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SMALL BUSINESS, TELECOMMUNICATIONS, AND ECONOMIC DEVELOPMENT: THE NEED TO LIFT REGULATORY RESTRICTIONS ON THE SHARING AND USE OF TELECOMMUNICATIONS SERVICES

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INTRODUCTION

Telecommunications is widely viewed as a strategic tool for improving economic competitiveness and development, and massive levels of telecommunications infrastructure investment have been proposed to stimulate economic development.¹ Much of this investment may be squandered in the absence of regulatory reforms necessary to improve access to advanced telecommunications services for small businesses, which are the most likely source of job creation and economic development in the coming decade.

This article proposes that, prior to approving new infrastructure investment, state regulators must eliminate a host of anachronistic “sharing”² and “use”³ restrictions which severely limit small business access to advanced telecommunications services. These restrictions cause significant economic inefficiency, unlawfully discriminate against small businesses, and have survived largely because small businesses have lacked the resources and

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1. Infrastructure is defined as “[t]hose structural elements of an economy which facilitate the flow of goods and services between buyers and sellers. Examples of these structural elements are communications and transport (road, railways, harbours, airports, telephones etc.),” THE MIT DICTIONARY OF MODERN ECONOMICS (3d ed. 1986).

2. The Federal Communications Commission has defined sharing as an “arrangement where several users collectively use, and allocate among themselves the cost of, communications services or facilities.” Regulatory Policies Concerning Resale and Shared Use of Common Carrier Services and Facilities, Reconsideration Order 62 F.C.C.2d 588, 600 (1977), *aff’d sub. nom.*, American Tel. and Tel. Co. v. FCC, 572 F.2d 17 (2d Cir. 1978) *cert. denied*, 439 U.S. 875 (1978) [hereinafter AT&T v. FCC].

3. The Federal Communications Commission has defined use and user restrictions as a “tariff term or condition that restrict a certain class of user from obtaining a tariffed service or using it in a specified manner.” Filing and Review of Open Network Architecture Plans, 4 F.C.C.R. 1, 165 n.750 (1988).

expertise to oppose them. Their elimination will significantly advance economic development objectives by increasing small business access to existing and future telecommunications services.

I. TELECOMMUNICATIONS AND ECONOMIC DEVELOPMENT

The acceptance of an important link between telecommunications and economic development has become widespread. For example, a recent paper by a Commissioner and staff of the Illinois Commerce Commission proposing a "Telecommunications Free Trade Zone" in Chicago states:

It is no more than conventional wisdom now to say that the ability of a city, state, region, or nation to compete in the global market place will hinge on the successful development of a highly sophisticated information infrastructure.⁴

Similarly, an "Infrastructure Report" by the National Telecommunications Information Administration (NTIA) describes the economic benefits of telecommunications as "clear and pervasive," and concludes that the availability of reliable telecommunications facilities can "facilitate economic development."⁵ In addition, about a third of the states have recently appointed telecommunications task forces with an eye toward stimulating economic development.⁶

The focus on telecommunications as a tool for improving economic development has at times led to proposals for massive new infrastructure investment. Recently, for example, the Clinton Administration proposed "a package of \$500,000,000 over the next four years for advanced public

4. Terence L. Barnich, et. al., Speech at The Telecommunications Conference; Local Exchange Competition: The \$70 Billion Opportunity; Telecommunications Free Trade Zones: Crafting a Model for Local Exchange Competition 2 (Nov. 19, 1991) (transcript on file with California Western Law Review). [hereinafter TFTZ Proposal]. See also DRI/MCGRAW-HILL, THE CONTRIBUTION OF TELECOMMUNICATIONS INFRASTRUCTURE TO AGGREGATE AND SECTORAL EFFICIENCY i (1991) (a study estimating that the U.S. economy benefitted from \$81.3 billion in saved labor and capital expenses between 1963 and 1982 due to advances in telecommunications technology).

5. U.S. DEPT. OF COMMERCE, NATIONAL TELECOMMUNICATIONS INFORMATION ADMINISTRATION, THE NTIA INFRASTRUCTURE REPORT x (1991). The Report finds that "American businesses can use telecommunications to operate more efficiently, better serve their customers, and compete more effectively in the rapidly changing global economy." *Id.* at i.

