

Incidental Paper

**Amendments to the
Communications Act of 1934
(1979 -1980)**

Congressional Testimony of:

Kurt Borchardt

Benjamin M. Compaine

John C. LeGates

John F. McLaughlin

Anthony G. Oettinger

Program on Information Resources Policy

Harvard University

Center for Information
Policy Research

Cambridge, Massachusetts

An incidental paper of the Program on Information Resources Policy.

AMENDMENTS TO THE COMMUNICATIONS ACT OF 1934

Testimony of Kurt Borchardt, Benjamin M. Compaine, John C. LeGates,
John F. McLaughlin and Anthony G. Oettinger
August 1980

The Program on Information Resources Policy is jointly sponsored by
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Director: John C. LeGates
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PREFACE

Our Program lists usefulness to policy makers among its principal goals. One form of this usefulness rests on the impartiality resulting from diverse funding, on competence based on ongoing dialogue with conflicting stakeholders and on our analytical ability.

To the Congress we differ from most witnesses, whose reasons for testifying lie in their partiality and whose special competence rises from their active role.

The breadth of our exposure provides us with an ability to see the ways in which diverse parts of the information business interact. One of the simplest conclusions from this vision is that they do interact. The principal message in our testimony in 1976 and 1977 to the 94th and 95th Congresses* was that there were more businesses with a stake in the Communications Act of 1934 than only telephony and broadcasting. Indeed, the list included both organizations which were already appearing in testimony, such as the computer industry and the peripheral equipment manufacturers, and organizations which were not, such as newspapers, banks and the Postal Service.

The point proved to be an indicator of the course that the "rewrite" effort was to take. As it progressed, new industry after new industry appeared and articulated diverse and often conflicting interests. One result has been the diminution of the scope of the bill, including the disappearance of a broadcasting rewrite in the House version, as the growing conflict emerged. Another has been the passing of several deadlines for early and easy passage of a bill, as fresh and unexpected stakeholders materialized.

We repeated this message in the testimony before the 96th Congress, which is presented in this volume. Added to it were several other points which emerged from the breadth of our perspective. We stressed that not only did the bill need to accommodate diverse stakeholders, but that the types of problems being addressed did not have "yes or no" answers, as many stakeholders claimed. Instead, solutions would involve the striking of balances. We stressed that "deregulation" did not necessarily equate with "competition", nor "regulation" with "monopoly". Rather a mix of regulation and deregulation would be required for any combination of competition and monopoly desired, even the extremes. (See John LeGates House testimony).

Furthermore, protection against subsidy, a key element in protection of competition, is a virtue that can only be achieved at the expense of economic efficiency - itself the goal of competition. (LeGates, Senate).

We view cost and revenue allocation neither as a disorganized and ineffective collection of compromises nor a uniform and simple system. Instead it is the very complex, finely tuned product of a political system

* (Available from the Program on Information Resources Policy as Incidental Paper WP-78-1).

involving local, state, and national interests. Disruption of the political mechanism, by changing the boundary between state and federal jurisdiction, could disrupt economic efficiency, political autonomy, and the ability to provide socially desirable services. (Oettinger, Senate).

Between the complexity of the process and the dynamism of the industries involved we suggested that ongoing decision making in the form of congressional intervention could be too rigid for the industries and too demanding for the Congress. We suggested that an independent regulatory agency continue to have major powers (Oettinger, House).

We also saw the possibility of centripetal forces interfering with the integrity of facilities and services. We argued that since Congress wished to create a growing role for competing organizations, it should also provide a growing role for mechanisms for co-operation, such as government sponsored negotiations, and the relaxation of certain anti-trust provisions (Borchardt, House and Senate).

The Senate invited John McLaughlin to testify on the subject of the U.S. Postal Service. He reinforced the view of the USPS as a stakeholder, particularly one that stands to lose business to the growing electronic transmission of information. He pointed out, however, that only USPS has connections to every household, and that no other organization seems to show an interest in delivering electronically originated messages to the whole population. USPS entry into that business merits consideration as a way to help with the losses that could otherwise appear.

The House invited Ben Compaine to testify on the media. He explained that the traditional descriptions of media (newspapers, broadcasters, etc.) make less sense today than to think of each as a combination of content and conduit. In light of the changes taking place in technology and industry structure, he recommended against freezing the media into their existing modes of operation. Newspapers must be able to move into other forms of distribution, such as over cable or telephone lines. Television broadcasters must be able to cope with competition via offline distribution, such as video cassettes or disks, as well as with cable or direct satellite broadcasting. He suggested that cable, not broadcast, cross-ownership with newspapers will be a major media policy issue in the decade of the 1980's.

Some of these points were not unique to our testimony. However, the others who presented them often did so in defense of their own interest; the Program's articulation did not.

Whatever bills pass or do not pass, we do not think that the problems addressed in the hearings can be "solved". Instead there will be ongoing conflicts and accommodations. These will require the action of public bodies, such as the courts, the Congress and regulatory agencies.

The ideas presented here will remain useful, and will be used by those bodies for years to come. For this reason we urge our readers to let us know of any errors or misrepresentations they discover here.

John C. LeGates
August 1980

VOLUME I—PART 2
THE COMMUNICATIONS ACT OF 1979

HEARINGS
BEFORE THE
SUBCOMMITTEE ON COMMUNICATIONS
OF THE
COMMITTEE ON
INTERSTATE AND FOREIGN COMMERCE
HOUSE OF REPRESENTATIVES
NINETY-SIXTH CONGRESS
FIRST SESSION
ON
H.R. 3333
TITLES I AND III
GENERAL PROVISIONS; TELECOMMUNICATIONS
CARRIER REGULATION

APRIL 24, 25, 26; MAY 1, 2, 3, 4, AND 8, 1979

Serial No. 96-122

Printed for the use of the
Committee on Interstate and Foreign Commerce



U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1980

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THE COMMUNICATIONS ACT OF 1979

WEDNESDAY, MAY 2, 1979

**HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON COMMUNICATIONS,
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
Washington, D.C.**

**STATEMENT OF JOHN C. LeGATES, DIRECTOR, PROGRAM ON
INFORMATION, RESOURCES AND POLICY, AND PRESIDENT,
CENTER FOR INFORMATION POLICY RESEARCH, HARVARD
UNIVERSITY, ACCOMPANIED BY ANTHONY G. OETTINGER,
CHAIRMAN**

Mr. LeGATES: Mr. Chairman, I am John LeGates. I am director of the program on information resources policy at Harvard University and president of the Center for Information Policy Research, a companion nonprofit organization.

With me here is Anthony G. Oettinger, chairman of both organizations.

We are supported by approximately 70 organizations, many of whom compete and conflict. With your permission, Mr. Chairman, two documents describing our work are appended.¹ The opinions expressed here, however, are my own.

Mr. LeGATES. The Van Deerlin bill relies heavily on two techniques to achieve its purposes. One technique is to rely on competition and the private sector * * * to the maximum extent possible to determine the variety, quality, and cost of telecommunications services and facilities. (Sec. 311(a), p. 41). The other is the reduction of regulation until it exists only to the extent necessary to protect the consumers of telecommunications services provided by dominant carriers. (Sec. 311(b), p. 41). This regulation, along with the class of dominant carrier will cease to exist after 10 years.

There appears to be an assumption that these two techniques will coincide: that monopoly and regulation go hand in hand, and so do competition and absence of regulation.

I fear that this assumption is unjustified. In this industry, a monopolistic structure has indeed been regulated and perhaps also fostered by regulation. However, the absence of regulation does not necessarily foster competition. Indeed, the American Telephone & Telegraph Co. established its dominant market position in an unregulated environment, as did International Business Machines.

The bill provides for deregulation of the industry after a decade by emptying the dominant carrier classification (sec. 322(d), p. 51). The assumption behind this provision appears to be that a decade of competition will have eliminated the reality of dominant carriers and that once regulation ceases, no carrier will achieve or regain domination.

An examination of the current published plans of the major competitors for interexchange traffic is not very encouraging. Those using terrestrial links, such as Southern Pacific Communications and MCI, cannot reach cities without building physical connections. These will be most economical to the largest cities. Somewhere, there will be a cutoff, leaving many, probably most, cities unserved. Those competitors planning satellite access can reach smaller cities but still have economic limitations. Only certain places will be profitable. Satellite Business Systems, American Satellite, and Xerox currently plan to market to only the largest 200 cities at most.

It may or may not be true that in a decade there will be no dominant carriers. It is certainly possible that there may be such carriers. I think that the bill will better serve its purposes if it leaves the flexibility, whether in its own provisions or in the hands of the regulatory commission, to cope with this possibility.

Another area where regulation may be needed to make competition work is in the allocation of costs and revenues. The present separations and settlements process will wither away under this bill. However, some of the functions it provides are essential and some process is needed to provide them. The Van Deerlin bill passes revenue from interexchange services to interexchange services by means of access charges (sec. 324, p. 52ff), some of which are

¹ Information Resources: Performance, Profits and Policy, and The Program: Who We Are and What We Do, by Anthony G. Oettinger, John C. LeGates, and John F. McLaughlin, are available from Harvard University, Cambridge, Mass. 02138.

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pooled. This approach differs significantly from the Hollings and Goldwater bills in the Senate. These provide for a fund which will distribute revenue to intraexchange carriers. The revenues for this fund will come from all interexchange carriers, whether they connect to intraexchange carriers or not.

The House and Senate versions will provide different incentives to carriers, with the House bill seeming to offer less incentive for an interexchange carrier to connect to intraexchange carriers. The way out of this, should you wish it, would seem to be a Federal presence in cost and revenue allocation.

An area in which regulation may be needed for competition to serve the public interest is in the coordination of the communications system. This has been achieved in the past by Bell System domination and a cooperative relationship among the different suppliers. Now a multiplicity of suppliers who are competitors instead of family members are appearing. This trend will accelerate under the Van Deerlin bill. The bill recognizes the need for coordination in the section entitled "Network Management" (sec. 332, p. 66). The increasing difficulty of network management, however, may require stronger provisions than this section offers. For discussion, I raise the possibility of extending the antitrust immunity beyond subsection (a): agreeing to the design, plan, construction, and maintenance of a nationwide network of telecommunications facilities, and the development of technical standards applicable to such services and facilities (sec. 332, (a), p. 66).

I have questioned whether certain details of the bill will adequately serve the purposes of the bill. In all these cases, there is a possibility that the bill has been overly specific. Alternate provisions or alternate timings might do the job better.

I wish to propose that you consider leaving greater administrative discretion to the Communications Regulatory Commission, operating within the twin guidelines of relying on competition and minimizing regulation. Otherwise, you risk the prospect that the letter of the law may work against its intentions.

Analysis of these issues in greater detail is being submitted to the Committee as written testimony by my colleagues Kurt Borchardt and Anthony Oettinger.

I thank you for the opportunity to express my views.

[Testimony resumes on p. 1229.]

[Statements of Messrs. Oettinger and Borchardt follow:]

(1212)

*Hearings before the
Subcommittee on Communications
of the
House Committee on Interstate and Foreign Commerce*

May 8, 1979

STATEMENT OF ANTHONY G. OETTINGER

Chairman, Program on Information Resources Policy
Harvard University

Mr. Chairman, my name is Anthony G. Oettinger. I am a professor at Harvard University, where I chair the Program on Information Resources Policy. I am also the holdover chairman of the Massachusetts Cable Television Commission, a body I've served on since 1972. I speak here only for myself, not for any institution with which I am affiliated, nor for any of the 70 or so diverse public or private organizations that support the Harvard Program's work (list attached).

It is a pleasure to testify before you once again. I shall focus my comments on Sections 322 and 324 of Part B of Title III of the Van Deerlin bill, a portion dealing with interexchange carriers.

My main point is that there are limits to unlimited competition. Consequently, I suggest that, except for the crucial question of locating jurisdictional boundaries, it may be more constructive to place greater weight on broad guidance for flexible regulation and less weight on detailed legislative injunctions. I will also draw your attention to certain key

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relationships between the interexchange and exchange jurisdictions and to the import of the different treatments of these relationships as envisaged by the Hollings and Goldwater bills in the Senate and your own here in the House.

Section 322 (d) would eliminate all regulation of interexchange markets after 10 years (p. 51). If I interpret the bill correctly in the light of Section 322 (b)(1)'s definition of a dominant carrier (p. 50), the elimination of all regulation by Section 322 (d) is tacitly based on the assumption that 10 years' operation of market forces will leave no one dominant in the sense of Section 322 (b)(1). Otherwise, regulation after 10 years would be as justifiable as before.

The facts at my disposal suggest that deregulation of interexchange markets may be a pipe dream and that attempting to live that dream may imperil the effectiveness of the proposed legislation. You yourself, Mr. Chairman, have noticed this, since you have been quoted as observing that "we continue to hear that full and fair competition is great in principle, but when it is proposed, limitations are suggested" (Telecommunications Reports Vol. 34, No. 1, August 7, 1978, p. 1). I think there are real limitations on competition, limitations that transcend self-serving arguments of interested parties.

The dream is a prevalent one. AT&T asserted for many years that it loved the regulated monopoly that was, could live with unfettered competition if it could be, but thought regulated competition the worst of all possible worlds. Many economists, as well as numerous industrialists, oppose monopoly and extol the virtues of an ideal free market place, an ideal that has never materialized, as my Harvard Business School colleague, Alfred D. Chandler, Jr., has chronicled so well in his book, The Visible Hand: The Managerial Revolution in America.

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Will it ever be? Experts are too wrong too often for me to wish to be foolish enough or arrogant enough to assert that "interexchange" will never be synonymous with "competitive". But I respectfully suggest, Mr. Chairman, that it may be as foolish or arrogant for a legislature to mandate that they will indeed have become synonymous by a date certain, 10 years or any fixed number of years out. It may therefore be more constructive, Mr. Chairman, to let the matter rest at or near the broad pro-competitive injunctions of Section 311(a) and Section 311(b). In that case the Communications Regulatory Commission would, under continuing Congressional oversight, have the latitude to apply that competitive standard -- absent from the Communications Act of 1934 -- to future conditions that I think none of us can foresee clearly enough to support so restrictive a mandate as is imposed by Section 322(d).

The absence of universal interexchange competition also implies a continuing need for supervising cost allocations. Such a need is clearly recognized in Section 324 of your bill. However, the language of Section 324(c) suggests that the need is seen as transitional only.*

I agree that the peculiar current separations and settlements process cannot long endure under emerging conditions. I also think, however, that the functions of that process (including cost allocation within and across jurisdictions) will remain essential, and that some appropriate way must be found to continue discharging these essential functions. Details on this point are in testimony which I am presenting to the Senate subcommittee. I therefore ask, Mr. Chairman, that I be permitted to incorporate that Senate testimony here by reference, since it is necessary background for

* Section 324(c)(2), however, seems ambiguous in that it could be read as allowing any ceiling whatever after 10 years.

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To the contrary, I think we are stuck in a world where relying on "competition...to the maximum extent possible" (Sec. 311(a), p. 41) will inevitably require significant regulation as well. I share the prevalent dissatisfaction with unnecessary regulation poorly done. Our challenge, Mr. Chairman, is to make necessary regulation work better.

In support of this viewpoint, let me explain why I think that "interexchange market" is not synonymous with "competitive market", now or in the foreseeable future. Exhibit 1 shows AT&T's major interexchange routes as of December 1978. Exhibit 2 shows major competing terrestrial interexchange routes as of the same date. These two sets of routes are superimposed for comparison in Exhibit 3. Exhibit 3 makes it clear that, as of now, there is indeed competition for interexchange facilities and services among several major cities. It makes it equally clear that there is no competition for interexchange facilities and services among most cities.

Exhibit 4 makes it clear that this need not always be so. The technologically possible coverage of Satellite Business System's proposed facilities extends over most of the United States. But what is seen as economically attractive, as contrasted with technologically possible, is illustrated by Exhibit 5. The interexchange satellite segment of the proposed XTEN (Xerox) system, like SBS's, is conceived of as reaching rooftops only at a few locations, not at every business or residential locale. What locations? Exhibit 6 suggests no more than 200 cities, of which 50 account for the largest and hence economically most attractive competitive markets. I am aware of no plans to extend competition more widely. So "interexchange" is not now synonymous with "competitive", nor is it likely to be in the near term.

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the three points that follow about equitable and effectively administrable ways to carry out necessary cost-allocation and related functions.

First, Section 324 provides for certain charges to interexchange carriers for both direct (324 (b)(1)) and common (324 (b)(2)) costs of exchange facilities. These charges are to be levied only on interexchange carriers "who seek to originate or terminate interexchange telecommunications service through the use of intraexchange telecommunications facilities" (Section 324 (a)(2), p. 53). Particularly with respect to common costs, I think this differs materially from comparable provisions of S.611 (Hollings bill) which envisages an exchange maintenance program based on fees collected from "all [emphasis added] interexchange carriers, in proportion to their relative amounts of interexchange traffic" (S.611, Section 223 (c), creating Section 222 (c), p. 54). I read "all" as meaning "whether they use any local exchange facilities or not."

If my reading of the differences on this point between H.R. 3333 and S.611 is correct, then very different competitive incentives and jurisdictional cost burdens would be mandated by the two bills. Your bill, Mr. Chairman, would encourage competitors to bypass local exchange facilities and jurisdictions to a greater extent than the Senate bill's incentives. I am not prepared to comment on the relative merits of these alternate incentives, but note the point as affecting cost allocations and as potentially significant in terms of technological possibility, economic efficiency and political reality.

Second, both H.R. 3333 and S.622 (Goldwater bill) make regulatory distinctions between basic voice and other local exchange services that I find absent from S.611. I think that the presence or absence of these distinctions will materially affect the complexity of cost allocations

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and pricing, whatever specific mechanisms are envisaged to perform these functions. More significantly, the presence or absence of these distinctions will also influence incentives to bypass local exchange facilities and jurisdictions or not. Besides, the distinction may grow untenable as digital technology becomes more widespread, reaches into residences, and makes telling a voice transmission from, say, banking transaction data, increasingly difficult.

Finally, H.R. 3333's Section 324 leaves much discretion to the States where S.611 (Section 222 (b), p. 54) injects a more significant federal role in cost allocation and price determination. The likely implications of this difference are the main burden of my testimony to the Senate, incorporated here by reference. I mention that difference to draw your attention first to its possible major impact on the viability of shifting jurisdictional boundaries from interstate/state to interexchange/exchange, and second to the likelihood of your having to reconcile the differences on this score between the two chambers.

Where the boundary between federal and state jurisdictions is to be set is clearly a matter of the highest legislative and judicial import, not one to be delegated to or preempted by any administrative agency. But the details of setting as yet dimly perceived and highly unpredictable competitive balances and differential incentives are of the stuff for which administrative agencies were invented in the first place.

On all these grounds, Mr. Chairman, I therefore suggest in conclusion that you consider leaving greater administrative discretion to the Communications Regulatory Commission within H.R. 3333's explicit guidelines for relying on competition and the private sector to the maximum extent possible. Change continues in the communications realm at a remarkably rapid pace. Even with the best of intentions and the most superb draftsmanship, too detailed a legislative mandate is bound to be confining, hence very likely to lead the affected parties to clog the courts and return to Congress time after time for petty legislative adjudications. I thank you.

