

of more than \$2.4 billion.<sup>134</sup> Thus, the proposed transaction does not remove a significant supplier of Type II special access from providing service in BellSouth's territory.

115. AT&T also does not have any special advantage as a supplier of Type II special access. We understand that BellSouth's discount plans are generally available and that numerous carriers obtain discounts.<sup>135</sup> Although AT&T purchases a significant volume of special access services, some other CLECs receive percentage discounts comparable to those obtained by AT&T.<sup>136</sup> These facts indicate that AT&T does not receive special access pricing from BellSouth that gives it any special advantage as a supplier of Type II special access services.

116. Moreover, available data indicate that CLECs have also deployed fiber-based facilities throughout BellSouth's territory, indicating that a variety of other firms have the ability to offer Type II special access services. The FCC concluded in its SBC/AT&T Order that "existing competitive collocations and the threat of competitive entry through collocation allow for special access competition in SBC's in-region wire centers where AT&T competes today."<sup>137</sup> The factual circumstances in BellSouth's territory support the same conclusion.

117. For a prior FCC proceeding, BellSouth has conducted a series of physical inspections of more than 100 central offices to determine the extent of fiber based collocators.<sup>138</sup> These data indicate that another CLEC had a fiber-based collocation in each central office in which AT&T had facilities and that there were an average of 3.8 fiber-based collocators other

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134. FCC, Statistics of Communications Common Carriers, 2004/2005 Edition, p. 43.

135. Declaration of Robert W. Bickerstaff, ¶ 13.

136. Declaration of Robert W. Bickerstaff, ¶ 13. Since certain discounts are based on its mix of circuits (e.g., DS1 vs. DS3), the length of time it is willing to commit to a term obligation, and the overall volumes it is willing to commit, the customer's average discount will depend on this mix.

137. SBC/AT&T Order, ¶44.

138. These inspections were conducted to determine which of the wire centers met the "unimpaired" standard for local transport and channel terminations specified in the FCC's Triennial Review Remand Order proceeding. BellSouth surveyed areas it considered to be most likely to support CLEC activity.

than AT&T in the central offices in which AT&T had facilities. Further, as noted above, CLECs have collectively deployed far more local fiber than AT&T.

118. In sum, these data indicate that areas where AT&T is collocated are typically served by other CLECs. Thus, there is no basis to conclude that the proposed transaction would adversely affect competition in the provision of Type II special access services.

**VIII. THE REDUCTION IN THE NUMBER OF INDEPENDENT ILECS RESULTING FROM THE PROPOSED TRANSACTION WILL NOT HARM COMPETITION.**

119. The proposed transaction combines BellSouth's nine-state local service territory with the thirteen-state service territory served by legacy SBC. Although these ILECs do not compete against each other in the provision of local service, the FCC concluded in 1999 in its evaluation of the SBC/Ameritech and Verizon/GTE mergers that mergers of large ILECs can be anticompetitive.<sup>139</sup> This section provides an overview of the competitive concerns raised by the FCC in reviewing the previous mergers of large ILECs and shows that these concerns no longer apply today.

120. While acknowledging that ILECs have non-overlapping service territories and do not directly compete for customers, the FCC concluded in its review of the SBC/Ameritech and Bell Atlantic/GTE mergers that mergers of large ILECs could harm competition to the extent they:

- increase the incentive for ILECs to discriminate against entrants; or
- harm the ability of regulators to evaluate ILECs' performance in opening local markets to competition.
- eliminate a potential mass market competitor;

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139. See FCC, Memorandum Opinion and Order 99-279, October 8, 1999 ("SBC/Ameritech Order"), ¶¶ 3, 56-62; FCC, Memorandum Opinion and Order 00-221, June 16, 2000 ("Bell Atlantic/GTE Order"), ¶¶ 3, 96.

