

CABLE TELEVISION: A SUMMARY OVERVIEW FOR LOCAL DECISIONMAKING

PREPARED UNDER NATIONAL SCIENCE FOUNDATION GRANT GI-32107
RESEARCH APPLIED TO NATIONAL NEEDS (RANN) PROGRAM

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**RAND REPORTS ON CABLE TELEVISION PREPARED
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This series of reports was prepared under NSF's grant to the Rand Communications Policy Program. It includes the following titles, each preceded by the series title *Cable Television* in the printed copies.

- R-1133-NSF, *A Handbook for Decisionmaking*, by Walter S. Baer.
- R-1134-NSF, *A Summary Overview for Local Decisionmaking*, by Walter S. Baer.
- R-1135-NSF, *The Process of Franchising*, by Leland L. Johnson and Michael Botein.
- R-1136-NSF, *Citizen Participation in Planning*, by Robert K. Yin.
- R-1137-NSF, *Technical Considerations in Franchising Major Market Systems*, by Carl Pilnick.
- R-1138-NSF, *A Guide to Federal Regulations*, by Steven R. Rivkin.
- R-1139-NSF, *Citizen Participation After the Franchise*, by Monroe E. Price and Michael Botein.
- R-1140-NSF, *Applications for Municipal Services*, by Robert K. Yin.
- R-1141-NSF, *A Guide to the Technology*, by Carl Pilnick and Walter S. Baer.
- R-1142-NSF, *Making Public Access Effective*, by Richard C. Kletter.
- R-1143-NSF, *Uses in Education*, by Polly Carpenter.
- R-1144-NSF, *A Guide for Education Planners*, by Polly Carpenter.

A special bibliography of Rand publications on cable television is available on request. Information on Rand publications may be obtained by writing to: Publications Department, The Rand Corporation, 1700 Main Street, Santa Monica, California 90406.

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PREFACE

During the past year, under a grant from the National Science Foundation, The Rand Corporation has studied the major issues surrounding local decisionmaking for cable television. This summary outlines the topics discussed in the study's principal report: *Cable Television: A Handbook for Decisionmaking*. Both this summary report and the Handbook are addressed to citizen group members, local government officials, and other people concerned with the development of cable television in their communities.

Cable television embraces such a host of political, social, economic, legal, and technological issues that any single document on the subject is in danger of being shallow at best and pretentious at worst. Consequently, this summary serves only as an introduction to issues that are discussed more fully in the Handbook and in the companion reports listed on the inside front cover. It also contains a number of checklists, drawn from the Handbook, of topics that communities should consider in their own decisionmaking processes.

Many people have contributed to this series of reports. I am especially grateful for the advice, criticism, and support of the Rand staff members and consultants who participated in the project. Constructive comments on the Handbook and this summary were made by members of the Cable Television Task Force, Committee on Telecommunications, National Academy of Engineering, and by a number of other reviewers. Needless to say, any errors of fact and judgment that remain are my responsibility alone.

CABLE TELEVISION: A SUMMARY OVERVIEW FOR LOCAL DECISIONMAKING

Cable television is a system for carrying television signals by wire rather than transmitting them over the air. Instead of the 7 or fewer television channels most Americans now receive, cable offers an immediate abundance of 20 channels, with more to come in the future. Cable television also holds out the promise of immediate viewer interaction with the program source. These technical prospects offer many undeniably dramatic possibilities, although some may prove to be more dramatic than feasible.

Cable began as a service to communities where conventional television reception was inadequate. Even now, cable principally serves small towns and rural areas where it can provide better reception, more channels of broadcast television, and sometimes locally originated programs. These cable systems generally have been highly profitable businesses.

Today, however, cable television stands on the threshold of development in the major metropolitan areas of the United States. Cable systems in the cities and suburbs will differ greatly in technology, economics, and services from systems built outside the "major markets." And contrary to what many people suppose, cable systems are unlikely to be rich sources of profits and fees for cities—at least not in this decade.