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HARVARD UNIVERSITY - PROGRAM ON INFORMATION RESOURCES POLICY

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National Technical Information Service
National Telecommunications & Information Administration
United States Postal Service
The Washington Post Company
Western Union International, Inc.
Xerox Corporation

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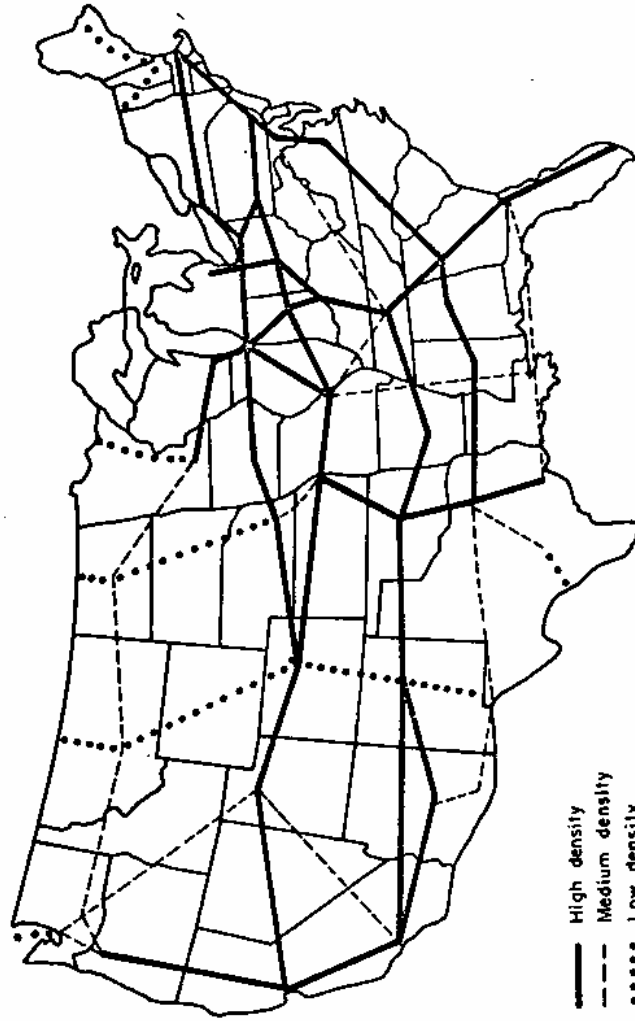


Exhibit 1: Major AT & T Interexchange Routes

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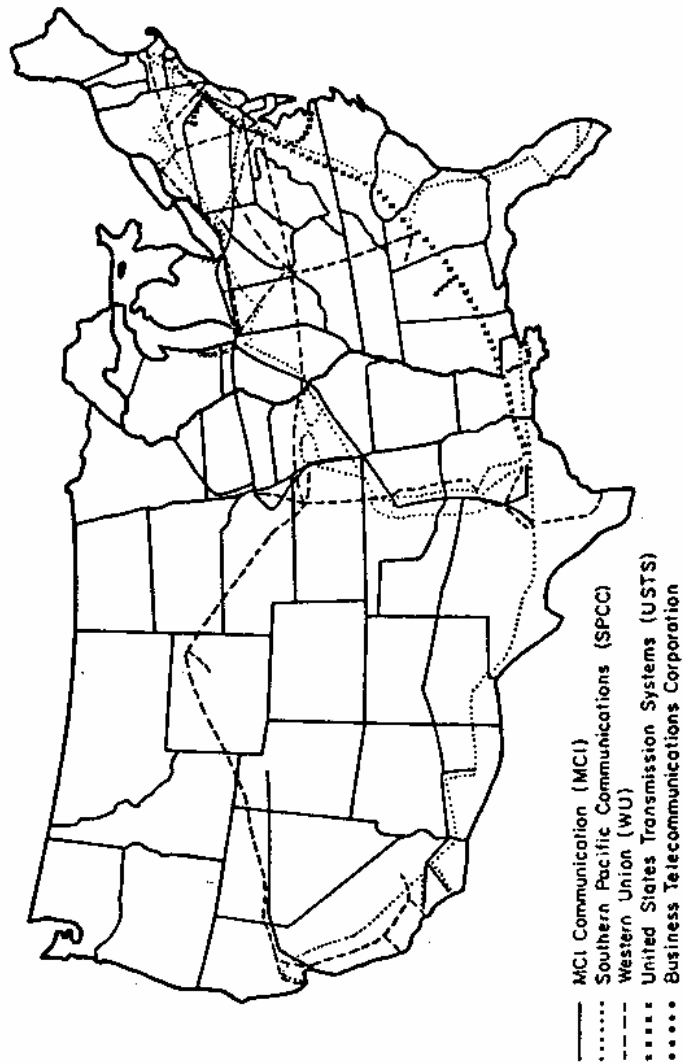


Exhibit 2: Major Competing Terrestrial
Interexchange Routes

(1221)

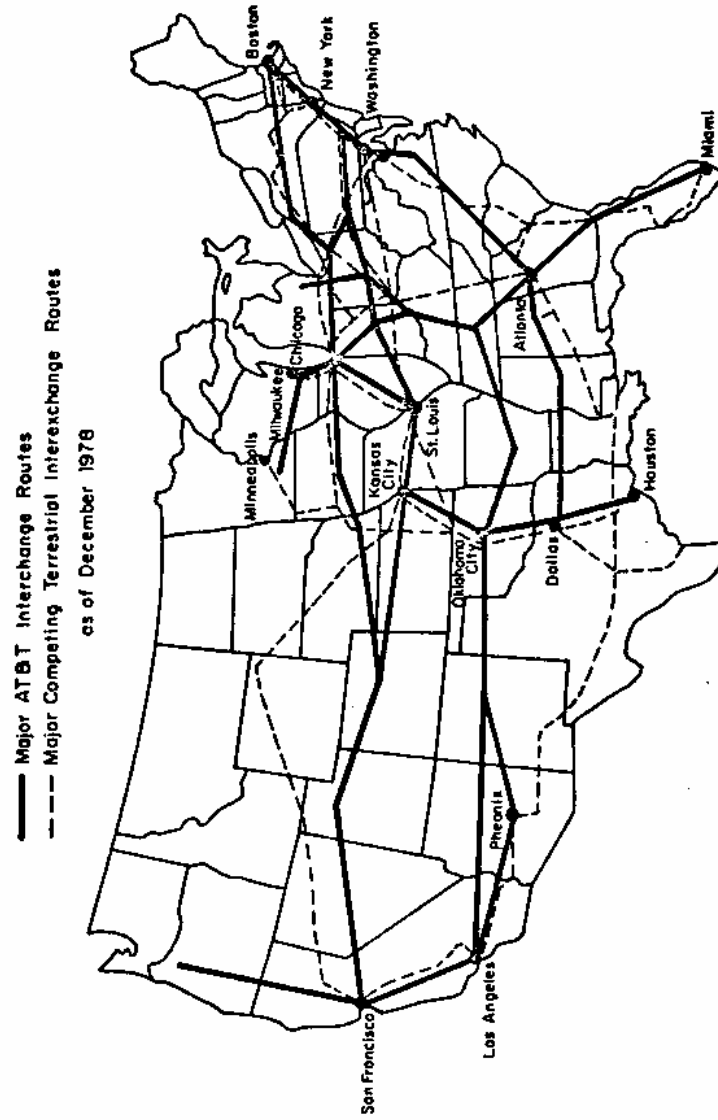


Exhibit 3: Major Terrestrial Interexchange Routes

(1222)

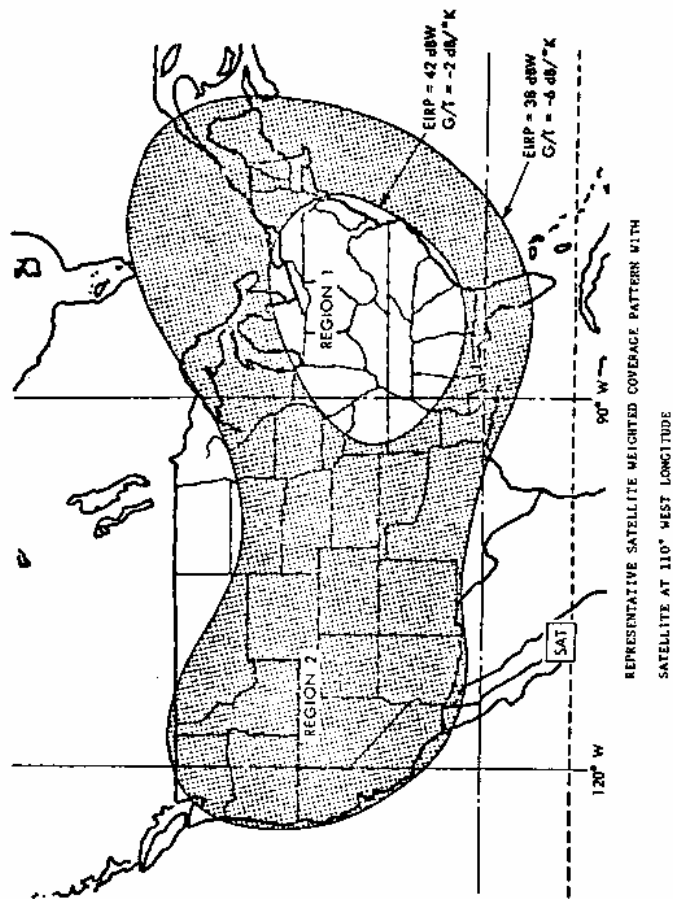
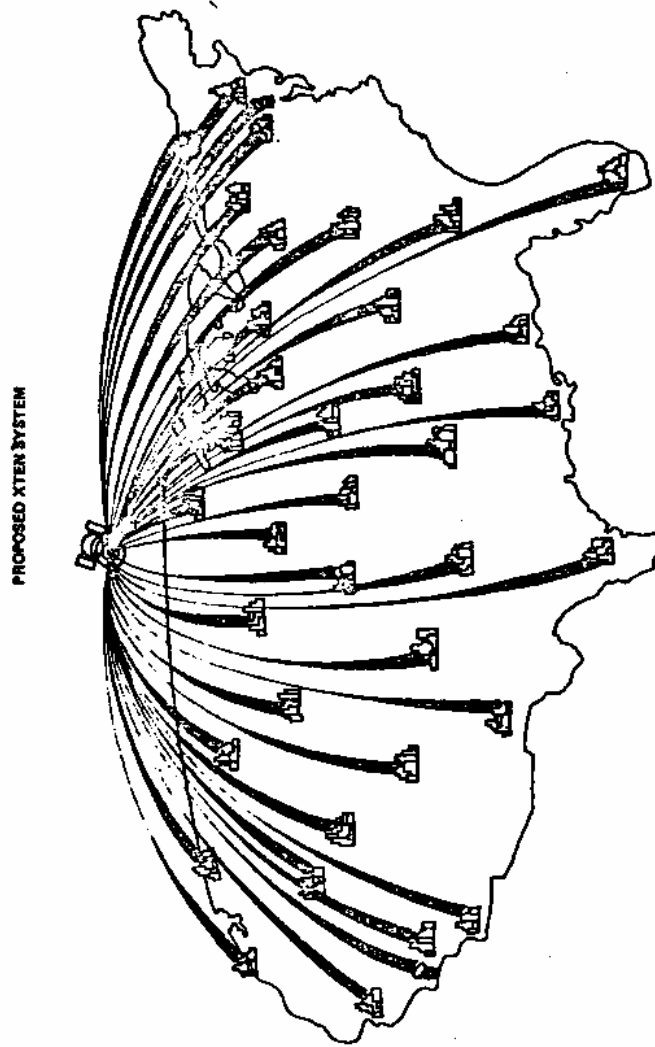


Exhibit 4: Technologically Possible Satellite Business Systems Geographic Coverage

Source: Satellite Business Systems. *Applications of Satellite Business Systems for a Domestic Communications Satellite System*, Vol. III, *Operational System Satellite and Earth Station Applications*, p. iii-4-28, submission to the Federal Communications Commission, December 1975.

(1223)

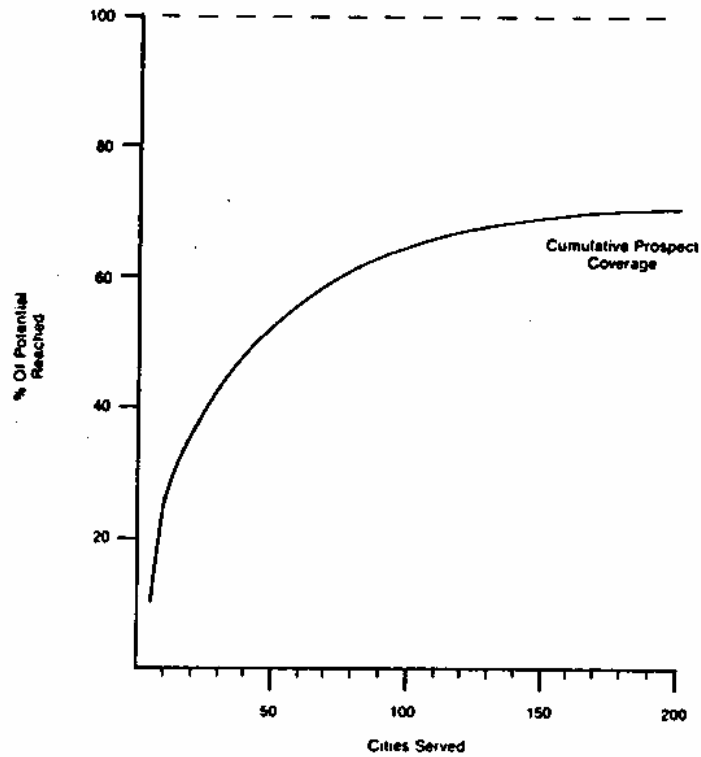


**Exhibit 5: Economically Attractive XTEN
Satellite Coverage**

Source: Xerox Corporation. *Petition for Rulemaking*, p. 5, submission
to the Federal Communications Commission, Nov. 16, 1978.

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**EXPANSION OF PROSPECTIVE MARKET FOR
INFORMATION SERVICES
AS A FUNCTION OF CITIES SERVED
1980 Projections**



**Exhibit 6: Pattern of Economic Attractiveness
of XTEN Satellite Coverage**

Source: Xerox Corporation. *Petition for Rulemaking*, Appendix C, p. 17c,
submission to the Federal Communications Commission, Nov. 16, 1978.

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*Hearings before the
Subcommittee on Communications
of the
House Committee on Interstate and Foreign Commerce*

May 2, 1979

STATEMENT OF KURT BORCHARDT
Research Fellow, Program on Information Resources Policy
Harvard University

My name is Kurt Borchardt. For nearly three decades I served as legal counsel to the parent committee of this subcommittee. My responsibilities included but were not limited to communications legislation.

At present I am a Research Fellow of the Harvard Program on Information Resources Policy. However, the views presented here are my own. It is gratifying to me that Chairman Van Deerlin and his able subcommittee staff are playing a leading and very constructive role in the communication and information areas.

My testimony will focus on the Network Management provisions contained in Sec. 332. I want to commend Chairman Van Deerlin and his co-sponsors for paying attention to processes as well as substantive goals. Just as the medium is the message, the interactive processes between the players who provide communications and information services and the federal government are parts of the substance of our information handling infrastructure.

Let me put these interactive processes into a broad perspective:

The emergence of the information handling complex -- a whole made up of complicated or interrelated parts -- has resulted from the marriage of telecommunication and data processing technologies on the one hand and a

(1226)

blending of monopolistic and free market philosophies on the other hand.

Before the marriage of the two technologies and before the increased reliance on marketplace forces, the Bell System designed, built, and operated the domestic telephone system exercising centralized managerial control. The Bell System perceived information handling as an extension of telephony and sought legislation to give it authority to exercise centralized managerial control over an information handling system designed, built, and operated by it. (A "system" as distinguished from a "complex" is a "regularly interacting or interdependent group of items forming a unified whole" (Webster's Seventh New Collegiate Dictionary, 1963).)

The data processing segment of the information handling complex evolved as the result of marketplace forces which responded to the leadership role played by IBM.

The federal government, in an effort to protect the public interest as it perceived that interest, has employed two tools vis-a-vis the telephone system: (1) common carrier type regulation and (2) antitrust enforcement; it has used mainly the tool of antitrust enforcement vis-a-vis the data processing segment.

With the emergence of the information handling complex, centralized managerial control will not be available to assure the satisfactory functioning of that complex. Will the marketplace forces be sufficient to assure such functioning? Or will a measure of coordination have to be achieved within that complex to assure its satisfactory functioning, and if so, how will it be achieved, and what will be the roles of the suppliers of information handling facilities and services, of the various categories of users of such facilities and services, and last but not least, of the federal government?

(1227)

The information handling complex constitutes one of several infrastructures on which our social, political, and economic systems are built. In order to gain a perspective, we might look at the energy and transportation infrastructures. We might also contemplate in what respects we differentiate between the domestic and the international aspects of the information handling complex; and finally, we might consider how we deal with weapons and space systems as distinguished from infrastructures.

To begin with weapons and space systems, here the federal government plays the role of manager viewing the systems primarily as technological phenomena which, unlike the infrastructures, do not directly offer services to the public. The energy and transportation infrastructures offer vital services to the public (or more accurately, to various publics), and therefore, the Federal government has demonstrated keen interest in the satisfactory performance of these infrastructures by establishing the Departments of Energy and Transportation. Other developed nations have seen fit to have their central governments assume managerial roles with regard to all three infrastructures: energy, transportation, and information handling.

With regard to our emerging information handling infrastructure, the federal government finds itself in an ambiguous role; it functions as manager insofar as the national security and the government's own information handling facilities and services are concerned; it has functioned as regulator insofar as the communications segment is concerned; and it functions as monitor insofar as the information handling complex is concerned.

Belatedly, there is recognition in the U.S. that we shall have to create special tools to deal effectively with the international aspects of the information handling complex, and H.R. 3333 contains provisions tending in that direction.

(1228)

With regard to the domestic aspects of the information handling complex, increased reliance on marketplace forces instead of centralized management raises the question how to achieve coordination sufficient to assure the satisfactory performance of the complex as a whole.

In giving Congressional approval and encouragement in Sec. 332 of H.R. 3333 to the use by carriers of negotiating and joint planning processes as technical coordinating tools, the sponsors of these bills recognize the urgent need for facilitating coordination within the information handling complex. While this recognition should be applauded, the sponsors might be well advised to ask themselves the following questions: Should the antitrust exemption contained in subsection (c) of Sec. 332 be limited to those aspects listed in subsection (a): construction and maintenance of a nationwide network of telecommunications services and facilities, and technical standards applicable thereto? Does Congress intend to withhold antitrust immunity from negotiations such as the ENFIA negotiations which were carried on under FCC and NTIA auspices? Should in addition to representatives of the Attorney General representatives of the Communications Regulatory Commission and the National Telecommunications Agency be authorized to attend or monitor such meetings? Should user groups be represented at such meetings? Should the antitrust immunity be denied if the coordinating activities pertain to data processing as well as telecommunication facilities and services?

These are not easy questions to answer, but they should be given careful consideration.

As we move from a Bell designed, built and operated telephone system to an information handling complex, coordination within that complex for purposes of assuring its satisfactory functioning may be facilitated through the use of a wide range of coordinating processes. The use of these processes undoubtedly will raise antitrust questions. The Attorney General should be authorized to judge, as he is now, each of these processes on its own merits, and the Commission and the Agency should be given ample leeway to use whatever coordinating tool they deem appropriate in the public interest.

I want to thank you for giving me an opportunity to appear before this subcommittee to express my views on this particular aspect of H.R. 3333, and I shall be glad to answer any questions which you may have.

Mr. VAN DEERLIN. Thank you, sir.

Do you have a statement, Mr. Oettinger?

Mr. OETTINGER. No, our statements are together. The rest will be submitted in writing.

Mr. VAN DEERLIN. You spoke for the group, in other words, Mr. LeGates?

Mr. LEGATES. Yes.

Mr. OETTINGER. I would be happy to take more of your time, if you wish.

Mr. VAN DEERLIN. Mr. Shooshan.

Mr. SHOOSHAN. There are a couple of questions I had. I just went through your statement this morning, Mr. Oettinger, and that was the first time I had a chance to look at it.

I think what we will do is, rather than take the time of the committee now, I will ask you to respond in writing about your statement.

Mr. OETTINGER. We would be happy to do that.

Mr. SHOOSHAN. Mr. LeGates, I have a couple of questions about your testimony.

You suggested in a couple of places that our bill has been overly specific. I might suggest in a couple of places in your testimony you have been overly vague. On page 3, you point out how the House and Senate versions offer different incentives to carriers; with the House bill seeming to offer less incentive for an interexchange carrier to connect to an intraexchange carrier than does the Senate bill.

How do you see that? What do you see that causes you to make that statement?

Mr. LEGATES. As I understand the House bill, if an interexchange carrier does not connect, it is not subject to access charges and, therefore, does not have to pay directly into the pool supporting the local carriers. That would avoid a cost which they have an incentive to avoid.

As I understand the Senate bill, they have to pay, whether they connect or not.

Mr. SHOOSHAN. OK. Is that a good idea? That was going to be my question. Do you like the surcharge on nonconnected carriers that is in S. 611?

Mr. LEGATES. I think it is a question of different consequences coming from different alternatives. In the absence of a surcharge for the people who don't connect, there will be less money available to support the local exchanges.

And I can easily imagine cash starvation occurring to the local exchanges, who may have to raise their rates.

Mr. SHOOSHAN. When do you see this cash starvation occurring?

Mr. LEGATES. Should a large enough percentage of the interexchange carriers fail to connect then the revenues which currently flow from interexchange to intraexchange will be reduced.

Mr. SHOOSHAN. If they fail to connect, how will they handle the local distribution of their traffic?

Mr. LEGATES. They could be seeking corporate business only and avoiding households.

Mr. SHOOSHAN. OK.

In other words, if they put, for example, a small dish on top of—

Mr. LEGATES. Exactly.

Mr. SHOOSHAN. Or to put it another way, like, for example, use the cellular concept like the X-ten proposal?

Mr. LEGATES. Yes; as is currently planned.

Mr. SHOOSHAN. Should those kinds of stand-alone systems pay a surcharge; make a contribution to the maintenance of the local exchange?

Mr. LEGATES. The word "should" puts me in a position of advocacy, which I don't want to be in. Some people win, and some people lose if they do, and also, if they don't. And if they do not pay such a surcharge, the possibility of local exchanges having to raise the rates to households or to businesses is there.

Mr. SHOOSHAN. What are the contrary problems of the nonconnected carriers?

I mean, you said there may be a problem if the telephone network loses the traffic. Are there now corresponding benefits to leaving the unconnected carrier unburdened by a surcharge?

Mr. LEGATES. There are clearly benefits.

They can then provide cheaper service to their customers. It also avoids the question of determining relative access charges and what those charges should be.

Mr. OETTINGER. May I interject?

I think our purpose is simply to point out, as Mr. LeGates has said, that this House and Senate version set up a rather different set of incentives and may thereby set in motion a rather different train of unfolding of events. And I think it is a point that will require some reconciliation.