6. See *id.* at 35-39, noting telecommunications infrastructure initiatives in North Carolina, Tennessee, Indiana, Washington, Kentucky, Michigan, Hawaii, Minnesota, Pennsylvania, California, and Kansas. Additional initiatives include the NEW JERSEY TELECOMMUNICATIONS INFRASTRUCTURE STUDY, see *infra* note 14 and accompanying text; REPORT OF THE ILLINOIS TASK FORCE ON ADVANCED TELECOMMUNICATIONS AND NETWORKING, see *infra* note 22 and accompanying text; the Iowa Infrastructure Study, TELECOMMUNICATIONS REPORTS, January 14, 1993; the Alabama "Information Age Task Force," TELECOMMUNICATIONS REPORTS, October 28, 1991; *Governor Announces Membership of Telecommunications Exchange* (Draft Press Release) New York State Department of Economic Development and New York State Department of Public Service (December 17, 1992). (on file with California Western Law Review).

telecommunications infrastructure projects," including a well-publicized high-capacity fiber optic "information superhighway."⁷

II. SMALL BUSINESS AND ECONOMIC DEVELOPMENT

Along with the new focus on telecommunications as a tool for economic development, there has been increased focus on the role of small business in driving economic development. Small businesses play a predominant role in the nation's economy, constituting almost 98 percent of all business establishments, and employing more than half of the nation's private sector employees.⁸ Between 1980 and 1988, small businesses were responsible for almost 70 percent of private sector employment growth,⁹ and are widely acknowledged as playing a special role in creating diversity and flexibility in the economy, as well as serving as vehicles for experimentation to meet the increasing challenges posed by a global economy.¹⁰

Because of small business' potential for creating jobs and leading economic expansion, increased efforts are currently being directed towards eliminating barriers to small business growth.¹¹ For example, President Clinton noted in his recent State of the Union address that "[b]ecause small business has created such a higher percentage of all the new jobs in our nation over the last 10 or 15 years,"¹² his economic plan includes "the boldest targeted incentives for small businesses in history."¹³

7. *Information Infrastructure Initiatives Spelled Out in Administration's Technology Plan*, TELECOMMUNICATIONS REP., March 1, 1993, at 24. Likewise, the New Jersey Board of Regulatory Commissioners recently approved New Jersey Bell Telephone Company's \$1.5 billion statewide fiber optic deployment plan. TELECOMMUNICATIONS REP., July 4, 1993, at 4.

8. U.S. DEPT. OF COMMERCE, BUREAU OF THE CENSUS, COUNTY BUSINESS PATTERNS 1988 3 (1990). The Census Bureau defines small businesses as establishments with less than 100 employees. *Id.*

9. *Id.*

10. *See, e.g.*, THE STATE OF SMALL BUSINESS: A REPORT OF THE PRESIDENT, TRANSMITTED TO THE CONGRESS 1990, UNITED STATES GOVERNMENT PRINTING OFFICE, WASHINGTON vii (1990).

11. *See, e.g.*, Carl T. Hall, *Small Firms Say They're Creating the Jobs*, S.F. CHRON., Feb. 11, 1993, at D1.

12. Steven Pearlstein, *Leap Years for the "Gazelles"*, WASH. POST Mar. 7, 1993 at H1. President Clinton's proposals include plans to lower taxes for people that invest in small businesses, tax breaks for new equipment purchases and the creation of a network of community development banks that are supposed to ease borrowing. *Id.*

13. Michelle Singletary, *Clinton Plans Get Positive Reviews From Firm Owners*, WASH. POST, Feb. 22, 1993, at 5. Likewise, California Governor Pete Wilson recently proposed a long list of tax cuts and incentives to spur small business growth, observing that "Small business led us out of the last recession by creating three-quarters of all job growth. Small business will lead us out of this recession too." *Excerpts From Wilson's Address: A Focus on Economy*, L.A. TIMES, Jan. 7, 1993, at A20.

III. SMALL BUSINESSES LACK ACCESS TO SERVICES THE EXISTING TELECOMMUNICATIONS NETWORK IS ABLE TO PROVIDE

Some regulators have already combined economic development interests in telecommunications and small businesses, and have acknowledged the importance of increasing telecommunications opportunities for small businesses. For example, a New Jersey Telecommunications Infrastructure study recently concluded the "economy runs a significant risk if the future telecommunications needs of small business cannot be met."¹⁴

Unfortunately, a number of recent studies have concluded that small businesses lack access to advanced telecommunications services routinely available to large users. For example, the NTIA Infrastructure Report concludes that, in contrast to many of the most "sophisticated applications" available to big users, "[t]he public switched network currently provides fewer alternatives to small businesses."¹⁵ Likewise, the New Jersey Telecommunications Infrastructure Study concludes that existing limits on the services available to small businesses will "increasingly constrain" their ability "to fully participate in the 'Information Age.'"¹⁶

Two dramatic differences become apparent in contrasting the telecommunications operations of small and large businesses. First, large businesses routinely have access to in-house telecommunications managers with substantial expertise regarding telecommunications services. The primary task of these experts is to help design, procure and manage the most efficient and cost-effective telecommunications system that will meet a business' telecommunications requirements. They maximize the value of the telecommunications network for large businesses by identifying efficient equipment and services options; managing and coordinating local, long-distance, enhanced service and equipment vendors; analyzing and optimizing traffic patterns; assisting in disaster recovery; providing training and troubleshooting for all telecommunications services; applying telecommunications solutions to business problems; and working with a variety of large user groups that typically intervene in regulatory battles for desirable services and rates. Overall, these managers enable larger businesses to use telecommunications as a strategic tool for enhancing business competitiveness. In contrast, small businesses individually lack the resources to retain in-house telecommunications managers, and thus routinely lack access to similar telecommunications expertise and assistance.