One can easily become fascinated with cable television as a new technology, but the programming it delivers is its real importance. Communities should focus on the services that cable can provide to people, not on the mechanics of the medium. Broadly speaking, cable offers five levels of improvements and new services:

- “More of the same”—the same sort of programming we presently receive, but with higher quality pictures and some programs for more specific audiences.
- Pay TV, offering sports events, first-run movies, Broadway shows, opera, and the like for payment of an extra fee.
- Public access channels available to individual citizens and community groups. Often using portable cameras, all sorts of groups—churches, Boy Scouts, minority groups, high school classes, crusaders for causes—can create and show their own programs. With public access, cable can become a medium for local action instead of a distributor of prepackaged mass-consumption programs to a passive audience.
- New services to individual subscribers, such as televised college courses and continuing education classes in the home. Cable’s capability for two-way communication between viewer and studio may in time permit doctors to participate in clinical seminars at distant hospitals, or enable viewers to register their opinions on local issues.
- New services to institutions, such as in-service training of nurses, teachers, and policemen. Public and private institutions might build their own two-way cable networks or lease channels to send x-rays among hospitals, exchange computer data, and hold televised conferences.

Figure 1 illustrates the possible evolution of cable services.

The technical design of cable systems must allow for future uses as well as for those feasible today. However, urban cable systems face a real chicken-and-egg problem in providing more than better reception and a few more television channels. Until new services are developed, cable in the larger cities may not attract enough subscribers to warrant large-scale commercial construction. But until systems are built and large subscriber markets are assembled, new services will not be profitable. The result may be a slower pace of system construction in the major markets than some previous accounts have projected.

Because they use municipal rights-of-way, cable systems nearly always operate under a franchise from the local city, town, or county. At the federal level, cable television is regulated by the Federal Communications Commission (FCC). State regulation is also an increasing trend.

On March 31, 1972, a new set of FCC rules went into effect that changes the future course of cable development. The FCC rules permit all cable systems to bring in some television signals from other cities. At the same time, cable systems in the

