

7. Since joining Capital Economics, most of my work has involved supervising economic analyses of mergers and acquisitions.
8. Over the years, I have conducted economic research in the areas of regulation, antitrust, and law and economics. As a product of this research, I have authored or coauthored numerous economic articles in professional journals and several books on these topics.
9. My name is James C. Miller III. I am Chairman of the Advisory Board for Capital Economics, an economic consulting firm specializing in research in the areas of antitrust, regulation, international trade, and other commercial issues. I am also John M. Olin Distinguished Fellow at the Center for Study of Public Choice at George Mason University and Chairman of the Board of Citizens for a Sound Economy, a research and advocacy organization. In addition, I serve as a public member of the Administrative Conference of the United States (Vice Chairman, 1986-1988), serve on various commissions (including the American Bar Association Committee on Government Standards), and serve on several boards of directors (for example, Goulds Pumps and the United Shareholders Association).
10. I received a B.B.A. in economics from the University of Georgia in 1964 and a Ph.D. in economics from the University of Virginia in 1969. Since then, in various positions with

Georgia State University (1968-1969), Texas A&M University (1972-1974), George Washington University (1971-1972, 1975-1976, and 1978-1980), and George Mason University (1988-present), I have taught undergraduate and graduate courses in general economics and industrial organization. In addition, I researched issues of government regulation while on the (associated) staff of the Brookings Institution (1972-1974) and on the staff of the American Enterprise Institute (1977-1981).

11. In 1974, I joined the senior staff of the Council of Economic Advisers, where I was responsible for antitrust and regulatory issues. From 1975 until 1977, I served as Assistant Director of the Council on Wage and Price Stability, where I was responsible for directing the agency's work on government regulation. I returned to government service in 1981, as the first Administrator of the Office of Information and Regulatory Affairs at the Office of Management and Budget, and then as Chairman of the Federal Trade Commission (1981-1985), and later as Director of the Office of Management and Budget (1985-1988).

12. I am the author or coauthor of many articles and books on competition, regulation, and antitrust issues, including Economic Regulation of Domestic Air Transport: Theory and Policy (Brookings Institution, 1974), Reforming Regulation (American Enterprise Institute, 1980), The Federal Trade

Commission: The Political Economy of Regulation (Hoover Institution, 1987), and The Economist as Reformer: Revamping the FTC, 1981-1985 (American Enterprise Institute, 1989).

13. We provide this affidavit, to which we severally, as well as jointly, ascribe.

INTRODUCTION AND SUMMARY

14. We have been asked by the seven Regional Bell Operating Companies (hereafter, the BOCs) to provide an analysis of the competitive effects of removing permanently the "interexchange restrictions" and the "equal access requirements" of the Modification of Final Judgment (MFJ) as they apply to the cellular telephone services provided by the BOCs' mobile telephone affiliates.
15. In preparing our analysis, we have reviewed materials in the instant proceeding -- specifically the initiating motion (including the accompanying report), the supporting briefs, and the opposing briefs. In addition, we have reviewed materials which we requested and materials which we obtained on our own. Finally, on our own initiative, we discussed with both BOC and non-BOC industry officials certain aspects of how the cellular market operates.

16. The MFJ restrictions currently apply to all radio services (except paging) supplied by the BOCs unless the BOCs obtain waivers for specific types of service or for services in particular areas of the country. In contrast, the non-BOC mobile carriers are not subject to either the interexchange restrictions or the equal access requirements of the MFJ.
17. The interexchange restrictions and the equal access requirements disadvantage BOC mobile carriers relative to their non-BOC mobile carrier rivals in various ways that lessen competition in the markets for cellular telephone services and for interexchange services. This lessening of competition reduces economic efficiency and consumer welfare.
18. Our analysis indicates that the likely benefits to competition and consumers of removing the MFJ restrictions at issue are substantial, that there is no substantial possibility that the BOCs would engage in (successful) anticompetitive conduct in the absence of the MFJ restrictions, and that therefore the restrictions cannot be defended on economic grounds.
19. The likely benefits of creating "competitive parity"¹ between BOC and non-BOC mobile carriers by removing the MFJ restrictions at issue are demonstrated by a comparison of prices for two important cellular services: Toll long

¹By "competitive parity," we mean operating under the same rules of the game.

distance and cluster services.

20. First, the data show that retail prices for toll long distance service exceed bulk wholesale prices by at least 110 percent. However, because of the MFJ's interexchange and equal access restrictions, the BOCs cannot obtain bulk wholesale rates and therefore cannot offer these savings to their customers. Moreover, in the absence of competitive parity the non-BOCs need not pass their bulk savings along to consumers. We estimate that if the MFJ restrictions were removed, BOC cellular customers alone would potentially realize annual savings of \$200 million.