Mr. SHOOSHAN. So you are here to point out rather than to recommend?

Mr. LEGATES. That is right. We are not an advocacy group of any kind.

Mr. SHOOSHAN. Fine.

My other question was on page 4 where you say: "For discussion, I raise the possibility of extending the antitrust immunity beyond subsection (a)." How about specifically, in what way? How would you extend?

Mr. LEGATES. For instance, negotiations like the ENFIA negotiations that have just taken place, Mr. Shooshan; are they allowable under this bill.

Mr. SHOOSHAN. Are they allowable under the 1934 act?

Mr. LEGATES. They have been allowed, in any case.

Mr. SHOOSHAN. Do you have any problems with the way in which they have been conducted?

Mr. LEGATES. Rather than my own problems, I would—

Mr. SHOOSHAN. I just want to understand what you are getting at.

Mr. LEGATES. OK.

I am getting at the possibility that network management will become an increasingly difficult thing to accomplish. It will require more and more discussions and arrangements among the members who, by nature, Mr. Shooshan, do not necessarily wish to get into the same room.

And you may wish to provide specific provisions allowing them to do so. Coming back to the ENFIA negotiations and extensions thereof—

Mr. SHOOSHAN. I thought we had, in that section. I just wondered what was inadequate about what is in the bill today?

Mr. OETTINGER. I think it may be a matter of reading the intent.

Mr. Borchardt, in his testimony, which you have before you in writing, goes into this in more detail. We think that, given the complexity of all of the issues, Mr. Shooshan, that a provision for negotiation is an excellent idea.

We have done a preliminary study of the conditions under which the ENFIA negotiations took place, and we believe these were rather unique conditions. Our concern is that the specificity here in prescribing certain circumstances, as stated on page 4 of Mr. LeGates' testimony, could be read narrowly as precluding other circumstances like the ones that permitted the ENFIA negotiations.

So really, it is an endorsement of the ENFIA; that anything that permits these folks under reasonable supervision, Mr. Shooshan, to get together is a good thing.

Mr. SHOOSHAN. It now increasingly becomes clear that it is a problem of communication from us to other people. Everybody for some reason wants to read that section as precluding things, when it seemed, at least to us, and that is why it was in there, that it was there to allow even the actual sitting down of carriers and the forming of an association, as the staff memo points out.

Mr. LeGATES. No, we agree with the intent.

I suppose our comment is simply that the language—

Mr. SHOOSHAN. Needs to be clarified. Fine.

Mr. VAN DEERLIN. Any further staff questions? Thank you very much.

Mr. LeGATES. Thank you.

Mr. VAN DEERLIN. Our next witness is Emanuel Fthenakis, President, American Satellite Corporation.

AMENDMENTS TO THE COMMUNICATIONS ACT OF 1934

HEARINGS BEFORE THE SUBCOMMITTEE ON COMMUNICATIONS OF THE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE NINETY-SIXTH CONGRESS

FIRST SESSION

ON

S. 611

TO AMEND THE COMMUNICATIONS ACT OF 1934, AS AMENDED,
TO PROVIDE FOR IMPROVED DOMESTIC TELECOMMUNICA-
TIONS AND INTERNATIONAL TELECOMMUNICATIONS, RURAL
TELECOMMUNICATIONS DEVELOPMENT, TO ESTABLISH A
NATIONAL COMMISSION ON SPECTRUM MANAGEMENT, AND
FOR OTHER PURPOSES

AND

S. 622

TO AMEND THE COMMUNICATIONS ACT OF 1934 IN ORDER TO
ENCOURAGE AND DEVELOP MARKETPLACE COMPETITION IN
THE PROVISION OF CERTAIN SERVICES AND TO PROVIDE CER-
TAIN DEREGULATION OF SUCH SERVICES, AND FOR OTHER
PURPOSES

APRIL 27, 30, MAY 1, 2, 3, AND 9, 1979

PROGRAM ON TELECOMMUNICATIONS POLICY
PART 2

Serial No. 96-45

Printed for the use of the
Committee on Commerce, Science, and Transportation



U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1979

53-297 O

May 3, 1979.

Senator HOLLINGS. Mr. Oettinger.

Mr. OETTINGER. Thank you, Mr. Chairman.

My name is Anthony G. Oettinger. I am a professor at Harvard University, where I chair the program on information resources policy. I am also the holdover chairman of the Massachusetts Cable Television Commission, a body I've served on since 1972. I speak here only for myself, not for any institution with which I am affiliated, nor for any of the 70 or so diverse public or private organizations that support the Harvard program's work. [List attached.]

It is a pleasure to testify before you once again. Now that you've jumped in to drain the swamp, I want to point out a few alligators.

We have been busy analyzing a lot of the data folks here have alluded to. There is too much to present here, but we tried to make explicit and intelligible something of the mind-boggling complexity that folks have alluded to. We had some success in quantifying

"The Hill-Burton Act, 42 U.S.C. §§ 291a *et seq.*, provides for Federal funding of State hospitals with the State determining which individual projects to receive financial assistance. [See *Euresti v. Stenner*, 327 F. Supp. 111 (D.C. Colo. 1971)] reversed and remanded on appeal but not as to delegation issue, 458 F. 2d 1115 (1972); the Social Security Act, 42 U.S.C. §§ 603, 607, conditions the release of AFDC-UP assistance funds upon the submission of a State plan and permits the States to determine who shall receive such funds [See *Carroll v. Finch*, 326 F. Supp. 891 (D.C. Alaska 1971)]; the *Public Works and Economic Development Act Amendments of 1976*, 42 U.S.C. sec. 3121 *et seq.*, provides for Federal disaster assistance upon determination of need by the governor of any State; the Public Utility Regulatory Policies Act of 1978, P.L. 95-617, 92 Stat. 3117, provides, in Sec. 603, for the payment of Federal grants to an institute "established by the NARUC".

"See the Natural Gas Pipeline Safety Act of 1968, 49 U.S.C. §§ 1671 *et seq.*, esp. §§ 1672, 1673; and the Environmental Quality Improvement Act of 1970, 42 U.S.C. §§ 4371 *et seq.*, which specifically states that the "primary responsibility for implementing this policy rests with State and local governments", 42 U.S.C. § 4371(b)(2). See also *U.S. v. Cincinnati Transit, Inc.*, 337 R. Supp. 1068 (D.C.S.D. Ohio 1972) discussing provisions of the Economic Stabilization Act of 1970, and amendments thereto, 84 Stat. 799, providing for local regulatory agency review and certification of all public utility rate increases.

"See 44 Fed. Reg. 9570 (Feb. 13, 1979).

what Paul Henson described in the preceding panel as the unquantifiable.

It's too much to present orally. My full testimony, with your permission, I would like to enter in the record along with additional comments by my colleagues, Kurt Borchardt and John LeGates. Mr. Borchardt's remarks are addressed to the matters of network management and system control in the absence of the old ways. Mr. LeGates' remarks address themselves primarily to some of the questions of divestiture and their consequences.

With your permission, I would like also included in the record—by reference—some of our testimony yesterday before the House where we touched on still other matters. We would be delighted to integrate some of these things for you and the staff and present them as a coherent picture, but my comments today focus on how telecommunication costs and benefits are to be apportioned between consumers of local exchange telecommunications services and consumers of interexchange—toll—services. I believe that continuing controversies on this score are unavoidable. The issue is how best to channel them. The cost picture is where all the action is and continuing controversies on this score are unavoidable. The issue is how best to channel them. They will not disappear. They can't be legislated away.

The Hollings and Goldwater bills put the presently federally regulated interstate toll services and the presently State-regulated State toll services under federally supervised interexchange services. Local exchange matters are left to the States, except for cost allocations, where a Federal presence is mandated.

By displacing a buffering role hitherto played by the State governments, this may lead to unmanageable confrontations between the Federal Government and local political powers. At the same time, the set of players is getting larger, less clubby, more visible, more contentious.

I shall only sketch my argument orally, trusting I have your permission, Mr. Chairman, to enter the supporting written details into the record.

Right now, cost allocations are mediated principally by the so-called jurisdictional cost separations process and the related revenue settlements process. As I see them, the principal functions of these present processes are as follows:

One, to allocate economic costs between the Federal and State jurisdictions, hence to define the total revenues permitted to be drawn from consumers in each jurisdiction.

Two, to modulate economic cost allocation with equity considerations while staying within the bounds of applicable legislative and judicial mandates. That means sloshing costs and revenues one way or another in a matter detailed with numbers and estimates in the exhibits that support my full testimony.

Three, to mediate idiosyncratic political balances between toll and exchange prices in each of the States.

Four, to keep relative peace in dividing revenues among the 1,500 or so current suppliers of traditional telecommunications services.

Five, to lend economic clout to the essential process of keeping the multiple suppliers of traditional telecommunications services in technical and operational harmony.

A continuing need for such administrative functions is recognized by various provisions of S. 611 and S. 622. If anything, the burdens of carrying them out will grow heavier as the number and variety of competing suppliers and anxious consumers grows and if the proposed exchange/interexchange boundary replaces the State/interstate border. That is my first major point. In light of the findings of the bills before us, it needs no elaboration. At issue is who shall bear these burdens, how effectively, and with what kind of policing.

The fact that A.T. & T. alleged in the past that they were the only ones competent to carry out these functions and that there is a tendency among some of the A.T. & T. competitors to reject that allegation should not blind us to the notion that the functions may well be essential and need to be carried out somehow. I think it's important to make that distinction so we don't throw out—I won't say the baby—the gorilla with the bath water.

I shall limit my comments here to the third of the functions I have mentioned; namely, that of balancing toll and exchange prices in each of the states. The balance now struck differs from State to State.

We can see something of what this balancing entails by looking at how widely both toll and exchange rates vary State by State.

This is 1976 data. The first exhibit—exhibit 23 of my written testimony for the record—shows that in Montana you pay a 30-cent toll to talk for 3 minutes during the day to someone 25 miles away. In Mississippi you pay 92 cents. The second exhibit—exhibit 24—shows that in the evening Ohio is now on top with 62 cents and Michigan at the bottom with 25 cents. At night, the third exhibit—exhibit 25—shows that Ohio still has the most expensive call at 59 cents, but Kansas now has the cheapest, at 16 cents. I should add that there is equally pronounced State-by-State variability in the book costs of interexchange plant. Hence State-by-State variability would occur under competitive true cost-based pricing, though not at all necessarily with the same pattern.

The fourth exhibit—exhibit 26—shows how basic rock bottom exchange rates vary around some major patterns. On top, with crosses, are basic business rates. On the bottom, with dots, are basic residential rates. By decades-old custom, basic business rates are roughly twice the basic residential rates. Both types of basic rates generally go up according to the number of other telephones that may be reached within a local calling area. But, around these broad trends, there is again pronounced variability.

I want to call your attention to that variability State by State.

My second major point, Mr. Chairman, is that each of the States, to make up its State cost pool, as now defined by jurisdictional separations, now adjusts relative State toll and local exchange prices by its own lights, reflecting its own economic and demographic patterns of both household and business consumers, its own urban/rural balances, and its own regard or disregard of the merits or demerits, powers or weaknesses of the communications suppliers within its borders.

Hence it will not be an easy administrative task either to harmonize or to dissociate State toll and interstate toll rates under the new common interexchange—Federal—umbrella envisaged by S. 611 and S. 622. Nor can this task be guaranteed to be devoid of political consequences, since making any change in State toll prices, up or down, will gore someone's ox or at least prick the skin of someone's calf.

Failure to change also implies certain risks. Wide variability in State toll prices may have remained unnoticed by many, or at least accepted by those doing business within many States as one of these peculiar consequences of State sovereignty within our federation. Such variability may be harder for Federal authorities to explain and sustain if what are now State toll prices fall under Federal interexchange authority. And it may be hard to do away with the variability without a myriad of Federal/local fights. Such fights are bound to arise over what proportions of exchange costs are to be reflected in local service prices and what proportions are to be charged to interexchange services, hence reflected in interexchange prices. The terms actual cost and relative use in S. 611 have a deceptive clarity. They hide the problem or, at best, they pose it. They surely do not solve it. They have, in fact, been the very battlefield of the last 30 years' war.

Let me summarize my two major points, Mr. Chairman, and make their import explicit. First, I have pointed out that present and prospective competition increases the number of interested parties within the telecommunications, data processing and other supplier industries; notably the U.S. Postal Service. It has already increased and promises to continue to increase the awareness and participation of consumers, both household and business; in short, what was a relatively small private club is going public in a big way. Second, shifting jurisdictional boundaries as envisaged by S. 611 and S. 622 will, I think, eliminate much of the buffering that joint boards and State responsibility for State toll provided in insulating Federal authorities from State-by-State, locality-by-locality accommodations between toll and exchange prices.

The effect is to set up potentially unmanageable Federal/local confrontations.

The House bill leaves a buffering role to the States. That may be an important point requiring accommodation between the two Chambers, after considering the relative impact on the administrability of the legislation as between these two approaches.

I also urge you to consider leaving greater administrative discretion to the FCC. Give them better guidelines, but I think if you inject the Congress into setting up and administering the detailed apparatus for your "giant handicapping" scheme you will end up grooming the horses, taking the bets, paying off every winner, soothing every loser, and shoveling away all the manure. That's what administrative agencies were created for in the first place.

I thank you for your attention.

[The statement and attachments follow:]

STATEMENT OF ANTHONY G. OETTINGER, CHAIRMAN, PROGRAM ON INFORMATION RESOURCES POLICY, HARVARD UNIVERSITY

Mr. Chairman, my name is Anthony G. Oettinger. I am a professor at Harvard University, where I chair the Program on Information Resources Policy. I am also

the holdover chairman of the Massachusetts Cable Television Commission, a body I've served on since 1972. I speak here only for myself, not for any institution with which I am affiliated, nor for any of the 70 or so diverse public or private organizations that support the Harvard Program's work (list attached).

It is a pleasure to testify before you once again. Now that you've jumped in to drain the swamp, I want to point out a few alligators.

Mr. Chairman, what is an economically efficient and also an equitable allocation of costs is the question most fought over throughout the history of telecommunications. It is, I think, the question underlying all the other questions about the bills before us. Everyone's stakes depend on the answers. For household and business consumers, the answers influence who pays how much for what. The answers influence the ability of competing suppliers to recover costs, including return on investment, without either predatory pricing or unfair burdens. They determine the political, economic and technological viability of this "giant handicapping scheme", if I may, Mr. Chairman, borrow your description of S. 611.

My comments focus on how telecommunications costs and benefits are to be appropriated between consumers of local exchange telecommunications services and consumers of interexchange (toll) services. I believe that continuing controversies on this score are unavoidable. The issue is how best to channel them.

The Hollings and Goldwater bills put the presently federally regulated interstate toll services and the presently state regulated state toll services both under federal supervision of interexchange services. Local exchange matters are left to the states, except for cost allocations, where a federal presence is recognized.

By displacing a buffering role hitherto played by the state governments, this may lead to unmanageable confrontations between the federal government and local political powers. At the same time, the set of players is getting larger, less clubby, more visible, more contentious.

Right now, cost allocations are mediated principally by the so-called jurisdictional cost separations process and the related revenue settlements process. Mention of these current processes widely draws snickers or dirty laughs. On their face, these processes do place among the more bizarre and occult forms of gerrymandering ever devised. However, without passing on the merits of the outcomes of these processes themselves, as polished jewels of effective administrative practice. As I see them, the functions of these present processes are as follows:

1. To allocate economic costs between the federal and state jurisdictions, hence to define the total revenues permitted to be drawn from consumers in each jurisdiction.
2. To modulate economic cost allocation with equity considerations while staying within the bounds of applicable legislative and judicial mandates.
3. To mediate idiosyncratic political balances between toll and exchange prices in each of the states.
4. To keep relative peace in dividing revenues among the 1500 or so current suppliers of traditional telecommunications services.
5. To lend economic clout to the essential process of keeping the multiple suppliers of traditional telecommunications services in technical and operational harmony.

A continuing need for such administrative functions is recognized by various provisions of S. 611 and S. 622. If anything, the burdens of carrying them out will grow heavier as the number and variety of competing suppliers and anxious consumers grows and if the proposed exchange/interexchange boundary replaces the state/interstate border. That is my first major point. In light of the findings in the bills before us, it needs no elaboration. At issue is who shall bear these burdens, how effectively and with what kind of policing.

I shall limit my comments here to the third of the functions I have mentioned, namely that of balancing toll and exchange prices in each of the states. The balance now struck differs from state to state.

The cost allocation question has persisted. I believe it cannot be legislated away. Why? Because I believe that what economists call "economies of scope" are inherent in past, present and foreseeable communications technologies, even though their extent in particular cases and at particular times are debatable and will forever be debated. There are economies of scope if a bundle of goods costs less to produce when capital and labor are shared in producing them rather than devoted by one or many suppliers to producing each in isolation from the others. Many of the controversies of the last decade would have gone away without legislation if this were not so for much of the communications technologies.

Please note that economies of scope are distinct from economies of scale, which refer to lower costs per unit of production as the scale of production grows. The concepts are not unrelated, however. Conceivably, if each good in a bundle could be

produced independently of the others with significant economies of scale, these could outweigh the economies of scope realized from producing them together. In that case, we could be economically efficient without being caught in the thicket of joint and common costs wrestling with the thorny problem of cost allocation. But we are deep in that thicket now. I see no real prospect of leaving it, however many of its thorn bushes we might hack away, or however many satellite orbits we might leap into so as to bypass parts of it.

I therefore focus my comments on S. 611 and S. 622 on how they put the question of cost allocation as distinct from how that question has been put in the past. This leads into examining the processes proposed in S. 611 and S. 622 for addressing the cost allocation and consequent questions.

The issue is joined in S. 611's proposed finding that "basic, universal, low-cost public telecommunications services must and can be maintained in an environment of increased competition, through appropriate financial, regulatory and procedural safeguards incorporated in both statutory policies and industry relationships" (Sec. 201(a)(8), p. 19), and in the statement that it "be the policy of the United States that such services and equipment be provided under conditions of full and fair competition, to the maximum extent feasible and consistent with the purposes of this Act" (Sec. 203, p. 20). Similar objectives are explicit in Section 201 of S. 622 (p. 4).

S. 611 and S. 622 thus do not and, I believe, cannot eliminate the long-standing tension between, on the one hand, the traditional cost-averaging practices evolved by the telecommunications industry and its regulators at all levels of government and, on the other hand, the pressures toward cost-related pricing induced by competition. How these tensions are to be handled therefore remains of central importance.

In this context, the bills propose replacing the interstate/state jurisdictional boundary with a boundary between federally regulated interexchange (toll) services and state regulated exchange (local) services (S. 611, Section 223(c), p. 53; S. 622, Section 201, p. 5). S. 611 requires interexchange carriers "to reimburse local exchange carriers directly for the *actual costs* [emphasis added] of originating, terminating, or transferring interexchange telecommunications services" (p. 53, lines 12-14). It recognizes the unavoidable commingling of jurisdictional interests by giving the F.C.C. "authority to review, in the aggregate, exchange costs and revenues to ensure that there is no unlawful discrimination in the use and pricing of exchange facilities as between exchange and interexchange services" (p. 54, lines 4-8). It would then further authorize the collection of certain fees from all interexchange carriers. These fees would be disbursed under supervision of a federal/state joint board to local exchange operators in a way defined "solely on the basis of *relative use* [emphasis added] of exchange facilities by exchange and interexchange services" (p. 55, lines 8-10). All this is meant to replace the processes hitherto "commonly referred to as jurisdictional separations" (p. 53, lines 8-9). Similar mechanisms for cost allocation are envisaged by S. 622, which also distinguishes voice grade from other services (p. 5), thereby further complicating the question of what costs how much.

The principal purpose of my testimony, Mr. Chairman, is to alert you to likely consequences of the proposed Section 223(c), for all affected constituencies and for the effective administration of the law. My colleagues Kurt Borchardt and John C. LeGates focus their testimonies on specific implications for the processes envisaged by other sections of the bill. Toward these ends, I wish to note for the record a working paper, "National Stakes in the Communications Revolution: Jurisdictional Cost Separations," recently issued for comment by the Harvard Program on Information Resources Policy. That paper contains much of the data and analysis that support our further testimony. It is not yet a finished product, but has already undergone enough of our Program's external reviewing process to assure me that it is correct in the main, although incomplete and not necessarily correct in certain details that could be important in an adjudicatory context, but are too fine grained to matter in a broadly brushed picture.

With exceptions I will note as they arise, all data I will present to you are for the year 1976. This is the most recent year for which I found it possible to map the comprehensive yet detailed national picture I believe you require for national legislative purposes.

Exhibit 1 shows, by jurisdiction, the dollar stakes of the traditional telecommunications industry (Bell System and Independents) and their consumers. It also shows the shares of state revenues derived from state toll and local exchange services. It seems safe to assert that aggregate stakes of competitors and their customers are of comparable magnitude, although we have not yet had the time or resources to make a more precise determination. The proportions of jurisdictional cost in Exhibit 1 (and therefore the proportions of the revenues from consumers in these jurisdic-

tions) are far from God-given, technologically immutable, economically determinate, timeless truths. They stem from cost allocations and related arrangements determined by the minds and pens of your predecessors in the Congress, as interpreted by generations of industry managers and of federal and state regulators. They are political allocations at the federal, state and local levels.