14. DELOITTE & TOUCHE, NEW JERSEY TELECOMMUNICATIONS INFRASTRUCTURE STUDY I-5 (1991) (on file with California Western Law Review). See also Letter from Donald Frey & John Rau to Hon. Jim Edgar (Apr. 1992), in REPORT OF THE ILLINOIS TASK FORCE ON ADVANCED TELECOMMUNICATIONS AND NETWORKING, TO JIM EDGAR, GOVERNOR, STATE OF ILLINOIS (1992) (noting that "small businesses are an essential part of the Illinois economy and finding ways to assist them to better use new and emerging technologies is imperative.").

15. NTIA INFRASTRUCTURE REPORT, *supra* note 5, at x.

16. NEW JERSEY TELECOMMUNICATIONS INFRASTRUCTURE STUDY, *supra* note 14, at I-3.

Second, large businesses employ a myriad of advanced telecommunications equipment and service options, including Private Branch Exchanges (PBXs), sophisticated Central Office-based Centrex services, private and virtual networks, advanced intelligent network-based features, and customized long distance options, all of which provide state-of-the-art features at economic prices. In contrast, small businesses lack the necessary volumes of usage to justify either the start-up or ongoing costs of such sophisticated options. Thus, small businesses routinely rely on a few, very basic services such as feature-less Plain Old Telephone Service ("POTS"), unsophisticated key systems, basic Centrex service, and limited toll service options that do not begin to match the attractiveness of those enjoyed by larger users.¹⁷

A discussion of even a sample of specific services and features that could benefit small business reveals a variety of useful functionalities that have become common and essential for larger businesses. For example, a "least cost routing" feature available through high-end PBXs, or a similar Automatic Routing Selection (ARS) feature available on sophisticated Local Exchange Carrier (LEC) Centrex service, makes it possible for businesses to route long distance calls automatically via software which is programmed to select the optimal provider for each call—taking into consideration service quality, cost (based on time of day and terminating locations), and redundancy requirements. This automatic routing function, long available to larger businesses, is currently an essential component in bringing to large businesses the benefits that flow from increased choices in vendors and providers. Least cost routing or ARS is unavailable to or uneconomic for individual small businesses, however, either because the appropriate PBXs are outside their price range or because the start-up or monthly rates for sophisticated LEC Centrex service make financial sense only at volumes unattainable by individual small businesses.

Small businesses also lack access to redundant telecommunications capability, increasingly prized by businesses as a hedge against telecommunications emergencies. Redundancy capability means that businesses with access to multiple providers can route traffic away from specific providers with telecommunications outages. The importance of uninterrupted telecommunications is significant in an era where loss of telecommunications

17. Some evidence suggests that small businesses are beginning to enjoy reduced rates for long distance services, and that "some of the most sophisticated services or products, until recently affordable only to the biggest businesses, are now reaching far down the ranks." Robin Goldwyn Blumenthal, *Just Like the Big Boys: Small Businesses Finally Get Some Respect From Telecommunications Companies*, WALL ST. J., May 18, 1992, at R10. The article specifically notes programs by interexchange carriers, including AT&T, MCI, and Sprint, offering small businesses services such as simplified billing, discounts on combined locations and volume discounts, conference calling tied to a single card, and information tracking calling patterns and usage. The number of small businesses with access to these services is unclear, and one analyst quoted in the article defined small businesses as "those with monthly phone bills between \$1000 and \$1 million a month", well beyond the traffic volume of the majority of small businesses. Moreover, there is no suggestion in the article that any small businesses have access to the full range of service and pricing options available to larger businesses. *Id.*

service results in substantial business losses. For example, a recent survey in New York City found that approximately 60 percent of small business respondents stated their business "could survive no more than one day without telephone service."¹⁸

Large businesses have sufficient traffic to use multiple vendors and are increasingly doing so, and the importance of redundant capability has been an important factor in the growth of the new Competitive Access Provider industry.¹⁹ However, small businesses lack the resources to maintain service with multiple providers and the ability to gain access to ARS functionality that can reroute traffic in emergencies. They have been unable to shield themselves against telecommunications disasters as effectively as larger businesses.

An additional example of a beneficial use of telecommunications technology available to larger businesses is their use of sophisticated equipment and services to gather detailed information regarding calling patterns as a strategic tool for identifying new business opportunities and solving business problems. Telephone traffic data, or call detail, is available from a variety of sources including high-end PBXs, the Station Message Detail Recording (SMDR) feature of sophisticated LEC Centrex service, and via magnetic tape call detail from 800 service providers. It can be used in conjunction with database processes to generate and sort calling information in a variety of useful ways.

For example, larger businesses currently have the ability to track incoming 800 call volumes in specific geographical areas, which can be used to gauge the effectiveness of an advertising or marketing campaign in a specific region. Likewise, large businesses can track outgoing calls (via PBX call detail or SMDR) to specific areas, which may identify, for example, a decrease of calls in areas with lagging sales, and thus may indicate the need for increased marketing attention. In addition, data regarding the length of calls may provide useful information regarding the efficiency with which certain tasks are being handled, and may reveal employee abuse.