21. Second, there are several quality issues to consider. For example, the importance to cellular customers of seamless coverage across geographic areas broader than, or simply different from, the FCC's rural and metropolitan mobile license areas is indicated by the tremendous growth in "clustering" (i.e., expanded local service areas).² We show that substantial customer savings are attainable through clustering. Even more relevant to the instant case, we conclude that customer welfare is likely to be higher in areas where BOCs are able to compete on equal terms, since waivers permit BOCs to innovate and to provide at competitive prices the expanded seamless coverage and the associated services

²Report of the Bell Companies on Competition in Wireless Telecommunications Services, October 31, 1991, Wireless Report, pp. 98-126.

that customers demand, such as intersystem handoff, automatic call delivery, and other technological improvements in cellular service.

22. Our analysis of industry performance leads us to conclude that there is no substantial possibility that the BOCs will engage in successful anticompetitive conduct in the absence of the MFJ restrictions at issue. Our method is to address major hypotheses that have been put forward by AT&T, MCI, Sprint, and others concerning potential anticompetitive conduct.³ Economic theory is sufficient in some instances to show that the interexchange restrictions and the equal access requirements are irrelevant to the ability and incentive of BOC mobile carriers to engage in anticompetitive conduct. In those instances where theory alone is not capable of predicting outcomes with sufficient certainty, we have conducted empirical analyses and conclude that concerns about potential anticompetitive conduct are unwarranted in those instances as well.

23. Overall, our analysis leads us to conclude that the benefits of removing the interexchange restrictions and equal access requirements governing the supply of cellular services by BOC mobile affiliates are highly likely to exceed any costs that

³See, for example, AT&T's Opposition to RBOC's Motion to "Exempt" Wireless Services From Section II of the Decree, MCI's Opposition to the RBOC's Motion to Eliminate the Interexchange and Equal Access Restrictions for All Current and Future "Wireless" Technologies, and Opposition of Sprint, U.S. v. Western Electric.

might arise because of anticompetitive conduct. Although we are unable to rule out the possibility of anticompetitive conduct in all instances, we are confident that cellular customers would be better served by removing the MFJ restrictions at issue than by retaining them.

POTENTIAL PRO-COMPETITIVE EFFECTS

24. Allowing the BOC mobile carriers to compete on an equal footing with other wireline and non-wireline mobile carriers would likely enhance competition and lead to lower prices and better cellular services overall. This is true for customers of non-BOC as well as BOC cellular services, as the additional competitive pressure from BOC mobile affiliates (where they exist in the market) would lead to an improvement in non-BOC performance.
25. In many cases, absent a waiver, only a single mobile carrier is able to provide particular cellular services that require the use of interexchange services between local access and transport areas (LATAs). In such cases, the non-BOC mobile carrier possesses market power that is limited only by the relatively inefficient means available to the BOC mobile rival to supply similar services.
26. For example, a non-BOC mobile carrier that possesses mobile licenses in several areas that cover more than one LATA may

integrate these cellular systems and provide seamless coverage throughout the broad area at a flat rate for airtime. Without a waiver of the MFJ restrictions, a BOC mobile carrier that also owns mobile licenses in each of the areas is unable to provide comparable interLATA seamless coverage. Moreover, due to the equal access requirements, the BOC mobile carrier's customers are forced to use their presubscribed interexchange carriers (PICs) when making interLATA calls within the cluster of mobile service areas. The BOC cellular carrier is thus unable to compete in the provision of expanded local area service at flat rates. Under these circumstances, the BOC mobile carrier is unable to provide significant competitive discipline over its non-BOC mobile rival's integrated system pricing and the quality of services it provides.

27. In short, the lack of competitive parity between BOC and non-BOC mobile carriers has significant adverse effects on cellular customers. We have evaluated the significance of the lack of competitive parity for three major mobile interexchange services: (1) toll long distance, (2) clustering, and (3) intersystem handoff.

TOLL LONG DISTANCE SERVICES

28. Currently, BOC mobile affiliates are required to provide their cellular customers with equal access to interexchange carriers. When a customer of a BOC mobile affiliate places an interLATA long distance call from her mobile telephone, the

call must be channeled through the customer's PIC at retail long distance rates. In contrast, customers of non-BOC mobile carriers are usually provided with the long-distance services of a single interexchange carrier. Non-BOC mobile carriers are free to obtain wholesale "bulk" rates for long-distance services which they may resell at prices that are limited only by the competitive pricing of their local cellular rivals. For example, AT&T offers non-BOC cellular carriers its "MEGACOM" service for interstate communications. MEGACOM corporate customers are able to obtain bulk long distance service at wholesale rates which include additional discounts depending on volume.⁴ Indeed, non-BOC mobile carriers may provide interexchange services within cluster areas themselves, rather than through resale, using their own microwave facilities.