121. None of these concerns is applicable here, for the reasons explained below.

**A. THE PROPOSED TRANSACTION DOES NOT HARM CONSUMERS BY INCREASING THE MERGED FIRM'S INCENTIVE TO ENGAGE IN TECHNICAL DISCRIMINATION AGAINST CLECS.**

**1. Overview of FCC discrimination concerns in 1999**

122. In its 1999 SBC/Ameritech Order, the FCC concluded that “the proposed merger also would increase the incentives and ability of the larger merged entity to discriminate against rivals....”<sup>140</sup> The FCC’s concerns at that time were based on what is now referred to as the “footprint” theory, which had been advocated by parties opposing the merger. To briefly review, certain opponents of that transaction argued that technical discrimination by one ILEC could discourage CLEC entry not only in the ILEC’s own service territory but also in other ILECs’ territories. That is, in their view, if one ILEC discriminates against a CLEC by providing poor quality interconnection or poor provisioning service, the CLEC will be deterred from entering into areas served by other ILECs as well as the discriminating ILEC. This reflects the opponents’ view seven years ago that efficient CLECs would not necessarily restrict activity to a single ILEC’s region.

123. The FCC accepted the merger opponents’ theory that discrimination against CLECs by one ILEC creates an “externality” that benefits other ILECs. In the FCC’s view, a merger that increases the size of an ILEC’s service territory enables the ILEC to capture a portion of the external benefits of discrimination and thus increases its incentive to discriminate. In the FCC’s words:

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140. SBC/Ameritech Order, ¶ 60. See also Bell Atlantic/GTE Order, ¶ 173.

In many cases, discriminatory conduct by an incumbent LEC in its region affects a competitor in areas both inside and outside the incumbent's region. [...] Because after the merger the larger combined entity would realize more of the gains from such external effects, the marginal benefit and corresponding incentive to discriminate in each area would increase.<sup>141</sup>

124. Before turning to the specific reasons why the concerns identified by the FCC in 1999 are no longer applicable, we make two preliminary observations.

125. First, whatever the merits of the FCC's "footprint" analysis as a matter of economic theory, the FCC in its SBC/Ameritech Order presented no empirical analysis to support its view that ILEC mergers deter entry and expansion by CLECs. We had undertaken an econometric analysis that demonstrated that prior mergers of large ILECs did not have an adverse effect on CLEC entry.<sup>142</sup> That is, our empirical analysis yielded results that were inconsistent with the "footprint" theory. The FCC did not accept the conclusions of this analysis, citing concerns about the adequacy of the measure of CLEC activity utilized in the analysis.<sup>143</sup> Since that time, however, a number of other researchers, including both academics and FCC staff members, have relied on the same measure of CLEC activity in several peer-reviewed studies of

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141. SBC/Ameritech Order, ¶¶ 192-3. See also Bell Atlantic/GTE Order, ¶ 178.

142. See Dennis Carlton and Hal Sider, Report to the FCC on Supplemental Analysis of the Katz/Salop Hypothesis, April 13, 1999. An extended version of this analysis, also co-authored with Thomas Stemwedel, has been published in ABA Section of Antitrust Law, *Econometrics: Legal, Practical and Technical Issues* (2005). The published version of this analysis incorporates three additional calendar quarters of data that became available after completion of our 1999 analysis. Our prior work also highlighted that the merger opponents' theory also was based on contradictory assumptions that: (i) CLECs recognize the incremental discrimination and respond to it by scaling back their investments; and (ii) regulators do not recognize that ILECs have increased their discriminatory activity.

143. SBC/Ameritech Order, ¶252.

CLEC entry and have endorsed its use for such purposes.<sup>144</sup> Therefore, while not essential to the resolution of any issue in this proceeding, we continue to hold the views that our analysis was reliable and that available empirical evidence is inconsistent with the footprint theory.

126. Second, competition has grown substantially since the FCC's analysis of ILEC mergers in 1999 and 2000. Since that time, CLEC activity has expanded dramatically and a large number of CLECs have deployed facilities including local fiber and now offer advanced services. Deployment of fiber networks and provision of services require various forms of cooperation and interconnection from ILECs.

- As discussed in our analysis of the impact of the proposed transaction on special access competition in Section VII above, available data from a variety of sources indicate a wide variety of CLECs have deployed fiber and facilities in metropolitan areas across the United States. For example, GeoTel data identify 17 CLECs with fiber networks in Atlanta and 15 CLECs fiber networks in Miami. (See Table 7.1 above.)
- There has been rapid growth in recent years in a wide variety of facilities-based mass market carriers that compete with services provided by ILECs including, for example, cable telephony, wireless voice services, and wireless broadband services.