The list of potential uses for detailed tracking information is constantly growing, as businesses experiment to find new ways to use telecommunica-

18. CONTINUOUS COMMUNICATIONS: ENHANCING NETWORK RELIABILITY THROUGH COOPERATION: A REPORT OF THE MAYOR'S TASK FORCE ON TELECOMMUNICATIONS NETWORK RELIABILITY 27-28 (1991).

19. *See, e.g.*, Comments of Robert C. Atkinson, Senior Vice President, Teleport Communications Group. John Eckhouse, *How Businesses Bypass Pac Bell's Toll-Call Monopoly*, S.F. CHRON., Mar. 8, 1993, at E5:

The motivation to use a company like ours [Teleport] is operational security. . . . You can be assured of being able to connect telephone calls so that no single network outage—whether a cut in the fiber, flood, earthquake or even terrorism like we had in New York—will knock you off the network.

Id. In recent years, Competitive Access Providers have established independent networks of fiber optic cable in metropolitan areas for the purpose of providing advanced or redundant services to large business customers.

tions services to gain a competitive edge. Unfortunately, individual smaller businesses lack access to the in-house expertise and resources required to manipulate call detail information into useful management reports.²⁰ Small businesses therefore lack access to an important competitive tool.²¹

These inequalities in the telecommunications capability of large and small businesses increasingly limit small business competitiveness and vitality. For example, inadequate telecommunications capability may hinder the ability of small businesses to become "partners" with large retailers and manufacturers that require all of their suppliers to electronically transmit all purchase orders, invoices, and shipping information services.²² These examples and others indicate that limitations in telecommunications capabilities threaten to restrain small business growth and vitality, and thus limit their ability to lead economic development in the coming decade.

IV. REGULATORY BARRIERS TO SMALL BUSINESS TELECOMMUNICATIONS ACCESS

Three regulatory barriers contribute greatly to small businesses' "second-class" status as telecommunications customers: (1) LEC tariff restrictions on the "sharing" of telecommunications services prevent small businesses from pooling their resources to purchase advanced telecommunications services and features that are too expensive for individual small businesses; (2) LEC tariff restrictions on the "use" of telecommunications services prevent small businesses from purchasing certain advanced telecommunications services, and limit their ability to use services in beneficial combinations; and (3) these LEC sharing and use restrictions limit the operations of outside telecommunications managers that provide small businesses with access to telecommunications expertise. This lack of expertise reduces the ability of small businesses to make efficient use of the network, and maintains the status quo in which small businesses, unaware of their "second-class" telecommunications status, are unable to press for an end to harmful tariff restrictions.

Economic reality dictates that access to many sophisticated services and features requires expenditures unsupportable by a single small business. For example, many large users gain access to sophisticated customer premises equipment features by purchasing PBXs that are too expensive for individual small businesses. Likewise, large users generally route their traffic over a

20. See *infra* note 32.

21. Some features are especially useful for specific businesses. For example, the Customer Detail Account Recording (CDAR) feature (available via advanced LEC Centrex service) makes it possible for a lawyer or accountant to input a customer or project code before dialing a call. By sorting SMDR data by CDAR code, the costs of the call can be conveniently passed through to a client. This saves an office manager or firm principals from laboriously poring over telephone bills to attempt to match calls with clients, a task which is frequently difficult and often fails to recapture all calls.

22. REPORT OF THE ILLINOIS TASK FORCE ON ADVANCED TELECOMMUNICATIONS AND NETWORKING, *supra* note 13 at 13.

variety of low-cost serving arrangements, such as dedicated private lines or virtual private networks, that are not cost-effective for individual small businesses.²³

Although economics tend to favor high volume users, the decisive factor that limits small business access to advanced telecommunications services is a variety of tariff restrictions imposed by LECs and sanctioned by state regulators. These include "sharing" restrictions that arbitrarily prevent small businesses from banding together to achieve the volumes and economies of scale enjoyed by larger businesses, and "use" and "user" restrictions that prevent small businesses from obtaining specific services or using them in a desired manner.