Over the years, the relative proportions of joint and common costs recovered from interstate toll, state toll and local exchange charges have changed in response to changes in technology, markets, judicial decisions and political balances.¹ Terms such as actual cost and relative use are putty, not bedrock. Historically, the remarkably and ingeniously malleable interpretations of the terms actual cost and relative use that appear in Section 223(c) of S. 611 have provided the means for accommodating to these vast changes. That is partly why the jurisdictional separation process has been significant. That is why the determination of actual cost will remain significant under any legislative mandate. The malleability of actual cost leaves plenty of room for the inevitable future arguments over the fairness of burdens allocated to the proposed interexchange (federal) and exchange (state) jurisdictions.

Neither is relative use a sole or sacred cost criterion. Without stretching any of the arguments that regulators and judges have accepted in the past from those who argued there was too much or too little loading on this or that to support claims of predatory pricing, undue burdens or other inequities or inefficiencies, I suggest (in Exhibit 2) that a widespread of changes in cost allocations might be supported, in either direction, by such arguments. Note that a dollar cost allocation change is more highly leveraged in the interstate realm than in the state realm, given the 30:70 ratio of interstate to state cost allocations that obtained in 1976. Present law leaves to state regulators the task of wrestling over how much of a cost change between a 21 percent increase and an 11 percent decrease (Exhibit 2) might devolve on state toll consumers and how much on local exchange consumers.

Hence, Mr. Chairman, the terms actual cost and relative use in S. 611 have a deceptive clarity. They hide a problem or, at best, they pose it. They surely do not solve it. They have, in fact, been the very battlefield of the last 30 years' war. Consider, in that light, the aggregate consequences of shifting the jurisdictional boundaries as envisaged in Section 223(c) and reflected in Exhibit 2a. Exhibit 3 shows how 1976 costs would be allocated to the proposed interexchange (federal) and exchange (state) "jurisdictions" under current ground rules. The pots are of nearly equal size.

Exhibit 4 shows how much variation between interexchange and exchange costs I think can be rationalized for the courts and the public with arguments no more bizarre than any used to date. Under the Act of 1934, however, the problem of balance between state toll and exchange revenues is for each state to wrestle with as it sees fit. Under S. 611, state toll would come under the interexchange (federal) rubric. However, by giving the F.C.C. explicit authority to review the aggregate balance of interexchange with exchange costs and revenues, Sec. 223(c) (p. 54, lines 4-8) would appear also to inject a federal presence at the borders of local political powers who hitherto dealt only with their State House and their phone companies.

In preparing Exhibit 4 I have therefore explicitly allowed for variation in the state toll/local exchange proportions. Given the 50:50 interexchange/exchange cost ratio as of 1976, a dollar can be sloshed one way or the other with equal leverage. However, the size of the exchange pot could be made to vary between a 41 percent increase and a 26 percent decrease under explicit federal scrutiny. Before, each state had the option of loading an average 21% increase in state allocation entirely into a 30% increase in local costs or entirely into a 70% increase in state toll costs, or somewhere in between. Likewise for an average 11% decrease.

For better or worse, passage of S. 611 or S. 622 therefore would raise to the federal level unavoidable local arguments hitherto spread around all the states and handled within the framework of state politics. Some additional data will give you further insight into the stakes in these arguments, and into the administrative and political consequences of raising these arguments to the federal level.

The perceptions of parties to these arguments can vary widely. The data in Exhibits 1-4, and the jurisdictional separations practices underlying them (described in detail in my previously cited "National Stakes in the Communications Revolution: Jurisdictional Cost Separations") can be viewed as evidence for a present overloading of costs onto the consumers of federally regulated interstate toll services. On the other hand, the data I am about to exhibit can be viewed as evidence for overloading of costs onto the consumers of state regulated state toll services. To reconcile

¹ A historical account is given in James W. Sichter, "Separations Procedures in the Telephone Industry: The Historical Origins of a Public Policy," Harvard Program on Information Resources Policy, Publication P-77-2, 1977.

these perceptions, it is necessary to draw on details of consumer demand for various services which my colleague John McLaughlin is beginning to develop in connection with his studies of tradeoffs between postal and telecommunications services, but which are not yet in hand.

Exhibit 5 is a map of the United States, with distances from Jefferson City, a place about at the center of Missouri. It's a familiar picture, which I'll call the geographic map of the United States. I call the four other exhibits I'm about to show you telephonic maps. Whereas the geographic map shows actual shapes with the circles showing miles, the telephonic maps will show costs, not distances, from Jefferson City.

Exhibit 6 is the first telephonic map. The map shows how much it costs to call from Jefferson City, Missouri, to any place in the United States beyond the Missouri border during the day and talk for 3 minutes. This means that all places that cost the same to call from Jefferson City lie on a circle around Jefferson City. A telephonic map therefore looks distorted, since inches on the picture are proportional to the price of telephone calls, not to geographic distance. Exhibit 6 shows the telephonic United States as of 1957. It cost \$1.70 to call a thousand miles station-to-station through an operator. There was as yet no option to dial it yourself.

The shaded picture of Missouri describes what aficionados call toll rate disparity. We can see it better in Exhibit 6a. To call a place on the Missouri border from Jefferson City, you pay Missouri state toll rates. In 1957, these were higher than interstate rates. This is shown by the border of the shaded Missouri. With interstate rates, you could reach a point just outside the black (interstate) border of Missouri at less than what it cost to reach a point just inside the shaded border at state toll rates. This example thus illustrates positive toll rate disparity. That's especially noticeable to folks along the border, since it means they pay more to call, say, 25 miles into Missouri than 25 miles into the United States.

By 1971, you could dial it yourself interstate, but not within Missouri. In 1971, the telephonic United States and the toll rate disparity looked like Exhibit 7. It cost \$1.15 to call a thousand miles and a good deal more to call New York than to call Cleveland. Exhibit 8 gives the picture as of 1977 when from Missouri you could dial yourself to anywhere. It's clear that seen from inside Missouri, the telephonic Missouri has grown substantially relative to the telephonic United States. Also it makes little difference now whether you're calling Cleveland or New York.

How come? Exhibit 9 tells part of the same story in different pictures. Between 1971 and 1977 the interstate toll rate schedule went up and changed shape. Most significant is the changed shape. By comparison with 1971, 1977 shows a steeper rise at shorter distances and a flattening at longer distances. The steep rise is what has magnified the telephonic picture of Missouri. The flattening is what has relatively shrunk the rest of the telephonic United States. That flattening is even more pronounced in Exhibit 10, which shows the same interstate rates in constant (1967) dollars.

Exhibit 11 shows how Missouri's State rates also rose and changed shape between 1971 and 1977. Keeping in mind the geographic shape of Missouri shown in Exhibit 12, the effect of the rate change on telephonic Missouri, as seen from St. Louis, is shown in Exhibits 13 and 14. Note especially, how St. Louis' nearest neighbors got pushed further and further away relative to its farthest. This has created a new disparity, about which more in a moment. The details of Missouri's toll rate disparity are evident in Exhibits 15 and 16. From a positive rate disparity in 1971 (at all but distances below 15 miles or so) Missouri went, by 1977, to a much more pronounced mix of negative rate disparity at distances below about 100 miles with positive disparity above 100 miles. Paying more to call short distances inward from the Missouri border than outward to the United States had become a thing of the past, while both state toll and interstate toll prices rose and changed shape.

The steep rise of shorter distance prices may, however, create what might be called an exchange/interexchange priced disparity. In Exhibit 17, note the rise in prices for calling 10 and 25 miles interstate. Where that are local calling areas straddling state borders, this would be noticeable in a steep jump in the price of calling a place just outside the local exchange area over the price of calling a place just within the local exchange area. Exhibit 18 shows that Missouri chose to hold the 10-mile price steady, though clearly conforming to the interstate pattern at 25 miles. This could avoid a steep jump in the price of calling (within the state) a place just outside the local exchange area over the price of calling a place just within the local exchange area.

Exchange/interexchange rate disparities would thus increase pressures for extending flat-rate local calling areas, precisely when competitive pressures and dominant economic wisdom are pressing for usage-sensitive and zone priced local calls. Though the long wars over toll disparity may have wound down, at least for

Missouri, similar battles appear likely to spring up at the exchange/interexchange boundary just in time for the feds to take charge of that border, as envisaged by S. 611 and S. 622.

What administrative and political burdens this may entail becomes explicit when looking—behind the data averaged over all states and beyond the details of a single state—at summary composites of all continental states.

What the preceding exhibits showed in detail for Missouri is summarized for all states in Exhibits 19-22. For 1971, Exhibit 19 shows that 10 states had state toll rates mostly above interstate toll rates and 6 had state toll rates mostly below interstate toll rates for calls to any distance. Two states had pegged their toll rates to the interstate rates. The others, like Missouri, showed complicated criss-crossing patterns with state rates above, at, or below interstate rates depending on the distance called. By 1977 (Exhibit 20), only three states had toll rates uniformly above interstate rates and 11 had gone uniformly below.

All this reflects a complicated amalgam of techno-econo-political change. In 1971 only 17 states had direct dialing. By 1977 essentially all did. And the changing shape of the rate curves, with their steep rise at shorter distances and their flattening at longer distances, could be ascribed to response to competition, to recognition of true costs, to both, or to neither according to the stakes of the arguer. Whatever "true" engineering costs might be, the costs at issue in this legislation are those hitherto determined by jurisdictional separations and envisaged by S. 611 and S. 622 to be determined at the interexchange/exchange border, in accordance with Section 223(c).

I wish to draw your attention, Mr. Chairman, not to the details of disputes over "true costs" and what's predatory pricing or an unfair burden, but to a great state-by-state rate variability and to the as yet unexamined, so far as I can tell, political and administrative consequences of this variability for the processes envisaged by S. 611 and S. 622. Exhibits 21 and 22 show that while intrastate toll rates have generally migrated downward relative to interstate rates, their variability remains great. I will show this explicitly in the next three exhibits.

Exhibit 23 shows that in Montana you pay a 30¢ toll to talk for 3 minutes during the day to someone 25 miles away. In Mississippi you pay 92¢. Exhibit 24 shows that in the evening Ohio is now on top with 62¢ and Michigan at the bottom with 25¢. At night, Exhibit 25 shows that Ohio still has the most expensive call at 59¢, but Kansas now has the cheapest, at 16¢. I should add that there is equally pronounced state-by-state variability in the book costs of interexchange plant. Hence state-by-state variability would occur under competitive "true" cost-based pricing, though not at all necessarily with the same pattern.

I finally turn to exchange rates. Exhibit 26 shows how basic exchange rates vary around some major patterns. On top, with crosses, are basic business rates. On the bottom, with dots, are basic residential rates. By decades-old custom, basic business rates are roughly twice the basic residential rates. Both types of basic rates generally go up according to the number of other telephones that may be reached within a local calling area. But, around these broad trends, there is again pronounced variability.

I can now make my second major point, Mr. Chairman. It is that each of the states, to make up its state cost pool as it is now defined by jurisdictional separations, now adjusts relative state toll and local exchange prices by its own lights, reflecting its own economic and demographic patterns of both household and business consumers, its own urban/rural balances, and its own regard or disregard of the merits or demerits, powers or weaknesses of the communications suppliers within its borders.

Hence it will not be an easy administrative task either to harmonize or to disassociate state toll and interstate toll rates under the new common interexchange (federal) umbrella envisaged by S. 611 and S. 622. Nor can this task be guaranteed to be devoid of political consequences, since making any change in state toll prices, up or down, will gore someone's ox or at least prick the skin of someone's calf. And any change will affect perceptions of the interexchange/exchange rate disparity I have described earlier, hence rock the exchange boat.

Failure to change also implies certain risks. Wide variability in state toll prices may have remained unnoticed by many, or at least accepted by those doing business within many states as one of those peculiar consequences of state sovereignty within our federation. Such variability may be harder for federal authorities to explain and sustain if what are now state toll prices fall under federal interexchange authority. And it may be hard to do away with the variability without a myriad federal/local fights. Such fights are bound to arise over what proportions of exchange costs are to be reflected in local service prices and what proportions are to be charged to interexchange services hence reflected in interexchange prices. As I have already

(1344)

noted (p. 8), the terms actual cost and relative use in S. 611 have a deceptive clarity. They hide the problem or, at best, they pose it. They surely do not solve it. They have, to reiterate, been the very battlefield of the last 30 years' war.

I close by summarizing my two major points, Mr. Chairman, and making their import explicit. First, I have pointed out that present and prospective competition increases the number of interested parties within the telecommunications, data processing and other supplier industries; it has already increased and promises to continue to increase the awareness and participation of consumers, both household and business; in short, what was a relatively small private club is going public in a big way. Second, shifting jurisdictional boundaries as envisaged by S. 611 and S. 622 will, I think, eliminate much of the buffering that Joint Boards and state responsibility for state toll provided in insulating federal authorities from state-by-state, locality-by-locality accommodations between toll and exchange prices.

The effect is to set up potentially unmanageable federal/local confrontations in arguments grown more complicated and among many more parties than in the past. The extensive procedural detail incorporated in S. 611 and S. 622 may aggravate rather than alleviate this problem. The parties may come to feel hopelessly confined, hence clog the courts and return to Congress time after time for petty legislative adjudications.

I therefore highlight for your consideration the fact that the Van Deerlin bill in the House contemplates leaving a greater buffering role to the states (H.R. 3333; Sec. 324). I also suggest you consider leaving greater administrative discretion to the Federal Communications Commission, within S. 611 or S. 622's explicit guidelines for placing increased weight but not exclusive weight on the marketplace.

The grand design of your "giant handicapping scheme", Mr. Chairman, is appealing. I just wonder whether you also wish to inject the Congress into setting up and administering the detailed apparatus for grooming the horses, taking the bets, paying off every winner, soothing every loser, and shoveling away all the manure. That's what administrative agencies were invented for in the first place.

My colleagues Kurt Borchardt and John C. LeGates explore this problem further in their testimonies. We are at your disposal, and your staff's, for any further light of detail you may wish to have us help shed on it. I thank you.

HARVARD UNIVERSITY—PROGRAM ON INFORMATION RESOURCES POLICY

CORE PROGRAM SUPPORT

Abt Associates Inc.	Field Enterprises, Inc.
Action for Children's Television	First National Bank of Boston
American District Telegraph Co.	First National Bank of Chicago
American Newspaper Publishers Assoc.	General Electric Company
American Telephone and Telegraph	General Telephone & Electronics
Arthur D. Little Foundation	Hallmark Cards, Inc.
Auerbach Publishers Inc.	Harte-Hanks Communications, Inc.
Bell Canada	Honeywell, Inc.
Beneficial Management Corp.	IBM Corp.
Boston Broadcasters Inc.	Information Gatekeepers, Inc.
The Boston Globe	International Data Corp.
Burroughs Corp.	International Paper
Canada Post	International Resources Development, Inc.
Central Intelligence Agency	International Telephone and Telegraph Corp.
Central Telephone & Utilities Corp.	Iran Communications & Development Institute
Codex Corp.	Lee Enterprises, Inc.
Common Cause	Lockheed Missiles and Space Co., Inc.
Communications Workers of America	John and Mary R. Markle Foundation
Computer and Communications Industry Assoc.	Marsteller Foundation
Consolidated Edison Company of New York, Inc.	McGraw-Hill, Inc.
Department of Defense	Mead Data Central
Des Moines Register and Tribune Co.	Meredith Corp.
Donaldson, Lufkin & Jenrette	Minneapolis Star and Tribune Co.
Doubleday and Co., Inc.	National Aeronautics and Space Admin.
Economics and Technology, Inc.	National Association of Letter Carriers
Encyclopaedia Britannica	National Telephone Cooperative Assoc.
L. M. Ericsson (Sweden)	New York Times Co.
Federal Communications Commission	Nippon Electric Co.
Federal Reserve Bank of Boston	

(1345)

Norfolk & Western Railway Co.
Oppenheimer and Co., Inc.
Payment Systems, Inc.
J. C. Penney Co., Inc.
Pergamon Press Ltd.
Pitney Bowes, Inc.
Public Agenda Foundation
Reader's Digest Association, Inc.
Salomon Brothers
Seiden & de Cuevas, Inc.
Southern Pacific Communication Co.
Standard Shares
Stromberg-Carlson Corp.
Systems Applications, Inc.

Time Inc.
Times Mirror
Transamerica Corp.
United Telecommunications
U.S. Department of Commerce:
National Technical Information
Service
National Telecommunications &
Information Administration
United States Postal Service
The Washington Post Co.
Western Union International, Inc.
Xerox Corp.

	LOCAL	TOLL	<u>TOTAL</u>
INTERSTATE		11.4	11.4 30%
STATE	18.8 (70%)	8.1 (30%)	26.9 70%
<u>TOTAL</u>	18.8 (49%)	19.5 (51%)	38.3

(1346)

Exhibit 1: 1976 Telco Cost Allocation(\$billion)

Interstate Spread	Intrastate Spread
\$11.4 billion	\$26.9 billion
5.8 ← → 14.3	32.5 ← → 24.0
-49%	+21%
+25%	-11%

(1347)

Exhibit 2: Possible Cost Allocation Spread

<u>Present</u>	<u>Proposal</u>
Interstate Toll	} Interexchange
State Toll	
Exchange	Exchange

State Jurisdiction: Italics

Exhibit 2a: Present and Proposed Jurisdictions

	\$ billion	
Interexchange (federal)	19.5	51%
Exchange (state)	18.8	49%
Total	38.3	100%
		(1349)

Exhibit 3: 1976 Interexchange/Exchange Proportions

Interexchange Spread	Exchange Spread
<p>\$19.5 billion</p> <p>11.9 ← → 24.4</p> <p>-39% +25%</p>	<p>\$18.8 billion</p> <p>13.9 ← → 26.4</p> <p>-26% +41%</p>

(1350)

Exhibit 4: Possible Cost Allocation Spread

(1351)

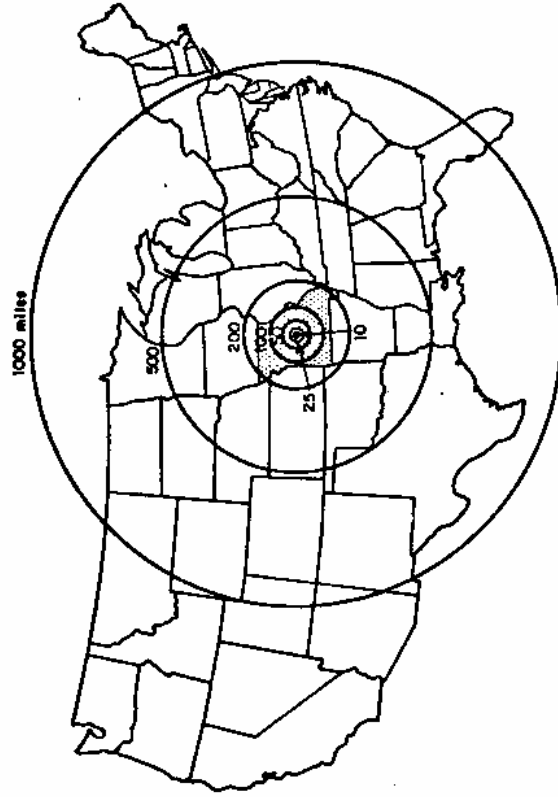


Exhibit 5: The Geographic United States

(1352)

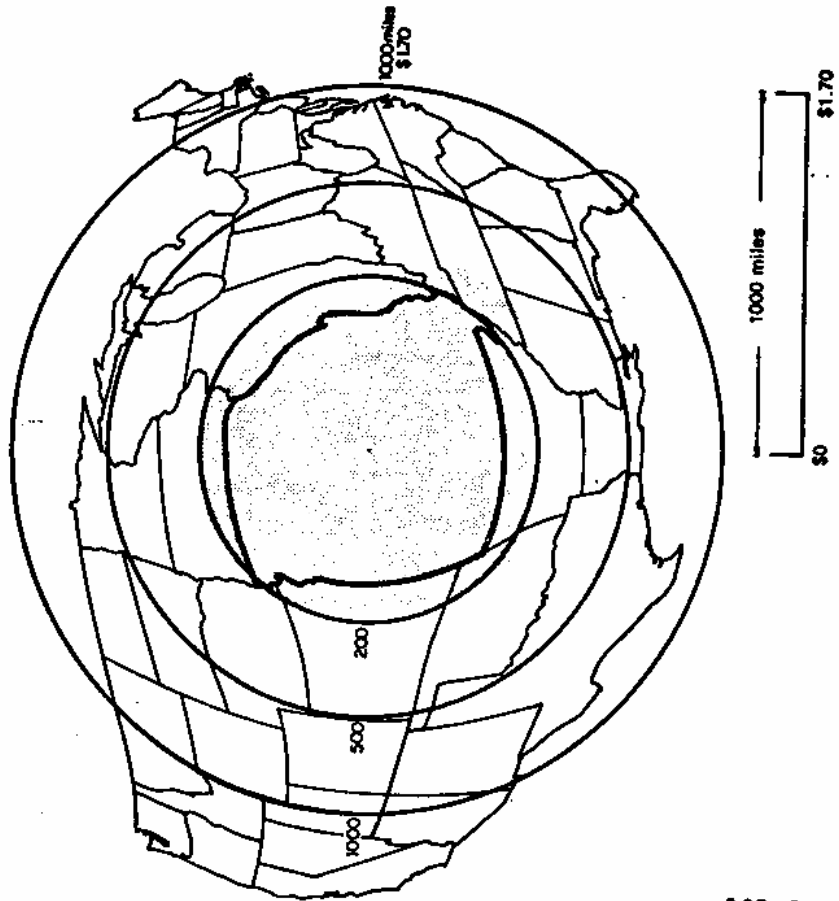


Exhibit 6: 1957 Telephonic United States

OCT 1979

JUL 10 1979

(1353)