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144. See, for example, Jaison R. Abel, "Entry into regulated monopoly markets: The development of a competitive fringe in the local telephone industry," 45 *Journal of Law and Economics* 289 (2002); Jaison R. Abel and Michael E. Clements, "Entry under asymmetric regulation," 19 *Review of Industrial Organization* 227 (2001); James Zolnierok, James Eisner, and Ellen Burton, "An empirical examination of entry patterns in local telephone markets," 19 *Journal of Regulatory Economics* 143 (2001); and Donald L. Alexander and Robert M. Feinberg, "Entry in local telecommunications markets," 25 *Review of Industrial Organization* 107 (2004). The authors of these studies note the same limitations of the data noted in our 1999 report, but still conclude that the measure of CLEC activity can be relied on in analyzing CLEC activity.

127. More generally, the widespread entry and expansion of services that compete with those provided by ILECs (but require ILEC cooperation), indicates that the FCC's concerns that ILEC mergers will lead to discrimination that deters entry and expansion of CLECs have not materialized. This experience provides no basis to conclude that this proposed merger would result in technical discrimination that would deter CLEC activity or deployment of other services that compete with those provided by ILECs.

**2. The concerns expressed by the FCC do not apply in today's competitive environment.**

128. We now explain why the "footprint" concerns raised by the FCC in its prior orders are no longer applicable in today's competitive environment. As the FCC recognized in its SBC/Ameritech Order, competition is "the one sure remedy for the incumbent LEC's threat of discrimination.[...] When local markets are open, discrimination in access cannot succeed because others will compete to provide fair access."<sup>145</sup> The rapid changes in the competitive environment for mass market and business customers in recent years reduce the incentive and ability of ILECs to engage in the type of discrimination that was the focus of the FCC's 1999 concerns about the effect of ILEC mergers on discrimination incentives.

129. In contrast to competitive conditions at the time of the FCC's SBC/Ameritech Order, ILECs today have even less ability to engage in technical discrimination without detection. This is because ILECs today face greater facilities-based competition for both business customers, from providers using competitive metropolitan fiber networks, and for mass market customers, from cable firms and wireless carriers. These facilities-based competitors typically need only to interconnect with ILECs without leasing underlying facilities. In contrast,

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145. SBC/Ameritech Merger Order, ¶ 230.

ILEC rivals in 1999 relied to a greater extent on facilities leased from ILECs and thus faced greater potential discrimination.

130. The growth of competition also restricts ILECs' incentives to discriminate because the presence of these rivals limits the ability of ILECs to benefit from discrimination. For example, the growth of local CLEC fiber networks means that customers that face ILEC discrimination frequently can utilize another carrier that does not depend on the ILEC's facilities. As a result, in comparison with 1999, discrimination by an ILEC today is less likely to enable the ILEC to retain customers but instead more frequently will drive customers to rivals' local networks. This, of course, reduces an ILEC's incentive to engage in discrimination.

131. Further, in the prior merger orders, the Commission concluded that it lacked the means to detect adequately discrimination by ILECs. But, as explained in greater detail below, the FCC and state regulators now have a decade of experience with the provisioning of UNEs and interconnection arrangements. Both AT&T and BellSouth are subject to a wide variety of performance metrics designed to detect discriminatory provisioning of UNEs and regulators have several years experience in evaluating ILECs' performance. The improved ability of regulators to detect discrimination reduces ILECs incentive to engage in discriminatory (by increasing the probability that such actions will be punished).

**B. THE PROPOSED TRANSACTION WILL NOT HARM COMPETITION BY REDUCING THE ABILITY OF REGULATORS TO EVALUATE ILEC PERFORMANCE.**

132. In its SBC/Ameritech Order in 1999, the FCC concluded that ILEC mergers can harm competition by reducing the ability of regulators to monitor ILEC performance. The FCC concluded that the SBC/Ameritech merger:

frustrates the ability of the Commission (and state regulators) to implement the local market-opening provisions of the 1996 Act. The merger ... would have an adverse impact on the ability of regulators and competitors to implement the competitive goals of the 1996 Act by deregulatory means.<sup>146</sup>

133. This section shows that there are no substantial “benchmarking” concerns with regard to the AT&T/BellSouth merger. There have been fundamental changes in the telecommunications industry since the SBC/Ameritech merger that greatly reduce concerns that the proposed merger will harm competition by impeding the ability of regulators to monitor ILEC performance.

