2005.08.30 13:44:38 Kansas Corporation Commission /S4 Susan K. Duffy STATE CORPORATION COMMISSION

BEFORE THE KANSAS CORPORATION COMMISSION

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AUG 3 0 2005

Application of Sprint Nextel Corporation for Approval of the Transfer of Control of United Telephone Company of Kansas, United Telephone Company of Eastern Kansas, United Telephone Company of Southcentral Kansas, Sprint Missouri, Inc. d/b/a United Telephone Company of Southeastern Kansas and Sprint Long Distance, Inc. From Sprint Nextel Corporation to LTD Holding Company.

Docket No. 06-SCCC-200-MIS

TESTIMONY OF JOHN W. MAYO

ON

BEHALF OF

SPRINT NEXTEL CORPORATION

AUGUST 30, 2005

1 I. INTRODUCTION, QUALIFICATIONS AND PURPOSE OF TESTIMONY

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3 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is John W. Mayo. My business address is Georgetown University,
McDonough School of Business, Old North Building, 37th and O Streets, N.W.,
Washington, D.C. 20057.

7 Q. WHAT IS YOUR OCCUPATION?

8 A. I am Professor of Economics, Business and Public Policy at Georgetown
9 University in the McDonough School of Business. I am also the Executive
10 Director of the Center for Business and Public Policy in the McDonough School
11 at Georgetown University.

12 Q. WOULD YOU PLEASE SUMMARIZE YOUR QUALIFICATIONS?

A. Yes. I hold a Ph.D. in economics from Washington University in St. Louis
(1982), with a principal field of concentration in industrial organization, which
includes the analysis of antitrust and regulation. I also hold both an M.A.
(Washington University, 1979) and a B.A. (Hendrix College, Conway, Arkansas,
17 1977) in economics.

18 I have taught economics, business and public policy courses at 19 Georgetown University, Washington University, Webster University, the 20 University of Tennessee, and at Virginia Tech (VPI). These courses include both

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graduate and undergraduate classes in industrial organization, regulation and antitrust.

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I also have served in senior administrative positions. Beginning in the fall of 1999 and continuing until July 2001, I served as Senior Associate Dean of the McDonough School of Business and during academic years 2002-2004, I served as Dean. Also, I have served as the Chief Economist, Democratic Staff of the U.S. Senate Small Business Committee.

I have authored a number of articles and research monographs, and have 8 9 written a comprehensive text entitled Government and Business: The Economics 10 of Antitrust and Regulation (with David L. Kaserman, The Dryden Press, 1995). 11 I have also written a variety of specialized articles on economic issues in the 12 telecommunications industry. These articles include discussions of competition and pricing in, and the industrial organization of, the telecommunications 13 industry. These articles have appeared in academic journals such as the RAND 14 Journal of Economics, the Journal of Law and Economics, the Journal of 15 Regulatory Economics, and the Yale Journal on Regulation. A more detailed 16 accounting of my education, publications and employment history is contained in 17 18 Exhibit JWM-1.

19 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I have been asked by Sprint Nextel Corporation ("Sprint") to evaluate the public
policy merits of the proposed separation of its incumbent local exchange carrier
(ILEC) operations after its merger with Nextel is completed. For a variety of

reasons that I will describe below, I conclude that, indeed, the proposed separation is in the public interest. My testimony, which describes the logic behind my conclusion, is organized as follows. First, in Section II, I provide a brief background discussion to frame the issue. Next, in Section III, I examine specific considerations associated with the proposed separation. Finally, in Section IV, I conclude the testimony.

7 II. LEGISLATIVE AND POLICY GUIDEPOSTS

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9 Q. CAN YOU PLEASE EXPLAIN WHAT SPRINT IS PROPOSING IN THIS 10 CASE?

Yes. It is my understanding that Sprint plans to separate its wireline local service 11 A. 12 operation into an independent, stand-alone operation. In December of 2004 Sprint Corporation and Nextel Communications, Inc. ("Nextel") entered into a 13 14 merger agreement pursuant to which, upon obtaining the requisite approvals, 15 Nextel would merge with and into a wholly owned subsidiary of Sprint. The 16 required approvals were obtained, and the merger has closed. In that merger 17 agreement, Sprint and Nextel agreed to use their reasonable best efforts to separate the ILEC business of Sprint. As part of that transaction a new holding 18 company has been created, and control of the Sprint operating companies serving 19 20 local customers will be transferred to that holding company. The application before this Commission asks for approval of that transfer of control. 21

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Q. IS THERE LEGISLATIVE GUIDANCE REGARDING THE CRITERIA TO BE USED WHEN EVALUATING THE MERITS OF SPRINT'S PROPOSAL?

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A. Yes. I have been advised by counsel that K.S.A. 66-136 grants the Commission
the authority to approve a transfer of certificates of convenience and necessity
granted to a common carrier or public utility and related contracts. I have also
been advised by counsel that, in making this determination, while K.S.A 66-136
does not specify a standard of review, the Commission has generally applied a
public interest standard.

10 Q. FROM AN ECONOMIC AND HISTORICAL PERSPECTIVE, ARE 11 THERE ADDITIONAL CONSIDERATIONS THAT SHOULD FRAME 12 THIS ISSUE?