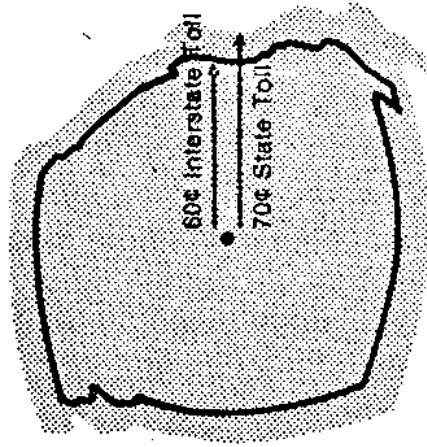


Exhibit 6a: 1957 Toll Rate Disparity

(1354)

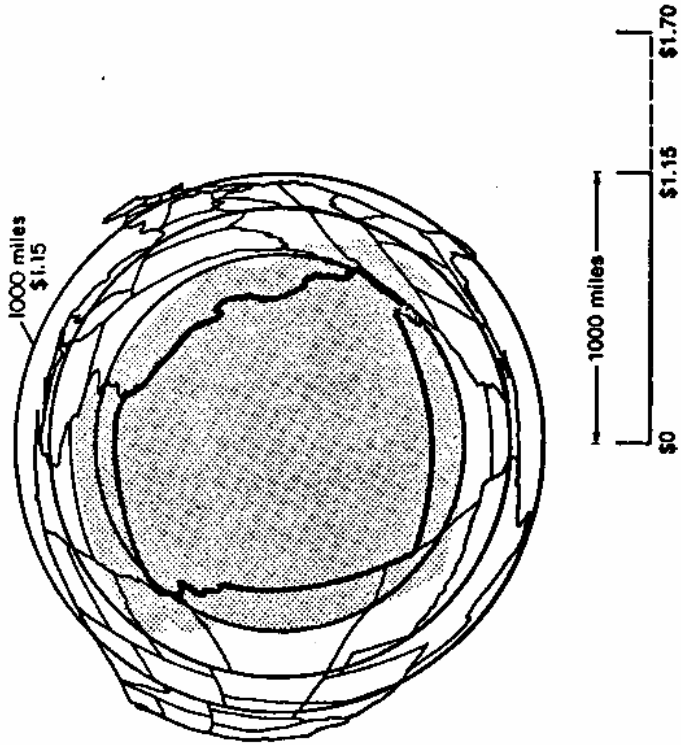


Exhibit 7: 1971 Telephonic United States

(1355)

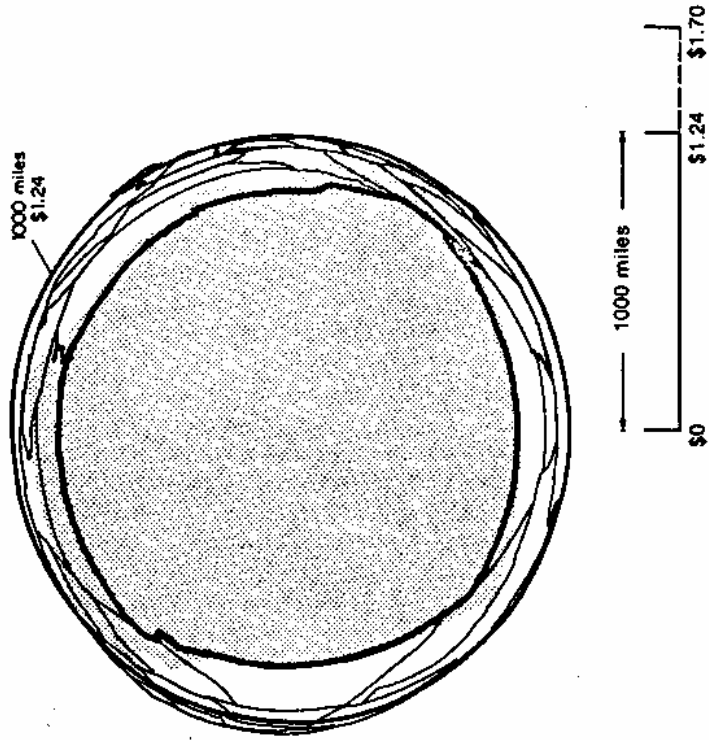


Exhibit 8: 1977 Telephonic United States

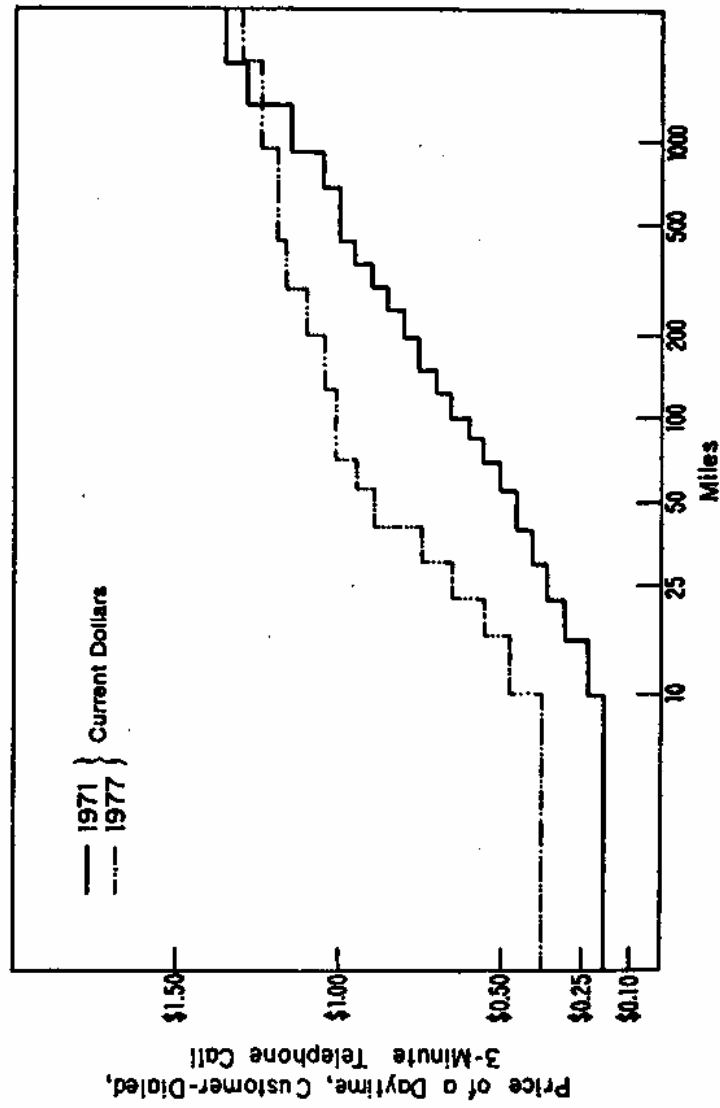


Exhibit 9: 1971 and 1977 Interstate Rates

(1357)

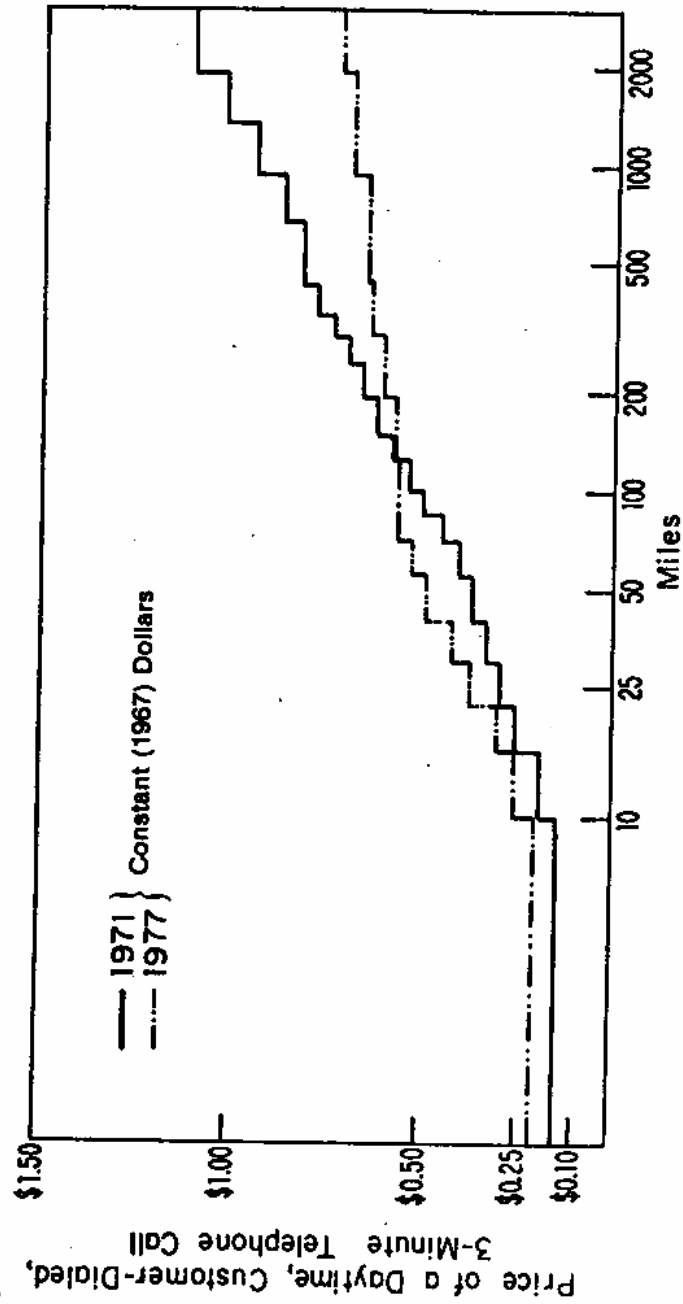


Exhibit 10: 1971 and 1977 Interstate Rates

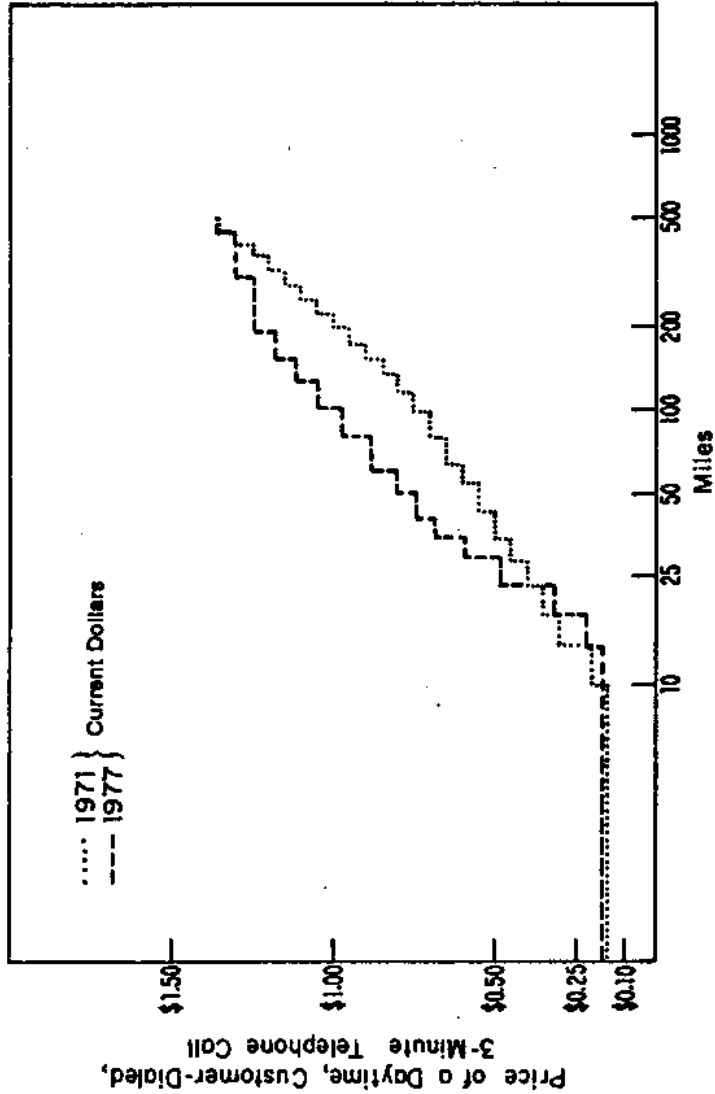


Exhibit 11: 1971 and 1977 Missouri
State Toll Rates

(1359)

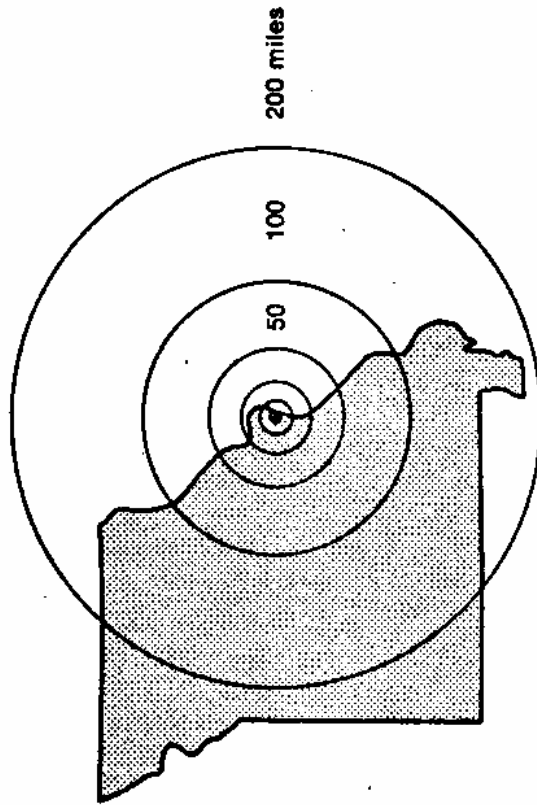


Exhibit 12: Geographic Missouri

(1360)

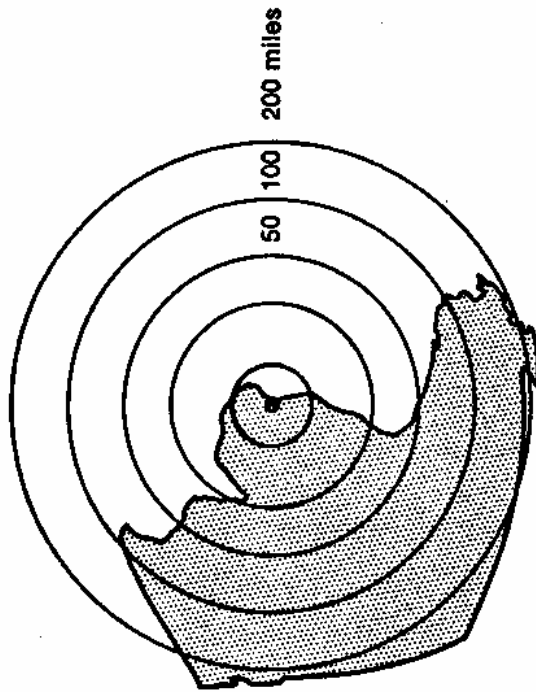


Exhibit 13: 1971 Telephonic Missouri

(1361)

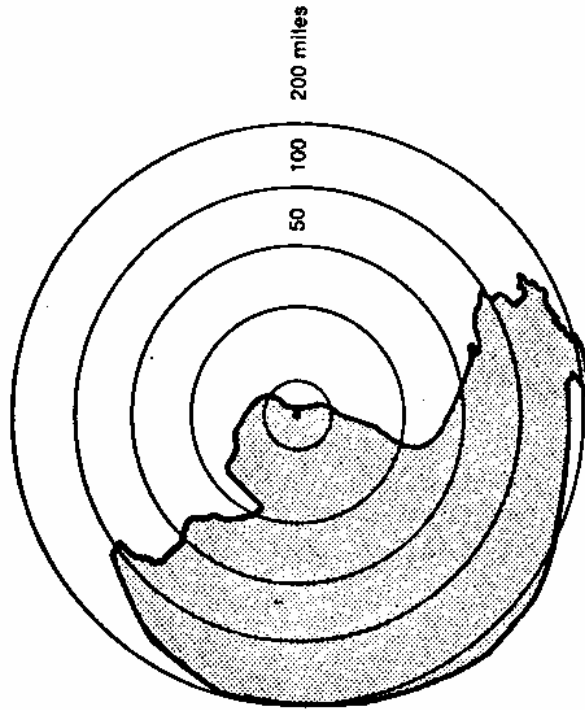


Exhibit 14: 1977 Telephonic Missouri

(1362)

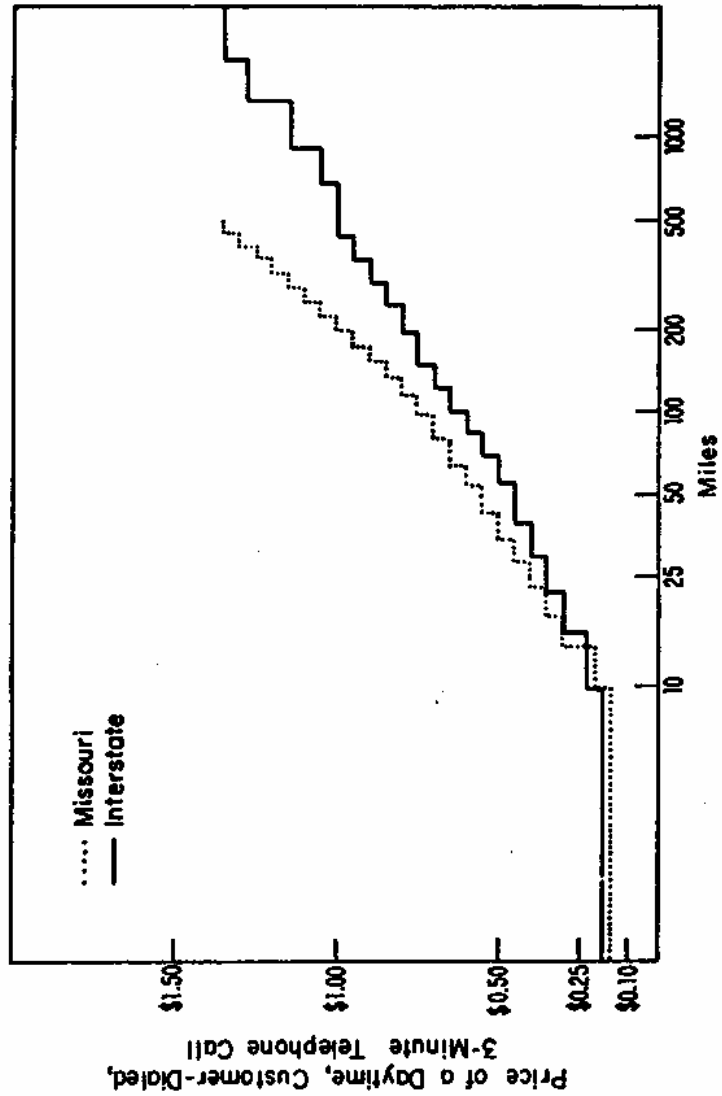


Exhibit 15: 1971 Missouri Toll Rate Disparity

(1363)

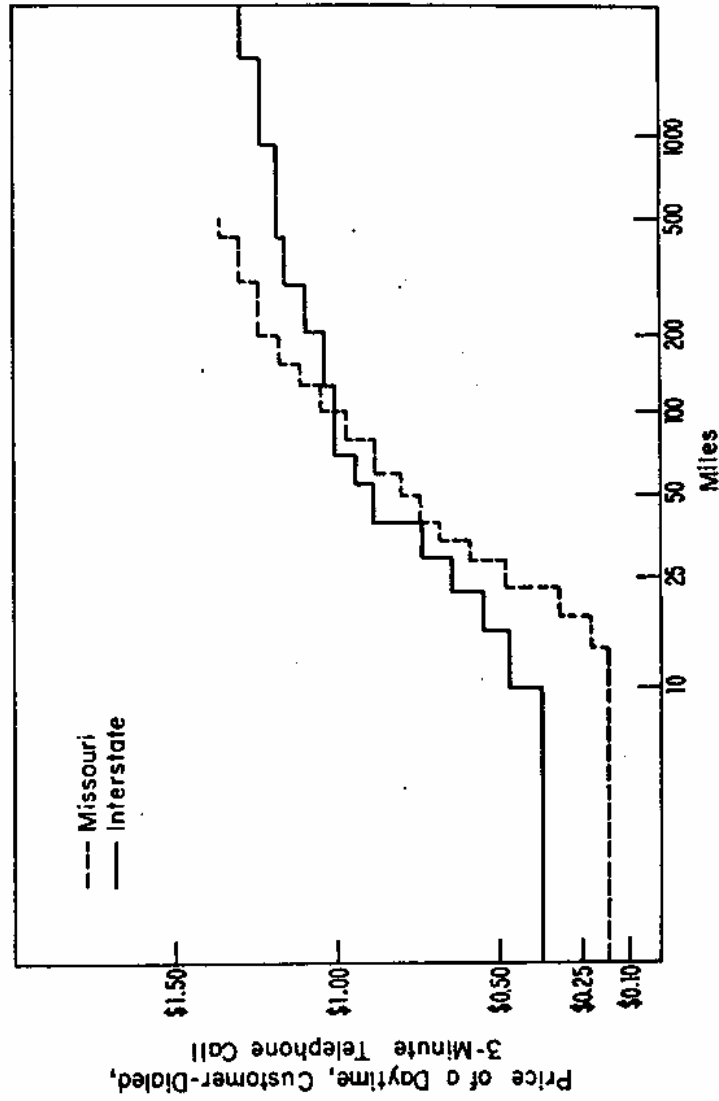


Exhibit 16: 1977 Missouri Toll Rate Disparity

(1364)