**1. The increase in competition faced by ILECs reduces potential concerns about the loss of a regulatory benchmark.**

134. Since the FCC expressed “benchmarking” concerns in 1999, competition has increased in nearly all segments of the telecommunications industry and competition has come to play an increasingly important role in constraining ILEC performance in providing wholesale services and unbundled network elements to CLECs and others. Put simply, under competitive circumstances, carriers that fail to provide adequate wholesale service will lose in the marketplace. For example, an ILEC facing intermodal competition that fails to provide adequate wholesale service to a CLEC risks losing subscribers to the intermodal rival. Under these circumstances, intermodal competition rather than regulation provides ILECs with the incentive to provide efficient wholesale services.

135. A regulatory benchmark is of far less competitive significance today than at the time of the SBC/Ameritech transaction when a major objective of the FCC was to “to enforce provisions of the 1996 Act that mandate competitive access to facilities and services.”<sup>147</sup> Many of these goals have been achieved, as reflected in the granting of long distance authority to

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146. See: SBC/Ameritech Order, ¶57, Bell Atlantic/GTE Order, ¶96.

147. SBC/Ameritech Order, ¶ 109.

ILECs in all 50 states. Moreover, the failure of UNE-P as a mass market entry strategy lessens the importance of benchmarks in promoting this form of entry.

**2. Regulators have developed and implemented a variety of measures of ILEC performance since 1999.**

136. Much of the FCC's "benchmarking" concerns in its 1999 SBC/Ameritech Order centered on concerns about regulators' attempts "to open markets to competition under sections 251 and 271 and state law."<sup>148</sup> At the time, the FCC and state regulators were struggling to develop a framework for evaluating ILEC performance in opening their markets to competition including the need to meet unbundling and resale obligations specified by the Telecommunications Act of 1996. These obligations had little precedent and required the development and implementation of a variety of new methods of monitoring ILEC performance.

137. Since that time, regulators have successfully developed and implemented a variety of measures for evaluating ILEC compliance with respect to obligations under the Telecommunications Act. More specifically, the FCC and state regulators, together with ILECs and CLECs, developed a set of performance metrics to ensure that ILECs had complied with interconnection obligations under the Telecommunications Act and state laws.

138. For example, in 2002 the California Public Utilities Commission (CPUC) created a "performance incentive plan" that established an automated system for establishing financial penalties for ILECs that failed to provide adequate service to CLECs in providing interconnection. The CPUC wrote:

We have created a set of procedures for allocating payments by the ILEC when OSS [operations support systems] performance to the CLEC is deficient. In effect, we have set forth a self-executing decision model that applies barrier-identifying criteria to the performance measurements results and charges the ILECs

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148. SBC/Ameritech Order, ¶ 57. See also Bell Atlantic/GTE Order, ¶ 96.

monetary amounts for deficient performance. A self-executing plan is one that requires no further review and no proceedings.<sup>149</sup>

139. The CPUC also monitors a number of additional performance measures used for diagnostic purposes.<sup>150</sup> In total, the CPUC established 44 separate performance metrics to monitor ILEC-CLEC interconnections.<sup>151</sup> To cite a handful of examples:

- ILEC order provisioning is monitored using metrics that include:
  - Average interval between ILEC receipt of an order and when the ILEC commits to a delivery date;
  - Average interval between ILEC receipt of an order and when notice is given that the order is rejected;
- ILEC service provisioning is monitored using metrics that include:
  - Percentage of due dates missed;
  - Average time until order completion;
  - Number of trouble reports generated prior to order completion.
- ILEC network performance is monitored using metrics such as:
  - Percent blocking (calls not completed) on common trunks;
  - Percent blocking on interconnection trunks;
- ILEC performance in providing collocation is monitored using metric such as:
  - Average time to respond to a collocation request;
  - Average time to provide a collocation arrangement.

140. AT&T and other ILECs today report a large number of performance metrics on a routine basis. In its role as an ILEC, AT&T tracks between 35 and 128 performance metrics per

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149. CPUC, “Opinion on the Performance Incentives Plan for Pacific Bell Telephone Company,” March 6, 2002, p. 4.

