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ABSTRACT

Cable television can dramatically increase the existing television offerings and open up important new services for the public. It offers a double potential: one for general service within a limited geographic part of the region and one for highly selective service all across the region. As a result, television will no longer have to be everything to everybody. However, this potential may not develop because of the boundaries of local government within which franchising takes place. Local franchising presents two problems: small municipalities may not attract a cable franchise, and interconnection between municipalities may not take place. Furthermore, because no production assistance or funding has been provided by the federal government, the promise of channels reserved for public agencies, organizations, and individuals may not occur. In order to curtail these deficiencies, the following actions are recommended: 1) although cable television will be developed by private individuals, it should be subject to public regulation; 2) although regulation will be handled essentially by municipalities, the state should set forth standards to assure that all built-up areas be covered and interconnected and to assist public programing; 3) the legislature and governor must act in 1973. (JK)

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CITIZENS LEAGUE REPORT

**CABLE TV:
FOR THE
NEIGHBORHOOD
AND FOR
THE REGION**

EM 010993

The job of the governor and Minnesota legislature in resolving
the four key issues of interconnection, coverage, franchising and programming -- in 1973

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FOR THE
NEIGHBORHOOD
AND FOR
THE REGION

The job of the Governor and the Minnesota Legislature in resolving the four key issues of interconnection, coverage, franchising and programming...in 1973

Prepared by
Citizens League Cable TV Committee
John W. Pulver, Chairman

U S DEPARTMENT OF HEALTH
EDUCATION & WELFARE
OFFICE OF EDUCATION

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INTRODUCTION

Cable TV has the potential of providing increased opportunities for a number of new programming uses of TV, for new forms of communication and for the delivery of many existing and new services. Initially, it will provide significant channel capacity that can be leased by the private market, programs put together by the operator on additional channels and open up three TV channels for use by groups, organizations, individuals and by schools and municipalities. It also provides opportunities for specialized programming directed to people with similar interests throughout the Twin Cities area. Eventually, cable holds the promise of new two-way communications from one TV viewer to another viewer. Enormous numbers of public and private services may then be provided on or use the same wire that provides TV programs.

We will not come near to realizing the potential of this new communications medium, however, if we continue to follow our present public policies. These policies on the cable service territory, connection of systems throughout the region, and the procedures for granting permission to cable companies to operate, are clearly inadequate. It is possible -- in fact, likely -- that if we continue to rely upon them, the local channels reserved for the public will not be used or will be ineffectively utilized: that large numbers of people within many built-up suburban communities will not receive or be able to use cable; that specialized programs which require a large regional market to reach their limited audience will not be developed; and that the public at large and governmental agencies will not be involved in determining what use to make of cable or the services they find desirable or necessary before and after the systems are built. All of this will result in the loss of much of cable's potential.

Decisions by the Legislature are urgently needed now...when cable is first beginning to develop....on the public framework for its development, the mechanism for consumer and user choice about the type of system to develop and the services it should provide. If these are not determined soon -- before additional systems are built and in operation -- we will not only lose a public resource and many opportunities, but will find ourselves trying to put together these pieces in the future. This subsequent effort will require years....if ever....not only for rebuilding early systems, but also for recapturing the public use potential which we may have lost.

MAJOR IDEAS

Cable television is coming -- a wire with a tremendous channel capacity and two-way capability. Its technology is not revolutionary. But its potential is dramatic, nevertheless. It will add a major dimension to our communications system in the metropolitan area . . . comparable to the dimension added to aviation when the jet simultaneously doubled the size of planes and their speed.

The communications possibilities of cable can dramatically increase the existing offerings on TV and open up important new services for the public. Increased TV entertainment . . . getting Vikings home games to viewers without sacrificing income to owners . . . high school and college football games . . . and additional movies are all possible. Prime-time programs built around special interests -- music, wrestling, art, auto racing, gardening, religion, and public affairs -- can be produced by organizations and directed to individuals with these interests. Public agencies -- schools, villages, cities, libraries, and hospitals -- can reach consumers or residents with information, classes, and new services, or, on a short-circuit basis transmit information, hold meetings, etc. between public buildings. New services -- burglar and security alarms, meter reading, and even diagnosis of patients in their homes -- are possible. Finally, small merchants can reach their markets while other private users can conduct polls on their products, run credit checks, conduct in-home shopping, or hold conferences from various plants and office locations in the metropolitan area.

There is, then, a double potential that cable can offer to its subscribers. One is for general service, within a limited geographic part of the region. The other is for highly selective service, all across the region. No longer will television be constrained to be, necessarily, every-thing to every-body. There can now be specialized, and profitable, markets -- one built around geographic areas and one built around particular interests.

This potential will be largely frustrated, however, by the pattern in which cable is beginning to develop. The system is being fundamentally shaped by the historic boundaries of local units of government within which the franchising takes place. In part, this is desirable -- since one market for programs will be the local community market. But it presents two major problems:

- * Some municipalities are not large enough individually to attract a cable system, though they would be attractive if treated as a part of a broader service area. The system of individual municipal franchising may deny these built-up communities service.
- * The opportunity for multiple, areawide programs of specialized interest on the many channels of cable will be missed--or, at least, delayed--if something is not done to interconnect the individual cable systems from the beginning. Cable is not unlike the telephone: Imagine what the phone system would be like if it were organized in only a few municipalities . . . and lacked the capability to send calls from St. Paul to Minneapolis, to White Bear Lake, or to Bloomington!

. I N O U R R E P O R T

Beyond the physical problem of system interconnection, there is the question of programming--especially for public use.

With cable, now, the federal government is trying a new approach (as contrasted with radio and broadcast television). 'Public' agencies, organizations and individuals are being provided with separate and reserved channels, at no cost to them. Present arrangements, however, make this promise illusory--since no production assistance, and funding, is provided. Nor is assurance built into the cable-contracting process for the various public users and subscribers to have a voice in the important local decisions that may well commit a municipality for 10 to 15 years.

How can these deficiencies be remedied?

1. We envision cable television will be developed not by the government but by private owners who can absorb the risk of this new venture. As an enterprise with many characteristics of a 'public utility' it must, however, have some public regulation.
2. We envision this regulation continuing to be handled, essentially, by the municipalities . . . but within a new public framework of objectives and standards, which should be set by the state. We propose the state set forth standards to assure:
 - * that all built-up areas will be covered.
 - * that systems will be interconnected from the beginning.
 - * that public programming will be assisted.
 - * that procedures will be followed to protect the public interest in the adoption of local contracts.
3. Only the Legislature and the Governor can seize the opportunity presented by cable television, and give the necessary--and urgently needed--basic direction to its inevitable and imminent development in the urban areas of this state. We are living on borrowed time, and action is imperative in 1973.

Again: action need not be significantly delayed. We commend municipalities for refraining from granting franchises during this past year, until basic issues would be thought through. Our proposal for state standards will initially cover all new--and, eventually, all--franchises. No further 'moratorium' is required, for a long study of the issues. The state needs only the six months required to establish, in law, the framework for the development of cable and to provide the needed assistance to the municipalities.

Major development can be under way in 1973, if the Governor will take the leadership and if the Legislature will respond.

BACKGROUND AND FINDINGS

I. Cable television is coming into the metropolitan area.

- A. The Federal Communications Commission (FCC) adopted rules in February, 1972, that opened up cable to the top 100 markets including the Twin Cities area.
- B. Cable companies are requesting permission (a franchise) from many municipalities to install their systems -- e.g., Bloomington, Lakeville, Farmington have awarded franchises, while city councils are in the process of doing this in Fridley and St. Louis Park. Discussion is under way in Minneapolis, St. Paul, New Hope, Crystal, Robbinsdale, Golden Valley, Edina, Richfield, Eden Prairie and Hopkins.

II. Cable television has considerable potential as a new communications system both for regional and neighborhood use.

- A. The technology of cable is rapidly developing -- increasing its capacity and possible uses.

The cable (coaxial cable) is a shielded wire capable of carrying a large number of electromagnetic signals which are sustained by amplifiers as they move along the wire. In a cable system these wires extend out in a network up to 25 miles (usually 5-10 miles) from a central point -- the head end.

Currently a cable can provide material on 24-27 channels to television sets equipped with a device (converter) that permits reception and selection from among these channels. The total number of channels available can be significantly increased by continued development of amplifiers and/or by building the system with dual cable (two cables bundled together).

The "cable" not only has considerable one-way signal capacity but also has the ability to carry signals in two directions if equipment (an amplifier and a responder, simple digit response unit, a voice transmitter, or camera for video signals) is installed at the viewing end to send signals back along the cable for two-way communication.

Various devices (filters) also make it possible to selectively block out reception of some signals to all television sets other than those equipped to receive them. This makes possible essentially closed-circuit use of cable for contracting users, for specialized audiences and the use of cable for pay television.

- B. Cable systems developed in the metropolitan area will initially provide a modest increase in the number of programs available to viewers on additional television channels and will improve reception of present channels for some of them.

- 1. Possibly 9-15 of a 27-channel one cable system will be in use when the system is installed. These will include the programs on the six over-the-air channels presently viewed in the metropolitan area (channels 2, 4, 5, 9, 11 and 17). Two additional channels will carry programs from independent stations in Chicago or Milwaukee while a few others may

carry continuous weather, stock and news reports, and FM radio. The cable company may put together programs on a separate channel when the cable system begins operation. Another two channels will be available for programs produced by educational and local governmental agencies and a third by community organizations and individuals.

2. Some viewers may experience improvements in the clarity of TV reception, especially from conditions causing interference (tall buildings, closeness to transmitters, airplanes, etc.) in the reception of some channels.

Providing TV reception to areas that otherwise could not receive a clear signal, and improving the reception of sets in cities with substantial interference, were the primary reasons for the initial development of cable. Many rural towns were either isolated by mountains which limited quality reception of TV signals or were located beyond the range of over-the-air broadcast TV. Cable eliminated problems with reception and generally increased the number of channels available to TV viewers in these communities by importing them from a number of cities. In other instances such as New York City, cable simply improved TV reception for viewers from interference caused by tall buildings.

The early cable systems--some found in towns in outstate Minnesota--had only a few channels (usually 12) with little if any locally originated programming. This early development, however, was important as it established the principle of subscriber payment for service.

3. A person living within a community with a cable system has the opportunity of receiving this service for a monthly charge (usually \$5-6). Additional sets may be connected to cable for an additional charge (about \$1). If a person desires the service, the cable will be installed by running the line (a drop) from a wire (feeder) which is hung from existing telephone or power company poles to his home and then to one or more TV sets. When utilities are installed underground, the service is similarly routed underground. A charge (from \$6-20) is usually made for this installation, but it is frequently waived as part of a promotional program.

An existing TV antenna does not need to be removed when cable is installed but it will be disconnected. When the cable system is using more than 13 channels the TV viewer who desires to see these will further require a set top device (a converter - about \$30-40) that allows him to select from the additional channels with the selection dial on his TV set.

C. Cable systems proposed for development in metropolitan areas today--with their considerable and growing channel capacity--open up many opportunities for numerous uses by both private organizations and the public.

1. Many channels (12-15 on a single cable and up to 40 on two cables) will be available on a lease arrangement from cable operators to businesses, organizations, or agencies interested in using cable for general audiences or specialized purposes.
2. Two channels will be reserved at no cost for local governmental and educational use, with another (public access) available to the public at-large (either organizations or individuals) on a first-come, first-served basis.

3. Cable operators may also use a channel for locally originated programs. These will probably cover local events or items of interest in the territory they serve (local news, high school athletic events) together with movies and whatever else the operator can put together to attract customers to subscribe to cable.
- D. Cable systems built today--with significant penetration (number of subscribers), further development of technology and investment in terminal equipment for two-way uses--have substantial potential to provide many new services.

Some observers suggest that cable TV development may be comparable to the advent of electricity and the dramatic changes occurring after power was produced and lines built for distribution. Only after electricity was available did inventors and entrepreneurs begin to think out and develop various uses for it.

At the present time, no one has a clear idea of what uses will be found for cable communications. Some of the possible new services currently suggested however, include the following in their ascending order of technical sophistication and cost of terminal equipment:

1. Services possible on the basic cable equipment network without return or two-way capability:
 - House or apartment hunting.
 - Job-finding assistance.
 - Political speeches and presentations by local candidates or public officials.
 - Low-cost advertising by small merchants.
 - Public health, product health education.
 - "How-to" programs -- find a doctor, find day care, get drug counseling, read a lease or credit agreement, make a home budget.
2. Simple monitoring services requiring a limited digital (non-voice) return capability:
 - Opinion and product polling.
 - Reading water, electric and gas meters.
 - Security -- fire and burglar alarms.
 - Monitoring flows in water mains, sewers, volumes left in oil tanks, automatic plant functions, air pollution.
3. Two-way audio communication services with limited information retrieval and channel access controls:
 - Merchandise and price comparison (quality, unit price).
 - In-home shopping.
 - Pay television -- movies and sports events.
 - Hold conferences or group meetings from remote locations.
 - Participate in debates, panels, discussions.
 - Professional development programs -- doctors, teachers, etc.
 - Credit checks.
 - Monitor location of vehicles.

4. General-purpose data services capability:

Computer assistance in figuring monthly bills, taxes, etc.
Facsimile reproduction of mail, newspapers, library materials.
Computer sharing.
Data transmission and retrieval to banks, billing facilities, etc.
Adding a "cable ordering" capability onto a "mail order" system.

5. Two-way video services with channel access controls.

Physician diagnosis and treatment of individuals.
Business and professional conferences.
Closed circuit TV within and between buildings.
Traffic surveillance.

Many of these services--especially those requiring advanced two-way capability and auxiliary equipment--will not be available when cable systems begin to operate. A substantial market of consumers must first be assembled. Many of them will also require development of new types of equipment not yet available and, as importantly, additional investment by users and/or consumers who desire them. Some may also develop on other than cable systems with either separate wires or wires of the telephone company, or on microwave relay systems. In all probability it will take a number of years for most of them to develop.

The capacity of the cable system that comes with its additional channels, its ability to serve small areas and devote channels to particular uses, and its expansibility, however, all combine to make cable a new communications complex -- a television of abundance.

III. The Federal Communications Commission (FCC) has left considerable room to other levels of government and to cable companies in choices about what uses to develop in individual cable systems and the pattern of local cable system development.