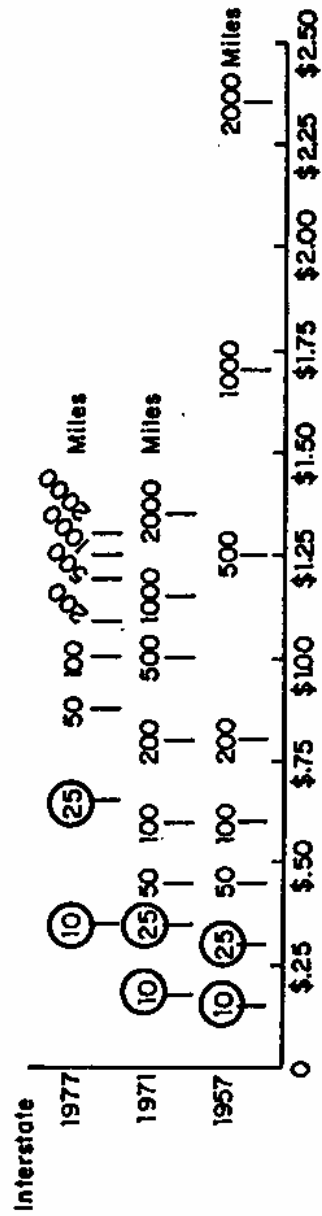


Exhibit 17: The Interstate Short
Distance Price Climb

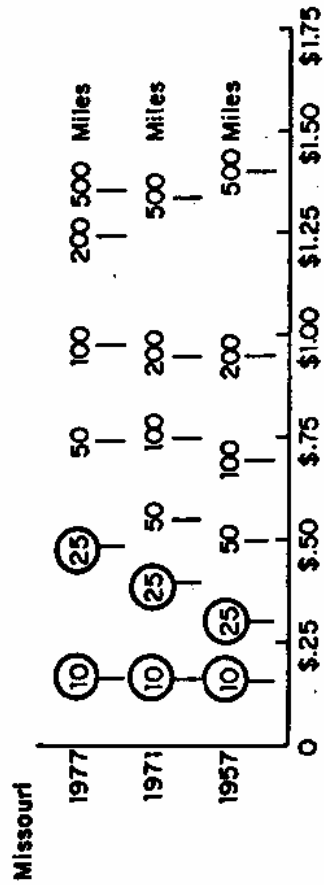
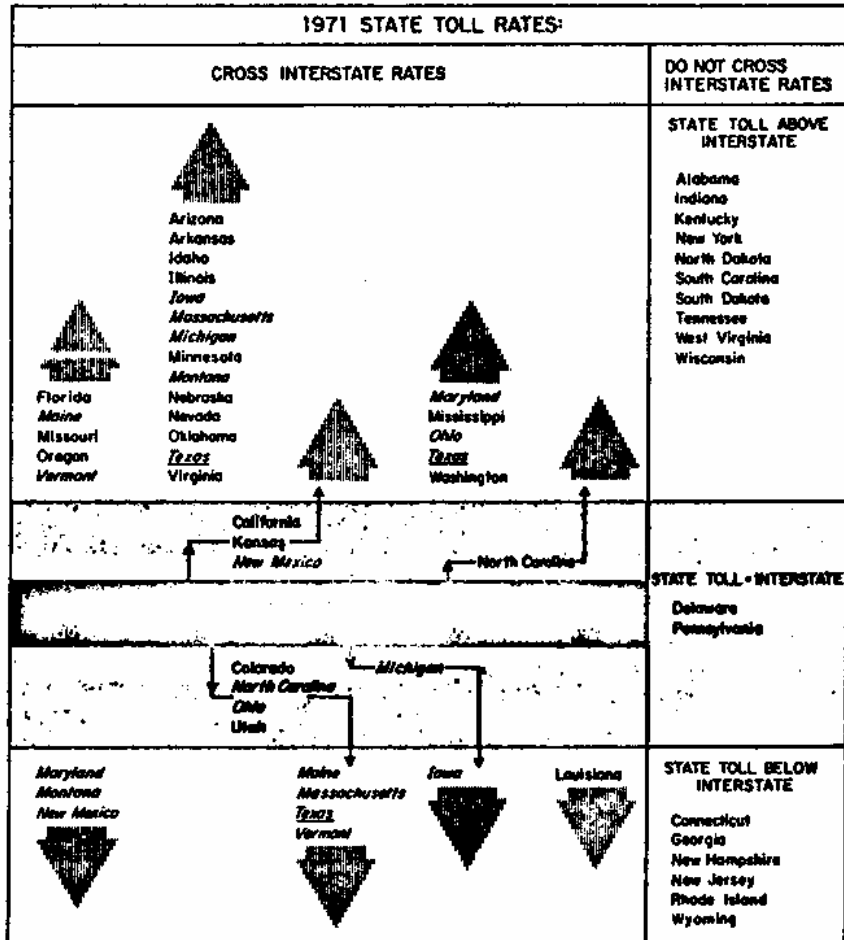


Exhibit 18: Missouri Holds the
10-Mile Fort

(1366)

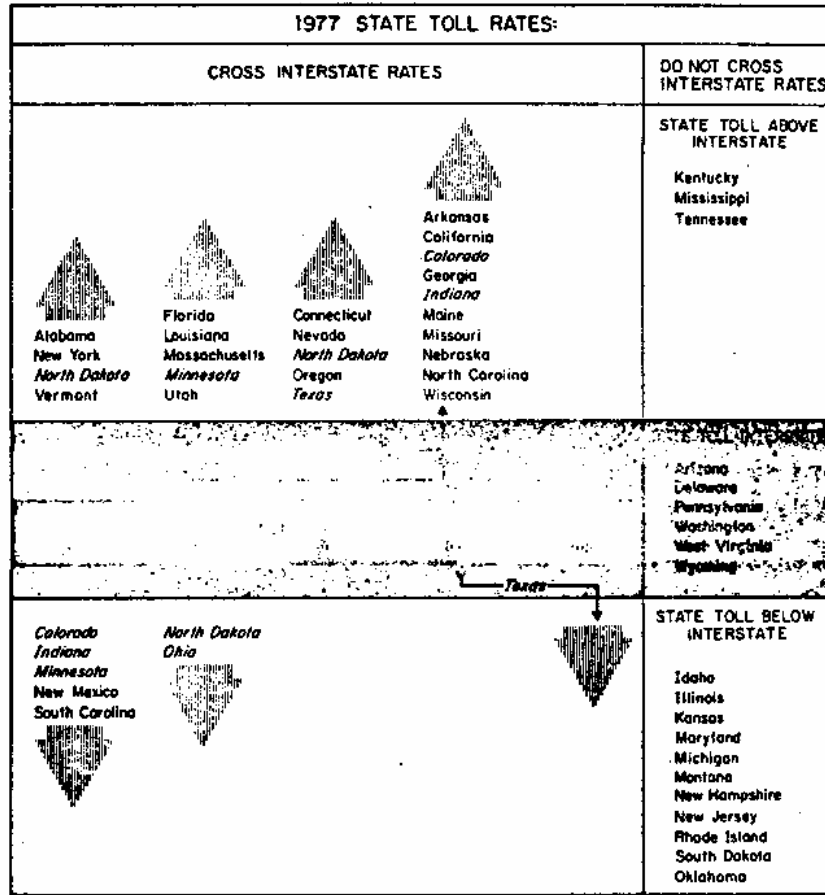


Legend

- States in *italics* cross the interstate rate band twice.
- States in underlined italics cross the interstate rate band three times.
- State rates equal interstate rates.
- Interstate rate band.

Exhibit 19: 1971 Toll Rate Disparity

(1367)



Legend:

States in italics cross the interstate rate band twice.

□ State rates equal interstate rates.

■ Interstate rate band.

Exhibit 20: 1977 Toll Rate Disparity

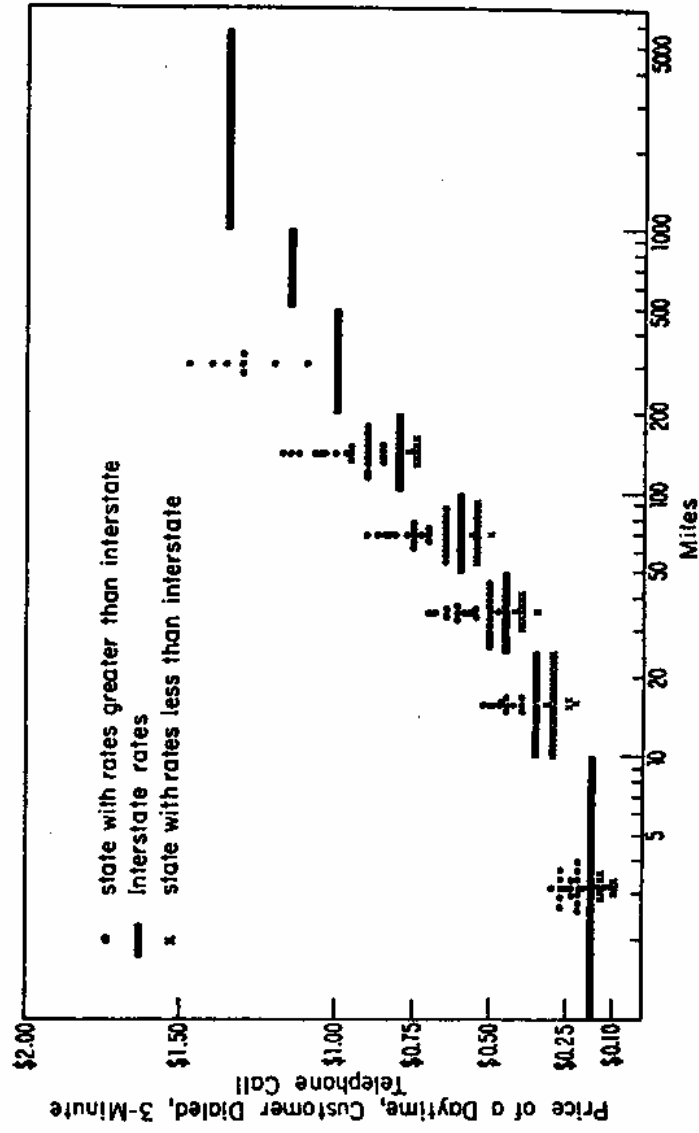


Exhibit 21: 1971 Toll Rate Spread

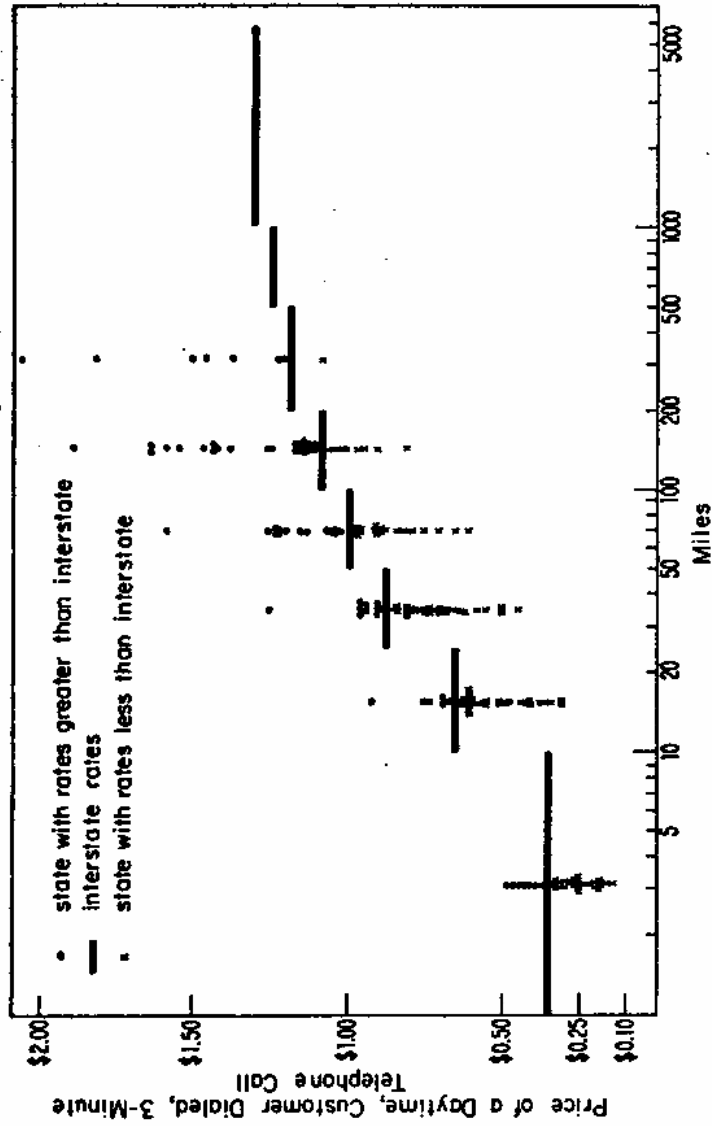


Exhibit 22: 1977 Toll Rate Spread

(1370)

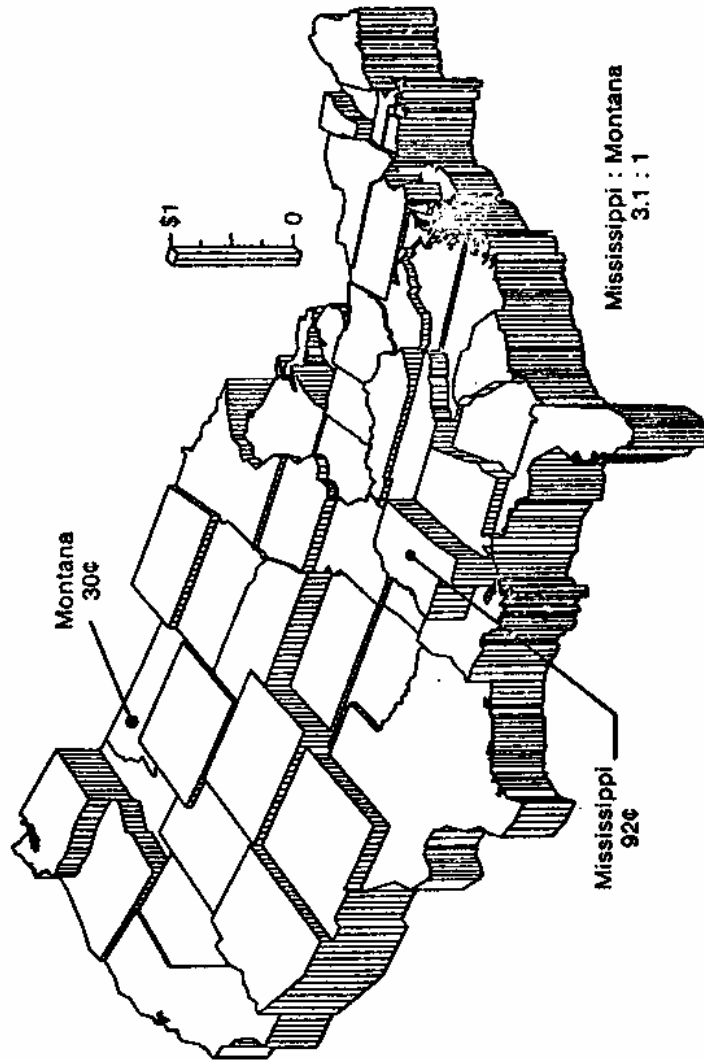


Exhibit 23: State Toll Day Rates,
3 Minutes, 25 Miles (1976)

(1371)

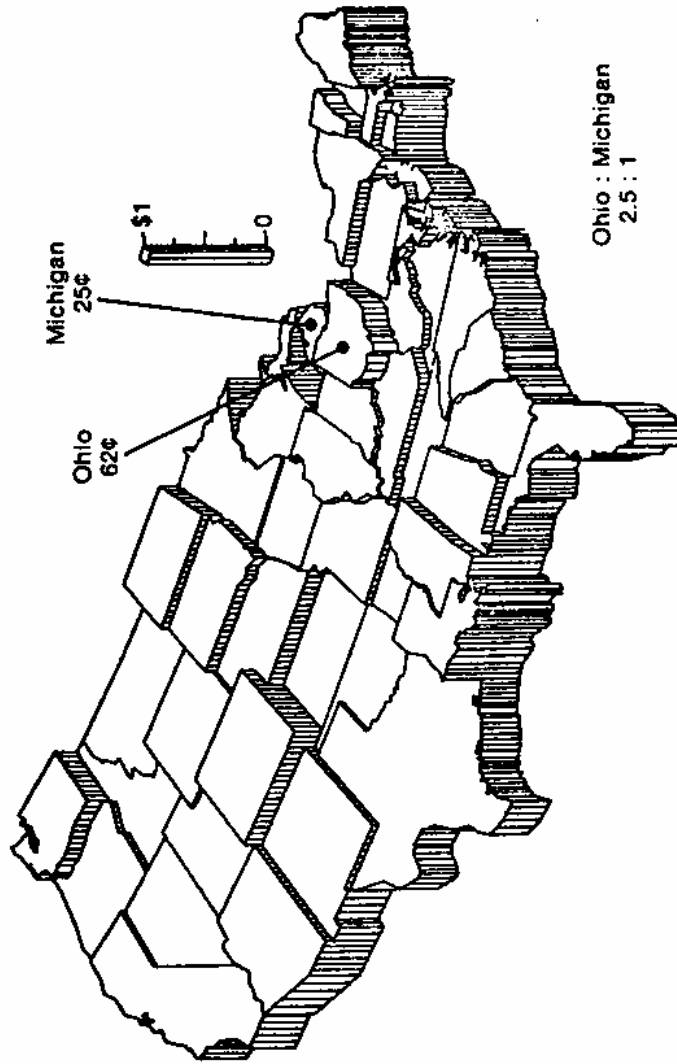


Exhibit 24: State Toll Evening Rates,
3 Minutes, 25 Miles (1976)

(1372)

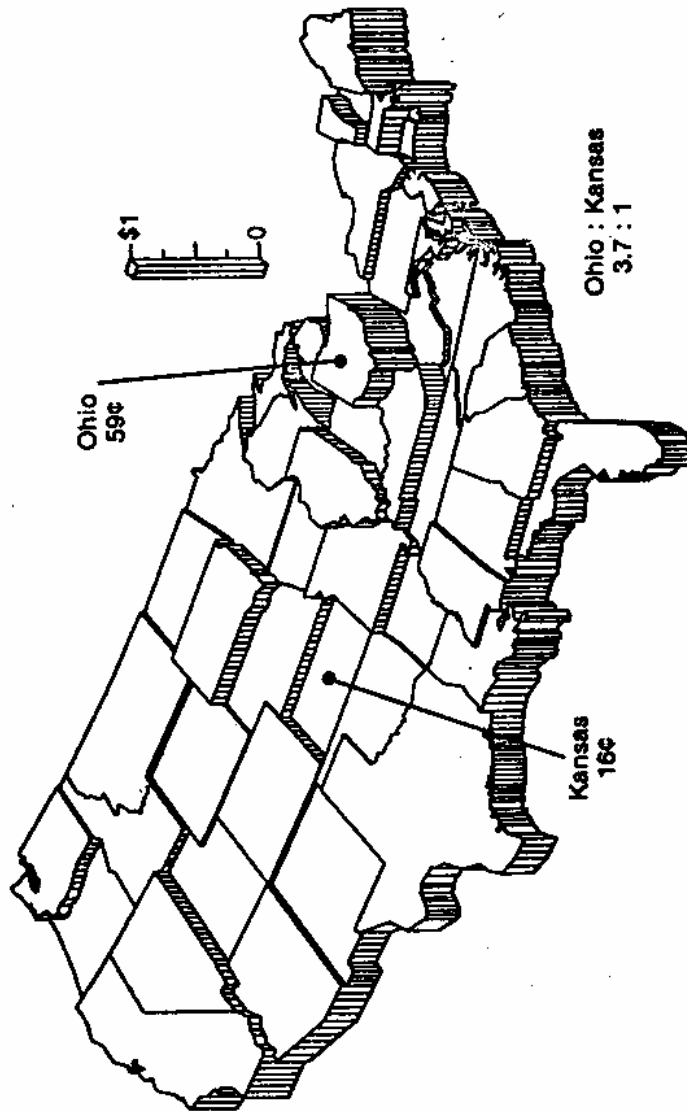


Exhibit 25: State Toll Night Rates,
3 Minutes, 25 Miles (1976)