150. CPUC, “Opinion on the Performance Incentives Plan for Pacific Bell Telephone Company,” March 6, 2002, p. 62.

151. See Appendix J to the CPUC Opinion.

state, for a total of 1,001 state-level performance metrics each month over its 13 state region. These measures are also calculated by local area and CLEC. In total, AT&T reports 2.3 million performance measures on a monthly basis.<sup>152</sup>

**C. THE PROPOSED TRANSACTION RAISES NO CONCERNS ABOUT THE ELIMINATION OF POTENTIAL MASS MARKET COMPETITION.**

141. In its SBC/Ameritech Order in 1999, the FCC concluded that SBC and Ameritech were potential entrants into the provision of mass market services in each other's territories and that the merger eliminated this potential competition.<sup>153</sup>

142. The proposed merger raises no such concerns as BellSouth cannot be considered a significant potential entrant today to the provision of mass market services in the legacy SBC service territory.<sup>154</sup> In addition, as discussed above, AT&T is withdrawing from, not expanding traditional wireline services to mass market consumers in BellSouth's territory. Thus, the proposed transaction does not raise the potential competition concerns that were, in part, the basis of the FCC's concerns in 1999.

143. Moreover, the experience of recent years indicates that an ILEC has no special advantage relative to other CLECs in providing mass market services outside of its service territory. For example, BellSouth does not have a significant customer base in legacy SBC areas and has no significant network assets that can be used to serve mass market customers outside of its service territory. We are unaware of any ILEC that has been commercially successful at providing mass market services outside of its service territory and there is no basis to conclude

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152. Declaration of James S. Kahan, ¶ 54.

153. "The merger eliminates SBC and Ameritech as significant potential participants in the mass market for local exchange and exchange access services in the other's region." SBC/Ameritech Order, ¶ 56. The FCC made a similar conclusion in its Bell Atlantic/GTE Order, ¶ 100.

154. Declaration of Barry L. Boniface, ¶ 35.

that BellSouth would pursue any out-of-region mass market entry strategy, especially in the face of the emergence in recent years of significant competition from VoIP and wireless technologies.

144. Within BellSouth's territory, as discussed above, legacy AT&T had ceased marketing traditional mass market services prior to the SBC/AT&T merger. The FCC has previously concluded that AT&T no longer plays a significant role in the establishment of market prices for mass market services.<sup>155</sup> As discussed in Section V above, AT&T has continued to pursue this strategy since completion of the SBC/AT&T merger.

145. In short, there is no factual basis for any concern that the proposed merger would eliminate "potential competition."

146. In sum, the concerns expressed by the FCC in 1999 regarding the potential harm from mergers of large ILECs are not applicable today. The widespread CLEC entry in recent years shows that the FCC's concerns have not materialized and is consistent with our prior arguments that the FCC's 1999 concerns were based on an unsupported economic theory. The growth of facilities based competition lessens ILECs incentive and ability to discriminate. Changes in industry conditions, including the opening of local markets to competition and the failure of UNE-based strategies of mass market entry have also mitigated concerns that ILEC mergers reduce regulators' ability to devalue ILEC performance.

### **CONCLUSION**

147. We conclude that the proposed transaction will not adversely affect competition for any of the services provided by AT&T and BellSouth. Instead, the proposed transaction will promote competition and benefit consumers by creating a more efficient firm that will be better

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155. See SBC/AT&T Order, ¶ 103, stating that "AT&T ceased being a significant participant" for mass market services, and that "SBC's current and future pricing incentives are based more on likely competition from intermodal competitors and the remaining competitive ILECs."

position to develop and deploy new products and services for business and mass market consumers.

I declare under penalty of perjury that the foregoing is true and correct to the best of my information and belief.

Signature: Dennis W Carlton  
Dennis W. Carlton

Date: 3/29/06

I declare under penalty of perjury that the foregoing is true and correct to the best of my information and belief.

Signature: Hal S. Sider  
Hal S. Sider

Date: March 29, 2006

# Appendix 1

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**EMPLOYMENT**

LEXECON INC., Chicago, Illinois (1977 - present): President, 1997 – 2001, Senior Managing Director, 2003 - present.

UNIVERSITY OF CHICAGO, Graduate School of Business (1984 - present): Professor of Economics.

UNIVERSITY OF CHICAGO, Law School (1980 - 1984): Professor of Economics.