A. The federal government through the FCC has preempted regulation of many programming aspects of cable TV, set minimum technical standards and required federal certification of each franchise.

The FCC in 1972 opened up the metropolitan markets for development of cable by lifting a ban imposed in 1966 upon the importation of distant signals. At the same time it adopted a set of rules regulating cable TV development. In these rules it preempted other levels of government from regulation of some aspects of this industry in contrast with the almost complete earlier preemption of over-the-air radio and television broadcast.

The FCC in its recent cable rules has preempted regulation over cable by states or localities in a few areas (television signal carriage), asserted limited preemption in others by permitting states and localities to supersede minimum FCC regulations (technical standards), in a third category has preempted many areas subject to a waiver to allow state and local regulation (number of reserved designated access channels), and finally has left open some areas to determination by the state and local units of government in its recognition of franchise provisions (boundaries of the territory to be covered by a franchise).

Overall, the spirit of FCC cable TV regulations is one which encourages experimentation with different methods of tapping the potential of cable television.

B. There are many important local choices to be made in the development of cable.

Regulation of cable beyond the requirements of the FCC largely occurs in the provisions built into franchises awarded by municipalities to cable operators. The state currently does not have any role or policies on the development of cable, its function or use in the state.

Under the present process, individual municipalities which appear to constitute an attractive potential market are approached by cable companies seeking a franchise.

A franchise is required to obtain permission from the local unit of government to cross or install cables on public streets, alleys and public rights-of-way. The franchise, however, may contain a number of provisions which are binding on the cable company in the grant of permission by the village. This possibility makes the franchise appear much like a contract and opens up opportunities for public discussion and choice in many areas.

Some of the local choices include the types of services a system provides, the design and layout of the cable network which affects opportunities for specialized programming, the amount of subscriber fees, the interconnection of systems, and the quantity and location of production facilities a cable company must provide. Important decisions are also made by municipalities in their choice of the specific company that will receive the franchise and operate the system.

The local franchising authority largely determines what procedures they will employ in granting a franchise. The present state law grants municipalities the power to award franchises for up to 25 years. The only requirement to make the franchise effective in villages under the municipal code is majority approval by the village council and subsequent publication. Some villages or cities with charters may be required to hold public hearings before granting a franchise. Typically, the ordinance (setting specifications) authorizing the franchise and the franchise document itself are drafted and adopted simultaneously. The FCC in its rules has also suggested some procedures. They require a statement from the municipality showing that it considered in a public proceeding the system operator's legal, character, financial, technical and other qualifications; and limit the length of franchises to 15 years. The FCC procedural requirements, however, leave considerable room to municipalities in actually determining what steps to take and the degree of public involvement in them.

CONCLUSIONS

I. Cable systems developed in the Twin Cities area must be interconnected from the beginning simply to assemble the market necessary for both private and public regional programs and services and to develop those connected to many specialized interests within this metropolitan area.

A. Much of the significant potential for cable will not be realized without interconnection of cable systems in the metropolitan area.

1. Many of the most significant future uses of cable--especially two-way services--will depend upon investment in them and their development by private companies. The channel capacity to handle these services will be readily available immediately after a cable system is installed, since possibly only half of the channels will be used for currently anticipated programs. Some of the possible services might include: Opinion and product polling, water, gas and electric meter reading, fire and burglar alarms, in-home shopping, credit checks, ordering and billing of merchandise, computer sharing, data transmission and retrieval to banks, billing facilities, etc., business, professional, union conferences and meetings from remote locations, closed circuit TV within and between buildings, entertainment on closed circuit systems with per-program payment (pay-TV of sport events and movies), and facsimile reproduction of mail, newspapers and library materials upon request to homes or offices.

Cable will not provide any of these new services, and much of its potential will not be realized, unless the cable systems are interconnected. It is essential that cable systems be tied together, simply to assemble an adequate market for potential consumers of these new services in the separated offices, plants, and viewers scattered in various cable areas throughout the region.

2. A major part of the potential for cable is the local geographic programming -- the events, and the educational, social, athletic and civic activities from local schools, municipalities, organizations and churches within the communities served by a single cable system. *This local programming dimension is clearly one immediate area of opportunity for cable--one that is viewed as extremely important by cable promoters and local public officials.*

A second significant immediate programming opportunity--which is equally attractive--however, comes from the programming organized around specialized subject areas directed to the segments of an audience scattered across the region. These include some of the existing "major league" sports and cultural activities plus others that, due to cable, have the potential of similarly developing into major attractions for many people.

This important regional and specialized programming dimension cannot be realized if the cable systems of this region are not tied together. Our experience in developing many of the major attractions of this area--those which exist as one of a kind--Vikings, Twins, North Stars, Saints, Minnesota Orchestra, art museums, Guthrie Theater--has taught us the necessity to pull together supporters from throughout the entire region

if we are to have them. Similarly, the programming opportunity cable offers for many activities and entertainment will require a comparable effort to assemble and develop the range of quality programs for specialized interests. This can be accomplished only if the subscribers to each of the individual cable systems are able to select from programs for the entire regional market.

Numerous groups already are organized around interests shared by members who live throughout the metropolitan area. These include civic organizations, recreational groups, trade unions, business organizations, churches, cultural organizations and numerous others based on a specific community interest or activity. Some specific areas include wrestling, tennis, car racing, various church and religious educational activities, community theaters, chess, bridge and other games, gardening clubs, etc. Programs in these areas which require both effective production and a critical number of viewers to support them, may be possible as a result of drawing together the parts of an audience found in a few communities with those in others.

3. The channel space on cable which opens up opportunities for local units of government (municipalities and school districts) must also tap the resources of agencies and institutions whose audience extends throughout the metropolitan area or large portions of it as another source of programming and to make possible some of the uses for cable's potential. These include post-secondary educational institutions--University of Minnesota, Minnesota Metro State College, six State Junior Colleges, seven private colleges, six Technical-Vocational Schools, numerous parochial schools; health agencies such as hospitals, clinics, and medical education and training institutions, plus area governmental organizations concerned with the environment, transit, highways, airports, parks, sewers and libraries. Programs produced by these organizations or services they develop can effectively utilize cable only if they can simultaneously reach their audience -- one that extends over the entire region or large portions of it. These agencies will find it difficult, and very inconvenient, to effectively use cable if they are required to transport tapes of programs to each of the systems one by one. The possibility of educational institutions offering courses to students, for example, would be limited unless they can simultaneously reach these students at one time.
 4. The interconnection of cable systems is beneficial to cable operation, as it would serve to enlarge the market for cable with the increased number of possible programs directed to special interests found throughout the region. The attraction offered by these programs to potential viewers can only be translated into increases in the number of subscribers and a return to the cable operators.
- B. The major issue today is how to best insure interconnection -- not whether this should occur.
1. Franchises already developed by Bloomington and Fridley contain language encouraging interconnection. However, these statements are not enforceable, as they do not specify what is meant by interconnection or provide any standards to determine whether it has been done. This determination is not made by the public but instead is left to the cable operator.

2. National studies proclaim the need for interconnection, but seldom outline how to accomplish it. Part of the difficulty in resolving this issue results from the focus on the technology for interconnection--the type of equipment and its design--rather than providing a view of interconnection as an essential basic element of a cable system in an urban area.
- C. Specific direction from the public is essential on what interconnection must be demonstrated on cable systems following their construction--and at specified times after this.
1. Interconnection for the cable operator largely means his system must have equipment to transmit or send signals to other cable systems in the area and to receive these particular signals. Each of the presently proposed cable systems, it should be noted, initially will have the ability to receive signals--those imported into the region, as well as those coming from over-the-air television stations in the area. They will not, however, necessarily have the technical ability to interconnect with other systems in this area.

Transmission of signals from each cable system will require an additional investment by the operator. This expenditure will vary depending on the number of channels that must be interconnected and the number of cable systems to which signals must be sent. The public can assist in resolving these two questions in the policies it initially adopts for the development of cable.

Although future uses for cable may require sophisticated equipment and a larger investment for interconnection to handle a substantial number of channels, many of these uses will take many years to develop. To require a substantial interconnection capability from the beginning would undoubtedly impose too great a financial burden on this largely infant industry, as would a requirement that all channels on the cable be activated immediately upon completion of the system--even though they are not likely to have customers for them. On the other hand, if cable is to permit development of new services, to provide an increase in the number of special programs and to grow, it is essential that at least minimal interconnection be demonstrated from the beginning in the same manner that a minimum number of channels must readily be made available when operation begins and that cable lines are installed within a specified area to permit connection by those who desire this service.

2. Decisions about how to technically interconnect cable systems can and should be left to the cable industry and the operators. They are best able to know what equipment is available and have the ability to work out the engineering questions such as whether each system should be separately interconnected, whether it would be better to do this through a central interconnection facility and whether interconnection should be done with microwave relays or trunklines connecting head ends. They can also work out the arrangements necessary for any cost sharing of any common facilities needed to accomplish this. These decisions, however, will be shaped by the specific direction initially provided by the public on its minimal interconnection expectations.

D. We concluded cable systems developed in the metropolitan area when they begin to operate should be required to demonstrate the capability of transmitting programs originated within their area on a single designated general public use channel to all cable systems in the Twin Cities area, together with the ability of receiving these. In addition, each system serving two or more school districts should also demonstrate the interconnection of cable systems serving these districts.

1. The minimal demonstration of interconnection on one channel will require development of basic facilities to insure cable systems are interconnected. It will further provide potential users with a more complete view of the range of possibilities for cable and reduce the concern about one of the possible difficulties in reaching their markets or adapting cable for their use. The number of channels and the links of interconnection can always be expanded as the demand increases for many additional programs or uses by the private market or by public agencies who need this type of system to assemble their audience.
2. The reservation on each system of a designated regional public channel will provide many potential public users (agencies and organizations) with an increasing part of their market as the number of subscribers increases, and will enable production of a number of programs that can be directed to specialized audiences throughout the area. Provision for a regional interconnected channel would remedy the difficulty of reaching audiences with either limited, specialized interests or those which extend over the entire area on a network of separate, individual systems which must be handled one by one. It would make it possible for cable to offer a considerably increased number of programs and thereby develop its multi-community programming dimension. This, in turn, should increase the appeal of cable for many additional potential subscribers, increase the return to the cable operators and the pace of cable's development

II. A limited number of cable systems should be developed in the metropolitan area to encompass all of the built-up urbanized areas simply to make cable available from the beginning to all potential subscribers, to increase the market for cable, and to improve the possibility for effective local programming. This will not happen if cable continues to develop only in a few selective-individual municipalities.

A. Residents of a large number of smaller suburban communities will be denied the opportunity of receiving cable, while cable operators and private users of cable will be able to reach only part of their market, if cable systems continue to develop on a municipal-by-municipal basis.

Of a possible 30 communities with high densities, only 7-13 municipalities have a sufficient number of housing units and a density likely to attract competitive bids from cable operators based on the experience in Fridley. These include:

Minneapolis
St. Paul
Bloomington (has awarded a franchise)
St. Louis Park
Fridley
Edina
Richfield

Roseville
Brooklyn Center
Brooklyn Park
Crystal
Columbia Heights
South St. Paul

A total of 17 communities with higher densities that may not attract competitive bids for cable systems due to their relatively small number of households include:

Anoka	North St. Paul
Spring Lake Park	Maplewood
Lexington	Landfall
Circle Pines	White Bear Lake
Hilltop	West St. Paul
Mounds View	Hopkins
New Brighton	Robbinsdale
Lauderdale	New Hope
Falcon Heights	

Apart from the 30 municipalities with higher densities, significant developed portions or all of 28 communities might well be attractive for cable development if they were included as part of a territory served by a cable system. Each of them individually, however, have lower overall densities and in most cases a small number of households that makes them less attractive to cable companies prepared to offer a number of services. These include:

Coon Rapids	St. Paul Park	Greenwood
Blaine	Cottage Grove	Excelsior
St. Anthony	Inver Grove Heights	Shorewood
Arden Hills	Mendota Heights	Mound
Shoreview	Mendota	Minnetonka
Little Canada	Burnsville	Plymouth
Oakdale	Apple Valley	Medicine Lake
Vadnais Heights	Deephaven	Golden Valley
Newport	Woodland	Wayzata
		Osseo

- B. The attractiveness of cable to private users either for programs or services they might develop will be limited if cable develops on the present patchwork basis that leaves gaps in the territory served by cable in the metropolitan area.

The cable market under the current approach will be limited only to those housing units, offices or plants in the larger, more densely developed municipalities that contract with cable companies.

Private users of cable may find it difficult, for example--even with an interconnected system--to reach many of their offices, plants or stores that are located in communities that are not likely to have cable, such as Hopkins, St. Anthony, Robbinsdale, New Hope, Anoka, Spring Lake Park, West St. Paul, Eagan, etc. Similarly, if they are interested in providing new services to either a mass or specialized market of people in their homes, these services simply will not be available in those communities without cable. Even at the beginning level of cable use, many local suburban merchants, for example, who might like to advertise their services or merchandise on the cable company channel will find they can reach only a part of their market. Similarly, the possibilities on the cable company channel for discussions and reports by candidates for public office or by public officials apart from the village councils will be limited since the local legislative, school and county districts frequently cover portions of a number of municipalities -- some that are not presently likely to have a cable system.

- C. The local programming dimension of cable and its use by local public institutions and the public at-large will be severely limited if cable continues to develop only within individual municipalities.

Any effective use of the reserved channels for local public programming directed to students, parents, taxpayers and residents of communities will be possible only if there is an adequate base for financial support of expensive program production and the development of cable systems that serve them.

Municipal use of cable -- Few of the individual municipalities within the metropolitan area--except possibly Minneapolis, St. Paul and Bloomington--have a financial base sufficiently large to support programs that would use the municipal channel. Few municipalities--even those that have granted a franchise--currently have any plans for use of this channel. Some services and programs suggested by studies, however, include:

- . Public health and product health education.
- . Presentations or discussions about issues before the city council.
- . "How-to" programs such as: find a doctor, find day care, get drug counseling, get social security, buy food stamps, register to vote, get married, get shots for children, file a complaint about municipal services, report pollution, etc.
- . Register opinions on issues posed by city officials.
- . Present and discuss city planning studies.
- . Monitoring flows in water mains, sewers.
- . Water meter reading, etc.

