekend. CHON-FM provides 12 hours each weekday. CBC radio provides 46 1/2 hours of local programming per week in addition to the CBC national radio programming it carries. Local radio programming recently has been reduced as a result of cuts to the CBC budget.

The CBC Northern Television Service has 21 1/2 hours available for regional programming each week as part of its regional service in addition to the CBC national network programming. Of these 21 1/2 hours, approximately 3 hours of programming originates in the North and includes such programs as *Focus North* and *Northland*. Approximately 15 minutes per week will be Yukon content this coming year.

In addition to this, varying amounts of local radio and television programming are provided by community radio stations and the community television channel operated by WHTV.

While Yukoners are relatively well served by local radio programming, they are very poorly serviced by local television programming.

2.1.3 Production Facilities

CBC Yukon has studio and remote audio production capability. As well, a CBC television production crew has now been established in the Yukon, with editing facilities. This crew will produce material for *Focus North*, *Northland* and for other CBC services.

Northern Native Broadcasting Yukon (NNBY) has eight track audio production facilities and remote production capability. As well, NNBY is developing a television production facility with initial plans to produce 26 half hour programs on the Yukon.

CKRW has both studio and remote audio production facilities. WHTV and the Ross River Broadcasting Society have studio television production facilities.

In addition, there are two independent production houses in the Yukon capable of producing broadcast quality audio and visual productions. As well, the Libraries and Archives Branch of the Government of Yukon have acquired VHS consumer quality video equipment which will be made available on a loan basis to community groups and individuals interested in producing programming.

In spite of significant disparities in the availability of broadcast services and local programming, a local production industry in the Yukon has begun to take shape.

2.2 Telecommunications

Telephone and related telecommunications services are provided in the Yukon by Northwestel. The area served by the company includes all of the Yukon, the western portion of the Northwest Territories and northern British Columbia.

Northwestel is subject to federal jurisdiction and therefore, is regulated by the Canadian Radio-Television & Telecommunications Commission. The services provided by the company include local, private line and public long distance telephone services and telegraph/telex services. Remote areas are served by radiotelephone.

The specialized telecommunications services offered by Telecom Canada and by CNCP currently are not available as part of the standard service package offered by Northwestel. However, the company has plans to provide the specialized Telecom Canada services in the near future and currently offers the CNCP services on a special request basis. These specialized services include a wide variety of voice and data transmission services designed to meet clients' need for high volume transmission or special data applications.

Rates for local residential services range from \$4.60 per month to \$7.20 per month. Rates for business services vary from \$8.90 per month to \$14.45 per month. In more remote locations, rates for the RuralTel II radiotelephone service involve charges for network access (\$6.00 per month residential; \$12.00 per month business), use (6 cents per minute for originating local calls only), rental of the radio telephone set (\$40.00 per month) and a one-time installation charge (\$200.00).

While there are no accurate statistics, actual penetration of telephone services in the Yukon is estimated to equal only 85% of all households, which is approximately 14% lower than the national average of 98.6% in 1984. However, given that some residents of the territory may choose not to have a telephone, penetration of telephones among households who wish to have access to the service may be somewhat closer to the national average.

Table II illustrates total operating revenues to NorthwTel in 1984 and 1985, divided by category of services. This table clearly demonstrates the high reliance of the company on long distance revenues. In 1985, local revenues accounted for only 11% of total revenues, while long distance accounted for 58%. The ratio between long distance revenue and local revenues is much higher for NorthwTel than it is for other telephone companies in Canada.

Table II: Operating Revenues: 1984 and 1985 (\$000 unless otherwise indicated)

	<u>1984</u>	<u>% of Total</u>	<u>1985</u>	<u>% of Total</u>	<u>Change</u>
Local	6,772	12%	6,957	11%	+3%
Long Distance (includes telegraph)	32,373	58%	35,336	58%	+9%
Private Line	12,939	23%	13,027	22%	+0.6%
Other (includes broadband and telex)	3,541	6%	5,088	8%	+44%
Total	55,625		60,408		+9%

Table III provides a summary of key financial indicators for the company in 1984 and 1985.

Table III: Key Financial Indicators, 1984 and 1985 (\$000 unless otherwise noted)

	<u>1985</u>	<u>1984</u>
Gross Revenues	\$ 60,408	\$ 55,697
Income Before Income Taxes	12,522	12,049
Total Financing Cost	7,436	6,247
Income Taxes	6,537	6,075
Net Income	5,985	5,974
Dividends	3,591	3,830
Earnings per Share	\$8.09	\$8.07
Dividend per Share	\$4.85	\$5.18
Equity	54,134	51,740
Return on Equity	11.3%	11.8%
Long-Term Debt	58,433	56,187
Debt/Equity Ratio	51.9%	52.1%
Return on Investment	12.2%	11.7%
Gross Plant Additions	16,230	14,301
Total Plant, at Cost	178,351	168,686

Source: *Northwestel Annual Report, 1985, p.3.*

Of the \$60.4 million in revenues generated by the company in 1985, approximately \$13 million was generated in the Yukon.

In 1985, NorthwesTel employed 492 employees at a salary cost of approximately \$15 million. Of these employees, 300 were located in the Yukon. As such, in 1985 NorthwesTel employed 64% of all Yukon personnel involved in the communications/utility sector and 3.1% of the total Yukon workforce, injecting approximately \$9.6 million in salaries into the local economy. Based on current trends, it is expected that NorthwesTel will continue to be a major source of employment in the Yukon economy, employing approximately 2.6% of the predicted Yukon workforce of 11,206 in 1987.