29. To illustrate the customer savings attainable through the provision of bulk versus retail long distance service, we provide in Exhibit 1 a comparison of AT&T bulk and retail long distance rates for 10-minute interstate calls between pairs of the top 10 U.S. cities ranked by population size. The bulk rates do not reflect a monthly flat charge assessed on wholesale purchasers, but they are conservative in that they

⁴AT&T's Contract Tariff No. 1 FCC filing for the MEGACOM service (February 27, 1992) establishes a contract price for domestic interstate usage rates at \$0.03 for the initial 18 seconds and \$0.01 for each additional 6 seconds thereafter, regardless of distance called. An additional monthly flat rate may be charged, but this rate is not reported in the tariff filing.

Exhibit 1

COMPARISON OF RETAIL AND BULK WHOLESALE INTERSTATE INTEREXCHANGE RATES¹
FOR CALLS PLACED BETWEEN MAJOR U.S. CITIES²

Rates Shown Are Dollars Per 10 Minute Call

	Los Angeles		Chicago		Houston		Philadelphia		San Diego		Detroit		Dallas		Phoenix		San Antonio	
	Retail	Bulk	Retail	Bulk	Retail	Bulk	Retail	Bulk	Retail	Bulk	Retail	Bulk	Retail	Bulk	Retail	Bulk	Retail	Bulk
New York	3.00	1.00	2.30	1.00	2.46	1.00	2.10	1.00	3.00	1.00	2.30	1.00	2.46	1.00	2.50	1.00	2.50	1.00
Los Angeles	-	-	2.50	1.00	2.46	1.00	3.00	1.00	-	-	2.50	1.00	2.46	1.00	2.30	1.00	2.46	1.00
Chicago	-	-	-	-	2.46	1.00	2.30	1.00	2.50	1.00	2.30	1.00	2.46	1.00	2.46	1.00	2.46	1.00
Houston	-	-	-	-	-	-	2.46	1.00	2.46	1.00	2.46	1.00	-	-	2.46	1.00	-	-
Philadelphia	-	-	-	-	-	-	-	-	2.50	1.00	2.30	1.00	2.46	1.00	2.50	1.00	2.50	1.00
San Diego	-	-	-	-	-	-	-	-	-	-	2.50	1.00	2.46	1.00	2.30	1.00	2.46	1.00
Detroit	-	-	-	-	-	-	-	-	-	-	-	-	2.46	1.00	2.50	1.00	2.46	1.00
Dallas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.46	1.00	-	-
Phoenix	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.46	1.00
San Antonio	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

¹ Based on AT&T's most recent filings with the FCC of Tariff No. 1 (Long Distance Message Telecommunications Service), and Contract Tariff No. 1 (AT&T MEGACOM service), representing retail and bulk wholesale interstate interexchange rates, respectively. Retail rates were calculated based on air mileage distances between cities. A flat monthly fee may be assessed on bulk purchasers, but this amount is not subject to a tariff filing requirement and is therefore not known.

² Top 10 U.S. cities ranked by population.

do not reflect likely volume discounts that cellular operators may obtain. Bulk rates are noticeably lower than retail rates for all city-pairs we examined.

30. Our conclusion is that permitting BOC mobile affiliates to offer bulk long distance rates is likely to result in reduced prices for these services by the BOC mobile affiliates. The potential annual cost savings to customers of BOC cellular carriers are estimated to amount to as much as \$200 million.⁵

⁵Our \$200 million estimate is derived in the following way. We estimate the percentage premium of retail over bulk long distance rates, and we apply this percentage to our estimate of BOC cellular toll long distance revenues. The retail/bulk premium is $(21-10)/10 = 110$ percent, where 21 cents per minute is AT&T's retail rate for long-distance interstate calls for distances of 56 to 124 miles and 10 cents per minute is AT&T's bulk rate through its MEGACOM service. See AT&T Tariff No. 1 (Long Distance Message Telecommunications Service) and Contract Tariff No. 1 (AT&T MEGACOM Service). (If the traffic volume weighted average distance of an interstate long distance call lies in a higher tariff bracket, the percentage premium would be higher than 110 percent. If, for example, the average percentage premium of retail over bulk long distance were calculated for those city pairs listed in Exhibit 1 the percentage premium would be 150 percent.)