The dollars a smaller municipality can make available for program production will be relatively less than a larger community and is likely to be very limited assuming the same amount of effort. Likewise, a small community with its relatively fewer subscribers will find the revenues from the franchise fee proportionately less than a larger community. Although any municipality desiring to produce programs on the municipal channel may be able to substitute for some direct costs by volunteer assistance or by calling on part of the time of regular employees, the smaller municipality will have a smaller financial base and consequently will have a more limited ability to produce programs, to provide services, or to use much of the time available to them on cable.

The issue for most suburban communities in their use of cable, however, is not whether they can do effective programming but whether they are able to do it at all.

The possibilities of cable, however, could be explored by these communities if many of them were in the same cable territory and pooled their funds with those of adjoining municipalities thereby aggregating sufficient resources to purchase tapes, equipment, or production assistance in developing their own programs. This arrangement not only would increase the possibility of producing programs for each of them individually or jointly, but also is possibly the only way there would be a sufficient number of programs to fill a channel for a few hours per week. Such a pooling arrangement might make it possible for example to employ a production crew that could go from one suburb to another to cover local issues and then schedule a few hours each evening on these topics. The increased programming possible by pooling funds, however, will not necessarily result in use of cable. It will only increase the possibility for some effective use and experimentation after public officials decide it is something that provides a desirable service to the community.

School district use of cable -- Only a few school districts under the present municipal-by-municipal approach to cable development will be able to use cable, as only parts of many of them are contained within a likely cable area. Most suburban school districts cover a larger territory than a single municipality while their boundaries and those of municipalities are seldom coterminous -- apart from Minneapolis, St. Paul and South St. Paul. This condition poses difficulties for the use of cable both for in-school instruction and for programs directed to homes by local school districts.

The effort to use cable as part of the classroom instruction will be very difficult if schools of a single district are located in a number of municipalities -- some with their individual cable systems and others without any. Similarly, the use of cable for adult instruction or to reach parents under the present arrangement will also pose problems as the homes of school district residents are likely found in a number of municipalities.

The potential use of cable for in-school instruction would be significantly increased if the territory covered by cable systems encompassed as nearly as possible all the school districts and municipalities in the built-up urban area. This would tend not only to insure that the schools of a particular school district were served by a single cable system but it would increase the number of school districts that could use cable. The 13 municipalities most likely to singly attract bids from a number of companies, for examples, encompass nearly all of ten school districts and parts of four others such as Robbinsdale, Osseo, Anoka and Roseville. By contrast, if a limited number of cable systems covered all 58 possible municipalities, a reserved educational channel would be available to almost all the territory in 20 districts and parts of nine others.

The problem of many large pockets of isolated homes resulting from the overlap of school district boundaries with municipal ones where a school district is served by two or more cable systems can be alleviated by interconnecting the systems and by designing the layout of trunklines so that residents of various school districts in a municipality can receive the programs of their district on the local educational channel. Unless this is done, many students, parents and residents will be isolated from the programs of their schools.

Public use -- Effective general public use of cable--whether by organizations or individuals who desire to reach an audience in a specified area--will be influenced by the size of the territory served by a cable system as this will partly determine the number of users and the size of the audience. The public access channel will be available from the outset for these users. However, based on experience with the present public access on Channel 17 and on cable systems in other cities, it will take a period of time before individuals and groups are likely to make much use of this channel. Increasing the territory covered by a cable system--especially in the suburbs--to include a number of communities will increase the number of potential users and the total size of the audience of selective viewers who would find these presentations interesting and attractive. A larger district would likewise make it possible for groups with similar interests in a geographic area--political parties, churches, garden clubs, civic organizations, chambers of commerce, etc.--to combine their efforts and limited resources in using this form of communications.

- D. Interconnection of cable systems in the metropolitan area will be haphazard, much more difficult and complex if cable continues to develop under the municipal-by-municipal approach.

One of the difficulties for cable companies tying together channels or their systems is the uncertainty about the number of systems that will develop in this region with which they must interconnect. Under the current approach the number of cable systems will continually increase as the larger municipalities award franchises. Beginning with possibly the five or six largest communities--Minneapolis, St. Paul, Bloomington, St. Louis Park, Edina, Richfield and Fridley--the cable network is likely to gradually expand in a short time to an additional eight to ten municipalities. As the number of cable systems increases, so likely will the requirements and the outlay for equipment to enable interconnection with the new systems. The possibility for cable operators to get together on any type of shared arrangement for part of these facilities or for a third party to develop them may also be limited until the number of companies and the areas they serve are known.

Municipalities desiring to have their cable systems interconnected with others in the region may similarly find it difficult in their negotiations with cable companies to do more than require interconnection with the immediately adjoining systems -- the present pattern.

- E. Neither the FCC nor municipalities can resolve the problem of cable service area gaps developing in built-up portions of large urban areas.

The FCC has not--and probably cannot--address itself to the problem of cable development in urban areas with a number of municipalities that differ in size and therefore relative attractiveness to cable companies. It does not suggest how cable might best develop to include at least all built-up portions of these areas -- particularly where there are a number of smaller municipalities -- but instead leaves this up to "local authorities".

FCC rules leave the issue of how to best divide an urban area into cable districts up to "local authorities". The FCC has adopted rules calling for a regulatory program with shared responsibilities between it and "local authorities". It rejected conventional federal licensing (the process used with radio and television) believing this would place an unmanageable burden on the Commission, and because local governments are inescapably involved in the cable use of streets and ways. Local authorities, they also note, are able to bring a special expertness to such matters -- for example, as to how best to parcel large urban areas into cable districts, how best to divide up a franchise area for phased construction -- and are in a better position to follow up on service complaints.

The FCC goes on to state that:

"Because of the limited resources of States and municipalities and its own obligation to insure an efficient communications service with adequate facilities at reasonable charges, the FCC must set at least minimum standards for franchises issued by local authorities. These standards relate to such matters as the franchise selection process, construction deadlines, duration of the franchise, rates, and rate charges, the handling of service complaints, and the reasonableness of franchise fees."

These minimum standards are administered by the FCC in the process of granting a certificate of compliance, which is necessary before new service may begin.

The only significant direction the FCC provides on cable areas is to the larger cities, where it notes the local authorities are uniquely competent to delineate the franchise area where there are two or more franchises granted within the community. In these cases--possibly Minneapolis and St. Paul--it emphasizes that

"cable service must be developed to equitably and reasonably serve all parts of the community. A plan, for example, that would bring cable to only the more affluent parts of a city--ignoring the poorer areas--simply could not stand. Also, while it is obvious that a cable company cannot build everywhere at once within a designated franchise area, provision must be made that the company develop service reasonably and equitably. There is a variety of ways to divide up communities, but this is a matter best left to local judgment."

The lack of any rules by the FCC on cable territories in urban areas is understandable as the states--not the federal government--have the power and responsibility to determine the units of local government and their powers, such as franchising. At best, the FCC might make some suggestions but it has limited ability to directly carry these out.

Municipalities, either individually or by voluntary joint agreement, cannot determine how to parcel urban areas into a number of cable territories within which a cable system operates to insure all built-up portions receive cable service from the beginning. Many municipalities may not feel it is in their short-term interest to join together with a neighboring municipality, especially if it appears they can attract a cable system by themselves. Even if they decided it would be better to get together, such an effort is likely to be made by only a few municipalities -- an improvement closing a few gaps but still leaving many in the built-up portions of the region.

In the Twin Cities area there already are examples of communities going it alone--Fridley and Bloomington, and the beginnings of efforts to join together as evidenced in discussions under way in southwestern Hennepin County between Richfield, Edina, St. Louis Park, Eden Prairie, Hopkins and Minnetonka, and in northwestern Hennepin County between Robbinsdale, Crystal, New Hope, Golden Valley and Plymouth. Comparable efforts, however, are not observed to anywhere near the same degree among suburbs in the remaining portions of Hennepin County or in Ramsey, Anoka, Dakota and Washington counties.

Past experience with the voluntary joint agreement approach to other services suggests it will be difficult and only partially successful, since it depends upon the good will and cooperation of municipalities that perceive a need to join together. Any community that finds it difficult for historical reasons to get together with their neighbor will not be inclined to do so for cable unless they are too small to hope to get their own system. Similarly, if they receive a proposal from a cable company they may be reluctant to carry on this joint discussion until agreement is reached and....instead may decide to withdraw at any time.

The major problem with the voluntary joint agreement approach to cable development is that it does not provide a mechanism for deciding which of the municipalities within the built-up urban area should initially be included within a cable service territory. In addition, the current joint agreement arrangement poses difficulties in simply obtaining agreement between a number of municipalities when any one of the major municipalities may withdraw and go it alone and any one of them may not go along with the agreement thereby jeopardizing it.

We concluded that if cable territories were designated municipalities would and should get together to determine the specifications for individual cable systems and award the franchise.

The designation of cable territories before municipalities grant a franchise would greatly assist in bringing communities together for this purpose and maintain the many advantages of municipal franchising.

The encouragement and work by cable companies--acting as a self-interested third party--can assist in getting municipalities to work together. Similarly, the knowledge that this approach is desired in the designation of territories for a single cable system by a higher level of government and the fact that a franchise may be approved for only the entire territory or a substantial portion of it would also encourage communities to get together. These two incentives are largely missing under the present voluntary joint agreement approach.

The joint agreement approach to franchising cable companies has a number of advantages. It permits a number of local communities to determine the types of services and characteristics of the cable system which will serve them, thereby insuring the local geographic programming dimension of cable is developed. It also allows a number of municipalities to jointly share in the expense of any technical assistance used in developing the franchise and its subsequent monitoring. The pooling of resources and talent for effective program production and/or services on the reserved municipal, educational and public access channels also is encouraged and facilitated if there is a joint agreement on the granting of the franchise. Unless municipalities can effectively make these decisions, their interest in the subsequent development of local uses and programs and any monitoring or handling of complaints may well lag or be minimal.

The joining-together of a few municipalities into a cable district may appear to dilute the local character of the cable system, but it can only strengthen this dimension by enabling either more or better local programs directed to local events and interests of either the entire district or individual municipalities within it. It is possible by the design and layout of the cable system in a multi-municipal area to lay the wires so that trunklines reach just the residents of a single municipality with programs that might be directed to or be of special interest to them.

- F. The Legislature in 1973--before additional cable systems are certified by the FCC-- must intervene and take action to grant a state agency the authority to determine the territory of each cable district within which a cable system may operate in urban areas and to certify franchises granted by municipalities within these.

The Legislature is the only body that has the power to remedy the present fragmented pattern of local geographic markets for cable and insure that cable as it develops will reach all of its potential market within urban areas. It is inconceivable that it will not do this.

The Legislature in taking action should not attempt itself to determine what would be the desirable size of a cable district or the extent of the territory within it, as work remains to be done before these lines can be drawn. This includes determining the minimum density and the size of a territory within which a cable system can be economically viable. Instead, the Legislature should focus this responsibility on a state agency, with the specific advice of regional planning organizations, and the participation of cable companies and local units of government.

Franchise territories should be proposed by municipalities and the cable companies. However, responsibility for a decision about the extent and size of them should rest with a state agency, as the problem of service area gaps is found in some larger urban areas of the state. The problem currently is most severe in the metropolitan area but it can be expected to extend to other growing urban areas such as Duluth, Rochester, St. Cloud and Mankato.

Once cable service territories are set by the state, municipalities within them can get together where necessary to further proceed with the steps leading to the granting of a franchise. Any backup mechanism, such as state franchising, that might operate to permit franchising in the event of an impasse in the joint agreement should still encourage the parties to get together and to resolve as much of an agreement as possible - particularly on the specifications for the system. It should also make it equally risky for both large and small municipalities not to find areas of agreement and ultimately to award the franchise.

III. Minimum state standards--on interconnection of cable systems, on their design and layout in communities and on some of the provisions of franchises--are needed. They should insure cable systems will provide adequate opportunities to users for both regional and local community programming and services and for minimum uniform protection of subscribers, users and the general public.

A. The FCC has provided a few maximum and minimum standards to franchising authorities but has left much of the specific regulation and development of cable up to states and municipalities.

The FCC in adopting its rules provided some direction in suggested general standards to local franchising bodies. In a few cases the Commission has set specific maximum limits on them and on local franchises. These include: the amount of the franchise fee (maximum of 3% to 5%), local regulation except by petition of non-broadcast access channels (public access, educational and leased channels), prohibition of any advertising material, lottery information and obscene or indecent matter on the reserved educational and public access channels, length of franchise (15 years), and the construction timetable (significant construction within one year of FCC issuance of compliance).

There is wide latitude for state and/or local regulation of many areas totally or beyond minimums suggested by the Commission. These include: the franchise area, subscriber rates and charges, service complaints, technical standards, production facilities, and the franchise selection process. Finally, the Commission has only mentioned other aspects of

cable development which are important to its development and the protection of the public interest in cable such as interconnection, the design and layout of trunkline networks in a community, service requirements, transfer or assignment of ownership, and provisions on penalties for non-performance and cancellation or revocation of the franchise.

- B. Municipal regulation of cable in the drafting of franchises and their contents is improving but by itself cannot insure cable systems will be developed to provide--in their initial construction--for maximum public programming opportunities and uniform minimum safeguards to consumers and the general public.

Adequate provisions in a franchise are extremely important since the franchise is a contract between the city and a cable company for a fairly long period of time. This agreement between the municipality and the company not only sets out requirements for the system that will shape its development and operation but once concluded will be very difficult to change for possibly 10-15 years. This situation not only suggests that municipalities approach this decision with care but also that to the degree there are generally agreed upon safeguards these be guaranteed by someone other than the individual municipality.

The public officials and staffs of municipalities undertaking to grant a franchise frequently are not familiar with cable--the numerous choices in services a system can provide or the best possible ways of building in safeguards for the subscribers, users and themselves. Several national studies on local franchising have concluded that municipal regulation of cable in the past has been a total failure largely because the municipality as a "one-shot", part-time participant in the franchising game is usually incapable of dealing on an equal informational basis with the applicants. This process requires a considerable amount of time on a topic that some city councils do not see as extremely important so that with the press of more imminent matters they are inclined to simply get it over with quickly.

Increasingly, however, some village and city councils are doing a considerable amount of work with the result that some recently developed franchise ordinances--Bloomington and St. Louis Park, for example--for the most part are better than others such as Stillwater and Lakeville-Farmington. These recent efforts, the time city councils now considering cable are spending in studying it, together with the availability of several handbooks on municipal franchising and a number of "model" ordinances suggest there will be continued improvement in the franchising process in the next few years.