13 A. Yes. Any serious examination of industrial structure and industrial change will find that firms are constantly re-organizing themselves, sometime in small ways 14 and sometimes in larger ways in order to perform more efficiently. The reason, of 15 course, is that in a capitalistic society, firms most generally create value for 16 shareholders by providing better services and products for consumers, bringing 17 18 new services to the marketplace and by providing these services in the most 19 efficient manner possible. Consequently, as firms strive to provide enhanced services and create customer value for their offerings, they naturally and 20 continually seek to organize themselves in the most efficient manner possible. In 21

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this sense, the proposed re-structuring by Sprint reflects the normalcy of industrial re-organization.¹

3 Q. IS THE RAPID TECHNOLOGICAL CHANGE THAT THIS INDUSTRY 4 IS UNDERGOING RELEVANT TO UNDERSTANDING SPRINT'S 5 ACTIONS?

6 In industries undergoing significant technological change such as the A. Yes. 7 modern telecommunications industry, it is both natural and expected that the frequency and significance of industrial re-organizations will be particularly 8 pronounced.² Indeed, the press of technological change in the 9 telecommunication industry has created a host of converging technological 10 platforms - wireless, wireline and cable -- that have created an industry in 11 12 significant flux. This flux, rather predictably, is destroying the uniformity of strategic interests and visions that characterized the industry in the past. The 13 result is that firms today can be expected to adopt quite different strategies 14 depending on their initial position within this broader industry. Indeed, as 15 16 observed by Harvard University economist Michael Porter, "Strategy is the

¹ Indeed, similar restructurings in other industries are quite common. See, e.g., Patrick A. Guaghan, <u>Mergers, Acquisitions and Corporate Restructurings</u>, John Wiley and Sons, Third Edition, 2002, pp. 393-429. Notable recent restructurings include spin-offs by American Express of its financial advisors unit and Viacom of the CBS and UPN networks. See also, Michael J. Critella "Back Where we Belong," <u>Harvard Business Review</u>, May 25, 2005, which describes Pitney Bowes organizational changes that have varied from a focus on organic growth, to establishing a diversified firm, to, more recently, engaging in spin-offs to achieve a "renewed focus on the core." (p. 58) For complementary discussion of the ongoing industrial re-organization in the chemical, computer and semiconductor industries, see Jeffrey T. Macher and David C. Mowery "Vertical Specialization and Industrial Structure in High Technology Industries," In <u>Business Strategy over the Industry Lifecycle - Advances in Strategic Management</u>, J.A.C. Baum and A.M. McGahan (Eds.) Volume 21, Elsevier Press, New York , 2004, 317-356.

² See, e.g., Debra Aron "Using Capital Markets as a Monitor: Corporate Spin-offs in an Agency Framework," <u>RAND Journal of Economics</u>, Vol. 22, Winter 1991, pp 505-518, who indicates that "Firms that are operating in rapidly changing markets are more likely to engage in spin-offs." (p. 506)

creation of a unique and valuable position, involving a different set of activities...
 If there were only one ideal position, there would be no need for strategy....The
 essence of strategic positioning is to choose activities that are different from
 rivals'."³

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Consequently, some telecommunications firms may at this juncture choose to 5 consolidate different lines of business while others (like Sprint) may choose to 6 separate lines of business and customer groups. This is entirely appropriate and 7 8 normal given that different firms may be situated very differently within the industry. The variation in the strategic visions and choices of individual firms 9 may be "messy" but it stems from a healthy quest that enhances the prospect for 10 11 consumer benefits as firms struggle for more efficient ways to organize themselves to better serve customers. Thus, while some may speculate as to 12 whether "this" or "that" organizational form is "the right one" for the future, the 13 dynamics of this industry are sufficiently strong that it is difficult, if not altogether 14 impossible, to know which of the myriad strategies and organizational forms will 15 be ultimately rewarded by consumers and shareholders.⁴ Thus, while it is 16 common to observe, or engage in, "arm-chair" quarterbacking in the corporate 17 structuring arena, the most prudent policy is to provide deference to the nuanced 18 insights of firms that are seeking to establish the most efficient structure possible 19

³ See Michael E. Porter "What is Strategy?" <u>Harvard Business Review</u> November-December 1996, p. 61. - 78.

⁴ Consider, for instance, that Southwest Airline's operations as a point-to-point, low-frills airline defied accepted industry wisdom when it began operations in 1971. Today, Southwest's business model has emerged as a shining success. Similarly, few anticipated the success of Google when it began in the mid 1990s. Yet today, its market capitalization is roughly equal to that of Time Warner, the largest media company in the world.

within which to satisfy consumers. In sum, the natural quest by firms to position
 themselves within the market so as to best and most efficiently satisfy customers
 creates a natural and ongoing propensity for corporate re-organizations. And the
 presence of rapid technological change very naturally accelerates these generally
 salubrious effects of corporate reorganizations.

6 Q. HAVE PREVIOUS STUDIES OF CORPORATE RE-ORGANIZATIONS 7 PROVIDED INSIGHTS REGARDING THE LIKELY CONSEQUENCES 8 OF SPIN-OFFS?