Some of the more prevalent sharing restrictions are so-called "geographic restrictions" that prohibit small businesses from sharing advanced Centrex services unless they are located on continuous property, e.g., a single building or group of contiguous buildings under common ownership such as a university campus or a hospital complex. These restrictions, still prevalent in three major regions of the country—regions served by BellSouth, US West, and Southwestern Bell—prevent small businesses from sharing a variety of services, including feature-rich Centrex service.²⁴

In fact, LEC tariffs are generally riddled with a variety of sharing and use restrictions that act as a bar on creative use of the existing network. For example, Pacific Bell's tariff prohibits the interconnection of Pacific Bell private line services with Pacific Bell exchange services.²⁵ This prevents businesses from combining tariffed inter-office high-speed private lines with tariffed intra-office exchange services. The impact of the restriction falls disproportionately on small businesses. They are relegated to buying inefficient and expensive inter-exchange services, while large businesses can accomplish the prohibited interconnection through the use of sophisticated PBXs that are beyond the price range of individual small businesses. Similarly, a number of LECs prohibit businesses from obtaining Feature

23. Large users with high traffic volumes also typically command special contract rates for their toll and 800 traffic.

24. These contiguous property restrictions are particularly troubling because they were established to limit the availability of Shared Tenant Services ("STS") arrangements due to policy concerns inapplicable to Centrex-based sharing arrangements. STS arrangements involve the shared use of a privately-owned PBX switch which makes possible a reduction in the number of local exchange access lines needed by the STS group, and bypass of local exchange facilities. Many states enacted STS restrictions in the last decade to address these concerns.

In recent reviews, the California, Michigan, and Ohio commissions have all found Centrex-based sharing arrangements to be distinct from STS arrangements, because Centrex-based sharing arrangements, unlike STS arrangements, do not result in a reduction in the number of local access lines utilized by the members of the sharing group, and cannot cause facilities bypass of LEC facilities. See *In re* Application of the Pacific Telephone and Telegraph Co., No. D.87-01-063, slip op. at 9-11 (Cal. Pub. Util. Comm'n Jan. 28, 1987); *In re* Application of Michigan Bell Telephone Co., No. U-8594, slip op. at 23-24, 27 (Mich. Pub. Serv. Comm'n Jul. 19, 1988); and *Enhanced Telemanagement, Inc. v. Ohio Bell Telephone Co.*, No. 89-848-TP-CSS, slip op. at 7-8 (Ohio Pub. Util. Comm'n Aug. 8, 1991).

25. Pacific Bell Tariff § B2.5.8.B.

Group A ("FGA") as an efficient and inexpensive service for switched traffic. This restriction also disproportionately burdens small businesses, which lack the efficient alternatives (private networks and/or substantial discounts for switched services) available to larger businesses.²⁶

A combination of sharing and use restrictions often leads to onerous results for small businesses. In Texas, for example, Southwestern Bell has divided the market for its Central Office-based Centrex service into several market segments, each with access to different features and services, and different rates. Sophisticated Centrex II service, which includes a variety of useful features²⁷ is arbitrarily limited to businesses that purchase a minimum of 30 lines, thereby relegating small businesses with less than 30 lines to feature-less Plain Old Telephone Service. To make matters worse, these small businesses are typically required to pay in excess of \$10.00 more per month per line for POTS service than larger businesses are required to pay for feature-rich Centrex and Plexar services.²⁸ To enforce this burdensome market segmentation, Southwestern Bell imposes a 30-line-per-premises minimum on its Centrex services. Since few small businesses have 30 stations on their premises, the 30-station minimum use restriction precludes small businesses from obtaining Centrex services.

Over the past two decades, advances in technology and increased service variety have diminished the LECs' market power over larger business customers, who individually can afford the expertise and other implementation costs necessary to take advantage of advanced telecommunications services. By contrast, smaller businesses, which can afford advanced telecommunications services only by sharing the implementation and monthly costs of such services, have been prevented by LEC tariff restrictions from exercising the same range of choices available to larger businesses. Thus, even as LECs continue to lose market power over larger businesses, they maintain their market power over smaller businesses, and have been largely successful in maintaining their historical pattern of charging more per unit of service to smaller businesses than to larger ones.²⁹ This historical

26. See *e.g.*, Pacific Bell Tariff § 175-T 6.1; New York Telephone Company Tariff, P.S.C. No. 913 - Telephone.

27. Southwestern Bell's Centrex II offering includes station to station calling, station hunting, call transfer attendant, restriction from outgoing calls, station restriction, reserve power, busy verification, night service, identified outward dialing, call intercept, call transfer, and consultation hold.

28. Compare, *e.g.*, Rates in Dallas for a General Business Line (1FH) versus a Centrex II line, as reflected in Southwestern Bell Telephone Company, Local Exchange Service Tariff, Section 1, Sheet 20 and Section 4, Sheet 7.

29. Monopoly providers frequently engage in price discrimination to increase profits, where they can prevent or limit sharing and resale of their services. F.M. SCHERER, *INDUSTRIAL MARKET STRUCTURE AND ECONOMIC PERFORMANCE* 253 (1970). Thus, where they can sustain tariff restrictions, as with Centrex service, LECs can extract high profit margins from smaller businesses that lack practical service alternatives, while targeting rate decreases to larger businesses that might be induced to switch from PBX to Centrex service. In a fully competitive market, in which small businesses enjoyed the right to band together to purchase the full range of choices available to larger users, LECs would lose their ability to segment the market

practice runs directly counter to the current regulatory focus on increasing the competitiveness of small business in order to stimulate economic development.³⁰

The final factor that limits small business access to existing telecommunications services is their lack of expertise. A recent study in Illinois concluded that one of the greatest barriers to small business use of advanced telecommunications services is "lack of knowledge."³¹ As discussed below, this lack of expertise, combined with their lack of individual resources, means that small businesses cannot effectively challenge tariff and other regulatory restrictions, and also means that small businesses cannot creatively combine available tariffed services in ways that would increase their telecommunications efficiencies and lower their costs.