- C. Minimum state standards for franchises granted by municipalities with subsequent state certification of them would insure uniform-consistent safeguards for the public and development of cable systems with maximum programming opportunities and services.

The development of the two major programming opportunities offered by cable--local community and regional--will be significantly influenced by the design and capability initially built into a cable system.

Design and layout of cable systems for local programming -- Cable systems can be designed in the layout of trunklines to permit direction of unique local programs on separate channels to sub-areas or communities of franchise territories. In a multi-municipal franchise territory these communities might be the individual smaller municipalities while in larger municipalities they would be local communities that may be identified in planning studies. Programs on this channel (probably the educational or public access) might consist of local neighborhood community events and issues, the athletic activities of the local high school, meetings of community organizations, etc.

The determination of the boundaries of local communities, the location of significant isolated pockets of school districts that serve their residents and how a cable system might serve these can best be made by local public officials with the participation of residents and cable companies. It is important, however, that the state insure this is done in one of its franchise standards if cable is to provide the possibility for programs that can be directed to the unique local interests of people.

If this possibility is not built into cable from the beginning, the local programming dimension of cable is likely to mean the "municipal dimension" and in larger cities such as Minneapolis and St. Paul could result in reduced opportunities for programs directed to the more limited geographic interests of residents in the sub-areas of the city. In the suburbs the lack of consideration for this factor will result in reducing the usefulness of the educational channel for school districts as they will not be able to reach many of their students or residents.

Interconnection of cable systems for regional programming -- The regional programming dimension of cable similarly requires state standards to insure it is realized. These consist of standards on interconnection -- where and when it is required, how it is demonstrated, signal performance and penalties in the event a cable system does not comply. Although municipalities may view interconnection as significant, they are less likely to see it as an important issue if they are looking at cable as a local communication system. State standards, therefore, should assist in insuring interconnection by requiring specific provisions for this be built into municipal franchises before they are certified.

Franchise provision standards -- The specific provisions of the franchise can cover a range of subjects from those relating to specifications of the cable system and its installation, to rates and changes to subscribers and users, production facilities, the fee charged the cable company for operation, and the procedures to be followed if the cable operator does not perform or transfers ownership, and in the periodic reopening of the contract -- usually for rate review.

It is in the franchise provisions that the general public interest of consumers, users and the municipality are protected including: rates that are fair and reasonable, access to books and records of the company, opportunities for user and consumer participation in the determination of rates and other topics when the franchise is reopened, and the recourse of a municipality if the cable company does not perform in accordance with the contract or does not comply with it.

Municipalities need to have considerable latitude in determining the specific contents of their franchises. The state, however, can play a significant role in insuring adequate safeguards are built into each franchise by adoption of minimum franchise standards outlining uniform items that must be included in the franchise and specific standards where necessary to insure protection of the public interest. The state, in doing this, for example, should require that public hearings be held for periodic rate reviews and that there be no charges made for disconnecting service, as these would insure an opportunity for public participation in the setting of rates and permit the operation of an open market for cable. However, the state, following the example of the FCC, should not set the monthly subscription rates as these are the product of the bargaining for services, type of system, installation requirements, production facilities, etc. arrived at between the franchising authority and the cable company. Any effort by the state to initially regulate these rates will more than likely discourage experimentation with many of the programming opportunities and services possible on cable.

- IV. Substantial technical information and assistance needed by local public officials either as they engage in the franchising process or in the subsequent review of cable system performance and rates presently is not available from any agency or public organization in this state. Likewise, the state lacks a body familiar with local cable development that can effectively speak for municipalities and the public to the FCC as it formulates rules, preempts areas of regulation or grants waivers to cable companies.
- A. Municipalities have limited technical information essential to their effective participation in the franchising process and later review of system performance and rates.

Most municipalities presently attempting to engage in the franchising process must do so with only limited technical knowledge about cable and with few informational resources at their disposal in this state. The result is that they are likely to deal with cable TV companies from an inferior informational basis. This may well lead to a cable system that has less capacity, fewer services and reduced program opportunities than would otherwise be the case if the municipality had information more equal to the cable company.

A growing number of handbooks and publications on municipal franchising can be of general assistance to local public officials. In addition, national resource centers such as the Cable Television Information Service are likely to provide an increasing amount of useful information. However, these resources are limited and not specifically applied to the requirements and characteristics of the franchising area.

A few larger municipalities--Bloomington and St. Louis Park--have turned to consultants for technical assistance in reviewing their proposed ordinances and in evaluating cable company proposals. These consultants were employed only near the end of the process, however, partly due to the cost of them. While these communities found the consultants to be helpful, municipalities may find it difficult to select a consultant that they are confident in, as many of them advise cable companies at the same time they are advising municipalities. Finally, consultant assistance may be limited due to the cost or simply not available to many communities either because they lack the resources or do not feel they should spend a considerable amount of money for this purpose.

The designation of larger franchise territories together with joint-use franchising by municipalities within these is likely to increase the possibility of pooling resources for this purpose. There is no body or agency in the state, however, to which municipalities can turn for this type of assistance either initially or later....for a technical review of their system or of subscriber rate increases requested by the cable company.

In the first years of cable, the issue of fair and reasonable rates is not likely to be a significant problem as cable companies will try to keep their rates as low as possible to attract subscribers. Expert technical and rate analysis assistance, however, will be needed by municipalities when a cable company requests an increase in its rates or whenever these rates are reviewed to effectively determine whether they are justified.

- B. The public--consumers and users of cable and municipalities--needs an effective-designated spokesman that can deal with the federal government on their experience with cable and on matters important to them.

The FCC has considerable power over cable from preemption of regulation by states and local franchising bodies, to its rulemaking and granting of waivers.

The present policies of the FCC in many cases are only temporary, until some experience is gained in working with them. The Commission has stated they will continue to evolve and specifically has noted local experience with them would be helpful to their further development. At the present time, however, there is no one--apart from individual municipalities that seldom appear before federal regulatory agencies--charged with acting as a spokesman for this purpose or to propose changes in the rules desired by the state or franchise bodies to permit higher quality cable systems. Similarly, there is no public body designated to check on and represent the public when cable companies request waivers from the FCC rules.

Neither the state nor local governments in Minnesota responded with comments to the recent rules of the FCC. This should not happen again. However, the development of an effective spokesman to the FCC will require not only simple designation of an agency but also giving it the tools to keep abreast of cable development in the state and the ability to assess technological advances in cable so that it will be able to speak knowledgeably.

We concluded that a state agency could best perform both the roles of providing information and technical assistance to local franchising bodies and acting as a spokesman for them and the public to the FCC.

Although municipalities might jointly be able to obtain assistance on their own, and present their views to the FCC, they will have problems doing so other than on an ad-hoc-infrequent basis. It is unlikely for example that they will retain a permanent staff for these purposes. Consequently they will have difficulty in keeping up with both the evolution of FCC rules and with developments in the cable field. Likewise they will lack an overview of local experience with cable beyond their own. The state, however, has the resources to perform these important functions and has a larger view of cable developments in a number of communities in the state which it can relate to the FCC. Finally, a state agency is more likely to be listened to by the FCC than a local unit of government.

- V. The present procedures municipalities must follow in awarding a franchise are completely inadequate. They do not provide potential users, consumers and the public with opportunities to know that cable is under consideration and to register their views about the characteristics of the system, its design and layout, the terms and conditions of the franchise and the merits of the applications at various points in the franchising process.

Municipalities, in Minnesota, unless they are required to follow more specific procedures in a city charter, may issue a franchise under state law only with a majority vote of the village council and subsequent publication in a legal newspaper. Even a single public hearing is not required. Some communities such as St. Louis Park and Bloomington have gone well beyond this to provide opportunities to the public.

Many of the difficulties some municipalities have recently experienced in considering and granting a franchise and the controversies over cable, however, resulted because of the lack of adequate procedures to make the process visible and open to consultation with the public. Generally a series of identifiable steps has also been missing.

The FCC recognized the shortcomings of the existing state and local procedures by adopting a set of their own. Franchising authorities must follow these before the FCC will grant a certificate of compliance. These procedures do not direct any specific steps but instead require a detailed statement from the franchising authority to accompany the franchise showing that the authority considered in a public proceeding the system operator's legal, character, financial, technical and other qualifications, and the adequacy and feasibility of construction arrangements. The FCC goes on to state:

"We expect that franchising authorities will publicly invite applications, that all applications will be placed on public file, that notice of such filings will be given, that where appropriate a public hearing will be held to afford all interested persons an opportunity to testify on the qualifications of the applicants, and that the franchising authority will issue a public report setting forth the basis for its action."

Public officials, citizens, potential consumers and users would all greatly benefit if a set of minimum-uniform cable franchising procedures were established by the state. Such procedures should do the following: Identify a series of orderly steps for all participants; increase public confidence in the process by requiring it be open with information to the public along the way and provide for specific opportunities for public comment; focus the discussion at various points such as on a set of written specifications and standards for the cable system before applications are taken; encourage competition between cable applicants; and obtain complete information necessary to evaluate their qualifications and proposals.

- VI. Public programming and experiments with cable will not develop unless this is encouraged and production support made available to public agencies, community organizations and groups. Eventually, rules will probably also be needed to regulate the scheduling of the reserved public channels.

The FCC has provided public agencies (local government and school), organizations and individuals with the opportunity of experimenting with cable by requiring three channels be reserved at no cost to these users for five years after a system begins operation. The reason for this is to open new outlets for local expression, the promotion of diversity in television programming, the advancement of educational and instructional television, and increased informational

services of local governments. Even as the Commission made access available, however, it recognized that their goal of creating a low-cost, nondiscriminatory means of access cannot be attained unless members of the public have reasonable production facilities available to them.

The major deterrent to the use of cable by the public for community programming will be the cost of program production including the equipment, facilities and the necessary production or support staff.

Some of the resources on the production side may be made available either from the cable operator or existing public institutions with studios, cameras and production staffs. Many schools, for example, already have audio-visual staffs, some film material and production equipment that should enable them to produce at least a limited number of programs on cable. Possibly, these resources might also be made available at low cost to other public agencies or to community organizations. Similarly, the cable operator could be required in the franchise agreement to carry shows produced with lower-cost one-half inch videotape equipment, and encouraged or required to make a specific amount of production facilities and equipment available to public users.

The initial franchising of cable by a number of municipalities in a few designated larger cable territories will also assist in making program production more feasible as it will encourage a pooling of the resources and talent of municipalities and schools and possibly of organizations with similar interests in a cable territory.

The entire area of public programming at this time is highly experimental. It is not clear what direction it will take or what types of programs might be seen as effective or useful. It is an area, however, which holds forth promise both to the public as a communications vehicle and possibly a new way of delivering some public services, to the viewers in increased choice of programs and eventually to the cable operator by increasing the market for cable.

We concluded that, in order for programming on the reserved public channels to develop, some funding source must be found to begin to support it and an organization set up to propose possible uses, facilitate making facilities and equipment available to all public users, handle complaints, and eventually to allocate time for use on these channels, evaluate the programs, and make recommendations to the franchising authority, the cable companies and the users for improvements in the system and in programs.

Most users of the reserved channels will probably have to largely rely upon their own ability to fund program production in the first years of cable. Possible sources include: federal grants, foundations, and any general tax funds appropriated by school boards or city councils. One added source, however, which could provide a limited amount of seed money would be a portion of the franchise fee. This fee is indirectly collected from subscribers and will largely be used to underwrite local monitoring of cable performance, the handling of complaints and local regulation of the system. However, revenues from this fee could also provide indirect subscriber support for public programs available on the three local reserved channels and the fourth regional channel.

Municipalities as they move into the franchising process should begin to set up the framework for handling the development and use of the reserved channels. This is necessary as some provisions need to be built into the franchise with respect to the cable operator's role in program production and the amount and use of a portion of the franchise fee.

- VIII. The Legislature must take action quickly in 1973 to organize the state for the coming of cable. This requires assigning responsibility to a state agency to determine cable service areas, to set standards for interconnection and for franchises, and adoption of uniform procedures for franchise granting by municipalities.

Only the Legislature can do the job that is needed in building the public framework for cable development in this state. It is the only body with the ability needed to cut across the pattern of historic boundaries that will limit the potential coverage of cable. Only it can provide the tools needed to bring cable systems together in part to develop the regional and special interest programs and services important to the market of viewers and users in the future and the safeguards needed to protect the public interest.

The opportunity to build the framework is at hand. Only a few cable franchises have been granted in the metropolitan area. If the Legislature does not act in 1973, it is likely by 1975 additional cable systems will develop along the lines of the present patchwork process, making it even more difficult to go back without increased cost and difficulty to resolve problems that will not go away.

We concluded the Legislature should grant the authority to resolve these problems of area coverage, interconnection, and franchise standards to a new state agency, as cable is a new area . . . with new issues . . . and requires immediate attention by a body familiar with it.

- IX. The Governor's leadership is essential if cable TV is to become a high priority item early in the coming session of the Legislature.

The subject of cable TV will be new to the Legislature. Because of this, the urgency to act may not be recognized. Consequently, if a set of ground rules are to be developed, the Legislature must have a proposal presented to them which calls for their attention and action in this session. The Governor can . . . and we believe should . . . do this.

We suggest the Governor include a proposal on cable TV in his program. His office can go to work immediately drawing upon the work of the Metropolitan Council . . . which is headed by an appointee of the Governor . . . the discussion under way at his direction in the Public Service Department . . . and proposals already made by various organizations.

RECOMMENDATIONS

- I. We recommend the Governor develop and present a proposal to the 1973 Legislature in a message calling for immediate action on many major issues important to the development of cable TV. The proposal should include features that insure:
- * Interconnection of cable TV systems in urban areas.
 - * Complete coverage by cable TV systems of the built-up portions of urban areas.
 - * Adequate protection of public interests and opportunities for public participation in the drafting and awarding of franchises by municipalities.
 - * Support for public programming production on cable.
- II. We recommend the 1973 Legislature in response to the Governor's message act to modify present public policies on the development of cable TV to insure that-- as cable systems are developed--they are able to achieve their full potential with adequate protection of public interests.