9 Yes. Academicians have studied the motivations for, and consequence of, spin-A. 10 offs for a number of years. These studies have consistently found that spin-offs are favorably viewed by the market.⁵ While the reasons are manifold and may 11 vary from one particular spin-off to the next, the most commonly noted reasons 12 for the favorable evaluation of spin-offs include the alleviation of managerial 13 14 diseconomies as the number and diversity of decisionmaking requirements is reduced, an improved strategic focus by managers of the spun company, and the 15 16 ability to create clearer management incentive-contracts. Importantly, these underlying drivers to improved corporate value are also factors that generally 17 inure to the benefit of consumers. The creation of a separate market valuation of a 18 19 spun company's activities and assets is also found to create a transparency that

⁵ See, e.g., Miles, J. A. and J.D. Rosenfeld "The Effect of Voluntary Spin-off Announcements on Shareholder Wealth," Journal of Finance, Vol. 38, 1983, pp. 1597-1606. Hite, G.L. and J.E. Owers "Security Price Reactions Around Corporate Spin-off Announcements," Journal of Financial Economic, Vol. 12, 1983, 409-436; J.D. Rosenfeld "Additional Evidence on the Relationship Between Divestiture Announcements and Shareholder Wealth," Journal of Finance, Vol. 39, 1984, pp. 1437-1448; and, Patrick J. Cusatis, James A. Miles and J. Randall Woolridge "Restructuring through Spinoffs: The Stock Market Evidence, Journal of Financial Economics, Vol. 33, June 1993, pp. 293-311.

better enables valuation by shareholders. This improved transparency, in turn,
 creates additional heightened incentives for managerial efficiencies. Additionally,
 spin-offs have been shown to improve investment decisions by improving the
 internal allocation of corporate capital.⁶

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III. SPECIFIC CONSIDERATIONS

7 Q. TURNING TO THE SPECIFICS, DOES THE PROPOSED SEPARATION 8 SERVE THE PUBLIC INTEREST?

9 Yes. A variety of considerations point toward the prospective benefits from the A. 10 separation. At the outset, it is important to note that the separation provides for a 11 restructuring of organizational form but does so with a virtually seamless 12 transition for consumers. My understanding is that current customers of United 13 Telephone Company of Eastern Kansas, United Telephone Company of Kansas, United Telephone Company of Southcentral Kansas and United Telephone 14 15 Company of Southeastern Kansas (United) will, upon completion of the 16 separation, receive uninterrupted service from this familiar and trusted telephone 17 company. Indeed, the company projects that it will offer the full portfolio of its existing services with no degradation of quality.⁷ Consumer confusion, always a 18 19 possibility in corporate re-organizations, is significantly reduced in this instance as customer service interface contacts will remain unchanged.⁸ The result is that 20 21 while there will be minimal, if any, disruption to consumers in the immediate

⁶ See Gertner, Robert, Eric Powers and David Scharfstein "Learning about Internal Capital Markets from Corporate Spin-offs," Journal of Finance Vol. 57, December 2002, pp. 2479-2506.

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wake of the separation, the re-organization will set the stage for a variety of benefits as the company efficiently re-organizes itself.

Additionally, it is my understanding that the senior management team of United, with its extant expertise in providing high quality telecommunications services, will largely remain in place.⁹ While this continuity of management expertise should provide additional comfort regarding the public interest merits of the separation, the heightened focus on, and accountability to, the local market will increase senior managers' incentives for providing superior and valueoriented telecommunications services within the local area.

10 Of particular note, the re-organization will permit the United to strategically and exclusively focus on its local base of wireline customers. The 11 merger of Sprint and Nextel in the wireless arena will have created a very large 12 and national company whose strategic interests are distinctly "wireless" and 13 "national". In contrast, United will have the opportunity to focus its competitive 14 energies on providing value for, and securing the business of, consumers within 15 its local geographic footprint. This heightened focus and reliance on its local 16 customers for its financial success means that the company will have maximal 17 incentives to create valued and innovative services for these customers. The re-18 organization, then, neatly aligns the firm's self-interest and those of consumers. 19

⁷ Testimony of Richard Lawson, pages 7 - 8.

⁸ ibid.

⁹ Testimony of Richard Lawson, pages 12.

1 The result is that the re-organization creates the likelihood of both improved 2 efficiencies and improved consumer service.¹⁰

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Additionally, by creating separate companies with distinct strategies, the 3 separation has the very real prospect of enhancing competition in the broad 4 5 telecommunications industry. In particular, once the separation is successfully completed Sprint, with its very large wireless presence, will be free to 6 7 unambiguously and vigorously pursue wireless-oriented or wireless-cableoriented strategies that target local wireline company customers. The restructured 8 9 local exchange company, in contrast, will have every incentive to maintain its 10 local customer base by offering high quality and innovative telecommunications services. The result is that the heightened competition will lead to improved 11 12 choices and service for telecommunications customers both in and outside of 13 United's geographic footprint.

14 Q. ARE YOU AT ALL CONCERNED THAT THE SPRINT SEPARATION IS

15 CONTRARY TO DIRECTION THAT RESTRUCTURING IS TAKING

16 AMONG OTHER ILECS SUCH AS VERIZON AND SBC?

A. No. As I noted earlier, rapid technological change, here augmented by recent
 federal court and regulatory decisions, is likely to cause specific
 telecommunications firms to adopt quite different visions and strategies for their
 companies' futures. These alternative visions stem from a variety of factors but

¹⁰ The "local focus" has proven successful elsewhere in the industry. For instance, Cincinnati Bell, which focuses on serving customers in the greater Cincinnati area, has continually received J.D. Power and Associates' customer satisfaction ratings that are among the highest in the industry. See, e.g., 2003 <u>Annual Report</u>, Cincinnati Bell, p. 10.

certainly the initial positions of the companies within the broader industry may
 create completely different strategies for various companies as they individually
 seek to find positions within the industry from which to best compete. As a
 result, the fact that Sprint's strategic direction may differ from that of other ILECs
 is neither surprising nor a cause for concern.