As an economic matter, individual small businesses lack the resources available to large businesses to retain full time in-house experts to manage their telecommunications systems. Small businesses must rely instead on shared "out-source" telecommunications managers to obtain equivalent expertise. However, LEC tariff restrictions that limit the sharing and use of telecommunications services also limit the availability of outside telecommunications managers. For example, sharing restrictions prevent entrepreneurial managers from administering sharing groups that enable small businesses to gain access to advanced services they could not afford on an individual basis. Moreover, sharing and unrestricted use of services enables small businesses to achieve savings in their telecommunications budgets that in turn enables them to afford management fees. The FCC recognized these benefits

effectively.

30. The services available to smaller users are not only priced higher per unit of service than those available to larger businesses, but also generally exhibit higher revenue-to-cost ratios, and thus are more profitable to LECs. This per-unit profit is generally described by the LECs as "contribution", which is consistent with the LEC claim that such higher profits "permit" them to price services such as residential exchange at low or even "below cost" prices. The validity of such a claim can only be determined by reference to valid cost studies. Some state commissions which have examined these issues have found that LECs have displayed such results largely through strategic cost allocations, and that residential services are in fact priced at or above cost. *See, e.g.,* New England Telephone & Telegraph Co., Generic Rate Structure Investigation, No. DR 89-010, slip op. at 39 (New Hamp. Pub. Util. Comm'n Mar. 11, 1991); *In re* Pacific Telephone & Telegraph Co., No. D.83-12-024, 13 C.P.U.C.2d 331, 352 (Cal. Pub. Util. Comm'n 1983).

31. REPORT OF THE ILLINOIS TASK FORCE ON ADVANCED TELECOMMUNICATIONS AND NETWORKING, *supra* note 14, at 18. The consultant that led a series of small business focus groups concluded:

Small business people simply don't know enough. They don't know what's available, how what's available can help their businesses, what things cost, or whether they'll pay out. And their sources of information are limited. Most have no expertise in-house. They are generally too busy operating their businesses to take the time to educate themselves. They are reluctant to spend money on consultants. And they question the objectivity and knowledgeable ability about their business of vendors.

Id. at 20.

over a decade ago as an important reason for removing sharing restrictions on all interstate services.³²

Lack of expertise results in a situation in which small businesses are unable to make efficient use of the network,³³ are unaware of the efficiencies they are missing, and are unable to organize to press for an end to burdensome regulatory restrictions. Thus, in contrast to significant large user participation (either as individual users or through trade associations or user groups)³⁴ and significant residential consumer representation (through official state consumer advocates and nonprofit public interest groups),³⁵ there has been almost a total absence of small business representation in

32. See e.g., *In re Regulatory Policies Concerning Resale and Shared Use of Common Carrier Public Switched Network Services*, 83 F.C.C.2d 167, 178-79 (1980), noting that:

The record in this proceeding has provided a number of examples where the ability to resell and share public switched network services might lead to the expansion of service options available to the public. For example, opening up the MTS/WATS market to resale and sharing opportunities may give rise to entry by firms specializing in sophisticated telecommunications management services which can offer services previously unavailable.

Id.

33. Consider, for example, the attempt by a small business to obtain the sort of detailed information on its telecommunications usage available through the network capability generally called Station Message Detail Recording ("SMDR"). As discussed above, SMDR provides data that can be utilized to spot business opportunities as well as solve specific problems. Historically, this information was available only on magnetic tape, a technology that was neither available or affordable to small businesses. A small business has no way to access the data on magnetic tape, and even if the data is provided on floppy disks, a small business usually lacks the expertise to manipulate the new data to generate management reports meaningful to its business. A small business will simply not have the in-house telecommunications expertise and resources that its larger business competitors use for such tasks.

Thus, while SMDR is a capability available in the network today, it is not practically available to individual smaller businesses. However, if smaller businesses can share the services of a third-party telecommunications manager, who can obtain SMDR on behalf of the entire sharing group, then the manager can affordably perform on behalf of the group members the same SMDR-related analyses that an in-house telecommunications manager can perform for the departments of a larger company. Smaller businesses can then benefit from the same tools larger rivals are currently utilizing to increase their competitiveness and economic strength.

34. For example, the following large users and large user groups filed comments in the Federal Communication Commission's Rulemaking on Expanded Interconnection with Local Telephone Company Facilities: Ad Hoc Telecommunications Users Committee, American Newspaper Publishers Association, American Petroleum Institute, Association of American Railroads, California Bankers Clearing House Association, EDS Corporation, FMR Corp., Independent Data Communications Manufacturers Association, Inc., Information Industry Association, International Communications Association. The only group filing comments on behalf of small businesses was the Chief Counsel for Advocacy of the U.S. Small Business Administration.