Cellular long distance revenues are estimated to be 10 percent of all cellular revenues including roaming charges, toll long distance, and other enhancements. This percentage is based on the Cellular Communications Industry Report, June 25, 1990, Donaldson, Lufkin & Jenrette Securities which estimated that 15 percent of a typical cellular customer's monthly bill is for long distance, roaming and expanded services, with supplemental roaming charges accounting for a significant portion.

As of December 1991, total cellular charges excluding long distance but including roaming charges were roughly \$76/month (CTIA Data Survey, March 1992). Thus, long distance charges per customer would be roughly \$8.44/month, or 10 percent of estimated average total cellular monthly charges including long distance ($\$76/0.9$). Based on the CTIA Data Survey estimate of 7.6 million cellular subscribers in 1991, annual cellular long distance charges as of December 1991 would be \$771 million.

The estimated BOC affiliate share of total population served

The ability of BOC mobile affiliates to compete on long distance rates with their competitors is also likely to result in lower prices for non-BOC cellular long distance services. (See paragraphs 50-53 below, where we present evidence concerning the extent to which bulk purchase savings would be passed on to consumers.) Non-BOC cellular carriers may not pass on their bulk long distance savings in areas where their competition is from a BOC mobile carrier constrained by the MFJ restrictions to charge retail long distance rates. Thus, establishing competitive parity may result in savings in long distance charges to non-BOC cellular customers as well. If so, the total savings may be as much as \$400 million per year.

CLUSTER RATES

31. Another area in which the BOC affiliates are competitively disadvantaged is in their ability to offer cellular services in expanded local areas that extend beyond their LATA boundaries. Elimination of the MFJ interexchange and equal access restrictions would permit the BOC mobile affiliates to compete on an equal basis with their competitors who are

by the top U.S. cellular operators is approximately 50 percent. See State of the Cellular Industry, CTIA, 1991. Assuming conservatively that only one half of the estimated \$771 million in cellular long distance expenses is incurred by BOC cellular customers and that retail long distance rates exceed bulk long distance rates by 110 percent on average, then close to \$200 million may be realized in consumer savings by permitting bulk long distance pricing by BOC cellular carriers.

rapidly developing expanded local areas through the acquisition of operating licenses in contiguous Metropolitan Statistical Areas (MSAs) and Rural Service Areas (RSAs) and the use of dedicated and bulk-rate interexchange services for interconnecting and consolidating Mobile Telephone Switching Offices (MTSOs). Regional systems enable the mobile carriers to take advantage of scale economies in system construction, operations, and marketing.⁶

32. Virtually all cellular companies have placed major strategic emphasis on the expansion of regional service. For example, as of December, 1991, McCaw Cellular Communications, Inc. had established expanded service areas, or clusters, in Florida, California/Nevada, Northeast U.S., Texas/Louisiana, and other areas, together accounting for about 80 percent of the company's potential subscriber population.⁷ At the same time, regional networks are also being formed by smaller operators such as Atlantic Cellular.⁸

33. Additional examples of regional networks include (1) Minnesota's Cellular 2000 System, (2) Virginia's Super System, (3) Texas' Lone Star Cellular Network, (4) Kansas' statewide cellular network, and (5) GTE's system throughout the State of

⁶See EMCI Study, p. 148, and Wireless Report, pp. 124-126.

⁷McCaw Cellular Communications, Inc. Form 10-K, December 31, 1991.

⁸EMCI Study, p. 148.

Indiana.⁹

34. If the MFJ restrictions were removed, the BOC cellular affiliates could serve expanded areas at flat airtime rates instead of at retail long distance rates. Moreover, lifting the artificial restrictions on pricing imposed by the equal access requirements would free the BOCs to respond to competitive market conditions.
35. Substantial customer savings are attainable through expanded local service areas. Non-BOC mobile carriers freely advertise their competitive advantage in the provision of mobile interexchange in the expanded service areas at local airtime rates. This is an indication of the value consumers place on such services.¹⁰ To obtain an idea of the magnitude of such savings, we provide in Exhibit 2 a comparison of cellular rates in two expanded local area clusters with the retail long distance rates that restricted BOC cellular affiliates are constrained to charge their customers. For example, in McCaw's California cluster, a cellular customer may place a 10 minute call from Sacramento to Stockton at a charge of \$2.90, the local peak airtime rate. The customer of a BOC mobile

⁹Ibid., p. 162.