6 Q. SHOULD THE COMMISSION BE CONCERNED THAT HOUSEHOLDS 7 WILL BE HARMED BY THE SEPARATION?

8 No. As I have described, the separation provides for a continuity of existing Α. 9 services, heightens the focus of managers on the ILEC's local customer base, and creates heightened opportunities and incentives for improved customer service. 10 11 In addition, every aspect of the extant regulatory oversight will remain. In particular, it is my understanding that the regulatory pricing plan under which 12 United operates will convey to the ILEC under the newly formed parent. That is, 13 the Commission will retain all of its operational, financial and regulatory 14 oversight mechanism that it has today to assure that the company's services are of 15 16 high quality and are offered at just and reasonable rates.

17 IV. CONCLUSION

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19Q.ITAKEITTHENTHATYOUAREQUITECOMFORTABLE20RECOMMENDINGAPPROVALOFTHESEPARATIONAS21PROPOSED?

A. Yes. My examination of the industry and the specific proposed restructuring lead
 me to conclude that the separation represents a normal manifestation of the desire

by corporate management to seek to re-organize the company in an efficient and strategically focused manner. The separation comes at a time in the history of the telecommunications industry that a host of such re-organizations may be expected. This diversity of strategic designs by firms certainly will create a new landscape for the industry, but there is every expectation that this specific reorganization will serve the public interest.

7 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

8 A. Yes.

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VERIFICATION

WASHINGTON, D.C.)) ss: WASHINGTON, D.C)

I, $\underline{John} Mago$, of lawful age, being first duly sworn, on my oath state: that I am the witness herein named; that I have read the above and foregoing Testimony; and that the statements, allegations and matters contained therein are true and correct to the best of my knowledge and belief..

John W. Mayo

day of Hugust, 2005 Subscribed and sworn to before me this $\underline{4}$

Afindes D. Barnes

My Appointment Expires: 12/14/06

Exhibit JWM-1

VITA

JOHN W. MAYO

CURRENT POSITION:

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Professor of Economics, Business and Public Policy, and Executive Director, Center for Business and Public Policy Georgetown University McDonough School of Business Old North Building 37th and O Streets, N.W. Washington, D.C. 20057

EDUCATION:

Ph.D., Economics, 1982, Washington University in St. Louis Dissertation: "Diversification and Performance in the U.S. Energy Industry"
M.A., Economics, 1979, Washington University in St. Louis
B.A., Economics, 1977, Hendrix College, Conway, Arkansas

FIELDS OF SPECIALIZATION:

Industrial Organization Regulatory and Antitrust Policy Applied Microeconomics Econometrics

PREVIOUS POSITIONS:

2002-2004 - Dean, McDonough School of Business, Georgetown University

- 1999-2001 Senior Associate Dean, McDonough School of Business, Georgetown University.
- 1997-1998 (Academic year) Visiting Professor of Economics, Business and Public Policy, Georgetown University School of Business, Washington, D.C.
- July 1994 July 1998 The University of Tennessee, Knoxville, TN. Professor of Economics, Department of Economics.

- July 1989 June 1994 The University of Tennessee, Knoxville, TN. Research Associate Professor, Center for Business and Economic Research, and Associate Professor of Economics, Department of Economics.
- September 1981 June 1989 -- The University of Tennessee, Knoxville, TN. Research Assistant Professor, Center for Business and Economic Research, and Assistant Professor of Economics, Department of Economics, September 1981-June 1988.
- June 1984 June 1985 -- U.S. Senate, Small Business Committee. Chief Economist, Democratic Staff.
- August 1982 December 1982 VPI, Blacksburg, VA. Visiting Assistant Professor of Economics, Blacksburg, Virginia.
- 1980 1981 Washington University, Center for the Study of American Business Dissertation Fellow
- 1979 International Institute for Applied Systems Analysis (IIASA) Laxenburg, Austria. Energy Research Fellow
- 1979-1980 -- Washington University, Graduate School of Business Administration Research Assistant.
- 1978 -- Washington University, Institute for Urban and Regional Studies. Research Assistant

HONORS, AWARDS, AND GRANTS:

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Undergraduate: Mosley Economics Prize (#1 graduating economics major), Alpha Chi (scholastic), Blue Key, Senior Honors Seminar.

Graduate: University Fellowship, Washington University (1977-78); National Academy of Sciences Young Research Fellow, Laxenburg, Austria (1979); President, Washington University Economics Graduate Student Association (1979-81); Dissertation Fellowship, Center for the Study of American Business, Washington University (1980-81).

Post-Graduate: Zaeslin Fellow of Law and Economics, University of Basel, Basel, Switzerland (2000 - present); William B. Stokely Scholar, College of Business Administration, The University of Tennessee (1993-1995); South Central Bell Research Grant (1988); Research Affiliate, Center of Excellence for New Venture Analysis, The University of Tennessee (1985); Summer Faculty Research Fellowships, College of Business Administration, The University of Tennessee (1983-1985).