35. The interests of residential consumers are represented in regulatory proceedings via a variety of official and private advocates. Most states have appointed official representatives charged with protecting residential consumers in telecommunications matters. This official representative is typically part of the Office of Attorney General (e.g., Massachusetts), a division of the Public Utility Commission (e.g., New York), or the Office of Public Utility Advocate (e.g., Texas, Pennsylvania, and Illinois). Residential consumers are also represented by a number of public interest groups including, among others, Towards Utility Rate Normalization (California), Consumer's Union, and American Association of Retired Persons.

regulatory proceedings.³⁶ The lack of participation by small businesses in the regulatory process has allowed LECs to maintain burdensome tariff restrictions that limit small business options.³⁷

V. THE IMPORTANCE OF UNLIMITED SHARING AND USE OF TELECOMMUNICATIONS SERVICES

As discussed above, two critical keys to economic growth in the coming decade are the availability of efficient and responsive telecommunications services, and the elimination of barriers to small business growth. These economic imperatives require that states move promptly to eliminate anachronistic regulatory barriers on the sharing and use of telecommunications services that threaten to undermine the ability of small businesses to drive economic expansion and job creation.

Sharing arrangements for telecommunications services perform an economic function that is repeated throughout a wide variety of industries from health care and insurance,³⁸ to employment search³⁹ and wholesale buying cooperatives.⁴⁰ The common underpinning to all these sharing arrangements is the fact that many commercial activities benefit greatly from economies of scale that can be achieved by pooling demand.

36. The Small Business Administration files comments in some of the larger proceedings at the Federal Communications Commission. Some state public utility advocate offices, such as Texas and Illinois, occasionally focus on small business concerns, and some companies providing telecommunications-related services to small businesses intervene on behalf of small business needs. However, there is not a single small business user group, trade association, or other representative that intervenes regularly on behalf of small business telecommunications needs.

37. There are no effective regulatory safeguards for small business. The Federal Communications Commission is required by statute to perform a "regulatory flexibility analysis" of the "impact of proposed rules on small entities." 5 U.S.C. § 603. However, in the absence of small business participation, there is rarely any specific focus on small business needs, and Commission orders routinely include a paragraph certifying that the order "would not have a significant economic impact" on a significant number of small businesses. *See, e.g.*, Major Recent Federal Communications Commission Rulemakings on Expanded Interconnection, CC Docket 91-141 (released Oct. 19, 1992) at 126; and Transport Rate Structure and Pricing, CC Docket No. 91-213 (released Oct. 16, 1992) at 68.

38. Many small firms individually may not be able to enjoy the lower health insurance premiums and/or greater health coverage that larger firms may command by virtue of their large population of employees and the risk distribution that such a group would produce.

39. Some firms are large enough to economically justify in-house employment departments that recruit, screen, train, and evaluate potential hires. Smaller firms cannot economically justify the expense in maintaining their own employee search department and therefore turn to executive search firms. The costs attendant to locating and acquiring information about a given set of job candidates are spread among a large number of small customers, so that each is able to enjoy the benefits that larger firms reap from operating their own employment office.

40. There are many examples of buyer cooperatives, including the Independent Grocers Association, the Association of Independent Dairies of America, and the Associated Theater Services. These groups procure goods at prices only larger buyers would be able to obtain, and often provide ancillary services designed to lower the costs of operating smaller businesses.

The FCC eliminated restrictions on the sharing of interstate telecommunications services more than a decade ago, first for private line services,⁴¹ and later for all switched services.⁴² The FCC found that unlimited sharing and resale would provide a variety of benefits and would (1) encourage cost-related pricing; (2) promote just, reasonable charges and discourage discrimination, thereby reducing the need for FCC oversight; (3) lead to more efficient utilization of communications facilities that now go to waste; (4) result in better management and marketing; (5) generate increased research and development; (6) produce an increased variety of communications services; and (7) effect growth of the total market for specialized telecommunications services.⁴³

The FCC has eliminated use restrictions based on similar reasoning. For example, in prohibiting use restrictions in tariffs for interstate Open Network Architecture services, the Commission held that "there is a strong federal policy against customer or user restrictions in tariffs," and that "such restrictions have often been used by carriers as a means of engaging in certain practices, such as cross-subsidization, price discrimination, and market segmentation . . . generally tend[ing] to impair competition and reduce customer welfare."⁴⁴

Beyond being economically inefficient, sharing and use restrictions unlawfully discriminate against small businesses. The FCC and almost all states have statutory provisions that prohibit carriers from making any "unjust or unreasonable discrimination in charges, practices, classifications, regulations or services."⁴⁵ The FCC has specifically found, in striking sharing restrictions, that it is unlawful discrimination for carriers to refuse to provide service to potential sharers simply because of their status.⁴⁶