UNIVERSITY OF CHICAGO, Department of Economics: Assistant Professor (1976 - 1979): Associate Professor (1979 - 1980).

MASSACHUSETTS INSTITUTE OF TECHNOLOGY, Cambridge, Massachusetts, Department of Economics (1975 - 1976): Instructor in Economics.

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HARVARD UNIVERSITY, Public Policy Summer Course in Economics (1977): Professor.

BELL TELEPHONE LABORATORIES (Summers 1976, 1977).

JOINT CENTER FOR URBAN STUDIES OF M.I.T. AND HARVARD UNIVERSITY, Cambridge, Massachusetts (1974 - 1975).

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FIELDS OF SPECIALIZATION

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ACADEMIC HONORS AND FELLOWSHIPS

M.I.T., National Scholar Award, 1968

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National Science Foundation Fellowship, 1972 - 1975

Recipient of Post-doctoral Grant from the Lincoln Foundation, 1975

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Alexander Brody Distinguished Lecture, Yeshiva University, 2000

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PROFESSIONAL AFFILIATIONS AND ACTIVITIES

Co-editor, Journal of Law and Economics, 1980 - present

Associate Editor, Regional Science and Urban Economics, 1987 - 1997

Associate Editor, The International Journal of Industrial Organization, 1991 - 1995

Member, American Economics Association, Econometrics Society

National Bureau of Economic Research, Research Associate

Member, Advisory Committee to the Bureau of the Census, 1987 - 1990

Editorial Board, Intellectual Property Fraud Reporter, 1990 - 1995

Consultant on Merger Guidelines to the U.S. Department of Justice, 1991 - 1992

Accreditation Committee, Graduate School of Business, Stanford University, 1995

Visiting Committee, MIT, Department of Economics, 1995 - present

Resident Scholar, Board of Governors of the Federal Reserve System, Summer, 1995

Member, Advisory Board, Economics Research Network, 1996 - present

Member, Steering Committee, Social Science Research Council, Program in Applied Economics, 1997 - 1999

Participant in meetings with Committee of the Federal Reserve on Payment Systems, June 5, 1997

Participant in roundtable discussions on "The Role of Classical Market Power in Joint Venture Analysis," before the Federal Trade Commission, November 19, 1997 and March 17, 1998.

Member, Advisory Board of Antitrust and Regulation Abstracts, Social Science Research Network, 1998 - present

Participant in the Round Table on the Economics of Mergers Between Large ILECS before the Federal Communications Commission, February 5, 1999

Advisory Board, Massachusetts Institute of Technology, Department of Economics, 1999 - present

Chairman, FTC Round Table on Empirical Industrial Organization (September 11, 2001)

Professor, George Mason Institute for Judges, October 2001  
Consultant on Merger Guidelines to the FTC, 2003  
Presidential Appointment to the Antitrust Modernization Commission, March 17, 2004 - present  
Co-Editor, Competition Policy International (CPI), 2004 – present  
Advisory Board, Journal of Competition Law and Economics 2004- present

### BOOKS

Market Behavior Under Uncertainty, Ph.D. Thesis, Massachusetts Institute of Technology (September 1975); Garland Publishing (1984).

Modern Industrial Organization, Scott, Foresman & Co., co-authored with Jeffrey Perloff, first edition (1990), second edition (1994), translated into Chinese, French, Hungarian and Italian; Addison Wesley Longman, third edition (2000), fourth edition (2005).

### RESEARCH PAPERS

"The Equilibrium Analysis of Alternative Housing Allowance Payments," (with Joseph Ferreira) Chapter 6 of Analysis of a Direct Housing Allowance Program, The Joint Center for Urban Studies of M.I.T. and Harvard University, (July 1975).

"Theories of Vertical Integration," presented at Fourth Annual Telecommunications Conference. Appears in a volume of Proceedings of the Fourth Annual Telecommunications Conference, Office of Telecommunications Policy, (April 1976).

"Uncertainty, Production Lags, and Pricing," American Economic Review, (February 1977).

"Selecting Subsidy Strategies for Housing Allowance Programs," (with Joseph Ferreira) Journal of Urban Economics, (July 1977).

"Peak Load Pricing With Stochastic Demand," American Economic Review, (December 1977). (Reprinted in Economic Regulation edited by P.L. Joskow, Edward Elgar Publishing Limited, 1998.)