COURSES TAUGHT:

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Undergraduate: Principles of Microeconomics, Current Economic Problems, Government and Business, Intermediate Microeconomics, Energy Economics

Graduate: Managerial Economics (MBA), Managing in a Regulated Economy (MBA), Economics (Executive MBA), The Economics of Strategy (MBA), Business and Public Policy (MBA); Competition and Competition Policy (MBA); Regulation and Deregulation in the American Economy (MBA), Understanding International Business (MBA), Industrial Organization and Public Policy (Ph.D.), The Economics of Antitrust and Regulation (Ph.D.)

PUBLICATIONS:

A. JOURNAL ARTICLES

"Regulatory Opportunism and Investment Behavior: Evidence from the U.S. Electric Utility Industry," (with Thomas P. Lyon) <u>RAND Journal of Economics</u>, forthcoming.

"On the Impotence of Imputation" (with T. Randolph Beard and David L. Kaserman), <u>Telecommunications Policy</u>, Volume 27, Issues 8-9, September-October 2003, pp. 585-595.

"A Graphical Exposition of the Economic Theory of Regulation" (with T. Randolph Beard and David L. Kaserman), <u>Economic Inquiry</u>, Volume 41, October 2003, pp. 592-606.

"Regulation, Competition, and the Optimal Recovery of Stranded Costs," (with T. Randolph Beard and David L. Kaserman) <u>International Journal of Industrial</u> <u>Organization</u>, Volume 21, June 2003, pp. 831-848.

"The Supreme Court Weighs in on Local Exchange Competition: The Meta-Message," (with David L. Kaserman) <u>Review of Network Economics</u> Volume 1, September 2002, pp. 119 – 131.

"Regulation, Vertical Integration and Sabotage" (with T. Randolph Beard and David L. Kaserman), Journal of Industrial Economics, Volume 49, September 2001, pp. 319-334.

"Efficient Telecommunications Policies for the 'New Economy': The Compelling Case for Access Charge Reform" (with David L. Kaserman), <u>International Journal of</u> <u>Development Planning Literature,</u> (Special Issue edited by William J. Baumol and Victor A. Becker), Volume 1, April 2001. "Regulatory Policies Toward Local Exchange Companies Under Emerging Competition: Guardrails or Speedbumps on the Information Highway," (with David L. Kaserman) Information Economics and Policy, Volume 11, December 1999, pp. 367-388.

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"Modeling Entry and Barriers to Entry: A Test of Alternative Specifications," (with Mark L. Burton and David L. Kaserman), <u>Antitrust Bulletin</u>, Summer 1999, pp. 387-420.

"Targeted and Untargeted Subsidy Schemes: Evidence from Post-Divestiture Efforts to Promote Universal Telephone Service," (with Ross Eriksson and David L. Kaserman) Journal of Law and Economics, Vol. 41, October 1998, pp. 477-502.

"Dominant Firm Pricing with Competitive Entry and Regulation: The Case of IntraLATA Toll," (with Larry Blank and David L. Kaserman) <u>Journal of Regulatory Economics</u>, Vol. 14, July 1998, pp. 35-54.

"The Role of Resale Entry in Promoting Local Exchange Competition," (with David L. Kaserman) <u>Telecommunications Policy</u>, Vol. 22, No. 4/5, 1998.

"Telecommunications Policy and the Persistence of Local Exchange Monopoly," (with David L. Kaserman), <u>Business Economics</u>, Vol. 33, April 1998, pp. 14-19.

"An Efficient Avoided Cost Pricing Rule for Resale of Local Exchange Telephone Service," (with David L. Kaserman) <u>Journal of Regulatory Economics</u>, Volume 11, January 1997, pp. 91-107.

"A Dynamic Model of Advertising by the Regulated Firm," (with Francois Melese and David L. Kaserman) Journal of Economics (Zeitschrift fur NationalÖkonomie), Volume 64, 1996, pp. 85-106.

"Is the 'Dominant Firm' Dominant? An Empirical Analysis of AT&T's Market Power,"(with Simran Kahai and David L. Kaserman), <u>Journal of Law and Economics</u>, Volume 39, October 1996, pp.499-517.

"Competition and Asymmetric Regulation in Long Distance Telecommunications: An Assessment of the Evidence,"(with David L. Kaserman) <u>CommLaw Conspectus: Journal of Communications Law and Policy</u>, Volume 4, Winter 1996, pp. 1-26.

"Deregulation and Predation in Long-Distance Telecommunications: An Empirical Test," (with Simran Kahai and David L. Kaserman), <u>Antitrust Bulletin</u>, Vol. 40, Fall 1995, pp.645-666.

"Cross-Subsidies in Telecommunications: Roadblocks on the Road to More Intelligent Telephone Pricing" (with David L. Kaserman), <u>Yale Journal on Regulation</u>, Volume 11, Winter 1994, pp. 120-147.

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"Two Views of Applied Welfare Analysis: The Case of Local Telephone Service Pricing -- A Comment and Extension" (with David L. Kaserman and David M. Mandy), <u>Southern</u> <u>Economic Journal</u>, Volume 59, April 1993, pp. 822-827.

"The Political Economy of Deregulation: The Case of Intrastate Long Distance" (with David L. Kaserman and Patricia L. Pacey), <u>Journal of Regulatory Economics</u>, Volume 5, March 1993, pp. 49-64.

Reprinted in <u>The Foundations of Regulatory Economics</u>, Robert E. Ekelund, Jr. (Ed.), Edward Elgar Publishing, Northhampton, MA.