¹⁰For example, McCaw states "the ability to offer wider areas of service may give the company a competitive advantage over the wireline companies in market clusters, such as San Antonio/Austin, where the company faces different wireline competitors in each of such markets which are unable at present to offer uninterrupted service or single point dialing." McCaw 10-K, December 31, 1991.

Exhibit 2

ILLUSTRATION OF SAVINGS TO CELLULAR CUSTOMER MADE POSSIBLE
BY THE EXISTENCE OF EXPANDED LOCAL SERVICE AREAS

All Rates Shown are for a 10 Minute Call

1. GTE / Mobilnet's Indiana Expanded Area
Calling from Indianapolis, IN, to Terre Haute, IN (84 miles)

BellSouth Rate:	\$5.30 ¹
GTE / Mobilnet Rate:	\$3.20 ²
Customer Savings:	\$2.10

2. McCaw Cellular's California Expanded Area
Calling from Sacramento, CA, to Stockton, CA (52 miles)

PacTel Rate:	\$4.50 ³
McCaw Rate:	\$2.90 ⁴
Customer Savings:	\$1.60

¹ Based on AT&T's retail long distance rate of \$0.21/minute plus BellSouth's "Standard Plan" peak hour local air-time rate (\$0.32/minute).

² Based on GTE/Mobilnet's "Expanded Calling Contract" peak hour local air-time rate (\$0.32/minute).

³ Based on AT&T's retail long distance rate of \$0.20/minute plus PacTel's "Basic Service" peak hour local air-time rate (\$0.25/minute).

⁴ Based on McCaw's "Basic Service Plan" peak hour local air-time rate (\$0.29/minute).

Sources: AT&T's most recent filings with the FCC of Tariff No.1, Long Distance Message Telecommunications Service, day rate; telephone conversations with sales representatives of BellSouth, GTE / Mobilnet, PacTel, and McCaw; "Cellular Rates, 1992," Paul Kagan Associates.

affiliate, required to place the call through the PIC at retail rates (since the two cities are located in different LATAs) incurs a charge of \$4.50 for the same 10 minute call. Clearly, consumer welfare would be enhanced if the BOC cellular operators were permitted to compete on an equal basis and to provide or resell interexchange services across LATA boundaries in expanded local service areas.

INTERSYSTEM HANDOFF

36. Intersystem handoff permits uninterrupted cellular service for mobile customers driving between adjacent mobile service areas. Efficient, perhaps even feasible, intersystem handoff requires more direct interconnections between adjacent MTSOs than is available to BOC mobile customers who must use their PIC as a result of the equal access requirements. Intersystem handoff is a service permitted when MTSOs in adjacent areas are connected so that cellular calls in progress when area boundaries are reached may be handed-off automatically to the adjacent MTSO, an operation virtually unnoticeable to the caller. Without intersystem handoff, calls are disconnected when cellular customers reach their area boundaries. With intersystem handoff subject to the equal access requirements, the call must be forwarded to the caller's PIC prior to connection with the adjacent MTSO, a process which takes 12 to 13 seconds under current technology, and frequently results in disconnection.

37. We are aware, of course, that a temporary blanket waiver of the equal access requirements has already been granted for intersystem handoff in recognition of the BOCs' inability to comply with the restrictions and provide handoff competitively due to technological limitations.¹¹ We conclude, however, that making this waiver permanent would benefit competition and consumers of non-BOC as well as BOC cellular services.
38. The relative inefficiency of providing intersystem handoff through a mobile customer's PIC instead of through a more direct MTSO interconnection is so great that, absent a waiver, the BOC mobile affiliates would, in effect, be prohibited from competing for intersystem handoff across LATA boundaries at current prices. Without the temporary waiver, there would be no competitive alternative in many areas of the U.S. to discipline the pricing of intersystem handoff by non-BOC mobile carriers.
39. Furthermore, even if it were technically feasible for BOCs to comply with the equal access restriction in handoff, BOC cellular customers would likely be worse off than non-BOC cellular customers due to the higher costs related to providing equal access to BOC consumers.¹²

¹¹See United States v. Western Electric Co., 1990-2 Trade Cas. (CCH) ¶ 69,177, at 64,452 (D.D.C. 1990).