"The Distribution of Permanent Income," Income Distribution and Economic Inequality, edited by Zvi Griliches, et al. (Halsted Press, 1978).

"Market Behavior with Demand Uncertainty and Price Inflexibility," American Economic Review, (September 1978).

"Why New Firms Locate Where They Do: An Econometric Model," in Studies in Regional Economics, edited by W. Wheaton, (Urban Institute, 1980).

"Vertical Integration--An Overview," in Congressional Record Hearings on the Communications Act of 1978. Bill H.R. 13105, (August 3, 1978).

"Vertical Integration in Competitive Markets Under Uncertainty," Journal of Industrial Economics, (March 1979). Awarded the P.W.S. Memorial Prize for the best essay in the field of Industrial Organization by a scholar under the age of thirty.

- "Valuing Market Benefits and Costs in Related Output and Input Markets," American Economic Review, (September 1979).
- "Contracts, Price Rigidity and Market Equilibrium," Journal of Political Economy, (October 1979).
- "Benefits and Costs of Airline Mergers: A Case Study," (with W. Landes and R. Posner) Bell Journal of Economics, (Spring 1980). (Reprinted in "Air Transport" in Classics In Transport Analysis series, edited by Kenneth Button and Peter Nijkamp, 2001.)
- "The Limitations of Pigouvian Taxes as a Long Run Remedy for Externalities," (with G. Loury) Quarterly Journal of Economics, (November 1980).
- "The Law and Economics of Rights in Valuable Information: A Comment," Journal of Legal Studies, (December 1980).
- "Price Discrimination: Vertical Integration and Divestiture in Natural Resources Markets," (with J. Perloff) Resources and Energy, (March 1981).
- "The Spatial Effects of a Tax on Housing and Land," Regional Science and Urban Economics, (November 1981).
- "Comments on Weicher," Journal of Law and Economics, (December 1981).
- Comment, in Sherwin Rosen ed. Studies in Labor Markets, University of Chicago Press, (1981).
- "Planning and Market Structure," in The Economics of Information and Uncertainty, edited by J.J. McCall, University of Chicago Press, (1982).
- "The Disruptive Effect of Inflation on the Organization of Markets," in Robert Hall, ed. The Economics of Inflation, University of Chicago Press, (1982).
- "A Reexamination of Delivered Pricing," Journal of Law and Economics, (April 1983).
- "Futures Trading, Market Interrelationships, and Industry Structure," American Journal of Agricultural Economics, (May 1983).
- "The Location and Employment Choices of New Firms: An Econometric Model with Discrete and Continuous Endogenous Variables," The Review of Economics and Statistics, (August 1983).
- "The Need for Coordination Among Firms With Special Reference to Network Industries," (with J. M. Klammer) University of Chicago Law Review, (Spring 1983).
- "The Regulation of Insider Trading," (with D. Fischel), Stanford Law Review, (May 1983).
- "Economic Goals and Remedies of the AT&T Modified Final Judgment," (with W. Lavey), Georgetown Law Review, (August 1983).
- "Equilibrium Fluctuations When Price and Delivery Lags Clear the Market," Bell Journal of Economics, (Autumn 1983).