"Demand, Pricing and Regulation: Evidence from the Cable TV Industry" (with Yasuji Otsuka), <u>RAND Journal of Economics</u>, Volume 22, Number 3, Autumn 1991, pp. 396-410.

"The Measurement of Vertical Economies and the Efficient Structure of the Electric Utility Industry" (with David L. Kaserman), Journal of Industrial Economics, Volume 39, Number 5, September 1991, pp. 483-502.

"Regulation, Market Structure and Hospital Costs: Reply and Extension" (with Deborah A. McFarland), <u>Southern Economic Journal</u>, Volume 58, Number 2, October 1991, pp. 535-538.

"Firm Size, Employment Risk and Wages: Further Insights on a Persistent Puzzle" (with Matthew N. Murray), <u>Applied Economics</u>, Volume 23, Number 8, August 1991, pp. 1351-1360.

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"Barriers to Trade and the Import Vulnerability of U.S. Manufacturing Industries" (with Don P. Clark and David L. Kaserman), <u>Journal of Industrial Economics</u>, Volume 38, Number 4, June 1990, pp. 433-448.

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"Long Distance Telecommunications Policy: Rationality on Hold" (with David L. Kaserman), <u>Public Utilities Fortnightly</u>, Volume 122, Number 13, December 22, 1988, pp. 18-27.

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"The Effectiveness of Mandatory Fuel Efficiency Standards in Reducing the Demand for Gasoline" (with John E. Mathis), <u>Applied Economics</u>, Volume 20, Number 2, February 1988, pp. 211-220.

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"Advertising and the Residential Demand for Electricity" (with David L. Kaserman), Journal of Business, Volume 58, Number 4, October 1985, pp. 399-408.

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"The Technological Determinants of the U.S. Energy Industry Structure," <u>The Review of Economics and Statistics</u>, Volume 66, February 1984, pp. 51-58.

B. BOOKS, MONOGRAPHS, AND OTHER PUBLICATIONS

.

"Competition in the Long Distance Market," (with David L. Kaserman) in <u>Handbook of</u> <u>Telecommunications Economics</u>, Martin E. Cave, Sumit K. Majumdar and Ingo Vogelsang, Editors, North Holland Elsevier, 2002.

"Shakeout or Shakedown? The Rise and Fall of the CLEC Industry," (with Mark Burton and David L. Kaserman), in Michael A. Crew, Editor, <u>Markets, Pricing, and Deregulation of Utilities</u>, Kluwer Academic Publishers, 2002.

"Resale and the Growth of Competition in Wireless Telephony," (with Mark L. Burton and David L. Kaserman), in <u>Expanding Competition in Regulated Industries</u>, Michael A. Crew, Editor, Kluwer Academic Publishers, 2000.

"Monopoly Leveraging, Path Dependency, and the Case for a Competition Threshold for RBOC Reentry into InterLATA Toll," (with T.R. Beard and David L. Kaserman), in <u>Regulation Under Increasing Competition</u>, Michael A. Crew, Editor, Kluwer Academic Publishers, 1999.

"The Quest for Universal Service: The Misfortunes of a Misshapen Policy," (with David L. Kaserman) in <u>Telecommunications Policy: Have Regulators Dialed the Wrong Number?</u>, Donald L. Alexander, Editor, Praeger Publishing Group, Westport, CT, 1997, pp.131-144.

Government and Business: The Economics of Antitrust and Regulation (with David L. Kaserman), The Dryden Press, Harcourt Brace College Publishers, 1995.

"Long-Distance Telecommunications: Expectations and Realizations in the Post-Divestiture Period" (with David L. Kaserman), in <u>Incentive Regulation for Public</u> <u>Utilities</u>, Michael A. Crew, Editor, (Boston, MA.: Kluwer Academic Publications), 1994.

Monopoly Leveraging Theory: Implications for Post-Divestiture Telecommunications Policy (with David L. Kaserman), Center for Business and Economic Research: The University of Tennessee, April 1993.

<u>State-Level Telecommunications Policy in the Post-Divestiture Era: An Economic</u> <u>Perspective</u> (with William F. Fox), Center for Business and Economic Research, The University of Tennessee, March 1991.

A review of <u>After Divestiture: The Political Economy of State Telecommunications</u> <u>Regulation</u>, by Paul E. Teske. Albany: State University of New York Press, 1990. Publius, Winter 1991, pp. 164-166. Deregulation and Market Power Criteria: An Evaluation of State Level Telecommunications Policy" (with David L. Kaserman) in <u>Telecommunications</u> <u>Deregulation: Market Power and Cost Allocation Issues</u>, J. Allison and D. Thomas (eds.), Quorum Books, 1990.

<u>The Economics of Local Telephone Pricing Options</u> (with J. E. Flynn), Center for Business and Economic Research, The University of Tennessee, October 1988.

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<u>Firm Entry and Exit: Economic Linkages in Tennessee</u> (with J. E. Flynn), Center for Business and Economic Research, The University of Tennessee, Knoxville, July 1988.

"The Economics of Regulation: Theory and Policy in the Post-Divestiture Telecommunications Industry" (with David L. Kaserman) in <u>Public Policy Toward</u> <u>Corporations</u>, Arnold Heggestad, editor, University of Florida Presses, 1988.