¹²See Memorandum of the Bell Companies in Response to MCI Communications Corporation's Letter Dated May 10, 1991 on the Feasibility of Incorporating Equal Access into the Intersystem Handoff Process, United States v. Western Electric, which refers to excessive costs associated with duplicative facilities and

POTENTIAL ANTICOMPETITIVE EFFECTS

40. We have identified two major types of hypotheses concerning the potential anticompetitive effects of removing the MFJ restrictions on the BOC mobile affiliates' supply of mobile interexchange services. The first type sees the source of potential anticompetitive effect in the duopoly structure of cellular competition. The second type is more traditional, as it focuses on the BOC-owned regulated local exchange carriers (LECs) as the basis for concern.
41. We have inferred these hypotheses from reviewing and studying several sources, including the original Department of Justice (DOJ) case against AT&T that led to the divestiture of the regional operating companies, numerous responses to BOC petitions for waiver of the MFJ restrictions on mobile services addressed by the DOJ and decided by Judge Greene, the FCC information services rulemaking, responses to the FCC Notice of Inquiry regarding CPE bundling, the opposition briefs in the instant petition, and articles in professional journals. In no instance have we found an articulation of a specific mechanism by which the BOCs would reduce the output of cellular services or mobile interexchange services in the absence of the MFJ restrictions. Moreover, to the extent we have been able to infer that the cause for concern stems from some broad hypothesis based on (1) raising rivals' costs, (2)

inefficient network design, pp. 6-7.

cross-subsidization, (3) discriminatory access, (4) cost-misallocation, or (5) strategic entry deterrence, we have seen no organized empirical evidence supporting such an hypothesis.

MARKET POWER IN THE CELLULAR MARKET

42. One major anticompetitive hypothesis concerns actual or potential market power of the facilities-based cellular carriers. This hypothesis is not BOC-specific. That is, according to this hypothesis, imposing interexchange restrictions and equal access requirements on non-BOC mobile carriers would be justified also.
43. The market power hypothesis maintains that the MFJ equal access requirements serve to constrain the retail and wholesale pricing of mobile interexchange services by the two facilities-based mobile carriers in each mobile license area containing a BOC mobile affiliate. The BOC mobile carrier is constrained directly, and since (for competitive reasons) the non-BOC mobile carrier cannot charge significantly more than that paid for long distance services by the BOC affiliate's cellular customers, the non-BOC mobile carrier is also constrained to charge no more than retail PIC rates for cellular long distance. Thus, this hypothesis views the retail PIC rate as a price ceiling, which would be exceeded in the absence of the MFJ restrictions.
44. A fundamental predicate of this hypothesis is contradicted by

the facts. Specifically, prices of cellular services supplied by the facilities-based mobile licensees are not regulated in any significant way.¹³ With or without the MFJ restrictions, BOC and non-BOC mobile carriers are free to set prices for cellular airtime as they choose. Thus, there is no incentive for a BOC mobile carrier to resell or to supply interexchange services in order to justify higher customer charges for mobile interexchange service.

45. The PIC rate is more accurately described as a price floor, not a price ceiling. With the MFJ restrictions, a non-BOC mobile carrier is protected from competition from its BOC mobile rival, since the BOC carrier is restrained by the MFJ from obtaining bulk discount rates on long distance service.

46. A second major predicate of the market power hypothesis is that competition between duopolists necessarily leads to poor market performance. On the contrary, duopoly competition is clearly capable of generating good market performance. That is, market structure alone is not a sufficient basis for predicting market performance.¹⁴

47. Moreover, several recent and burgeoning developments suggest that mobile license areas may now or will soon contain

¹³Service Annual Report on State Regulations, Cellular Telecommunications Industry Association (CTIA), June, 1992 edition.

¹⁴See Jean Tirole, The Theory of Industrial Organization, MIT Press, Cambridge, MA, 1988, pp. 209-218.

significantly more than two competitors. It has been estimated that personal communications services (PCS) may compete for a substantial share of cellular's potential market.¹⁵ Also, recent FCC actions to enable Fleet Call, the largest independent operator of Specialized Mobile Radio (SMR) systems, to enhance its system to provide two-way radio communications in six of the largest MSAs will doubtless constrain the pricing of the facilities-based cellular operators in those areas.¹⁶ Finally, the near-future competition between E(enhanced)SMR systems and cellular systems may be dramatically increased, as digital technology is introduced to expand effective spectrum capacity.

48. These new radio services may provide significant competitive discipline for cellular services even though certain cellular customers may not view them as close substitutes. Under conventional antitrust analysis, market definition is concerned with the share of all cellular customers comprised of "swing" consumers -- those who would be willing to substitute towards PCS or ESMR services if the price of cellular services rose significantly. As these new services become widespread, it is unlikely that the two facilities-based cellular operators would find that a 5 percent price premium would be sufficient to compensate them for the lost income earned on customer usage that would be diverted to

¹⁵See EMCI Study, p. 195.