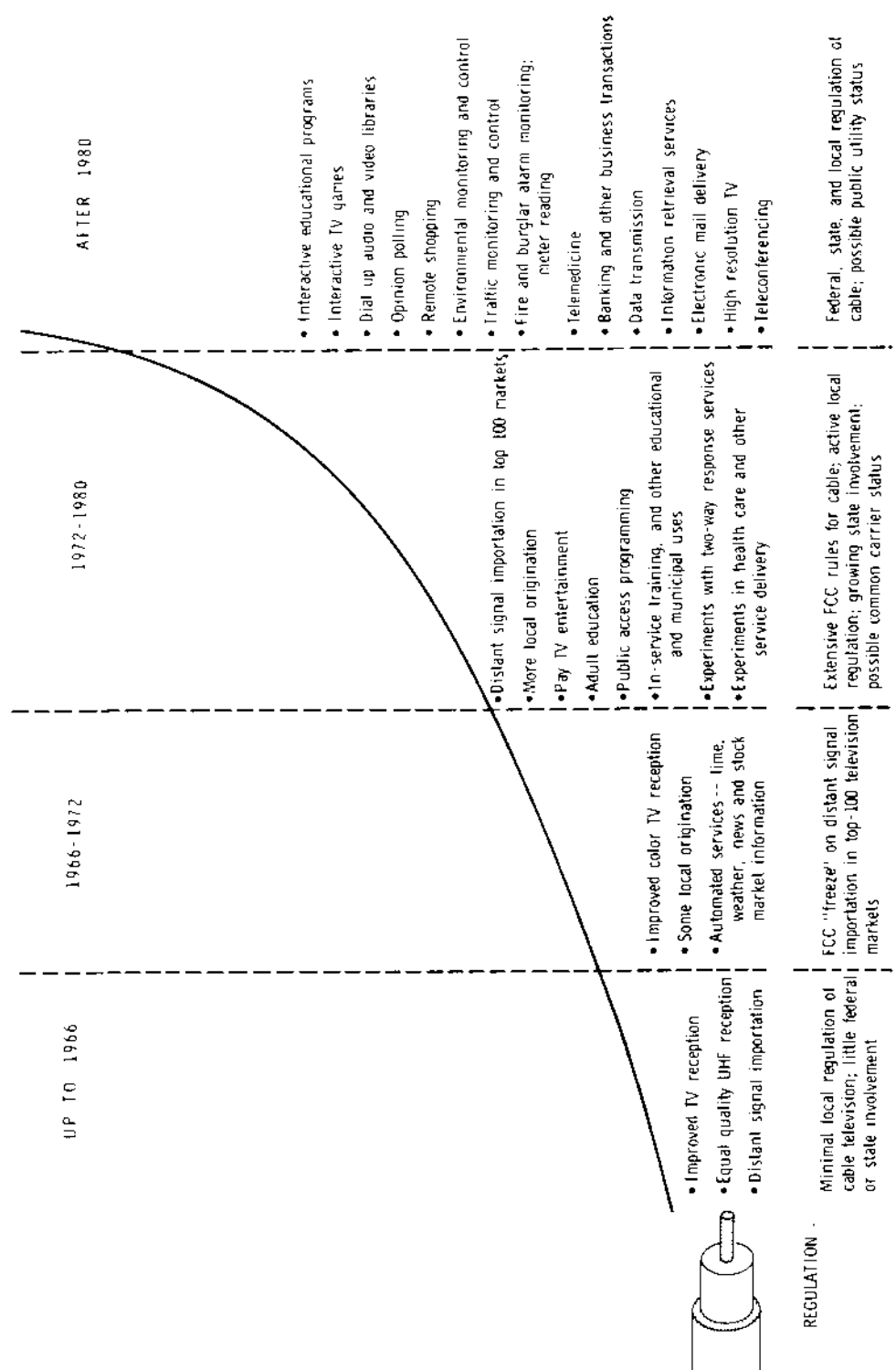


Fig. 1—Potential growth of cable television services

100 largest television markets must provide at least 20 channels and must offer new nonbroadcast services, including:

- Local programming, usually known as "cablecasting," if the system has more than 3500 subscribers.
- Leased channels for pay TV and other services.
- Public access to a cable channel.
- A channel for educational programming.
- A channel for municipal services.
- A capacity for two-way services, such as public opinion polling, that require return signals from the subscriber.

The rules also require local franchise authorities to follow certain standards if their franchises are to obtain an FCC "certificate of compliance"—without which the cable system cannot carry any broadcast signals. Franchise fees to the city, for example, are limited to 3 percent of gross subscriber revenues. In granting a franchise, the local authority must consider the "legal, character, financial, technical, and other qualifications" of applicants by means of a "full public proceeding affording due process."

In effect, a local franchise authority cannot set more demanding requirements than those specified in the rules unless it can justify them to the FCC. This can be done by means of a "special showing" after a franchise has been awarded. However, the local franchisor has full authority to define the franchise areas, set rates for service, determine whether the system will be publicly or privately owned, and select the franchisee.

Local decisionmaking for cable television is a continuous process, moving from planning through drafting the franchise, selecting the franchisee, regulating the system, and managing public services on cable. It is also part of the overall local political process. Many individuals and interest groups in the community will want to inform themselves on the issues and make their voices heard.

With growing public awareness of cable, ownership will perhaps be the most emotionally charged topic a community will confront. The basic ownership issue is whether the community should follow the standard pattern of franchising its cable system to a private operator. Other possibilities include municipal ownership, a public cable authority, noncommercial ownership, or a joint venture between a commercial and a noncommercial group. These alternatives offer prospects of greater community control and direct use of surpluses if the system is successful,

but they also involve significant risk and demand a much greater community commitment. On a national scale, public or noncommercial cable systems would serve as useful yardsticks to measure the performance of private operators.

Two basic approaches, negotiation and competition, have been used in cable planning and franchising. Under the first, the city selects a prospective cable operator and negotiates the many terms and conditions that will go into the franchise. In contrast, "the competitive bid and award" approach involves a longer and more formal proceeding in which the franchise authority must detail the terms and conditions of the franchise in advance. The authority then invites bids from all interested parties and makes the award according to preestablished criteria.