(1373)

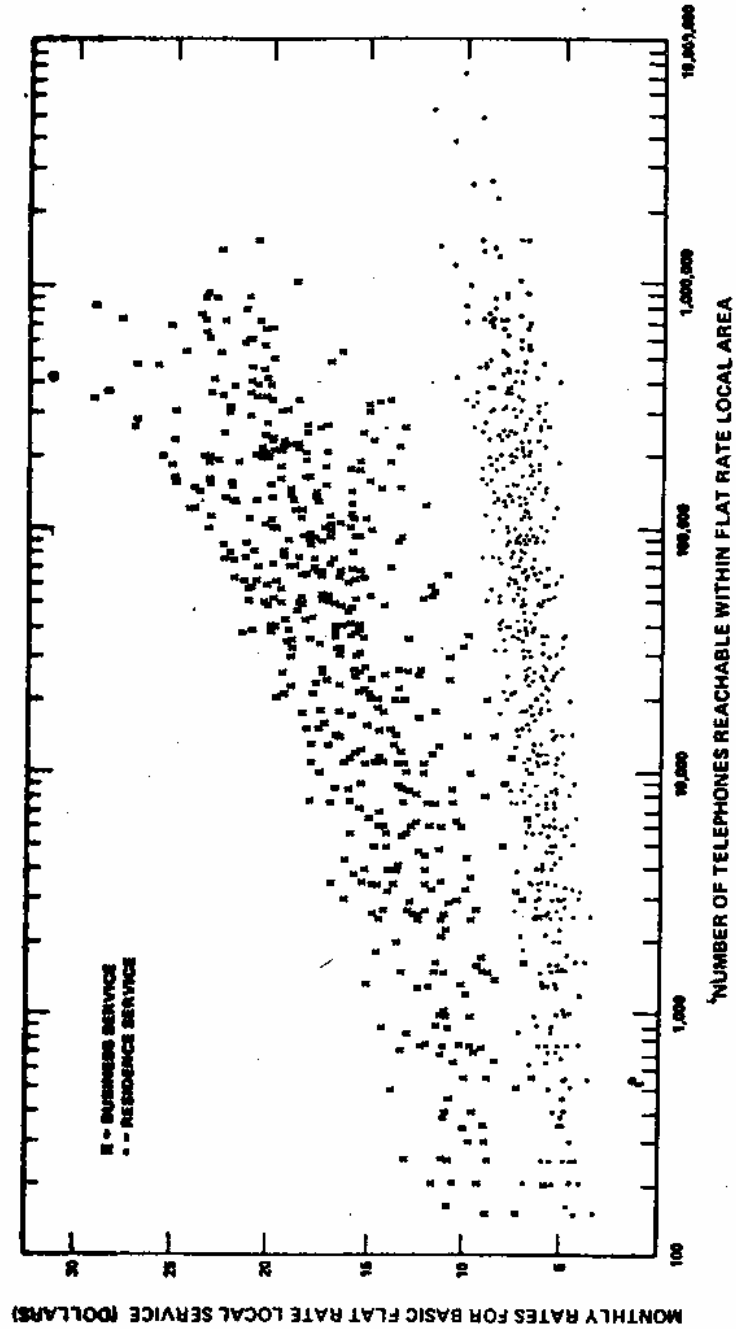


Exhibit 26: Variability in Basic
Local Rates (1974)

(1374)

STATEMENT OF KURT BORCHARDT, RESEARCH FELLOW, PROGRAM ON INFORMATION
RESOURCES POLICY, HARVARD UNIVERSITY

My name is Kurt Borchardt. For nearly three decades I served as legal counsel to the House Interstate and Foreign Commerce Committee. My responsibilities included but were not limited to communications legislation and legislative oversight of the FCC's regulatory activities.

At present I am a Research Fellow of the Harvard Program on Information Resources Policy. However, the views presented here are my own. I reside in South Carolina, and it gratifying to be that Chairman Hollings and his able staff are playing a leading and very constructive role in the communication and information areas.

My testimony will focus on the Commission-assisted public negotiation provisions of Sections 207 and 210 of S. 611 and the carrier agreement and association provisions of Section 225 (d)(2)(D)(iii) and (d)(2)(H) of S. 622. I want to commend Senators Hollings and Goldwater and their cosponsors for paying attention to processes as well as substantive goals. Just as the medium is the message, the interactive processes between the players who provide communications and information services and the Federal Government are parts of the substance of our information handling infrastructure.

Let me put these interactive processes into a broad perspective:

The emergence of the information handling complex—a whole made up of complicated or interrelated parts—has resulted from the marriage of telecommunication and data processing technologies on the one hand and a blending of monopolistic and free market philosophies on the other hand.

Before the marriage of the two technologies and before the increased reliance on marketplace forces, the Bell System designed, built and operated the domestic telephone system exercising centralized managerial control. The Bell System perceived information handling as an extension of telephony and sought legislation to give it authority to exercise centralized managerial control over an information handling system designed, built, and operated by it (A "system" as distinguished from a "complex" is a regularly interacting or interdependent group of items forming a unified whole" (Webster's Seventh New Collegiate Dictionary, 1963)).

The data processing segment of the information handling complex evolved as the result of marketplace forces which responded to the leadership role played by IBM.

The Federal Government, in an effort to protect the public interest as it perceived that interest, has employed two tools vis-a-vis the telephone system: (1) common carrier-type regulation and (2) antitrust enforcement; it has used mainly the tool of antitrust enforcement vis-a-vis the data processing segment.

With the emergence of the information handling complex, centralized managerial control will not be available to assure the satisfactory functioning of that complex. Will the marketplace forces be sufficient to assure such functioning? Or will a measure of coordination have to be achieved within that complex to assure its satisfactory functioning, and if so, how will it be achieved, and what will be the roles of the suppliers of information handling facilities and services, of the various categories of users of such facilities and services, and last but not least, of the Federal Government?

The information handling complex constitutes one of several infrastructures on which our social, political, and economic systems are built. In order to gain a perspective, we might look at the energy and transportation infrastructures. We might also contemplate in what respects we differentiate between the domestic and the international aspects of the information handling complex; and finally, we might consider how we deal with weapons and space systems as distinguished from infrastructures.

To begin with weapons and space systems, here the Federal Government plays the role of manager viewing the systems primarily as technological phenomena which, unlike the infrastructures, do not directly offer services to the public. The energy and transportation infrastructures offer vital services to the public (or more accurately, to various publics) and, therefore, the Federal Government has demonstrated keen interest in the satisfactory performance of these infrastructures by establishing Departments of Energy and Transportation. Other developed nations have seen fit to have their central governments assume managerial roles with regard to all three infrastructures: energy, transportation, and information handling.

With regard to our emerging information handling infrastructure, the Federal Government finds itself in an ambiguous role; it functions as manager insofar as the national security and the government's own information handling facilities and services are concerned; it has functioned as regulator insofar as the communications segment is concerned; and it functions as monitor insofar as the information handling complex is concerned.

Belatedly, there is recognition in the U.S. that we shall have to create special tools to deal effectively with the international aspects of the information handling complex, and S. 611 and S. 622 contain provisions tending in that direction.

With regard to the domestic aspects of the information handling complex, increased reliance on marketplace forces instead of centralized management raises the question how to achieve coordination sufficient to assure the satisfactory performance of the complex as a whole.

In giving Congressional approval and encouragement in S. 611 and S. 622 to the use by the suppliers of telecommunication services and the Commission of negotiating and associating processes as coordinating tools, the sponsors of these Bills recognize the urgent need for facilitating coordination within the information handling complex.

While this recognition should be applauded, the sponsors might be well-advised to ask themselves the question: Why limit the use of both of these coordinating tools to specific situations such as interconnections, tariffs, and access charges instead of leaving the Commission free, as it is now without legislation, to use these tools whenever it considers such use in the public interest?

Furthermore, a word of caution seems appropriate. Let us not arouse excessive expectations regarding the general effectiveness of these tools. Take, for example, the ENFIA negotiations, which happened to result—fortunately—in agreed interim access charges. The circumstances surrounding the negotiations were exceptional rather than ordinary.

I have attended some of the negotiations, and I have interviewed most of the important participants. My observation is that the success of the negotiations was due largely to a number of factors which may not be present to the same degree in other situations. The factors—not necessarily in the order of their importance—are: (1) Negotiations concerned the stakes of different service providers and did not involve the stakes of user groups to an extent sufficient to warrant their participation in the negotiations. (2) The stakes of the service providers were perceived in terms of more or fewer dollars and not in terms of the justice or injustice of paying access charges. (3) The stakes of the service providers were further limited by being short term ("interim") and not constituting a precedent for the long run ("rough justice"). (4) The players had good and sufficient reasons—though different ones—for wanting to reach an agreement. (5) The personalities of the players' representatives, the Commission moderator, and other participants were well-suited in terms of credibility, patience, sense of humor, and sense of proportion to the task of negotiating and bargaining in an attempt to reach a reasonable compromise.

What might we conclude from these observations? I suggest we might conclude that successful public negotiations with Commission assistance will be the exception rather than the rule and that we should be cautious not to raise excessive expectations that this tool will go a long way in replacing adversary processes when it comes to achieving coordination between contending players within the information handling complex.

As we move from a Bell designed, built, and operated telephone system to an information handling complex, we may have to pay the price of achieving coordination within that complex through an increasing number of adversary proceedings in lieu of private and intra- and inter-company negotiations and agreements which constituted an important management tool within the Bell-managed telephone system.

Negotiations and associations for purposes of coordination will be valuable tools wherever these tools may be used to advantage, though the occasions for their use may be infrequent. The Commission should be given ample leeway as it has been in the past to use these tools whenever it deems this appropriate in the public interest.

STATEMENT OF JOHN C. LEGATES, DIRECTOR, PROGRAM ON INFORMATION
RESOURCES POLICY, HARVARD UNIVERSITY

Mr. Chairman, my name is John LeGates. I am Director of the Program on Information Resources Policy at Harvard University and President of the Center for Information Policy Research, a companion non-profit organization.

Our purpose is to examine the changes taking place in the information industries with the aim of usefulness to government, industry and the public. We are supported by approximately seventy organizations, many of whom compete and conflict. Two documents describing our work are appended. The opinions expressed here, however, are my own.

I read both S. 611 and S. 622 as aiming to identify and classify distinct facilities and services, to isolate them into separate accounts and, in some cases, to divest

them into organizational entities without common financial structure, facilities or personnel.

However great may be the virtue of simplicity in what S. 611 terms "full separation", one thing is clear. That is not where we are today. Joint and common costs abound in the telephone companies, and in the competing industries as well. Virtually every kind of competitor with the telephone system also has them. This is true of the computer industry, the data processing industry, the companies making terminals, modems and interface devices, and the small and large competitors in the interexchange transmission business.

The bills provide for a transition. This will involve a process, apparently applicable to Category II carriers but not to competing industries with joint and common costs, of classifying facilities and services, separating accounts, and maybe separating organizations.

I submit that pushing this task too far too fast is both impractical and undesirable. It could involve administrative nightmares, direct damage to affected industries, and the prospect of permanent inefficiency.

Let me begin with administrative nightmares. I see these as arising from two activities: the classification of services, and the allocation of joint and common costs.

These activities have something in common—a lack of definitional clarity.

An example of lack of clarity in classification is afforded by the FCC's two "Computer Inquiries". These have addressed the problem of finding a distinction between "computing" and "communications". Failure of the first inquiry to produce a satisfactory working definition led to the second inquiry. This is still in progress after almost three years. I think that the problem is neither intricacy nor ineptitude. The problem is that there is no inherent difference between the two. Distinctions, if they must be made at all, will be arbitrary, or will be based on current offerings. Arbitrary distinctions tend to break down upon application; those based on current practice refuse to hold still.

Some, possibly most, of the services, functions, and capabilities up for classification present the same problem—there is no inherent distinction. If distinctions are made, then services will crop up which fail to fit. If the classifications are enforced, they could freeze an industry whose dynamism is a strong virtue.

Any classification of services, functions, and capabilities or any allocation of costs will benefit some parties and harm others. Those who are harmed will defend themselves. They will have a strong weapon: the lack of definitional clarity. There will be appeals to the FCC and, as has been the growing trend, to the courts. The possibilities for tying up progress on claims and counterclaims are almost endless.

Lack of clarity in allocating joint and common costs arises from the fact that these are arbitrary and indeterminate on purely economic grounds, especially in the absence of perfect competition. Additional assumptions must be made. In this industry these assumptions have been and are now determined by political accommodations within the framework of statutory and case law. Tony Oettinger explores this in detail.

The only way to avoid arbitrariness in allocating joint and common costs is by complete separation of capital and labor for every facility, service, or function. Carried to the extreme, this would create a fragmented industry made up of small companies. Many would be operating close to the margin to keep ahead of the competition. Such an industry would be unlikely to offer coordinated services, or to accumulate the cash necessary for major technological breakthroughs.

The possibility for direct damage to the industry lies in breaking up entities. The Hollings bill (Sec. 205(d), p. 31ff) requires separation within 180 days of enactment for certain classes of service and facility. It appears to require divestiture of Long Lines from AT&T. It also appears to require divestiture of intrastate, interexchange services from Bell operating companies. Likewise with MTS and WATS. It would appear to require breaking up Southern Pacific Communications Corporation by virtue of its SPRINT service, and MCI by virtue of its EXECUNET service. It may make ATT's Advanced Communications Service, or anything like it, illegal for any offerer.

Some of these divestitures are probably contrary to the intent of the bill, as they would damage entities who are already underdogs in the competition. Others may retard the development of desirable services. Still others, because of the timing if nothing else, will weaken existing services before the competitive environment has produced a replacement.

The prospect of permanent inefficient stems from a problem built into "full separation". Full separation is incompatible with economies of scope. Economies of scope, different from economies of scale, are achieved by doing more than one job with one resource. Using the same handset to make both local and long distant calls exemplifies economies of scope.

(1377)

It can be argued that the economies built into a competitive environment are greater than economies of scope. The answer to that question is not known. What is known, however, is that some separations can only be made at the expense of economies of scope, and that the possibility of permanent inefficiency is present whenever this happens.

We can now construct a restatement of the whole issue of separating entities. The issue is "how far can we separate entities to encourage competition without becoming bogged down in administrative swamps, doing direct harm to the existing system, or losing more through loss of economies of scope than we gain by competition?"

The bills each deal with separation of entities at three levels: classification, accounting separation and organizational separation.

The Hollings bill classifies all carriers as Category I or Category II depending on the degree of effective competition (Sec. 204(a), p. 26ff). To determine the degree of effective competition, the FCC "shall define and establish by rule generic classes and subclasses of telecommunications services based on relevant distinctions as to the primary functional telecommunications capability provided to the user and the degree of substitutability between and among comparable services." The Goldwater bill (Sec. 225(d)(2)(A)) eliminates this step, and classifies only by degree of competition. Both bills call for ongoing review of the classification.

The Hollings bill stresses classification by service, but also adds two other criteria: functions, and capabilities, the latter being open to interpretation as "facilities". The classification by services could be an administrative swamp, as suggested above. Adding functions and capabilities makes it worse. The bill avoids the FCC Computer Inquiry's unsolvable problem by avoiding service, function and technology criteria altogether, and classifying only by degree of competition. A logical and consistent follow-through would be to avoid these criteria elsewhere as well, and adopt the Goldwater bill's approach of going directly to degree of competition.

Accounting separation is specified in both bills, with heavy reliance on allocation of costs among different services. The Hollings bill specifies (Sec. 220(a), p. 49) "such guidelines shall be designed to accomplish a complete accounting divestiture of competitive services of such carrier." The Goldwater bill requires the Commission (Sec. 201(d)(2)(B), p. 9) "to allocate costs of service provided in order to ensure that in any case where telecommunications products or services are provided by a carrier which also provides the monopoly service, revenues and costs attributable to the provision of monopoly service and all other services may be properly identified."

Like classification, cost allocation poses administrative difficulties because of the lack of underlying logical distinctions. Distinction can only be achieved by separation of entities. Although entity separation has a logical advantage over accounting separation, it also has an enormous practical disadvantage—it precludes economies of scope. Both bills may be setting in motion a process which will harm economies of scope to achieve cost allocation. A specific prohibition against using entity separation as a tool to achieve accounting separation would be beneficial.

Both bills deal with entity separation. The Goldwater bill allows it as a tool "to accomplish policies" (Sec. 201(d)(2)(C), p. 10). The Hollings bill goes farther, and requires entity separation through a series of specific prohibitions (Sec. 203, p. 22, and Sec. 205(d), p. 31). These prohibitions rely on the definition of "fully separated entity" (Sec. 103, 11, p. 6) which requires not having "common directors, officers, employees, or financial structure or commonly owned facilities. . . ."

These provisions of the Hollings bill are powerful. They deal specifically with services which make up a large part of the existing industry, and they specify a degree of separation which requires separation of plant. The language does not contain adequate safeguards to prevent damage to economies of scope. There would be less potential for harm if these separations were required only after accounting separation had failed to do the job, and when the harm to economies of scope could be balanced by a compensating good, such as the economies of effective competition.

In summary, I am recommending that the classification of entities by service, function, or capability be avoided where possible, that accounting separation be used instead of entity separation to avoid harming economies of scope, and that entities not be separated until there are alternative competing entities.

I thank the committee for the opportunity to express my views.

Senator HOLLINGS. Mr. Knecht.

Mr. KNECHT. Thank you, Mr. Chairman.

I am Louis B. Knecht, secretary treasurer of the Communications Workers of America.

(1387)

Senator HOLLINGS. Well, I can see we are off to a glowing start.
The union is against the bill.

NARUC says study it by a commission.

Professor Oettinger, who got us started in this direction, reminds me of what they used to say aboard ship: "When in danger, when in doubt, run in circles, scream and shout."

I don't know where we are going. Can you tell me?

I yield to you.

Senator HOLLINGS. Can you explain the reason for the variability referred to by Professor Oettinger, when he talks about within that 25-mile area a 30-cent call for 3 minutes is 30 cents in Montana and 92 cents in Mississippi?

Mr. LARKIN. Very easily.

Senator HOLLINGS. They are both rural States. We don't have the New York problem there.

How do you explain that?

Mr. LARKIN. You have different costs in different States and different investments. You have some telephone entities with 2 percent money from REA. Others are paying 9 and 10 percent. You have different labor rates and different local costs of material.

You have many other variables too. You have underground, as opposed to overhead cable. You have some equipment that may have been there since the year 1. In other areas you have ESS equipment which is far more sensitive.

Senator HOLLINGS. You have a good comparison with Ohio and Michigan. They would be developed, of the same industrial communities, and yet Ohio is 62 cents and Michigan is 25.

Ohio is more than twice that of Michigan.

Mr. LARKIN. That could be easily explained if you went to the numbers. You don't know what their original cost is or what their continuing costs are.

The variables go on and on. That is the difficulty of making comparisons.

For instance, we have a situation upstate where we have one company. It has a different system in the same company. The resolution of that has plagued us for years.

Senator HOLLINGS. I understand that.

When you use the Federal approach, will it be more equalized? Will it be a fairer system? Professor Oettinger, how do you account for the variables?

Mr. OETTINGER. As I indicated in my testimony—we find it difficult to correlate the variability in the costs with the variability in rates.

Mr. Larkin is accurate in pointing out that different States like to put different loads on different folks, to paraphrase another expression.

Senator HOLLINGS. The cost is the same, but it's a difference in allocation?

Mr. OETTINGER. No. There are really wide variabilities in costs. But how the costs vary may have nothing to do with how the rates vary. There is a lot of occult work that folks like Mr. Larkin do—between costs and prices.

If I may for a moment go back to your nautical analogy earlier, mine was not a counsel of despair going around in circles shouting. I simply suggest this, that I think there is an urgency for passing legislation that makes it explicit that encouraging competition is part of the regulatory standard and that the standard is forbearance from regulation so that explaining why regulation, as opposed

to explaining why not regulation. Such standards need to be written into the act to recognize current reality and make it easier for the FCC to forbear regulating without running afoul of the courts.

I might say the absence of such standards, of a competitive standard and a standard of don't regulate unless you have to is a serious hobble to the present commission.

I found that to be the case in my own experience within Massachusetts Cable Television Commission.

We devoutly for 3 years tried to find a lawful formula for decreasing regulatory burdens.

We found no way of doing that without getting hauled into court and very likely losing.

Last year we submitted a bill to the Massachusetts Legislature asking for a simple change in our organic legislation, namely, saying: "Don't regulate unless you have to and explain why you have to regulate." That bill is now on the Governor's desk.