¹⁶Ibid., p. 198.

mobile services such as ESMR and PCS.¹⁷

49. To complete our evaluation of the market power hypothesis we provide empirical evidence based on actual pricing for three different types of cellular services: (1) mobile interLATA toll long distance, (2) local cellular airtime, and (3) cluster airtime service.

InterLATA Toll Long Distance

50. Since a significant number of wireline mobile licenses are possessed by non-BOCs and since only the BOC mobile carriers are subject to the MFJ restrictions, there are several mobile license areas in the U.S. in which both facilities-based cellular carriers are free of the MFJ restrictions. Specifically, in these latter areas, neither mobile carrier is subject to equal access for interLATA toll long distance calls. Thus, the cellular competitors' behavior and market performance in these areas are highly relevant to the question of likely industry performance should the MFJ interexchange restrictions and equal access requirements be removed.
51. We contacted all cellular carriers in the top 120 MSAs (except Puerto Rico) where neither facilities-based operator is

¹⁷A premium of 5 percent is used by the DOJ Horizontal Merger Guidelines for the purpose of defining antitrust markets. See U.S. Department of Justice and Federal Trade Commission Horizontal Merger Guidelines, April 1992, ¶ 1.11.

affiliated with a BOC, and the information we obtained is summarized in Exhibit 3. All indicated that they offer direct dial long distance service with their chosen interexchange carrier (IXC) only. They obtain this service at wholesale, bulk rates. The vast majority (67 percent) indicated that they pass bulk wholesale cost savings on to customers (see next-to-last column in particular). Thus, it is clear that competition between cellular carriers in the absence of the MFJ restrictions typically results in long distance rates that are lower, not higher, than PIC rates.

52. Many of these non-BOC cellular operators use their ability to offer bulk rates as a selling point, even though long distance charges comprise a small portion of total cellular charges. None of the non-BOC cellular operators we contacted offers an equal access option. However, customers typically have the ability to access their PIC with a calling card (at operator-assisted rates). The lack of interest in direct equal access on the part of non-BOC cellular operators indicates that it is not an option that is of particular concern to customers. That is, customers appear to be more interested in obtaining cost savings than in having direct access to their PICs.

53. In Exhibit 4, we quantify the cost savings that actually accrue to long distance mobile customers in two of the MSAs in which neither of the mobile carriers is subject to the MFJ restrictions. Depending on the carrier and distance called,

Exhibit 3

PHONE SURVEY ON LONG DISTANCE SERVICE PROVIDED BY FACILITIES-BASED
CELLULAR OPERATORS IN MSAs WITHOUT EQUAL ACCESS RESTRICTIONS¹