Neither approach is clearly preferable to the other for all communities. Moreover, a combination of open competition and negotiation may be preferred. The Handbook describes the competitive bid approach more fully, so that communities can be familiar with the steps it may entail. These steps are not all mandatory, however, and in cases where franchising authorities prefer stronger elements of negotiation, some of them can be eliminated or compressed in time and scope. The steps include:

1. Adoption of procedures for planning and franchising.
2. Assessment of community needs, objectives, and alternatives.
3. Public hearings and tentative decisions on major issues such as ownership, franchise district boundaries, and interconnection.
4. Hearings on and adoption of a draft franchise document describing the general terms and conditions of the final franchise.
5. Preparation and dissemination of a Request for Proposals from franchise applicants, based on the draft franchise document.
6. Hearing on proposals received from applicants for the franchise.
7. Decision on award of franchise.
8. Application for an FCC certificate of compliance.
9. Monitoring system construction and certifying performance.
10. Continuing administration of the franchise.

Citizen participation should be encouraged throughout the process. The franchising authority will want to consider forming citizen groups to advise it on issues such as ownership, public access, and use of the education and local government channels. The authority also will want to consider its need for community surveys, consultant assistance, and independent studies.

The FCC has mandated one cable channel for education, one for local government, and one for public access in the major markets. The cable operator is to furnish these channels free of charge on an experimental basis for at least five years. Communities outside the major markets also may require these access channels in their franchises.

Simply making channels available, however, by no means guarantees that they will be used well or even used at all. A community therefore should start drawing its plans to use the access channels early in the decisionmaking process. Public services on cable can include:

- In-school instruction
- Instruction for homebound and institutionalized persons
- Preschool education
- High school and post-secondary degree courses in the home
- Career education and in-service training
- Community information programming
- Community information centers
- Municipal closed-circuit applications

The most important reason to experiment now is to assure that public uses of cable are not foreclosed by a rapid development of entertainment and other commercial services. Consequently, civic leaders, educators, and local officials should take seriously their mandate to develop applications for the access channels in the next five years.

In time, cable television may influence the way we live as radically as the automobile and the telephone have done. Most individuals and groups who have studied cable conclude that its growth will serve the public interest. Still, the long-range impact of cable communications is largely unknown. The necessary and unavoidable short-term decisions that must be made will have long-lasting, unforeseen, and possibly unintended consequences.

The development of cable television demands more decisionmaking by local communities than most new technologies have required in the past. These decisions cannot and should not be left to federal and state regulators, or to large, nationwide corporations and interest groups. Local interests—business interests, local government officials, community group leaders, and individual citizens—should have a voice in shaping the terms of a community's franchise, influencing its award, and determining the programming and services the system will deliver.

CHECKLISTS FOR LOCAL DECISIONMAKING

Cable Television Technology

- Has the community determined how many central distribution points (headends) it will need to assure good-quality service?
- Have the number and location of local studios been considered?
- Does the community want to encourage separate neighborhood programming through subdistricting?
- Have the advantages and costs of interconnection with other cable systems been considered?
- Have system capacity requirements for one-way and two-way services been thought through carefully? If the local franchise requires more capacity than the FCC rules specify, the community must have plans for its actual use.
- Has provision for later expansion been made in the initial system design? If not, rebuilding the system to add two-way capacity or extra channels may be so costly as to inhibit development of new services.

Cable Economics

- Has the community independently evaluated the capital cost and projected financial operations of its cable television system? It should not rely solely on projections supplied by franchise applicants, but should measure these projections against its own estimates. This need not require a detailed and expensive study; rough calculations often can suffice. However, financial projections should include breakdowns of
 - capital costs
 - subscriber saturation
 - anticipated revenues
 - operating expenses
 - operating income and net profit
 - sources and uses of funds