While there are other companies selling and servicing telephones and related equipment in the Yukon, the above description of the Yukon telecommunications environment has demonstrated that the current structure and performance of NorthwesTel is the dominant factor. This environment is characterized by a relatively high level of access to basic service in the large communities with some evidence to suggest that inequities may exist in the availability of telephone service in other areas of the territory. As well, the current absence of specialized services constitutes a significant gap in the services available to business and larger volume users.

3.0 Communications and Economic Development

3.1 Broadcast

In the Report of the *Study Team* to the Task Force on Program Review (the Nielsen Task Force) on Economic Growth: Culture and Communications, the authors examined the relationship between subsidies to cultural activities and economic growth. They concluded that the nature of demand for cultural products such as television programs is very different from that of other products. The cultural production process does not result in the production of a series of identical products for which customer demand is unlimited. Instead, it results in the production of a single unique product which most consumers will demand only once. The value of the product is its uniqueness, making it a very high cost and high risk product.

A cultural industry, then, such as program production and to a certain extent broadcasting, does not have the opportunity to develop economies of scale in the actual production process. Therefore, it remains a high cost, labour-intensive industry with a relatively low economic impact multiplier. As such an investment in television broadcast production in the Yukon will not necessarily lead to an economic return on the investment made.

However, purely economic criteria may be offset in government-decision-making by other factors, such as quality of life or cultural considerations.

Enhanced quality of life in Yukon communities is important both for the current residents and for those new residents that may be attracted to the communities as economic development occurs. Consequently while there may not be an economic justification for increased production of broadcast programming, it is probably fair to say that without increased choice in entertainment programming in the communities, there may be a negative impact on attracting new residents to communities tht are currently underserved. The areas where the broadcast communications are less than could be desired are outlined in Section 2.0.

3.2 Telecommunications

In *The Impact of International Competition on the Canadian Telecommunications Industry and Its Users* (a study commissioned by the federal and provincial governments from D.A. Ford and Associates Ltd.), the authors assess the impact of the rates charged for telecommunications services on the productivity and efficiency of businesses in Canada. Based on their analysis, they conclude that lower telecommunications rates are not in and of themselves sufficient to convince businesses to move their operations to locations where there are lower rates available. However,

should such lower rates become available, the authors are convinced that the positive impact of such rate decreases on Gross National Expenditures and employment would be greater than if tax reduction of comparable magnitude were to be implemented.

These findings suggest that action by governments in the area of telecommunications, designed to increase service and/or lower rates, could be justified in purely economic terms.

It is worthy of note that the Department of Community and Transportation Services is participating with the Federal and Provincial governments in a study of the Impact of Telecommunications on Regional Economic Development. Results will be assessed in the spring of 1987 when this work will be completed.

4.0 Opportunities in the Yukon Communications Environment

As was demonstrated in Section 2.0, gaps do exist in the availability of communications services in the Yukon. However, as was discussed in the preceding section, programs to address these gaps are unlikely to be wholly justifiable based on economic grounds alone. This is especially the case in broadcasting and in the area of program production in particular. Any policy framework developed by the Government of Yukon to address communications, then, should contain policy objectives which address economic, and cultural and quality of life policy objectives.

Given this, key opportunities in both broadcasting and telecommunications may be identified.

4.1 Broadcasting

Two key opportunities exist in the area of broadcasting:

First, programs could be established to address the disparities which exist between Yukon communities with respect to the availability of broadcast services. There is a role for the Government in increasing the choice of broadcast services available to residents of underserved communities. A number of methods could be employed to accomplish this including:

- i) encouraging private enterprise to extend service to presently underserved communities;
- ii) providing information packages designed to assist communities in implementing local initiatives; and
- iii) subsidizing provision of services.

Secondly, the extremely low level of Yukon originated television programming on the CBC Northern Television Service constitutes a major gap in the local/regional television service available to Yukoners in comparison to the level of service found in any other region of the country. Methods to address this problem could range from discussions with the CBC designed to encourage the carriage of more Yukon-based programming to the establishment of a heavily subsidized local Yukon television service carrying a full complement of Yukon news, information and related programming. Activities in this area can be expected to provide an economic stimulus in this sector of the Yukon economy provided that there is an emphasis placed on local production of the programming that is to be broadcast.

A strengthened local television production industry will also provide the opportunity for additional locally produced material to be sold to other television networks operating in Canada and around the world. This has the double benefit of further increasing demand for local services and also providing an impetus to tourism as more exposure is given to the Yukon throughout the world.

However, with respect to both of these broadcast opportunities, it must be remembered that government programs could not be justified in economic terms alone and that other policy objectives must be served. This suggests that cultural and quality of life issues must be considered in program design and implementation.

4.2 Telecommunications

Gaps also appear to exist in the availability of basic telephone service in the Yukon and in the availability of specialized telecommunications services. Programs designed to close these gaps could have direct economic impact to the extent that local residents and businesses gain access to basic telephone service and larger volume users have access to services which allow them to operate more efficiently and productively.

Programs to deal with these service gaps would largely take the form of influence programs directed towards the Canadian Radio-Television & Telecommunications Commission and the federal Department of Communications designed to make them more sensitive to the particular needs and interests of residents of the Yukon. However, such programs could not be seen in and of themselves as sufficient to attract "new business" to the Yukon but rather, could work in conjunction with other government programs by providing an overall improvement in the climate for business activity. In addition, to the extent that such programs do increase access to telephone service for residents of remote areas, quality of life objectives also could be served.