"Entries and Exits of Firms in the Tennessee Economy: Foundations for Research," <u>Survey of Business</u>, The University of Tennessee, Volume 23, Number 1, Summer 1987, pp. 21-23.

"The Relationship of Manufacturing and Nonmanufacturing Firm Entry and Exit in Tennessee" (with Joseph E. Flynn), <u>Survey of Business</u>, The University of Tennessee, Volume 23, Number 2, Fall 1987, pp. 11-16.

A Review of <u>Municipal Ownership in the Electric Utility Industry</u>, by David Schap. New York: Praeger Publishing Company, 1986. <u>Southern Economic Journal</u>, Volume 54, Number 1, July 1987.

Entries and Exits of Firms in the Tennessee Economy (with W. F. Fox, et al.), Center for Business and Economic Research, The University of Tennessee, Knoxville, May 1987. (Condensed report published in Survey of Business, The University of Tennessee, Volume 23, Number 2, Fall 1987, pp. 3-10.

"The U.S. Economic Outlook," <u>Survey of Business</u>, The University of Tennessee, annual contributor, 1986-1994.

An Economic Report to the Governor of the State of Tennessee, Center for Business and Economic Research and the Tennessee State Planning Office, Annual Contributor, 1981-1994.

"An Economic Analysis of a Monitored Retrievable Storage Site for Tennessee" (with W. F. Fox, L. T. Hansen, and K. E. Quindry), Final Report and Appendices, December 17, 1985.

"Directly Served Industries and the Regional Economy" (with Charles Campbell), Contract Completion Report, the Center for Business and Economic Research, The University of Tennessee, October 1984.

CONGRESSIONAL AND REGULATORY TESTIMONIES:

U.S. Senate (Commerce, Science and Transportation Committee; Energy and Natural Resources Committee, Subcommittee on Water and Power;); Tennessee State Legislature (Senate Finance, Ways and Means Committee; Special Joint Legislative Committee on Business Taxation; and, Senate State and Local Government Committee); Maryland State Legislature (Environmental Works Committee); Federal Communications Commission; Pennsylvania Public Utility Commission; Michigan Public Service Commission; Missouri Public Service Commission; Illinois Commerce Commission; West Virginia Public Utility Commission; Wyoming Public Utility Commission; Washington Utilities and Transportation Commission; Utah Public Service Commission; Wisconsin Public Service Commission; California Public Utilities Commission; Florida Public Service Commission; Delaware Public Service Commission; Montana Public Service Commission; Maryland Public Service Commission; Massachusetts Department of Public Utilities; Georgia Public Service Commission; Colorado Public Utilities Commission; North Carolina Public Utilities Commission; Texas Public Utility Commission; Arkansas Public Service Commission; Connecticut Department of Public Utility Control; Kansas State Corporation Commission; and New Jersey Board of Public Utility Commissioners.

INVITED SEMINARS AND SELECTED CONFERENCE PRESENTATIONS:

Columbia University, University of Chicago, University of Paris (Dauphine IX), Vanderbilt University, Washington University in St. Louis, University of Michigan, Ohio State University, University of Minnesota, University of Florida, University of Texas, Rutgers University, University of Missouri, Kansas University, University of Utah, University of Basel (Switzerland), University of Freiburg (Germany), University of Central Florida, American Enterprise Institute, Federal Communications Commission, Telecommunications Policy Research Conference (TPRC), National Conference of State Legislatures, U.S. Advisory Commission on Intergovernmental Relations, Southwestern Bell Corporation

CONSULTING:

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U.S. Department of Justice, Antitrust Division; U.S. Federal Trade Commission; AT&T; Sprint; MCI Telecommunications; Enron Power Marketing, Inc.; Optus Communications (Australia); United Parcel Service; Tennessee Valley Authority; Antitrust Division, Office of the Attorney General, State of Tennessee; U.S. Senator Howard Baker, Jr., U.S. Senate Majority Leader; Oak Ridge National Energy Laboratory; Arkansas Consumer Research; Division of Energy Conservation and Rate Advocacy, Office of the Arkansas Attorney General; U.S. Department of Energy

PROFESSIONAL PRESENTATIONS:

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"The Influence of Firms on Government" (with Mirjam Schiffer). Presented to the Southern Economic Association Annual Meetings, New Orleans, November 2004.

"Warm Glow and Charitable Giving: Why Don't the Wealthy Give More to Charity? (with Catherine H. Tinsley). Presented to the Southern Economic Annual meetings, Tampa, Florida, November 2002.

"Competition, Policy and Firm Strategy in U.S. Long Distance Telecommunications." Presented to the Academy of Management annual meetings, Washington, D.C. July 2001.

"Regulation and Administrative Discretion: Evidence From the Electric Utility Industry" (with Thomas P. Lyon). Presented to the Southern Economic Association Annual Meetings, Atlanta, GA, November 1997.

"Regulation, Vertical Integration and Sabotage." (with T. Randolph Beard and David L. Kaserman) Presented to the Western Economic Association Annual Meetings, Seattle, Washington, July 1997.

"Regulation and Investment: Evidence from the Electric Utility Industry." (with Thomas Lyon) Presented to the American Economic Association Annual Meetings, New Orleans, January 1997.

"Targeted and Untargeted Subsidy Schemes: Evidence from Post-Divestiture Efforts to Promote Universal Telephone Service." Presented to the Southern Economic Association Annual Meetings, New Orleans, November 1995.