More specifically, we recommend:

- A. The Legislature create a new state agency to develop and carry out the ground rules by which cable TV will develop in Minnesota.
1. We recommend a new state agency be created. If this is not possible, then the Public Service Commission (PSC) should be designated . . . and advised by a 15-member committee appointed by the Governor in drafting standards. The state agency should be assisted by a limited-new cable TV staff.
 2. The new state agency should be authorized to perform the following functions with regard to these issues:
 - a. Interconnection
 - 1) Adopt minimum standards for the interconnection of cable systems in urban areas to be incorporated in all franchises including specified signal performance standards and the reservation for public use of a regionally designated channel that must be interconnected on all cable systems.
 - 2) Petition and advocate the Federal Communications Commission (FCC) amend its rules or grant a waiver to permit the reservation of a uniformly designated fourth channel for public use on all cable systems in the Twin Cities area once there are two or more systems in operation. This is needed to develop the regional programming dimension of cable TV and to guarantee interconnection is accomplished. The state agency should also be authorized to designate an organization to be responsible for developing and adopting rules on the allocation of time and users of the reserved regional channel.

Proposals for changes in FCC rules based on experience with them in this state should also be subsequently prepared and presented by the agency acting as a spokesman for the state--its residents and municipalities.

- b. Cable coverage -- Adopt a set of minimum standards for the size of cable territories within which a franchise may be awarded by municipalities; approve, modify, or reject boundaries for specific territories proposed by municipalities and cable companies; expand boundaries to extend service upon petition by adjoining municipalities meeting state standards; to change the boundaries of the territory or award the franchise in accordance with provisions agreed upon by 75% of the weighted vote of municipalities in the cable territory upon petition by any municipality in a multi-municipal territory where efforts over a reasonable period of time fail to obtain a joint agreement.

The advice and comment of the Metropolitan Council and other regional planning organizations should be solicited in the drafting of standards for cable coverage and interconnection and in review of all proposals for cable territories.

- c. Minimum franchise standards -- Adopt a set of minimum standard provisions covering a number of specified items that must be included in all franchises to insure adequate protection of consumers, users and municipalities; provide municipalities with legal, technical and planning advice and certify each franchise to determine whether it is consistent with state standards. A copy of each franchise should be sent to the appropriate regional planning organization before state certification.

These standards should apply to any franchised system which has not undertaken substantial construction or received an FCC certificate by December 31, 1972, and to franchises coming up for renewal after that date.

- d. Support for public programming -- Encourage municipalities with planning, technical and legal advice to obtain support for public programming in the franchise agreement and encourage municipalities to set the franchise fee at the maximum of 5% allowed by the FCC. The state agency should further request approval by the FCC of franchise fees that set aside revenues in a public cablecasting fund beyond the regular 3% permitted by the FCC for local regulation.

- B. The Legislature amend the municipal code by adoption of a set of uniform procedures for the granting of cable franchises which do the following:

- * Insure communities develop specifications for their cable systems and the franchise that set forth the local programming requirements and the desired advanced services before inviting cable applications.
- * Insure visible opportunities for public comment and discussion at many key points in the franchising process.

All steps in the franchising process should be open to the public with appropriate notice. (Suggested procedures are outlined on pages 43-44.)

III. We recommend the Metropolitan Council:

- * Propose to the state agency the standards for cable coverage and inter-connection appropriate for the Twin Cities area.

A similar role may be appropriate for regional councils in other parts of the state.

- * Present to the state agency its comments on the proposals--made either by the cable companies or the municipalities--for the designation of cable service territories within the metropolitan area.

(Our recommendation that the state agency provide for review and comment by the Metropolitan Council appears above in section b on cable coverage.)

- * Present to the state agency, before state certification, its comments on all franchises granted by municipalities within the Twin Cities area.

(Our recommendation that a copy of each franchise be sent to the Metropolitan Council, at the same time the franchise is sent forward to the state agency, appears above in section c on minimum franchise standards.)

IV. We recommend municipalities in discharging their basic responsibilities for the installation of cable TV seek production support for public programming, set up a mechanism to be concerned with the development of this programming and the monitoring of cable company performance, and award the cable TV franchise.

More specifically, we recommend municipalities:

- A. Negotiate a franchise producing programming support from the cable operator and sufficient funds from the franchise fee to reserve a portion of them for public programming on the reserved local channels.

Municipalities should obtain part of the support essential for underwriting public programming in their negotiations two ways:

- * Seek to obtain in the cable franchise a specified amount of production assistance in facilities, equipment and staff support from the cable operator.
- * Seek to set the franchise fee at the 5% maximum allowed by the FCC with at least 40% of this to be segregated in a public cablecasting fund to be used in accordance with the yearly budget recommendations of the local cable TV advisory committee.

- B. Incorporate meaningful public participation in the franchising process and establish a local cable TV advisory committee when the franchise is awarded to assist in the subsequent development of public programming and to monitor the performance of the cable operator.

Efforts should be made to inform possible users and the public about cable--its potential, uses and importance. Opportunities to solicit their views should be made available before specifications are developed. Likewise, public comment and discussion should be solicited in public hearings after specifications are developed, and in a review of the applications for a cable system with further public notice of why a particular company was selected after a winner is announced.

The local cable TV committee should be appointed by the franchising body. It should consist of representatives of municipalities, school districts, organizations and citizens who have an interest in the development and use of cable. A majority of the members should represent the public at-large rather than governmental agencies and special interests.

Responsibilities and duties of this local group would be to develop proposals for possible uses and programs on the local reserved channels, to handle problems that arise in the utilization of these channels and propose rules governing their use, to monitor the performance of the cable system and to handle complaints. They should also periodically make recommendations for changes to the cable franchise--such as the addition of two-way services, increased public programming support, or rate changes, when rates are reviewed, the franchise reopened, and at its expiration.

- C. Grant a franchise--either singly or jointly as appropriate in a state-approved cable territory--in accordance with state procedures meeting or exceeding state and federal standards. In cable territories with two or more municipalities, franchise-granting should be handled as follows:
1. Each of the municipalities would adopt resolutions establishing a joint powers board consisting of two representatives from each municipality with the vote of each member weighted on the basis of the population of each municipality. This board should be granted the power to draw up the specifications for a cable system, the contents of a request for cable proposals, notify the public and conduct hearings, review applications and select the cable company. Each municipality should then approve the same franchise, and jointly establish the local cable TV advisory committee.
 2. If the municipalities are unable to agree within a reasonable period of time (possibly one year), any one of them may petition the state agency for a change in the boundaries of the franchise territory to permit those in agreement to award the franchise or request the state agency grant the franchise in accordance with those provisions agreed upon by 75% of the weighted vote of municipalities in the cable territory.

V. We recommend the state agency, in establishing its standards, specifically consider and adopt the following:

- A. Cable service territory -- Standards containing minimum criteria for the territory within which a cable system may be franchised.

Based on our knowledge, we suggest each cable service territory in the Twin Cities area include a minimum specified number of dwelling units with an average density of not less than a specified number of dwelling units per mile to provide cable service in the built-up portions of the metropolitan area. The boundaries of a territory should follow the outer edge of adjoining municipalities with similar interests, without dividing any municipality. It should encompass entire school districts if possible. Where this is not feasible, provision should be made to interconnect cable systems and design the serving trunklines to permit the programs of each school district contained in more than one cable territory to reach all of the schools and residents of their district.

The standard for a service territory could require, for example, a minimum of 20,000 dwelling units with an average density of not less than 50 dwelling units per square mile. This standard would result in designation of 11-13 cable territories for the Twin Cities area covering 36-57 municipalities with 82-88% of the total households in the metropolitan area. The number of municipalities within a cable territory would vary from 1 to 10.

The specific areas within a territory to be served by the initial installation of a cable system should be left to the municipalities.

Sparsely settled portions of a cable territory with fewer than 20-30 households per mile, for example, could be treated differently from the more densely populated area by exempting the cable companies from the necessity of installing a cable in these sparsely settled areas and requiring payment of a higher installation fee by those persons who are more than 660 feet from the end of the network required initially in the franchise.

Very large designated cable territories--for example, those with an excess of 60,000 dwelling units--should be able to determine how to divide their territory into cable franchise areas. The two central cities (Minneapolis and St. Paul) might well divide their territory and award two or more franchises to serve different portions of their total territory.

- B. Attachment to service territories -- Municipalities adjoining an authorized cable service territory may petition the state to extend service from an existing system in accordance with state standards on the number and density of housing units.
- C. Design and layout of cable systems to serve sub-areas, or communities within cable territories -- Municipalities shall identify local planning communities or, where there are three or more municipalities or school districts in a cable territory, the boundaries of individual municipalities and the portions of school districts which serve their residents for the purposes of directing unique signals for local community programming. They must then demonstrate upon request for state certification how these sub-areas are provided for in the design and layout of the cable trunkline system and the use of cable for point-to-point communication. In Minneapolis and St. Paul, for example, there are approximately ten communities identified in city plans. The design and layout of the trunklines should make it possible to direct signals for programs unique to these communities.

- D. Interconnection -- When two or more cable systems are in operation in the metropolitan area, each cable system shall be interconnected with all others in the region to permit, at specified signal performance standards, the simultaneous carriage of public programs originating from any cable territory on a uniformly designated reserved channel.

This standard would require that each cable system have the technical capability of both receiving and sending programs from other systems in the area for the purpose of enabling public programs on a fourth reserved channel and for development of private leased services to reach general and specialized audiences throughout the region.

- E. Franchise provisions -- Every contract entered into by municipalities and a cable company shall contain provisions on the following items and shall meet the minimum standards set forth by the FCC or the state as follows:

1. Number of cables.
2. Channel capacity of each cable and allocation of channels for different uses (one each for local government, education, public access and regional public use) and one for local programming originated by the franchise.
3. Minimum technical standards on signal strength at any point in the system. FCC standards, as a minimum, should be incorporated by reference.
4. Two-way capability of the cable system and provision for monitoring only with the specific written authorization of the subscribers.
5. Length of franchise.
6. Length of residential subscriber contracts; not to exceed 30 days.
7. Rates. Maximum rates to be specified for connection charges, monthly subscriber rates and special rates for production support, including:
 - a. Connection charges:
 - 1) Initial connection charge for the first set.
 - 2) Additional installations at the same location.
 - 3) Disconnection service which shall be free.
 - 4) Re-connection charges.
 - 5) Relocating service within a home.
 - 6) If any, to specified governmental agencies.

- b. Monthly rates:
 - 1) Initial receiver.
 - 2) Each additional receiver.
 - 3) Deposits.
 - 4) If any, to specified governmental agencies.
 - c. Charges or monthly fees for converters on TV sets and other auxiliary subscriber equipment.
 - d. Charges for production support, equipment rental and any other charges to users.
8. Periodic rate review and approval; a public hearing must be held.
9. Production facilities and staff support. Minimum specifications for cable system studios, mobile units, cameras and production facilities to be provided and type of videotape the cable system must handle for users of the reserved channels shall be set out in the franchise.
10. Franchise fees and frequency of payment. A fee of 3% of gross subscriber and pay TV revenues may be charged for a franchise fee. An additional 2% may be charged if it is designated for a separate origination cablecasting fund used to produce programs on reserved public channels.
11. Cable installation. A project map showing aerial and underground construction, street or backlot routing and street repair requirements.
12. Performance bond and deadlines for construction of systems. Period of time from certification by the FCC to beginning and end of construction and beginning service to subscriber. The percentage of energized feeder cable to be installed each year should also be specified.
13. Service requirements. Period of time allowed from report of normal trouble and repairs to cable system, restoration of service following natural catastrophes, and the hours repairmen must be available.
14. Re-opener clause. Either the municipality or the cable company may have the right to amend the conditions of the franchise either upon 90-day notification, annually at some stated date or after a specified number of years. The procedure for amending the franchise should be explicitly stated, and provide for prior notification to the franchisee and a public hearing. The power to amend should specifically include:
 - a. Rates.
 - b. Schedules of system installation and extension of service.
 - c. Number of channels the system must carry.
 - d. Number of channels set aside for specified purposes.
 - e. Performance standards.
 - f. Two-way capability.
 - g. Types of services to be provided by franchisee.

15. Penalties for non-performance. These should include fines, together with procedures for determining when they may be imposed.
16. Cancellation or revocation. Franchise must specify the condition under which a franchisee voids the franchise through non-compliance or inaction, and the procedure that will be used to notify the company and the state that the franchise is being cancelled.
17. Transfer of right and assignment. The franchise should prohibit the franchisee from assigning or transferring ownership or significant control (more than 10%) of the company or the cable system without written approval from the municipalities and the state. The franchisee shall continually keep on file with the franchiser and the state a current list of its shareholders holding 10% or more of its outstanding stock and officers with their current addresses. In the event a transfer of franchise is approved, the rate base shall not include good will or non-tangible items (value of the franchise) in re-opening the franchise for the purpose of a rate change.
18. Municipal purchase. After notification, a municipality or municipalities in a franchise territory may purchase a system at fair market value of capital improvements and structures excluding good will and other non-tangible items at the end of the franchise period and operate it with approval of the state.
19. Access to books. A municipality and the state shall, through designated officials or departments, have the right of access to and inspection of all books, records and accounts of the cable company.
20. Filing of communications with regulatory agencies. Copies of all petitions, applications and communications submitted by the franchisee to the FCC, the state or the municipalities shall be filed with the state and the municipalities.

DISCUSSION OF RECOMMENDATIONS

PART I - GENERAL DISCUSSION

1. *What are these recommendations intended to accomplish?*

We believe our recommendations, taken as a whole, will result in four significant improvements. These include:

- A. A clear public framework will be established within which cable TV can develop to expand its market of subscribers and users. It will provide increased opportunities for the production of a wide variety of programs to general and specialized audiences within both local geographic communities and the entire Twin Cities region.

Our proposals for state designation of cable franchise territories to cover the built-up urban area and standards for interconnection, design and layout of cable systems, we believe, will enable cable to reach an increased number of residents and better develop its program and service potential.

- B. Adequate opportunity for public comment throughout the franchising process will be assured together with sufficient information and protection for subscribers, users, and franchising authorities in the process of leading to the granting of a franchise.

The uniform franchising procedures we propose are intended to set forth a series of visible steps and opportunities for public discussion at key points as communities move through the process of granting a franchise. Minimum state standards for franchises, together with state certification of franchises, we believe, should guarantee uniform protection of the public interest of subscribers and municipalities and significant consideration of a number of important issues as franchises are developed. The technical and legal advice we recommend the state offer municipalities should assist them in doing an adequate job developing their franchise and in selecting an operator.