Dates Called: 5/29/92 - 6/18/92

Operator	MSA Market	MSA Rank	Wireline	Bundled Carrier	Savings Passed On ²	Equal Access ³
Rochester Tel.	Rochester, NY	34	Yes	RCI	Yes	No
Assoc. Comm.	Rochester, NY	34	No	AT&T	Yes	No
C-TEC	Northeast PA	56	Yes	MCI	- ⁴	No
Vanguard	Northeast PA	56	No	AT&T	- ⁴	No
US Cellular	Tulsa, OK	57	Yes	AT&T	Yes	No
McCaw	Tulsa, OK	57	No	Yes ⁵	- ⁴	No
Centel	Youngstown, OH	66	Yes	MCI	Yes	No
WKBN Broad.	Youngstown, OH	66	No	AT&T	Yes	No
Centel	Harrisburg, PA	84	Yes	AT&T	- ⁴	No
Vanguard	Harrisburg, PA	84	No	Yes ⁵	Yes	No
Alltel	Little Rock, AR	92	Yes	AT&T	Yes	No
McCaw	Little Rock, AR	92	No	AT&T	Yes	No
Centel	Las Vegas, NV	93	Yes	Sprint	Yes	No
McCaw	Las Vegas, NV	93	No	AT&T	Yes	No
Centel	York, PA	99	Yes	AT&T	Yes	No
Vanguard	York, PA	99	No	AT&T	Yes	No
Century	Shreveport, LA	100	Yes	AT&T	- ⁴	No
McCaw	Shreveport, LA	100	No	AT&T	Yes	No
Centel	Peoria, IL	103	Yes	Telecom	- ⁴	No
US Cellular	Peoria, IL	103	No	AT&T	Yes	No
Centel	Lancaster, PA	105	Yes	AT&T	- ⁴	No
Vanguard	Lancaster, PA	105	No	Yes ⁵	Yes	No
Alltel	Jackson, MS	106	Yes	AT&T	- ⁴	No
Cellutel	Jackson, MS	106	No	MCI	Yes	No
Indep. Cell.	Huntington, WV	110	Yes	AT&T	Yes	No
Vanguard	Huntington, WV	110	No	Yes ⁵	Yes	No
Pricellular	Utica, NY	115	Yes	No. Utica	Yes	No
Syracuse Tel.	Utica, NY	115	No	AT&T	Yes	No
GTE/Mobilnet	Tampa, FL	22	Yes	AT&T/Sprint ⁶	Yes	No
McCaw	Tampa, FL	22	No	AT&T	- ⁴	No
GTE/Mobilnet	Lakeland, FL	114	Yes	AT&T/Sprint ⁶	Yes	No
McCaw	Lakeland, FL	114	No	AT&T	- ⁴	No
Alltel	Augusta, GA	108	Yes	AT&T	- ⁴	No
GTE/Mobilnet	Augusta, GA	108	No	AT&T	Yes	No
Centel	Charleston, SC	90	Yes	AT&T	- ⁴	No
GTE/Mobilnet	Charleston, SC	90	No	AT&T	Yes	No
Centel	Greensboro, NC	47	Yes	AT&T	- ⁴	No
GTE/Mobilnet	Greensboro, NC	47	No	Yes ⁵	Yes	No
Centel	Raleigh, NC	71	Yes	AT&T	- ⁴	No
GTE/Mobilnet	Raleigh, NC	71	No	AT&T	Yes	No
Centel	Johnson City, TN	85	Yes	Sprint	- ⁴	No
GTE/Contel	Johnson City, TN	85	No	AT&T	Yes	No
US Cellular	Knoxville, TN	79	Yes	AT&T	Yes	No
GTE/Contel	Knoxville, TN	79	No	MCI	- ⁴	No
GTE/Contel	Norfolk, VA	43	Yes	MCI	Yes	No
Centel	Norfolk, VA	43	No	Yes ⁵	Yes	No
GTE/Contel	Newport News, VA	104	Yes	MCI	Yes	No

Exhibit 3

PHONE SURVEY ON LONG DISTANCE SERVICE PROVIDED BY FACILITIES-BASED
CELLULAR OPERATORS IN MSAs WITHOUT EQUAL ACCESS RESTRICTIONS¹

Dates Called: 5/29/92 – 6/18/92

Operator	MSA Market	MSA Rank	Wireline	Bundled Carrier	Savings Passed On ²	Equal Access ³
Centel	Newport News, VA	104	No	AT&T	- ⁴	No
GTE/Mobilnet	Austin, TX	75	Yes	AT&T	Yes	No
McCaw	Austin, TX	75	No	AT&T	Yes	No
GTE/Mobilnet	Ft. Wayne, IN	96	Yes	Yes ⁵	- ⁴	No
Centennial	Ft. Wayne, IN	96	No	AT&T	Yes	No
GTE/Contel	Evansville, IN	119	Yes	Sprint	Yes	No
US Cellular	Evansville, IN	119	No	AT&T	Yes	No
GTE/Mobilnet	Portland, OR	30	Yes	AT&T	- ⁴	No
McCaw	Portland, OR	30	No	AT&T	Yes	No
GTE/Contel	Fresno, CA	74	Yes	MCI	Yes	No
McCaw	Fresno, CA	74	No	AT&T	- ⁴	No
GTE/Mobilnet	Beaumont, TX	101	Yes	AT&T	Yes	No
Centennial	Beaumont, TX	101	No	MCI	Yes	No
GTE/Mobilnet	Houston, TX	10	Yes	AT&T	Yes	No
LIN Broad.	Houston, TX	10	No	AT&T	- ⁴	No
GTE/Contel	Davenport, IA	98	Yes	MCI	Yes	No
US Cellular	Davenport, IA	98	No	AT&T	Yes	No

¹ The operators surveyed include the wireline and non-wireline licensees in the top 120 MSAs (excluding Puerto Rico) in which neither license is held by a BOC.

² Indicates whether the salesperson stated that long distance cellular service is provided at a discount from retail long distance rates. Extent of the discount is not known.

³ The fact that an operator does not offer equal access may not preclude subscribers from accessing their PIC with a calling card (at operator-assisted rates).

⁴ The salesperson was not aware of any discount. This does not preclude the possibility that these carriers actually pass on bulk cost savings to customers.

⁵ The operator bundles long distance service, but the salesperson did not know which carrier is utilized at the present time.

⁶ AT&T is the carrier utilized for long distance calls within Florida, and Sprint is utilized for long distance calls beyond Florida.