"Dominant Firm Pricing with Competitive Entry and Regulation: The Case of IntraLATA Toll," with Larry Blank and David L. Kaserman. Presented to the Southern Economic Association Annual Meetings, Orlando, Florida, November 1994.

"The Economic Welfare Effects of Extended Area Telephone Service," with Carlos Martins-Filho. Presented to the Western Economic Association Annual Meetings, Seattle, Washington, July 1991.

"Demand, Pricing and Regulation of Cable TV Services: Evidence from the Pre-Deregulation Period," with Yasuji Otsuka. Presented to the Southern Economic Association annual meetings, New Orleans, Louisiana, November 1990.

"Market Contestability: Toward an Operational Index," with David L. Kaserman. Presented to the Western Economic Association annual meetings, Lake Tahoe, Nevada, June 1989. "The Political Economy of Deregulation: The Case of Intrastate Long Distance," with David L. Kaserman and Patricia Pacey. Presented to the Southern Economic Association annual meetings, San Antonio, Texas, November 1988.

"Barriers to Trade and the Import Vulnerability of U.S. Manufacturing Industries," with Don Clark and David L. Kaserman. Presented to the Southern Economic Association annual meetings, San Antonio, Texas, November 1988.

"Cross-Subsidization in Telecommunications: Economic Theory Versus Regulatory Rhetoric" with David L. Kaserman, Western Economic Association annual meetings, Vancouver, British Columbia, July 1987. Also presented at the Southern Economic Association annual meetings, Washington, D.C., November 1987.

"The Effects of Regulation on R&D: Theory and Evidence," Southern Economic Association annual meetings, New Orleans, Louisiana, November 1986.

"The Measurement of Vertical Economies and the Efficient Structure of the Electric Utility Industry" with David L. Kaserman, American Economic Association annual meetings, San Francisco, California, December 1983.

"Regulation, Advertising and Economic Welfare" (with David L. Kaserman), Southern Economic Association annual meetings, Washington, D.C., November 1983.

"Multiproduct Monopoly, Regulation and Firm Costs," Southern Economic Association meetings, Atlanta, Georgia, November 1982.

"Forecasting Economic Activity in Tennessee with a Quarterly Econometric Model," Southeastern Economic Analysis Conference, Charlotte, North Carolina, September 1982.

"The Technological Determinants of U.S. Energy Industry Structure." Regulatory Workshop, Center for the Study of American Business and the Department of Economics, Washington University, December 1981.

WORKING PAPERS:

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"A Unification of the Graphical Exposition of the Economic Theory of Regulation," (with T. Randolph Beard and David L. Kaserman), March 2005.

"The Influence of Firms on Government" (with Mirjam Schiffer), November 2004.

"Common Costs and Cross-Subsidies: Why do Common Costs Appear so Large in Regulated Industries?" (with Mark L. Burton and David L. Kaserman), September 2004.

"Understanding Participation in Social Programs: Why Don't Households Pick up the Lifeline?" (with Mark Burton), March 2005.

"Warm Glow and Charitable Giving: Why Don't the Wealthy Give More to Charity" (with Catherine H. Tinsley), June 2001.

EDITORIAL REVIEWER:

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National Science Foundation, Brookings Institution, Federal Trade Commission, The MIT Press, <u>American Economic Review</u>, <u>Quarterly Journal of Economics</u>, <u>Journal of</u> <u>Law and Economics</u>, <u>Economic Journal</u>, <u>Journal of Business</u>, <u>RAND Journal of</u> <u>Economics</u>, <u>Journal of Regulatory Economics</u>, <u>Review of Economics and Statistics</u>, <u>Economic Inquiry</u>, <u>Journal of Industrial Economics</u>, <u>Journal of Economics &</u> <u>Management Strategy</u>, <u>Review of Industrial Organization</u>, <u>Scandinavian Journal of</u> <u>Economics</u>, <u>Eastern Economic Journal</u>, <u>Southern Economic Journal</u>, <u>Contemporary</u> <u>Economic Policy</u>, <u>Industrial Relations</u>, <u>Growth and Change</u>, <u>Review of Regional Studies</u>, <u>Journal of Economics and Business</u>, <u>Quarterly Review of Economics and Business</u>, <u>Journal of Policy Analysis and Management</u>, <u>Quarterly Journal of Business and</u> <u>Economics</u>, <u>Regional Science and Urban Economics</u>, <u>Financial Review</u>, <u>Journal of</u> <u>Money</u>, <u>Credit</u>, <u>and Banking</u>, <u>Social Science Quarterly</u>, <u>Telecommunications Systems</u>, <u>Public Finance Quarterly</u>, <u>Japan and the World Economy</u>, <u>Energy Economics</u>

EDITORIAL, CORPORATE BOARDS AND OVERSIGHT BODIES

Editorial Board, Journal of Regulatory Economics, 1999-present.

Editorial Board, Review of Industrial Organization, 2002-2003.

Board of Directors, Vice President, National Safety Council, October 2002- present.

Board of Trustees, Occupational and Environmental Health Foundation, June 2003-present.

Research Advisory Committee, National Regulatory Research Institute (Ohio State University), 1993-1997.

PROFESSIONAL MEMBERSHIPS AND COMMITTEES:

American Economic Association Western Economic Association Southern Economic Association American Law and Economics Association International Telecommunications Society European Association for Research in Industrial Economics