- C. A spokesman for the public at large, users, consumers and the public officials will be provided to the FCC in its formulation of rules and the granting of waivers such as the authority for a reserved regional channel.

The state agency, with a new cable staff and the responsibilities we recommend, can become a focal point of information about cable--its technological development and the experience with it in the entire state. As such, it can make a valuable contribution to both municipalities in their efforts at franchise-drafting and later review of cable performance and rates as well as to the FCC as an advocate for the public and for franchising authorities in the further evolution of federal rules.

- D. The public programming opportunities offered by cable will be encouraged--both within local geographic areas and the region.

Our recommendations for allocation of a portion of the franchise fee and for creation or designation of citizen cable TV bodies will facilitate program production by public agencies and community organizations.

The citizen groups, we contemplate, will initially be concerned with the problems of program production and the use made of the four reserved channels. However, their continuing involvement in cable within each territory can also provide a place where a number of issues likely to arise after cable TV is operating can be identified and either resolved or passed on with recommendations to the appropriate bodies for resolution.

Some of the issues that may arise as cable develops include: Rules governing the scheduling and use of reserved channels, provision of cable service to people with low incomes, determining when an increase in the number of reserved channels is needed, charges for the leasing of channels by public agencies, and a determination about whether the cable operator is performing in accordance with the contract and whether it is keeping abreast of advancing technology just prior to the review of subscriber rates or the reopening of the franchise.

2. *Is the recommended multi-level approach to the regulation of cable TV necessary?*

In our discussion of the problems with the current public process of cable development, we were inescapably led to the conclusion that a third level of regulation--the State--is needed.

The present system of dual regulation by the FCC through its national rules and the regulation by individual municipalities in their franchises has a number of deficiencies which cannot be remedied. The dual federal-municipal approach is most inadequate within large urban areas with a number of municipalities of different sizes. Individual municipal franchising, in these areas, simply results in a highly fragmented pattern of cable development and a network of cable systems which are not linked together and therefore cannot serve the regional and special interest programming dimension possible within these larger urban areas. A number of municipalities in the metropolitan area will not receive cable and as a consequence the possible market for cable will be limited and a number of potential users denied the opportunities of cable communication. Finally, experience with the individual municipal franchising approach presents a very mixed picture in providing adequate opportunities for thorough consideration of what cable can do for a community and the degree of protection it offers subscribers, users, and the public.

We considered but rejected the municipal-voluntary joint agreement approach to the franchising of cable in urban areas as one way of alleviating many of the problems resulting from individual municipal franchising. This approach, by itself, would eliminate some of the service area gaps from small communities not receiving cable in the built-up portions of metropolitan areas. In addition, it would enable a pooling of resources and talent both for programming and for obtaining information needed by local units of government as they enter into the process of granting a cable contract and subsequently analyze the subscriber and user rates. The joining together of municipalities for the purpose of franchising would also result in a possible reduction in the total number of cable systems within the metropolitan area, thereby easing the problems of interconnection. The greatest strength in this approach is that it would maintain the best feature of the individual municipal approach--the tailoring of a cable system to serve local residents and the local programming dimension of cable. It is entirely possible that municipalities would not be too interested in developing local programming opportunities if they are not involved from the beginning in determining what kind of a system they desire. The major shortcoming of this approach,

however, is the considerable uncertainty about whether it would succeed by itself in discouraging individual municipal franchising. Our conclusion, based on past experience with voluntary joint use agreements, was that they might be developed in a few places but could not be relied upon to encompass all built-up communities in the metropolitan area. Finally, this approach would not insure concern for regional interconnection or provide a mechanism for achieving it.

We looked at several other alternative local units of government that might better be able to handle the development of cable TV in serving the local and regional markets but found them inadequate. They included:

Counties -- Franchising by counties instead of municipalities would minimize the program delivery problems resulting from overlapping boundaries of school districts and municipalities. This approach could also eliminate the problems of service area gaps to the extent each county issues one or more franchises to cover the major urbanized portions of it. The resources and talent that could be gathered both to obtain technical assistance and for effective use of reserved channels would be significantly increased over what is possible under the individual municipal approach. Finally, interconnection difficulties would diminish as counties would probably require cable systems be interconnected within their territory, leaving only the remaining problem of interconnecting the five or six franchising units in the metropolitan area.

We concluded that counties would not be appropriate units to grant franchises instead of municipalities, since their size and interest would not necessarily result in emphasizing the local community programming aspects of cable or achieving the regional ones. Cable systems contracted for by counties are less likely to be tailored to serve the various local geographic communities than those developed by municipalities and will not necessarily be interconnected to achieve the regional programming possibilities with cable.

School Districts -- Franchising by school districts would insure that one of the local community programming possibilities of cable could be met. Since school districts typically cover an area encompassing a number of municipalities, franchising by them would increase the possibility of cable service covering all of the built-up portions of the metropolitan area. The irregular boundaries of many suburban school districts, however, would pose problems for the installation of cable systems and tend to diminish other opportunities apart from education for local community programming. Finally, franchising by school districts would add another general responsibility to this special-purpose organization and would not assure tying together of the regional market.

Metropolitan Council -- A single franchise or even a number of them granted by the Council in the metropolitan area would eliminate many of the problems with individual municipal franchising, would insure the interconnection of all cable systems in the region, and aid development of the regional programming dimension. A single franchise might be easier to handle but such a system would be too large to insure local programming development. Also, there are few operators with the capital resources to handle the entire area. We concluded, however, that this approach would be accomplished only at the substantial risk of losing the local programming possibilities cable TV offers - opportunities we felt municipalities could better develop. We agreed with the FCC that cable TV needs experimentation with a variety of systems and many operators in a number of localities to develop much of its potential. Finally, we note the Council has a full agenda in completing work on a number of issues which would limit its ability to handle cable franchising.

State Franchising -- The state, it was noted, presently regulates and awards territories for banks and trucking routes. Similarly, it was suggested the state might also grant the franchises after receiving the comments of affected municipalities and school districts. Regional interconnection, it was noted, could be insured if this was required by the state. We concluded, however, that state franchising was not an attractive alternative as it would eliminate the ability of local areas to determine the specifications for cable systems that would serve them and would probably result in the loss of the local community programming dimensions of cable. Finally, in the absence of a compelling reason for change from the basic pattern of municipal franchising to one of state franchising, we opted for continuing with municipal franchising as modified by joint agreements where necessary.

We concluded that a third level of regulation is necessary to establish standards within which local decisions about granting a franchise could be made. These standards -- the size of a cable franchise territory, interconnection of cable systems within a region, the procedures for granting a franchise, and minimum requirements in franchises -- could better be set by the state than by the federal government or by regional organizations of government. States presently have the power to set standards and to a great degree are already engaged in this activity in areas such as pollution control, education, and many aspects of commerce.

3. *Is there a case on the merits for having franchising done by municipalities?*

Yes. Cable TV offers many new opportunities for local geographic programming presently not available by other communication systems. Over-the-air broadcast TV, for example, presently operates as a regional - not a local system. Similarly, daily newspapers largely provide regional coverage of news with limited space devoted to local events. Cable, however, has the potential for building around local events and community, educational, cultural, religious and athletic activities. These include local high school games, plays and discussions on problems or proposed programs in the community. We concluded municipalities would better support and encourage development of this programming dimension of cable than other units of government. Their interest in doing this would be increased if they must consult with possible local users and their residents in determining the specifications for their system and are then able to award the franchise for their area.

Many choices must be made in developing the specifications for the franchise. Most of these decisions are local in character. They can effectively tailor the system in its design and layout to permit unique programming to sub-areas or communities within a municipality. Others can match the desire to develop local programming with the support necessary to produce them. A municipality, for example, might well decide to allow somewhat higher subscriber rates in return for a fine-grain layout of trunklines, significant production support for public programming, free cable connection to public buildings, or underground installation. These decisions should be left with municipalities simply to encourage experimentation with different aspects of cable and to encourage development of the local programming dimension.

Concern for the regional programming dimension of cable and for special-limited interest programs that require a large number of viewers can be met without removing the franchising from municipalities. Most importantly, this can be accomplished by simply requiring interconnection and by our recommendation for a regional reserved channel. It does not require a single franchise for the metropolitan area.

4. *Will joint-agreement franchising in multiple municipal cable territories work?*

We believe it will -- even though past experience with this approach indicates it is a difficult route to take. Cable is a new service in contrast with others municipalities have attempted to jointly agree upon. As such, it has two incentives which are likely to encourage municipalities to get together:

- * Cable operators who have an interest as a third party are likely to work in getting municipalities to agree on a joint franchise.
- * Municipalities in an approved cable territory know that the state expects a franchise to cover the territory. It will be difficult for a single large community to gain state certification of a franchise if it goes it alone. Similarly, small communities can hold out only at the risk they might be subsequently deleted from the cable territory by the state agency and thereby lose the opportunity for receiving cable service. Municipalities are further encouraged to make as much progress as possible in settling differences about the specifications for the franchise and in selecting the cable company as the state agency is required to use these agreements where they exist as the basis for awarding a franchise in the event the joint agreement approach fails before a franchise is granted.

5. *Why should the State--not the Metropolitan Council--regulate cable franchising in the Twin Cities area?*

There is a need for uniform minimum standards in franchises -- particularly those protecting users, consumers and municipalities throughout the state. Although much of the current activity toward franchising is observed in the Twin Cities area, it is also under consideration by a number of outstate communities such as Owatonna, Waseca, Windom and Worthington.

Many of the 42 outstate municipalities that have cable systems operating can also use assistance in improving their franchises as they expire or in their periodic analysis of rates . . . two issues municipalities in the Twin Cities area will also eventually face. Many of these franchises will become subject to FCC rules in the next 5 years. Further, approximately 9 of these franchises granted in the late 1950's will expire in the next 5 years. Some changes in the services of these cable systems might well be considered at this time.

The major issues of regional significance--interconnection and coverage--can be handled by regional planning organizations advising the state agency as it sets standards for them and decides upon the cable franchise territories.

The work necessary to develop recommendations in these areas will require some time from the Council. However, this is considerably less than what would be needed in time and staff for the standard-setting, franchise and rate assistance we view as needed. This function can better be performed within a single state agency rather than a number of regional planning organizations -- some of which are just beginning to develop.

6. *What role would the Metropolitan Council and other regional organizations have in the federal-state-municipal regulation of cable TV?*

We recommend a significant role for the Metropolitan Council and other regional organizations of government. This would include advising the state agency on the following:

- * Proposals on standards for the cable franchise territories. The information collected by the Council on the size, density, and characteristics of communities in the metropolitan area will be needed and helpful to the state in developing its standards for cable territories.
- * Proposals on standards for interconnection.
- * Comment on all cable franchise territories proposed by municipalities or cable companies.
- * Comment on all franchises granted by municipalities before state certification.

We believe the Council and other regional organizations can be of great assistance to the state agency in the same manner they advise the Minnesota Municipal Commission. They should take the initiative in presenting their views on standards and proposed cable territories or be specifically requested to do this by the state agency. Finally, they should have the opportunity to review and comment on all franchises by receiving a copy at the time they are submitted to the state agency. The state agency should allow sufficient time for this review before it acts to certify the franchises.

7. *How long will the recommended process take?*

After the Legislature acts, we estimate it would take six months to a year for the state agency to adopt standards and to approve the cable territories. We believe this amount of time is reasonable given the significant improvements possible with these two steps. It need not actually delay the granting of franchises for many communities. The state agency should quickly determine the standards for franchise territories so that discussions under way in the central cities and in joint meetings between a number of suburbs can continue to be directed to developing specifications for their cable systems.

Although our recommendations may delay the actual awarding of franchises for a short time, we are not calling for a moratorium on cable franchising to study it. This step was proposed in the 1971 session and passed in New York and New Jersey. Such a step would only further increase the time before franchises could be granted. Rather, our recommendations call for action in 1973 with only a short period after this to set up the state agency and for adoption of needed ground rules for cable TV development.

DISCUSSION OF RECOMMENDATIONS

PART II - DISCUSSION OF SPECIFIC RECOMMENDATIONS

II-A-1 The State Agency

1. *Why is a new state agency for cable TV recommended?*

Cable TV is so new and at this stage different from other services that it requires immediate attention from a new agency. This agency should be directed by a hearing board made up of people who are interested in, and have some familiarity with, cable TV. Some of them should also have familiarity with possible use of cable TV by the public and the franchising process as viewed by municipalities, regional planning organizations, and the cable companies. A limited new staff must also be assembled.

We found that none of the existing state agencies are presently equipped or organized to perform the recommended functions. As a consequence, we concluded it probably would not take more time to set up a new agency than to integrate cable TV into an existing agency. Adding responsibility for cable to an existing agency would require familiarizing board members with it, and overcoming problems in introducing a new staff into an existing department.

The Public Service Commission (PSC) came closer than any existing agency to having the attributes we were looking for in the state agency. The semi-judicial function it performs, however, together with the possible emphasis on rate regulation (which is not what's needed now) persuaded us to recommend creation of a new state agency.

If a new agency and board is not possible, we recommend the Legislature designate the PSC as the state agency, and that it be initially advised as it drafts standards by a 15-member committee appointed by the Governor. We concluded this committee would be helpful to the Commission in gaining familiarity and competence in dealing with issues likely to arise in the setting of standards, and enable the Commission to gradually phase cable into their functions.

It is possible, after a number of years under a separate agency, that the state responsibility for cable could be transferred to the PSC, particularly as issues begin to arise on the amount of subscriber rates.

2. *How can the state regulatory function be funded?*

We suggest the state assess cable system operators .5% of their gross operating revenues -- the same fee assessed by the FCC. Although a modest start-up appropriation will be needed, the state might be subsequently repaid as revenues are generated from new systems.

II-A-2 Interconnection and the reserved regional channel

1. *How would reservation of a channel for regional public use achieve interconnection?*

The interconnection of cable systems is a necessary step for the operation of this reserved public channel. As a basic element in the public framework for cable system development, requirement of this channel would be a catalyst for and demonstrate the interconnection of cable systems -- a feature necessary for many of the future services that may be developed by the private market.

We propose standards be adopted by the state for interconnection and reservation of this fourth public channel and that these be made a part of each franchise in large urban areas.

The minimum state standards, for example, might require interconnection of cable systems to provide for a regional public channel at a specified uniform channel location on the dial to be operated above a specified signal quality when two or more cable systems are operating within the metropolitan area.