- Has the community gathered and examined the available financial models and economic data about cable system operations? This information makes it possible for local officials and private citizens to form their own judgments about the economic prospects for cable in their communities. During the planning and franchising processes, however, most cities will want to have the advice of independent experts.
- Have estimates been prepared of the percentage of households that will subscribe to cable and the sensitivity of financial results to this figure? Subscriber saturation is the most important single factor in determining system success or failure and the most difficult to forecast in major market systems. Yet a range of estimates can be derived from the experience of other communities, household surveys, and expert judgments.
- If the community is small, and particularly if it is in a major market, has it investigated the economies of scale that would be realized by common or coordinated franchising with neighboring towns?
- Conversely, have the economic consequences of forming multiple cable districts within the community been investigated?
- Have the costs of, and projected revenues from, local origination and new services been examined carefully so that unrealistic demands will not be made? Remember that programming and other software generally will cost much more than hardware. Unless a community has good reason to think otherwise, income from new services other than pay television should not be expected to contribute heavily to system revenues in its early years.
- Has the community secured full information from each franchise applicant on his financial status and how he intends to finance system construction?

Ownership Options

- Has the community considered the advantages and disadvantages of commercial, noncommercial, and public system ownership?
- Has the ownership pattern of nearby cable systems been explored?

- If the community franchises its cable system to a commercial operator, will local ownership (perhaps including ownership by minority group individuals) be a factor in selecting the franchisee?
- Has the franchising authority required each applicant to list its local partners, their ownership shares, and any other consideration given to local residents?
- Has the possibility of a joint venture between a local group and a commercial cable operator been explored?
- Have potential problems of local media cross-ownership been evaluated?
- Would the city have legal authority to raise money for and own a municipal cable system?
- Has the community considered creating a special public authority, perhaps covering more than one local jurisdiction, as an alternative to municipal ownership?
- Does the community possess the local leadership and financial resources for noncommercial cable ownership?
- If either public or noncommercial ownership is under serious consideration, can the following questions be answered satisfactorily:
 - Where will the money come from to build the system?
 - Who will take final responsibility for system operations?
 - Is the city or nonprofit group prepared to wait through several years of losses in anticipation of eventual surpluses?
 - What would happen if the system failed?

Planning for a Cable System

- Has the responsibility for franchising been established within the city council or other local franchising authority?
- Has the franchising authority considered the effect of the FCC rules in regard to

- broadcast signals the cable system may carry?
 - minimum channel capacity, access channels, and other system requirements?
 - local cablecasting?
 - franchising procedures?
- Have state laws or regulations regarding franchising been taken into account?
 - In selecting a cable operator, what combination of "negotiation" and "competitive bid and award" approaches will be used?
 - Has the franchising authority adopted a detailed set of procedures for planning the system, drafting the franchise, and making the franchise award? Have a time schedule and budget been worked out?
 - Do these procedures include opportunities for citizen participation at all major decision points, through public hearings and less formal means?
 - In planning for a cable system, has the franchising authority considered
 - the available literature about cable?
 - the experience of similar communities?
 - conducting a community survey?
 - delegating community study committees?
 - hiring consultants or commissioning expert studies?
 - What has been done to involve all elements of the community in the planning process?
 - Have the size and desired characteristics of cable franchise districts been studied, as well as interconnection requirements?
 - Has the possibility of joint or coordinated franchising with neighboring jurisdictions been considered?
 - Have various system design concepts been explored?
 - Has an economic feasibility study been made?

- Have the administration and use of the education, local government, and public access channels been investigated?
- Have public hearings on major franchise issues been conducted with
 - adequate public notice?
 - reasonable choice of time and location to encourage citizen participation?
 - a published explanation of decisions?

Franchising the System

- Has the franchising authority considered the many terms and conditions that must be included in the franchise? (These provisions are discussed in Leland L. Johnson and Michael Botein, *Cable Television: The Process of Franchising*, The Rand Corporation, R-1135-NSF, February 1973.)
- Has the use of consultants to provide information and explore alternatives been considered?
- Have public hearings on the draft franchise document been held?
- If the competitive bid and award approach has been adopted, has the franchising authority drafted a Request for Proposals (RFP), indicating which franchise provisions are open for competitive bidding?
- Has the RFP been disseminated as widely as possible to noncommercial and commercial organizations?
- Does the RFP require full disclosure of the applicant's financial, ownership, character, technical, and other qualifications for the franchise award?
- Has the franchising authority conducted an independent analysis of the area's economic potential for cable with which each applicant's response can be compared?
- Has each applicant's track record in operating cable systems in other communities been assessed?