It seems to me that those are two key ingredients needed to permit necessary regulation and avoid unnecessary regulation. My concern is not over what the outcomes are, whether the pie carving is good or bad or who will suffer and who will benefit—it is that specifying too many details in the law is something that may get the Senate and House into an endless swamp, with folks coming back day after day with the kind of hooting and hollering they now do before regulatory commissions. What seems preferable is delegation to regulatory authorities of a more explicit mandate to the effect that it is time to explicitly take the competitive standard into account. It's time explicitly to justify regulation rather than justify the absence of it.

I think that would go a long way.

There is no doubt in my mind that terminal equipment is something that should have been deregulated long ago, although there is also no doubt in my mind that excruciating care needs to be taken in the details of how it's done and that such care cannot and should not be taken in legislation, given continuing rapid change.

Let me give you a case in point.

Where I first came into the terminal equipment issue 10 years ago with some studies of the matter of harm to the network, at that time A.T. & T. was alleging the linemen would fall off poles like flies if anyone else hooked things to their network. They took people to court for selling as foreign attachments gizmos that would go onto the center of the dial, where the number is. They said that would harm the network.

There were absurdities like that, clearly out of place.

Let me jump to the other extreme.

Suppose that in a totally unregulated way somebody sold to every household a gizmo for automatic dialing. You can't get through to the number you want to call, so you press a button and the gizmo keeps dialing over and over again. If one of these were active all the time in every household, nobody could get a call through ever again.

That would put us in a situation of the French telephone system, of which it's said that 50 percent of the folks are always waiting for a phone and the other 50 percent are always waiting for the dial tone.

(1394)

At that extreme, yes, there can be real harm.

For the Congress of the United States to get itself bogged down into those minuscule shadings, I submit, Mr. Chairman, you haven't got time enough in the world. Tell the FCC they have to justify regulating, not deregulating, but delegate the details to them.

Senator HOLLINGS. I want to thank each of you on the panel for the committee.

We have a rollicall and that is the last call. We have to rush over to make it.

The committee will be in recess until 2 this afternoon.

Thank you.

[Whereupon, at 12:30 p.m., the hearing was recessed, to reconvene at 2 this same day.]

AMENDMENTS TO THE COMMUNICATIONS ACT OF 1934

HEARINGS BEFORE THE SUBCOMMITTEE ON COMMUNICATIONS OF THE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE NINETY-SIXTH CONGRESS

FIRST SESSION

ON

S. 611

TO AMEND THE COMMUNICATIONS ACT OF 1934, AS AMENDED,
TO PROVIDE FOR IMPROVED DOMESTIC TELECOMMUNICA-
TIONS AND INTERNATIONAL TELECOMMUNICATIONS, RURAL
TELECOMMUNICATIONS DEVELOPMENT, TO ESTABLISH A
NATIONAL COMMISSION ON SPECTRUM MANAGEMENT, AND
FOR OTHER PURPOSES

AND

S. 622

TO AMEND THE COMMUNICATIONS ACT OF 1934 IN ORDER TO
ENCOURAGE AND DEVELOP MARKETPLACE COMPETITION IN
THE PROVISION OF CERTAIN SERVICES AND TO PROVIDE CER-
TAIN DEREGULATION OF SUCH SERVICES, AND FOR OTHER
PURPOSES

MAY 10, 11, 16; JUNE 5, 6, AND 7, 1979

PART 3

Serial No. 96-45

Printed for the use of the
Committee on Commerce, Science, and Transportation
PROGRAM ON INFORMATION RESOURCES POLICY



HARVARD UNIVERSITY

U.S. GOVERNMENT PRINTING OFFICE

WASHINGTON : 1979

53-362 O

(1959)

STATEMENTS OF JAMES V. P. CONWAY, DEPUTY POSTMASTER GENERAL; JOHN F. McLAUGHLIN, EXECUTIVE DIRECTOR/ POSTAL AND ALLIED ARENA, PROGRAM ON INFORMATION RESOURCES POLICY, HARVARD UNIVERSITY; AND FRANKLIN T. JULIAN, DIRECTOR, DATA TELECOMMUNICATIONS POLICIES AND PLANNING

Senator HOLLINGS. Mr. McLaughlin, we can start with you. Go right ahead.

Mr. McLAUGHLIN. Mr. Chairman, I'm happy to be back before this subcommittee.

I'm executive director of postal and allied arenas at Harvard University's Program on Information Resources Policy. We conduct a policy research program supported by 70-some organizations who have diverse and conflicting stakes in information policy. Our supporters are well-represented here today, because they include the Postal Service, NTIA, CCIA, Xerox, A.T. & T., IBM, Southern Pacific, the letter carriers and a host of others having a strong interest in electronic message services. (A list of program affiliates is attached.)

Between 1964 and 1977 I was an employee of the U.S. Postal Service. For the last 5 years of that time, I served as Director of the Office of Strategic Planning.

I am testifying today in a personal capacity, not as a representative of Harvard, our program or any of its supporters.

I realize that today's hearing schedule is tight, so I will keep my remarks brief.

First, let me address the broad question of telecommunications and postal services. Based upon my experience and my recent research, I am convinced that developments to date in the sphere of telecommunications, computers and banking have had both positive and negative effects upon the traditional postal system. Since 1970, the volume of domestic toll telephone calls has increased far more rapidly than the volume of letter mail, not just in percentage terms, but in absolute numbers as well. And, while historical data

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are sparse, it appears that this growth in toll telephone messages has been at the expense of that portion of the mail stream which we would call correspondence.

Simultaneously, transactions in the mail--specifically, bills, payments and items such as bank statements--have been growing dramatically. This growth in transactions can be attributed to a number of demographic and economic factors, but it also stems from the wide availability of credit card systems and personal checking accounts which, in turn, are the result of evolving telecommunications and computer technologies.

Looking to the future--perhaps 20 years from now--I can envision the possibility that further developments in telecommunications, computers and banking will eliminate the demand for a large portion of the present postal system.

Considering the interaction between mail and other systems of communications, and considering the Federal Government's commitments to providing the Nation's citizens with ready access to communications services, I believe it is both appropriate and desirable that this subcommittee address the future role of the Postal Service as part of the subcommittee's efforts to review and revise the Communications Act of 1934.

As to what specific role USPS should play, if any, I hold no brief. I would like to mention, however, some of the pros and cons of Postal Service participation in the telecommunications business.

EMS services, such as Mailgram, ECOM, and Intelpost are very interesting for a variety of reasons, but they are insignificant side-shows in the overall communications business. The major telecommunications effort being considered by USPS is a large scale system using electronic input from high-volume mailers. These messages would be transported and sorted electronically, then printed and enveloped at the destination post office for final, manual delivery by letter carriers.

This is the approach described by the National Research Council as a Generation II EMS, and this is the type of system that RCA has been designing and evaluating for USPS. The lion's share of messages flowing through such a system probably would be routine, monthly billings destined primarily to households and small businesses. Initial studies have claimed that an EMS like this might handle 20 to 25 billion pieces a year at a savings of 3 to 5 cents per piece.

I can think of a number of excellent reasons why USPS should pursue the development and operation of such a system.

First, assuming the validity of a billion dollars a year or more in savings, USPS has an obligation to achieve those savings and pass them back to their mailers.

Second, by passing along such savings to businesses that make large mailings, USPS protects a significant portion of its business and thus can spread the fixed cost of delivery services to 95 or 100 billion pieces of mail, not 65 or 75 billion pieces.

Third, such a venture is politically more attractive and more feasible than closing 30,000 small post offices or knocking off a couple of delivery days a week.

Fourth, no one else is really addressing the same market in the same way. After 20 years of talk about EFTS, for example, I know

(1961)

of no serious effort underway at the moment that would displace the existing household or retail billing system in the foreseeable future. I don't know anyone who is seriously attempting to build any kind of EMS that will reach 70 million households all around the country or, I might add, that would provide any kind of walk-in service for the occasional user.

For all of these reasons, USPS should be working on EMS.

On the other hand, I can see a number of factors that argue against USPS entry into the telecommunications field. Some of these concern market structure, management capabilities, regulatory jurisdictions and other small but important details with which I will not bore you at the moment.

The critical factor to be considered is the institutional nature of the Postal Service. It is an organization accustomed to a monopoly position. It is an organization which exhibits a high proportion of common costs, thus presenting the opportunity for subsidizing competitive services from monopoly revenues.

It is an organization which enjoys direct Government subsidies, freedom from most Federal, State, and Local taxes and—for all intents and purposes—it enjoys the full faith and credit of the U.S. Government. Given this, the real question becomes: Can Congress and the administration develop ground rules that would allow USPS to offer telecommunications services that would benefit both the Postal Service and its customers without distorting the rest of the telecommunications sector?

Having thought about these factors for and against USPS entry, I sense there might be some acceptable possibilities in the middle ground. Use of the USPS delivery mechanism to reach addressees without terminals, for example, might make many private EMS ventures more attractive than they are today. Perhaps USPS could provide a distribution mechanism for all private systems. I do not know, and I do not think anyone else knows, what are the economics of this middle ground that Mr. Nyborg and other witnesses spoke of. But I do believe that they merit serious exploration.

Thank you, Mr. Chairman, for your kind invitation to express my views on this important subject.

[The document referred to follows:]

(1962)

HARVARD UNIVERSITY—PROGRAM ON INFORMATION RESOURCES POLICY

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Iran Communications & Development Institute (Iran)	U.S. Postal Service
Knight-Ridder Newspapers, Inc.	The Washington Post Co.
	Western Union International, Inc.
	Xerox Corp.

(1963)

Senator HOLLINGS. Thank you very much, Mr. McLaughlin.

(1976)

Senator HOLLINGS. Well, now, Mr. Julian, do you want to comment on this marketing of service? What do you think of the Post Office going into marketing this particular service?

Mr. JULIAN. Mr. Chairman, we believe that it is proper that private industry continue to provide a variety of electronic message services. We believe it has in the past. We believe that there will be an even greater variety provided in the future. And we believe that new technology will come in that will allow not just a variety of vendors, but a larger variety of services to be supplied; and that it is proper for private industry to provide these in all ways, and

(1977)

that there is no necessity for the USPS to enter this area of business, and that their role in all of this is the physical delivery of mail and the interconnection through the other electronic message services provided by private industry.

Senator HOLLINGS. Mr. McLaughlin, do you want to comment on that?

Mr. McLAUGHLIN. Well, I think that I have seen a surprising amount of consensus here today in a number of areas, one of which has been the idea of the Postal Service providing interconnection for physical delivery from other systems.

I think the one issue that has not been raised in that regard addresses who those other system are aimed at. I am not an expert, but I am somewhat familiar with proposals for ACS, XTEN, SBS, and some of the other more specialized systems that have been proposed.

I can see a great deal of potential for the vendors of those services to go out and market those services to large commercial or industrial customers, and interconnect with the Postal Service for delivery.

No one has yet addressed though, I think, the need of the person who walks in off the street, the small businessman who has 25 to 50 messages a month, or maybe at one time in a month, who is not going to be serviced by one of these large systems.

I think perhaps there is the potential for the Postal Service to provide services for the large common carriers in terms of interconnection, and they'd have the final delivery.

Perhaps there is a window there of some type—worth exploring—of a Postal Service contract with other vendors or common carriers to offer a postal-type service that was basically intended for the man-off-the-street.

(1980)

Senator PRESSLER. I'd just like to ask Mr. McLaughlin, I'm very interested in knowing what your group up there at Harvard is doing. Please send us some of your papers. Is anybody thinking about what would happen if a communications satellite got knocked down; with all this advanced thinking we're doing, we almost have to have a fallback communications system?

Can you imagine what would happen if there'd be a brownout or a satellite didn't work? Is there any thought being given to this question? Or is this so far-fetched that it would never happen?

Mr. McLAUGHLIN. Well, I think, considering some of the events over the last couple of years, it's not farfetched.

I think you get into many of the same arguments as the FCC has heard over many years on submarine cables versus satellites, what you need for a fallback position, national defense considerations, or what have you.

I've heard many people talking here today, including Senator Goldwater earlier, about future systems; and I think there is a tendency, on the part of many of us, to generalize our own experience to the whole population.

I know of many friends and colleagues who have no qualms about sitting down and playing with a computer terminal. On the other hand I don't see most of the population of the United States doing that in the near future.

I think a lot of the sophisticated systems that we talk about are very nice and very efficient for business, but you still will have the need for conventional postal services for a long time to come.

Senator Pressler. I have no further questions.

Unless somebody else wants to respond to that, I'll recess, subject to the call of the Chair.

[Whereupon, at 12:50 p.m., the hearing was adjourned, subject to the call of the Chair.]

**PROHIBITED RENEWAL CONSIDERATIONS AND
CROSSOWNERSHIP RESTRICTIONS**

**HEARING
BEFORE THE
SUBCOMMITTEE ON COMMUNICATIONS
OF THE
COMMITTEE ON
INTERSTATE AND FOREIGN COMMERCE
HOUSE OF REPRESENTATIVES
NINETY-SIXTH CONGRESS**

SECOND SESSION

ON

H.R. 6228

**A BILL TO AMEND THE COMMUNICATIONS ACT OF 1934 TO PRO-
VIDE THAT THE FEDERAL COMMUNICATIONS COMMISSION, IN
CONSIDERING APPLICATIONS FOR THE RENEWAL OF BROAD-
CASTING STATION LICENSES, SHALL NOT TAKE INTO AC-
COUNT ANY OWNERSHIP INTERESTS OF THE APPLICANT IN
OTHER BROADCASTING STATIONS OR IN OTHER COMMUNICA-
TIONS MEDIA, AND FOR OTHER PURPOSES**

APRIL 23, 1980

Serial No. 96-141

**Printed for the use of the
Committee on Interstate and Foreign Commerce**



**U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1980**

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PROHIBITED RENEWAL CONSIDERATIONS AND CROSSOWNERSHIP RESTRICTIONS

WEDNESDAY, APRIL 23, 1980

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON COMMUNICATIONS,
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
Washington, D.C.

STATEMENT OF BENJAMIN M. COMPAINE

Mr. COMPAINE. Thank you.

Mr. Chairman, my name is Benjamin M. Compaine. I am executive director of the media and allied arenas of the Program on Information Resources Policy at Harvard University. I am also the editor and coauthor of a recently published book, *Who Owns the Media? Concentration of Ownership in the Mass Communications Industry*.

However, I speak here only for myself, not for the program nor any of the nearly 100 diverse private firms and Government agencies that support the program's work.

On March 3, 1980, I presented testimony to your colleagues at the House Committee on Small Business, Subcommittee on General Oversight and Minority Enterprise. At that time, I offered a general statement on concentration of ownership of the media and described a framework within which it might be better understood. Today I will restrict my remarks to the more narrow issues of the proposed legislation in H.R. 6228.

There is general agreement that the media and communications environment of 1980 is radically different from the one that existed when the Communications Act of 1934 was enacted. Technology is encouraging change at an increasing rate, so that the legislation of today, if not carefully considered may be outdated in much less time. Crucial to this understanding, I believe that it is most helpful to reduce our reliance on such traditional media terms as "newspaper," and "television." What we are really concerned with are sources of content creation—that is, programing in the broad sense that includes news as well as entertainment—and the information distribution process—that is, transmission channels that includes broadcast, cable, telephone, and similar electronic services, as well as physical delivery of hard copy product, such as a newspaper. Traditionally, it has been the limitations of the distribution side that proved to be the bottleneck in providing maximum diversity of programing.

At the threshold of the 1980's, we can envision a not too distant future in which distribution will become less of a problem, as cable connections to homes provide potential access to 50 or 100 channels of broadband information, or as the telephone network becomes increasingly integrated with vast data bases in remote locations providing a variety of information to anyone with a telephone and video screen. These developments and others are an important context for current legislation.

As a result of technological innovation, it would be a mistake to restrict those firms currently in the information creation or distribution business to their existing mode of operations. Publishers and distributors of newspapers, in their current ink and paper format for example, must be able to move into other forms of distribution, such as over cable or telephone lines. Television broadcasters must be able to anticipate and react to competition

from offline distribution such as video cassettes or disks, as well as cable or direct satellite broadcasting to homes and apartment buildings.

In addressing the specific questions put to us by this committee, let me summarize my analysis:

One, studies of both the content of television programs and newspapers find no consistent pattern of either social benefit nor harm stemming from ownership of different media in geographically separate markets. That is, the better multimedia conglomerates perform their media and journalistic roles as well as the best of the nondiversified or locally owned properties, while the less conscientious cross-media owners are no different than the poorer single entity proprietors.

Two, cross-media ownership of a newspaper, television, and radio station in a particular market by a single entity does not result in any significant economies of scale and thus provides no economic benefit for advertisers nor users in the community. Nor is there evidence of improved service to the community. Thus, there are no economic nor social justifications to support additional combinations. This is not to say that in any given situation they are serving their constituents worse than if ownership were split up.

Three, given the multiplicity of radio stations and owners in both AM and FM service in most markets—and the likelihood of even more available frequencies—there no longer appears to be a technological justification for content regulation of radio that differs from that applied to the print media. Licensing regulations can be set at a minimum level that takes into account only fitness of the owner to have the right to use the assigned spectrum space. There is no need to force a given radio station to provide mandatory types of programming any more than the only newspaper in town should be required to print a certain number of letters to the editor or run a certain number of inches of political columns.

Four, although video programming is moving rapidly via cable toward the radio model of large numbers of channels for specialized interests, it is not there yet. At this point we can only wait to see how that potential is fulfilled by programmers and used by information consumers and advertisers. Thus, for the time being, there is continuing rationale for separate treatment of broadcast television owners.

Five, because situations in markets vary, the FCC should be permitted considerable flexibility in case-by-case decisionmaking in such areas as mandatory sale of media property. While Congress should continue to provide guidelines, the complexity of the changing media environment must provide leeway for exceptions. In general, however, there will probably be potential for little harm in prohibiting by statute future crossownership of a newspaper and broadcast station in the same market. But in the longer run, a question which is going to be of even greater impact concerns ownership of a cable franchise and a local newspaper in the same market, but this is something now under the auspices of State or local jurisdictions. I believe that cable, not broadcast, crossownership is going to be the primary policy issue of this decade.

I appreciate the opportunity to meet with you today and will be pleased to elaborate on these comments during the discussion.

(55)

Mr. VAN DEERLIN. Mr. Compaine and then Mr. Krasnow.

Mr. COMPAINE. I would like to remind everybody we keep talking about ownership of the distributing network, that is the station or whatever, but what we are really trying to get to is diversity of content. And this still gets back to the opportunities of programmers to provide the diversity of content. The point about cable being so

(56)

important is that regardless of who owns the cable stations the new systems going in have 50 or 78 or 100 channels. And the way that these systems get sold to the public is by offering them services that go beyond what they can get by turning on their local broadcast service stations, which most people can get already.

So that the opportunities for diversity are really in filling up these channels that the cable operators, no matter who they are, are crying for. They are hungry to get special interest programming to meet the needs of various parts of the community to meet their needs and interest them in getting the cable. So I think in the long run the interest of groups is in opportunities for programming and not necessarily owning the wire or the transmitter that provides the signal.

I think a number of people who are bothered by section 2 would support section 3. And those of us who were in the news media used to say that when everybody is mad at you you are probably doing a pretty good job.

Mr. Botein, you raised a couple of points I thought very important. It is not the intent of the legislation to nullify other multiple ownership regulations. And I would be very interested if you would care to supply any language that you feel would clarify the legislation in that regard. We will consider it and take care of that situation whether it be in statutory language or in report language or something. But the clarification is serious in terms of the public interest and we would not want that to occur.

The limit on number of stations you can hold and so forth are questions that I think virtually every member of the committee wants to see remain.

Just one last question for the panel generally. In dealing with legislation like this, it is clearly narrow. It does not, and Mr. Compaine in particular talked about trying to see to the future. This does not deal with some other forms of crossownership that at some point we might want to deal with. It seems to me that it would be difficult to predict at this time what those kinds of crossownership issues might be in the future. And therefore it might be best to leave that until it is more clear what abuses if any could grow out of ownership between newspapers, broadcasting, cable systems, satellite systems, et cetera.

Would you, particularly, Mr. Compaine, because you are kind of a futurist in this area, feel that is an accurate judgment or do you feel we know enough to act now in that area?

Mr. COMPAINE. Well, we can speculate. We have already seen the first case arise in Hartford where the local Cable Commission has ordered the Times Mirror Co. to divest itself of either the Hartford Courant or two cable franchises it has in that area for just that reason; that they don't want to see the same company own both. This is a case where there is regulation though it is not coming from the Federal Government.

I think that as we look at the types of services cable can provide, whether it is informational services, news bulletin services, interactive services, classified advertising, we certainly can see now the potential for a cable operator to offer some types of information that are similar to what a newspaper now offers. Whether or not the newspaper should therefore be able to do it because it is a continuation of their business or whether or not they should be told they can't do it because it is potential competition is a question I think that will have to be dealt with.

And I agree this is really not the time for any legislation on that but we should keep our eye on that. And that is I think going to become a big problem. And I would rather not see it become a problem with a lot of grandfathering later on. As soon as it gets a little further into the consciousness I think somebody has to be ready—

Mr. SWIFT. You are talking in the next 3 or 5 years?

Mr. COMPAINE. Yes, I am not talking about 10 years.

Mr. SWIFT. Any other comments on that?

Mr. COMPAINE. No.