In the event a cable company does not comply with these requirements, it should be treated as it would for non-compliance with other provisions of its franchise -- i.e., a demand for payment of the performance bond, fines or revocation of the franchise.

2. *Isn't the FCC reservation of three channels sufficient for public use?*

The present FCC rules largely ignore one of the major dimensions of life within metropolitan areas and a major potential source of programs -- namely, those activities which are organized around special interests plus those that encompass audiences in a large portion of the urban area.

The three channels the FCC requires be reserved at no cost to users in all new cable systems are primarily intended to serve local governmental and educational institutions and organizations or individuals (public access channel) that live within the limited territory served by each cable system. Although it is possible local officials could make these channels available to agencies or organizations which serve an audience that extends beyond their boundaries, they would not be inclined to do so if there is sufficient demand for this time from local users.

The single distinctive feature of these regional programs is that viewer interest in them extends beyond the immediate area served by one cable system to the entire region. The programs on this channel may originate from within any cable system. Some may be produced in downtown Minneapolis or St. Paul or at the University, while others may originate in any of a number of suburbs. They might consist of athletic events, cultural activities, news stories, public hearings, college or technical classes, etc. These regional-type programs should not have to compete for time or channel space with local programs, nor should local programs be crowded off the cable to provide room for these special interest or regional features.

One area, for example, where a conflict between different types of programs might first become apparent will be in the competition between educational institutions for the use of cable. A local educational channel might be primarily reserved for use by the local school district. If this school district begins to use cable either to supplement in-school instruction, to substitute home instruction for in-school for shut-ins or even for regular students, it will likely make extensive use of cable during the school day. Additional programs for parents, basic adult education, language instruction, or community programs might well move into the evening hours. Similar efforts by higher educational institutions to comparably use cable will only collide with the time used by the local school districts, with the result that either some of the local district programs or those of the higher educational institutions will be displaced.

3. *Who would use the regionally designated channel?*

We contemplate the regional channel would be broadly reserved to various users at no cost for up to five years, similar to the reservation by the FCC of local public channels. The users could include: Higher educational institutions (University, Metropolitan State College, Junior Colleges, Technical-Vocational Schools), churches, various specialized organizations (League of Women Voters, cultural or athletic clubs), and governmental agencies (county, regional or state). The purpose of this channel would be the same as the local reserved channels in providing potential regional users with the opportunity to experiment with cable and in providing the public with information and services.

Is a single channel sufficient?

Some agencies or organizations might determine cable is of considerable value in the delivery of their service and will choose to lease one or more channels. It is also possible the demand for time on this channel could increase to the point that an additional channel would be needed. When this occurs, we suggest the rules presently applied by the FCC on the expansion of channels be used to expand the number of regional channels (N + 1 rule - when a channel is used 80% of the weekday time during any 3-hour period for 6 weeks running, the system will have 6 months in which to make a new channel available).

4. *Who would be responsible for allocating programs and time on this regional public channel?*

We recommend the state agency designate an organization to be responsible for administration of this channel, including the development and adoption of rules on the allocation of time and the use of the regional channel, handle complaints, and develop proposals for possible programs and uses for it. This organization could well be a non-profit one such as KTCA or an advisory body to the Metropolitan Council. The members should be broadly representative of the public

with an interest in the development and use of cable. Its membership should also consist of some persons who are familiar with the various potential users, such as public institutions and organizations and with the cable companies in this region.

5. *How would administration and development of the regional channel be funded?*

We suggest the limited staff necessary for this activity be funded from modest fees charged the users of this channel and from a limited portion of the public cablecasting funds of each cable territory.

II-A-2 Cable service territories

1. *Will the proposed cable service territories cover all municipalities in the 7-county metropolitan area?*

No. Many municipalities in the metropolitan area, especially communities on the periphery, lack the density or the number of housing units to make cable service economically viable. Only municipalities which are heavily developed, or those undergoing rapid development, are likely to be included in the initial cable territories. If the state initially includes municipalities with very low densities or only a few clusters of developed area in a cable territory, it is possible the cable companies will not even make the effort to bid for a franchise. As cable systems develop and become economically viable, however, the state agency should move, upon request, to extend service to municipalities adjoining existing franchise territories. This would be comparable to the expansion of the free-dialing telephone zone in the past few years.

II-A-2 Public programming

1. *How do you get public service on TV?*

The "public" as a national policy will have its own channels on cable. These consist of a minimum of three channels that will be made available at no cost for up to five years to local governmental, educational and general public uses. We recommend an additional channel also be made available for regional public uses.

Space for the public to use cable was made available by the FCC, due in part to the substantial channel capacity of cable. Initially, many of these will not be used, and it was therefore possible to reserve a portion of them with little out-of-pocket expense to cable companies. In contrast, space in newspapers and time on radio and TV is too valuable to owners to make them available for adequate public use.

The public service possibilities on cable are one of its greatest potentials. The major question, however, is what is going to be done with it?

The largest obstacle to development of public uses of cable will be obtaining the necessary support and funding needed for program production.

Some governmental agencies, such as school districts and higher educational institutions, already have some of the resources necessary and a way to begin development of the programs.

It is important, however, that government not be the only public use. The many organizations that could effectively use cable to carry programs of general and special interest will need assistance if the public use is to be meaningful. Most of them, however, lack the equipment, facilities, or staff support necessary to produce programs. Significant community use may well require development of facilities and assistance that could cost upwards of \$25,000 per year.

2. *How will public programming be funded?*

We recommend that a portion of the needed assistance come from the cable operators and from some of the franchise fee revenue. The franchise fee, however, particularly in the early years, is not likely to produce much revenue. Even a municipality such as Bloomington, however, when it has reached a potential 40,000 subscribers paying \$5.50 per unit, would only receive \$11,000 per year on its 5% franchise fee. Assuming 40% of this was set aside for program production, it would make only \$4,400 available. Further, it is likely this program fund could be divided between users on all of the public channels.

Many organizations are likely to seek out funding from other sources, especially foundations, due to the limited resources likely to be available to enable them to produce programs and to use cable.

II-B Cable franchising procedures

1. *What specific procedures should be adopted by the Legislature in amending the municipal code for cable franchising?*

We recommend the Legislature amend the municipal code by adopting procedures that outline a series of visible steps that are open to the public and insure adequate information of the cable applicants. We believe the following procedures could accomplish these objectives:

1. Development of a request for a proposal (RFP) containing:
 - a) A set of standard provisions setting forth the specifications for the cable system and services to be offered by any cable operator.
 - b) A draft of each bid variable with points attached to each of them to note their relative importance, e.g., types of services to be offered, capability of system to send two-way signals, financial condition of company, rate structures, etc.
 - c) Information requested of applicants, e.g., who owns what parts of the firms, who controls the company, how the company proposes to pay for the cable system, location of other cable systems the company owns or operates, identification of proposed management, their detailed construction plan, and any relationship of the cable company with suppliers of equipment and producers of programming.
2. Circulation of the RFP in the community - followed by a public hearing.
3. Distribution of the RFP to cable associations and companies, with public notice in local and regional newspapers.
4. Bidders conference - Prospective applicants ask questions about the RFP.

5. Closing date - A date is specified for closing of bids if a specified number is received.
6. Review of applications and public hearing - Bidding firms are checked out for their operation and performance by a specified staff or a citizen advisory committee followed by a public hearing on the merits of the finalists.
7. Selection of company and announcement - Final negotiations are completed, a bidder selected, and the winner announced in a press release explaining why this company was selected.
8. Referral of the cable franchise for state certification - The franchise agreed upon by the municipality and the cable company is sent to the state agency for certification. A copy is also sent to the Metropolitan Council or another regional organization as appropriate for their review.

2. *Why are these procedures needed?*

The existing set of procedures provides little direction to local public officials about how to go about the franchising process or to the public and users on the more important steps that require their involvement. As a consequence, present procedures are completely inadequate.

The procedures we recommend would remedy these deficiencies by doing the following:

- * Identify a series of steps for all participants and the public.
- * Provide specific opportunities for public consultation about the specifications for the system and the operator, the terms and conditions of the proposed franchise and the merits of the applications.
- * Produce a set of written specifications for the cable system before cable companies make their proposals thereby giving the community an opportunity to determine what features they desire and their relative importance. The cable operators also benefit by knowing before they submit a bid what the community is looking for, thereby enabling them to determine whether they can meet these and what will be needed to develop a system in the community.

IV-B Local advisory committee

1. *Why is a local cable TV advisory committee needed?*

The establishment of a continuing cable TV organization in each franchise territory is essential, given the numerous issues likely to arise after a cable system is operating. In addition, there is a need to focus responsibility on someone who would be concerned with the reserved local public channels. We concluded that local public officials will simply lack the time to handle this function as other issues rise in importance and consume their interest and time. Finally, we believe it would be desirable that the body responsible for watching over and encouraging use of the public channels be representative, not only of municipalities, but also of educational and organizational and individual users, plus the general public.

2. *What are some of the possible functions of this body?*

The local cable committee should be responsible for the following:

- A. Proposing possible uses and programs for the three reserved local channels to stimulate development and use of them.
- B. Actively encourage and assist community organizations and governmental agencies desiring to use and develop programs for the reserved channels by allocating any public funds made available for this purpose and by working with agencies, non-profit organizations and others requesting assistance.
- C. Develop and recommend policies and procedures for utilization of these channels, e.g., scheduling, notice of programs for viewers.
- D. Monitor the operation and performance of the cable system, review and, where possible, handle complaints and report its findings to the franchising body and the cable company with recommendations for improvements in the operation of the system.
- E. Investigate the developing cable technology and propose recommendations for the amendment of conditions of the franchise to the franchising body for addition or deletion of cable services, extension of cable, the number of channels and the two-way capability of the cable system, and other changes it concludes are needed to the franchise agreement.

IV-C Multi-municipal franchising

How would franchises be granted in multi-municipal cable territories?

Municipalities would be encouraged to get together and jointly develop the specifications for a single system to serve their territory. We recommend this be done by a board made up of two representatives from each municipality but with the voting weighted in accordance with the population of each municipality. The joint-powers board would function to carry the franchise from the beginning when specifications are developed, through consultation with groups and agencies, public hearings, the advertising for bids, and conduct negotiations with the cable companies. The final product of these efforts would be a recommended uniform franchise and a recommended cable company to be submitted for approval by each of the villages or city councils.

The purpose of weighted voting with equal representation on the joint board is to give each municipality a voice based on population for working out the terms of the franchise and to provide some direction to the state on the relative degree of agreement in the event the efforts at a joint agreement fail and the state is requested to award the franchise. This joint-agreement approach has worked in the past -- and we believe with the encouragement of cable companies and the state agency -- can work for cable TV. It is very similar to the type of joint-uniform-franchising currently used by suburban municipalities with the Minneapolis Gas Company. Similar discussions are also under way with Northern States Power Company on the regulation of electric rates.

We are further encouraged by responses to a questionnaire we sent in March, 1972, to public officials of all municipalities in the metropolitan area over 2,500 population. Of the 45% who responded, 39% felt there should be 1-15 cable franchises in the area. About 67% of the respondents strongly or somewhat agreed that shared expertise and knowledge of cable TV would be an advantage of a joint-powers agreement, while 51% felt this approach would be desirable as it would make it possible to include local school districts in fewer franchise territories.

V-A Availability of cable service in a cable franchise territory

Will all the residents of a cable service territory receive cable service when cable is first installed?

Not necessarily. This will depend on where people live within the community and the degree of development in the area in which they live. Some residents of municipalities -- particularly in developing suburbs -- may live some distance from the more completely settled portions of the community. In these cases, it would be considerably more expensive in terms of the cable company's return on its investment to wire these more sparsely settled areas, or it would require a higher rate for subscribers in the more fully developed areas to cover these added costs to residents in less densely settled areas. For example, the subscriber revenue from a mile of cable with 70 homes per mile will be double what it could be with half the number of homes along another mile of cable. As a result, the cable company is likely to suggest the system be installed initially only in the built-up area with provision for an added extension fee to be paid by persons desiring service who live some specified distance beyond the edge of the initial system. This practice is very much like that of the power companies in the early installation of power lines in rural areas when it, too, was an infant industry. Although this premium for extension will deny initial-early service to some residents of many municipalities, it can be remedied in time by building into the franchise an opportunity to extend the area of cable installation within a community when rates are reviewed or the franchise reopened. At these times, if it appears the cable company is obtaining a reasonable rate of return, one change in the service it provides may be to extend the area within a municipality covered by cable. Some of the homes in areas not initially serviced might also ultimately receive the opportunity for cable at no added extension charge when a specified amount of land has achieved a density specified in the franchise.

V-C Design and layout of cable trunklines

What difference does the design and layout make to the use of cable TV?

A major part of the significant local community programming possibilities of cable TV will be lost if attention is not paid to the subject. The local community dimension and use of cable TV can be significantly enhanced if the trunklines are laid out to permit programs unique to a small geographic area of interest to reach just the residents of these sub-areas. It can make it possible for cable TV to become a source of programs for smaller communities with which people identify...a third dimension on top of the larger city or cable territory and the region. These programs in larger cities could include those to residents of local high schools, or a few adjoining small neighborhoods that make up

a functioning community of interest. In the suburbs they would include programs of local schools to reach residents of portions of a single school district located in a number of municipalities, or the residents of a single municipality in a multiple-municipal cable service territory.

The layout of trunklines can greatly expand the utilization of cable TV for local programming. For example, if five trunklines in a single system are laid out to serve five different local communities and/or portions of a school district in a cable service area or five villages in a multi-municipal cable territory, it would be possible to present five different programs over a single public access, educational or municipal channel. This unique "local community" programming may only slowly develop. However, it will not even be possible unless care is exercised from the outset in the design of the cable system in a cable territory.

V-E Franchise provisions

1. *Are the recommended franchise provisions viewed as a model franchise?*

No. The list of specific provisions we have recommended covers only those items we viewed as important in protecting the interests of subscribers, users and municipalities. Many other items must also be included in a franchise, including possibly public liability insurance, permits to occupy the streets, relocation of facilities, etc. In those instances where we recommend specific requirements in the standards, these should be viewed as minimum standards by municipalities. In other cases, where we mention only the item (number of cables), we concluded the franchise should contain provisions covering this point, but that the requirements should be determined by the municipality as it negotiates the franchise.