- Has the franchising authority analyzed each applicant's ability to build and operate the system on his own?
- Have definite criteria and weighting factors been established to aid in selecting the franchisee?
- Has the franchising authority given effective public notice, held public hearings, and published a written opinion in granting the franchise award?

Local Responsibilities Beyond the Franchise Award

- Are the franchising authority and citizen groups prepared to:
 - comment on the cable operator's application for a certificate of compliance from the FCC?
 - join in any special showings necessary to gain FCC certification?
 - initiate or respond to waiver petitions before the FCC?
- Have plans for monitoring system construction and certifying performance been drawn?
- Has responsibility for administration of the franchise been delegated?
- Have effective procedures been adopted for resolving subscriber complaints and enforcing franchise provisions?
- Is the local regulatory program adequately staffed and budgeted?

Public Access

- If the community is outside the major markets, will it specify public access requirements in its franchise?
- If the community now has an operating cable system, will public access arrangements be negotiated with the operator?
- Do the local rules for public access meet FCC requirements? Do they also provide for

- regular scheduling of some access programs?
- use of production facilities and equipment?
- stated charges for any production costs levied on users?
- Has the community considered delegating responsibility for public access to a Public Access Board or other community entity? (If it does so, a special showing to the FCC will be necessary.)
- How will the community organize to make best use of public access? Who will train community groups and individuals in the use of video? Can those interested in public access
 - work closely with the cable operator?
 - build around a local institution?
 - use expert assistance to get started?
- How will funds be raised to support access programming? Has the community considered using part of its franchise fee for this purpose? (This also may require a special showing to the FCC.)
- How will access programs be promoted to attract an audience? How will access groups get feedback from viewers?

Public Services on Cable

- If the community is not in a major market, will its franchise require free use of an education and a government access channel?
- Has the franchising authority designated planning groups to recommend how to use the education and government channels?
- Has the franchising authority or planning group considered
 - whether to set rules for administering the education channel, supported by a special showing to the FCC?
 - how the government channel will be administered?
 - what construction schedule and rates are appropriate for wiring schools and other public facilities?
 - what production facilities and equipment can be used?

- what rates for noncommercial use of additional leased channels will be set?
 - where funds for programming and service development will be obtained?
 - how audiences will be made aware of, and participate in, public services on cable?
- What specific educational and municipal applications have been proposed? Each application should be subjected to a series of questions like the following:
 1. What is being done now?
 - who provides the information or service?
 - who uses it?
 - how is it delivered to users?
 - is there feedback from users?
 - how much is spent on service delivery and feedback?
 2. What are the present problems in providing the service?
 3. How might cable television help? Would other media, such as broadcast television, the telephone, or the mails be as effective?
 4. Can the service be provided on the free education or government access channels?
 5. Will it require other facilities or equipment?
 - additional channels?
 - private channels?
 - two-way response (data, audio, or video) from viewers?
 - viewer-to-viewer communications?
 How much will this cost?
 6. Who will do the programming or provide the service? How much will it cost?
 7. How will the target audience be identified and reached? How much will this cost?
 8. What are the arrangements for audience feedback?
 - how will success or failure be measured?
 - how will feedback modify the way the service is provided?
 How much will it cost?
 9. Overall, how will the service be paid for?
 - from existing local budgets, as a result of cost savings?

- from additions to local budgets?
 - from state or federal aid?
 - from foundations or private gifts?
 - by taxing cable subscribers?
10. Will a special showing to the FCC be necessary? Must any local, state, or federal laws or regulations be changed?
 11. What will be the effect on existing local institutions that now provide the service? Must new institutions be created?
 12. What specific steps must be taken to implement the service on cable television?
- Has the cable system been designed to accommodate other public services at a later date?
 - What are the prospects for demonstrating new educational or municipal applications on the community's cable system?