The numerous economic and legal bases identified by the FCC in the last two decades for eliminating sharing and use restrictions present a strong case for unlimited sharing and use of telecommunications services. The case for unlimited sharing and use of telecommunications services is significantly strengthened, moreover, given the prevalence of new regulatory initiatives designed to increase the availability to responsive and efficient telecommuni-

41. *In re Regulatory Policies Concerning Resale and Shared Use of Common Carrier Services and Facilities*, 60 F.C.C.2d 261 (1976) ("Private Line Sharing Order"); *aff'd on reconsideration*, *In re Regulatory Policies Concerning Resale and Shared Use of Common Carrier Services and Facilities*, 62 F.C.C.2d 588 (1977) [hereinafter Private Line Reconsideration Order]; *aff'd AT&T v. FCC*, 572 F.2d 17 (2d Cir. 1978), *cert. denied* 439 U.S. 875 (1978).

42. *In re Regulatory Policies Concerning Resale and Shared Use of Common Carrier Public Switched Network Services*, 83 F.C.C.2d 167 (1980) [hereinafter Switched Access Order].

43. *AT&T v. FCC*, 572 F.2d at 23.

44. Amendment of Sections 64.702 of the Commission's Rules and Regulations (Third Computer Inquiry); and Policy and Rules Concerning Rates for Phase I Competitive Common Carrier Services and Facilities Authorizations Thereof; Communications Protocols under Sections 64.702 of the Commission's Rules and Regulations, Memorandum Opinion and Order on Further Reconsideration, 3 F.C.C.R. 1143 (released Feb. 18, 1988).

45. *See, e.g.*, 47 U.S.C. § 202 (1988).

46. Switched Access Order, 83 F.C.C.2d at 173.

cations services as a means of strengthening business competitiveness. In such an environment, it is increasingly counterproductive to maintain anachronistic sharing and use restrictions which are designed to, and operate so as to, significantly limit telecommunications options for small businesses.

To ensure that small businesses gain access to the full range of services the network is able to provide, small businesses must be able to obtain the telecommunications services they need, in any combination they desire, not just the services that carriers want to sell them. This requires that remaining "sharing" and "use" restrictions be eliminated or considered presumptively invalid, with LECs carrying a heavy burden to justify any restrictions they choose to assert. Likewise, authorizations for new LEC infrastructure investment could be conditioned on LEC removal of existing use and sharing restrictions. This procedural remedy may be particularly appropriate because it ensures that money is not spent in order to facilitate service availability to certain preferred segments while anachronistic restrictions simultaneously restrict service availability for small businesses.⁴⁷

Elimination of sharing and use restrictions will advance economic development by fostering increased use of the existing telecommunications network. Sharing arrangements will no doubt arise in states that currently bar such arrangements, thereby giving small businesses new opportunities to services such as ARS, SMDR, CDAR and disaster recovery.⁴⁸ Entrepreneurs catering to small business needs will proliferate in a regulatory environment devoid of arbitrary limits on creative solutions. Small businesses will gain access to additional out-source telecommunications managers that will increase their familiarity with and use of advanced telecommunications solutions, and small businesses increasingly aware of the importance of efficient telecommunications opportunities may be more effective at organizing to demand fairness in regulatory disputes over terms and conditions of monopoly services.

47. State commissions can require LECs to eliminate sharing and use restrictions in a variety of proceedings, including general rate cases, proceedings on alternate regulatory models, and as part of dockets specifically designed to improve small business access to telecommunications services. Regardless of the specific forum, it is essential that any substantive review of individual sharing and use restrictions be done in a manner that minimizes delay and expense associated with prolonged regulatory disputes. Especially for small businesses, regulatory delays and expenses in obtaining access to new and efficient services are in themselves barriers to access that must be eliminated to ensure real telecommunications choice and economic development.

48. Small business access to efficient telecommunications services will also be furthered by establishment of explicit obligations on LECs to provide small businesses with access to all services that are "technically and economically feasible." This standard, already reflected in the Illinois Public Utilities Act and the New York Public Service Commission rules, logically places the burden on the provider of monopoly services to provide any requested service, once evidence has been presented that a service is technically feasible and has sufficient demand to recover its costs. See Illinois Public Utilities Act, § 13-505.5; N.Y. COMP. CODES R. & REGS. tit. VI, § 605.2(a)(3) (1990). Recognition of such an obligation is important because small users currently face repeated denials for new service requests, even for services that are already available from other LECs with similar network capabilities.

CONCLUSION

It is counterproductive at best for states to embark on ambitious telecommunications infrastructure initiatives designed to facilitate economic development and competitiveness, while maintaining restrictions that limit the usefulness of the telecommunications network to small businesses, which are the most likely source of job creation in the coming decade. The FCC accurately predicted more than a decade ago that unlimited sharing would increase the availability of service options and expertise required to strengthen business competitiveness. In the midst of a heightened regulatory commitment to telecommunications policies that facilitate economic development and competitiveness, it is imperative that state regulators remove remaining sharing and use restrictions that arbitrarily limit small business' access to beneficial telecommunications services.