2. *What items should be included in a franchise? What minimum state standards are recommended?*

1. Number of cables -- This item should be determined by municipalities in their negotiations with cable companies. Many systems in urban areas, today, are initially installed with two cables bound together. This makes it possible to quickly expand the number of cables by the simple addition of amplifiers to the second cable when these are needed. Depending upon the level of two-way services or the amount of point-to-point use anticipated for cable TV, it is possible even more cables might be desired.
2. Channel capacity and channel allocation -- The minimum number of channels should be specified in the franchise. The FCC currently requires a minimum of 20. Recent franchises require 24-27 when the cable systems begin operation.

The number of channels allocated for public use should also be specified. State standards should require the three channels required by the FCC and the fourth designated channel for regional public use. Recent franchises also stipulate that a percentage (20%) of the additional channels added to the system be dedicated and reserved for public use. This automatically increases the number of public reserved channels as the total number of channels increases.

The municipality should also specify whether a cable operator must operate and program a channel with local material, news and information. The FCC in its rules originally required an operator to do this when a system had 3,500 subscribers. This rule, however, was successfully challenged so that the rule no longer must be followed unless this provision or a similar one is contained in the franchise. It should be noted that many cable operators, however, have included this in their proposal to a municipality as well as a commitment to locate a studio in the cable service area.

3. Minimum technical standards -- Franchises should contain a number of technical standards relating to the signal strength at various points in the system and under various climatic conditions. The FCC has adopted a set of minimum technical standards and their measurement that should be incorporated into the franchise. The state or municipality may, however, following adequate technical advice set higher standards in specific areas covered by FCC standards or those not included in the FCC rules.

Technical standards for the fourth reserved regional channel must be adopted by the state and should then be incorporated in each franchise.

4. Two-way capability -- Much of the potential for cable TV lies in its use as a two-way communications system. This requires, however, that the degree of two-way capability (simple digital, audio or video) be set out in the franchise from the beginning and be subject to change at subsequent regular intervals.

Invasion of privacy -- The advent of response signals on cable makes it possible to monitor what the viewer is watching or with audio or video capability what the viewer is saying or possibly doing. This situation must be anticipated and specific steps taken in federal and state standards to prohibit such monitoring at minimum without the specific written authorization of the subscriber. Ultimately it is desirable to move toward techniques that would make it not only legally but technically impossible to monitor unless the subscriber or viewer allowed it.

5. Length of franchise -- This issue is important as the basic requirements for a cable system will probably be subject to only slight modification during the life of the franchise. When the franchise has expired, however, a new one may be re-negotiated. At this time, all provisions may be reviewed.

The state of the art of cable technology is rapidly developing. Much of the equipment--amplifiers, transmitters, responders, etc.--is undergoing change and new ones added every 3-5 years, so that much of the equipment and some capability (number of channels, two-way signal capability) of a system are obsolete in a few years. Similarly, the uses for cable are likely to rapidly develop within a decade. The FCC has recognized this and suggests franchises be limited to 15 years. Many other studies and experts in the field suggest franchises run for only 10 years. Although a shorter period of time might be desirable to ensure the system is keeping current with the state of the art, the cable operator must also be allowed a reasonable period of time to recover his investment.

The issue of franchise length, at this point, is one that should be open to negotiation but in any case should not exceed 15 years. A shorter term (possibly 10 years) should be seriously considered by a municipality -- especially if the cable operator will permit only limited possibilities for reopening many clauses in the franchise or if it feels there are many uncertainties about the development and use of cable that suggest a thorough review and re-appraisal in a shorter period of time.

6. Length of residential subscriber contracts -- We recommend the state set a standard that would allow only a month-to-month contract with subscribers. This would have the effect of allowing the market place to operate by permitting subscribers to terminate service if programs or technical quality are unsatisfactory.
7. Rates -- A series of rates and charges for various types of services and subscribers should be specified in the franchise. Most of these must be left to negotiation. It is not necessary the state set rates or charges as cable TV companies have an incentive to keep them as low as possible to initially attract subscribers. The state, however, should set standards that would insure the operation of the market in such areas as requiring disconnection service charges be free. Municipalities might also be concerned about the level of charges for production support and equipment rental if one of the major sources of public programming support is to be realized.
8. Periodic rate review -- The franchise should call for review and approval of rates at specified times (possibly every 4-5 years). Procedures for this review should be set out in the franchise with state standards requiring open proceeding and public hearings.

These rate reviews provide an opportunity to a community to review and evaluate the performance of the cable system as the basis for a request to increase services or for improvements to the cable system when new rates are approved.

9. Production facilities and staff support -- Specific minimum requirements for equipment, studio facilities and staff should be contained in the franchise. These represent one of the major sources of program support for public production and are important if any significant public use is to be made of cable TV. Municipalities should also consider the type of video tape a cable system must handle, such as half-inch equipment. The lower cost of this equipment could significantly reduce some of the initial production cost. This would also make it possible with the same amount of funds to make an increased amount of equipment available to many more users.
10. Franchise fees -- The state should adopt a standard setting the maximum franchise fee. The current FCC maximum is 3% of gross subscriber revenues. The state in setting its standard might look toward expanding the 3% figure to cover not only subscriber revenue but also pay-TV revenues. It should also allow municipalities to charge up to 5% if the additional 2% is designated for a separate cablecasting fund to produce programs on reserved public channels.
11. Cable installation -- Franchises should contain a statement of the layout of cable trunklines to serve sub-areas of the franchise territory and a map showing the overhead and underground installation required.

12. Performance bond and deadlines for construction -- These must be contained in franchises to discourage the past practice of franchise holding and trading and to specify the extent of cable system development in a cable territory. The state should consider either adopting the FCC one-year deadline for construction and/or of setting a minimum amount for a performance bond in its standards.
13. Service requirements -- The municipality should consider the issues of availability of repair services, hours repairmen must be available, etc. and incorporate provisions for these in their franchise.
14. Reopener clause -- The rapid development of cable TV technology and the varying experience with development of it and the services it provides suggests there be a degree of flexibility in changing the franchise. If many of the cable TV franchise provisions could be amended from time to time the concern with the length of it would diminish. The specific items that can be amended and the procedures for doing this, however, must be included in the franchise.
15. Penalties for non-performance -- The franchise should contain a provision for penalties to be imposed in the event the cable company does not perform, such as excessive down-time. Procedures for determining when there is non-performance and the amount of the fine must also be set forth.
16. Cancellation or revocation -- Conditions under which a cable company voids the franchise through non-compliance or inaction must be contained in the franchise together with procedures to notify the company that the franchise is being cancelled. The state should also require it be notified in these cases.
17. Transfer of right and assignment of the franchise -- The public should know who the owners are of the cable company which serves their community. In the event ownership is transferred or sold, it is important that any value attached to the franchise which is a public resource be discounted. We suggest this be done by requiring both municipal and state approval of assignment or transfer of ownership or more than 10% of the control of a cable company. Attaching value to the franchise in a sale would further be discouraged by not permitting good will or non-tangible items to be included in the rate base for computing a rate of return in any request for reopening the franchise for a rate change.
18. Municipal purchase -- In the event a cable company defaults and is not able to perform, the municipality should have the ability to purchase the system and operate it to enable service to continue until a new franchise is granted. This should be incorporated in the franchise but the state should require its approval before this can occur.
19. Access to books -- Information about the fiscal performance of the cable company is needed by municipalities to evaluate the rates and charges when they are periodically reviewed. State standards should also require similar access by the state.
20. Filing of communications -- It is important municipalities and the state be informed of all requests to the FCC for any waivers, petitions or communications by cable companies. The public should have the opportunity to respond, if necessary, to these but will be unable to do so unless these organizations are notified.

WORK OF THE COMMITTEE

Background

In the summer and fall of 1971 there was considerable discussion about cable TV underway in the village and city councils of the Twin Cities area. Bloomington, Fridley, Lakeville-Farmington were well along toward awarding franchises, while four northwestern Hennepin County suburbs, St. Paul, St. Louis Park and others had received letters of interest in seeking a franchise from cable TV companies.

As this discussion proceeded it became increasingly recognized throughout the metropolitan area that CATV involved significant public policy questions which would have to be soon answered. Specifically, there was a great deal of uncertainty about whether individual CATV systems would be interconnected and how some smaller fully-developed suburbs would receive cable. Also, it was becoming apparent that cable might well open up new opportunities for governmental bodies to communicate with their citizenry, for schools to provide education outside of the classroom and provide a new way for private enterprise and governmental agencies to deliver services.

These many new developments and the questions that were being raised led the Citizens League Board of Directors to authorize formation of a research committee with the following assignment:

"Review the current process of granting CATV franchises in this metropolitan area and consider how the public interest can best be served in this process. The committee should explore what potential contribution cable television can make to the metropolitan area. It should consider the extent to which public bodies have a need for, and a desire to use, CATV channels to provide a public service. The committee should consider what standards should be developed, what regulations and restrictions are necessary, and at what governmental level various decisions regarding CATA should be made."

Membership

A total of 24 members actively participated in the work of the committee. It was chaired by John W. Pulver, a banker. Staff assistance was furnished by Clarence Shallbetter, Research Associate; Richard Sadler, Research Intern; and Jean Bosch of the League clerical staff. In addition to the chairman the following members served on the committee:

Paul Farseth
Douglas A. Hedi.
Fred S. Hird
Charles B. Howard
R. G. Konzelman
Gene E. Marien
Jud McCarthy

Harold A. Miller
Donald M. Monson
J. Dudley Moylan
Peter Norum
Stuart R. Peterson
W. D. Philipson
Peter Popovich
Robert H. Rohlf

Alan Shilepsky
Fred Schaschl
John Schwarzwald
Jon Shafer
David R. Smith
Sidney L. Stolte
William P. Walsh
Donald Z. Woods

Committee Activity

The committee held 39 meetings from December 15, 1971, to November 15, 1972. Most of the meetings were 2½-hour evening sessions held alternately at public libraries in Minneapolis and St. Paul. Detailed minutes of each meeting were prepared of both presentations made to the committee and its deliberations.

The committee initially began its work by obtaining extensive background information on cable TV, and various issues it posed. The following resource persons generously provided information and shared their thoughts and opinions with the committee:

Sherman Headley, General Manager, Midwest Radio & TV (WCCO).
Robert Davies, President, Electronics Consultants, Inc., Richfield.
Brian Sinder, Vice President, Community Information Systems, Inc.
Arthur Harkins, Director, Office for Applied Social Science Research and the Future, University of Minnesota.
Jon Shafer, local consultant on cable television.
Dr. John Schwarzwalder, General Manager, Twin City Area Educational TV Corp. (KTCA and KTCI).
Burton Paulu, Director, Department of Radio & TV, University of Minnesota.
Arnold Walker, Coordinator, Closed-Circuit TV, University of Minnesota.
James Nolte, Director, Electrical Engineering & Continuing Education in Engineering and Science, University of Minnesota.
Bruce J. Kittilson, Director of Instructional Media Services, St. Paul Public Schools.
William Shragg, Coordinator of Instructional Media, Osseo School District.
Harold Gregory, Consultant in Radio-TV Education, Minneapolis Public Schools.
Warren W. Gerecke, Consultant in Radio-TV Education, Minneapolis Public Schools.
Wayne Nelson, Audio-Visual Director, Bloomington Public Schools.
James Goetz, President, General Television, Inc.
Douglas Ammons, District Representative, Community Tele-Communications, Inc.
Jim Keller, representative of Minnesota Cablevision, a subsidiary of American TV, Denver, Colorado.
Robert Rohlf, Director, Hennepin County Library.
Glenn L. Brudvig, Director, Bio-Medical Library, University of Minnesota.
Mrs. Barbara Hughes, member, Anoka County Library Board.
Richard Schrad, Assistant City Manager, St. Louis Park.
R. Michael Amyx, Village Manager, New Hope
Robert McDonald, Hopkins City Council Member.
William J. Ford, Farmington Village Manager.
LeRoy Graphenteen, Farmington Village Council Member.
Paul Dow, then Executive Director, Metropolitan Section, League of Minnesota Municipalities.
Adrian Herbst, then Bloomington City Attorney.
Gerald Davis, Fridley Village Manager.
Richard A. Sands, Senate Research Staff.
Ron Vegemast, consulting electrical engineer.
Mike Roberts, Director, State Public Service Department
Harold Brown, State Public Service Department.
Howard Kaibel, Jr., Executive Secretary, Minnesota Municipal Commission
Clayton LeFevre, Attorney for Suburban Rate Authority.
Robert Carlson, Commissioner, State Public Service Commission.

The committee received excellent cooperation from the staff and personnel of many municipalities, the Metropolitan Council Cable Advisory Committee, and cable companies. The committee is deeply grateful for this assistance.

Committee members were regularly supplied with material on cable, from local newspaper articles to major source documents. These included:

Federal Communications Commission Rules on Cable Television Service,
Federal Register, February 12, 1972.

On the Cable - The Television of Abundance.
Report of the Sloan Commission on Cable Communications, 1971.

Cable Communications in the Dayton Miami Valley;
Basic and Summary Report, Rand Corporation, January, 1972.

Urban Cable Systems - an Interim Report - Mitre Corporation,
November, 1971.

State, Federal, and Local Regulation of Cable Television,
Stephen R. Barnett, Notre Dame Lawyer, Vol. 47, No. 4, April, 1972.

Cable Television: A Guide for Citizen Action;
Monroe Price and John Wicklein, Pilgrim Press, 1972.

Cable Television in Detroit - a study in urban communications; summary of;
Cable Study Committee for Common Council, City of Detroit, May, 1972.

Drafting Municipal Franchises for Cable Television Systems,
James I. Masters, Management Information Service, International City
Management Association, January 1972.

Investigation of Cable Television and Other Forms of Broadband Cable
Communications in the State of Illinois (56191),
David H. Armstrong, Chairman, Illinois Commerce Commission, January 5, 1972.

ABOUT THE CITIZENS LEAGUE . . .

The Citizens League, founded in 1952, is an independent, non-partisan educational organization in the Twin Cities area, with some 3,600 members, specializing in questions of government planning, finance and organization.

Citizens League reports, which provide assistance to public officials and others in finding solutions to complex problems of local government, are developed by volunteer research committees, supported by a fulltime professional staff.

Membership is open to the public. The League's annual budget is financed by annual dues of \$10 (\$15 for family memberships) and contributions from more than 500 businesses, foundations, and other organizations.

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