- "Futures Markets: Their Purpose, Their History, Their Growth, Their Successes and Failures," Journal of Futures Markets, (September 1984). (Reprinted in Futures Markets edited by A.G. Malliaris and W.F. Mullady, Edward Elgar Publishing Limited, 1995; and in Classic Futures: Lessons from the Past for the Electronics Age, edited by Lester Telser, Risk Books, 2000.)
- "Energy and Location," Energy Costs, Urban Development, and Housing, Brookings Institution, (1984).
- "The Economics of Gray-Market Imports," (with C. DeMuth), written for the Coalition to Preserve the Integrity of American Trademarks (COPIAT), (May 1985).
- "The Limitation of Pigouvian Taxes As A Long Run Remedy for Externalities: Extension of Results," (with G. Loury) Quarterly Journal of Economics, (August 1986).
- "The Rigidity of Prices," American Economic Review, (September 1986).
- "The Theory and The Facts of How Markets Clear: Is Industrial Organization Valuable for Understanding Macroeconomics?" in Handbook of Industrial Organization, eds. Schmalensee and Willig, (1989).
- "Market Power and Mergers in Durable Good Industries," (with R. Gertner), Journal of Law and Economics, (October 1989).
- "Comments on Vertical Integration and Market Foreclosure," Brookings Papers on Economic Activity, (December 19, 1990).
- Book Review of Tirole's The Theory of Industrial Organization, Journal of Political Economy, (June 1990).
- "The Genesis of Inflation and the Costs of Disinflation: Comment," Journal of Money, Credit & Banking, (August 1991, Part 2).
- "The Theory of Allocation and its Implications for Marketing and Industrial Structure: Why Rationing is Efficient," Journal of Law and Economics, (October 1991).
- "The Economics of Cooperation and Competition in Electronic Services Network Industries," in Economics of Electronic Service Networks, Wildman Steven ed., Praeger Press, (1992).
- "Merger Policy and Market Definition Under the EC Merger Regulation," (with W. D. Bishop). Conference on Antitrust in a Global Economy, Fordham Corporate Law Institute, (1994).
- "The Antitrust Economics of Credit Card Networks," (with A. Frankel) Antitrust Law Journal, (Winter 1995).
- "Economic Organization and Conflict," Journal of Institutional and Theoretical Economics, (March 1995).
- "Antitrust and Higher Education: Was There a Conspiracy to Restrict Financial Aid?" (with G. Bamberger and R. Epstein) The Rand Journal of Economics, (Vol. 26, No. 1, Spring 1995, pp. 131-147).

- "The Competitive Effects of Line-of-business Restrictions in Telecommunications," (with K. Arrow and H. Sider), Managerial and Decision Economics, (Vol. 16, pp. 301-321, 1995). (Reprinted in Deregulating Telecommunications - The Baby Bells Case for Competition, edited by Richard S. Higgins and Paul H. Rubin, John Wiley & Sons Ltd., 1995.)
- "The Antitrust Economics of Credit Card Networks: Reply to Evans and Schmalensee," (with A. Frankel), Antitrust Law Journal, (Spring 1995).
- "Antitrust and Payment Technologies," (with A. Frankel), Review, Federal Reserve Bank of St. Louis (November/December 1995).
- "Antitrust Policy Toward Mergers When Firms Innovate: Should Antitrust Recognize the Doctrine of Innovation Markets?" Testimony before the Federal Trade Commission Hearings on Global and Innovation-based Competition (October, 1995).
- "You Keep on Knocking But You Can't Come In: Evaluating Restrictions on Access to Input Joint Ventures," (with S. Salop), Harvard Journal of Law & Technology, (Volume 9, Summer, 1996). (Reprinted in e-Commerce Antitrust & Trade Practices, Practising Law Institute, 2001.)
- "Comments on Causes and Consequences of Airline Fare Wars," Micro Brookings Papers on Economic Activity, (1996).
- "A Critical Assessment of the Role of Imperfect Competition in Macroeconomics," in Market Behavior and Macro Economic Modeling, Brakman, Van Ees, & Kuipers (eds.), MacMillan Press (1997).
- "Price Rigidity," Business Cycles and Depressions, David Glasner ed., Garland Publishing, Inc., (1997).
- "Communication Among Competitors: Game Theory and Antitrust," (with R. Gertner and A. Rosenfield), George Mason Law Review, (1997). (Reprinted in e-Commerce Antitrust & Trade Practices, Practising Law Institute, 2001.)
- "Comments on Born and Viscusi," Brookings Papers on Economic Activity: Microeconomics, (1998).
- "Antitrust and Higher Education: MIT Financial Aid (1993)" (September 1997) (with G. Bamberger), The Antitrust Revolution, (Oxford University Press, 3rd edition 1999).
- "Market Power and Vertical Restraints in Retailing: An Analysis of FTC v. Toys 'R' Us," (with H. Sider), The Role of the Academic Economist in Litigation Support, edited by Daniel Slottje, North Holland, (1999).
- "The Economics of Religion, Jewish Survival and Jewish Attitudes Toward Competition on Torah Education," (with A. Weiss), Journal of Legal Studies, (2001). (Reprinted in Essential Readings on Jewish Identities, Lifestyles and Beliefs, edited by Stanford M. Lyman, Gordian Knot Books, 2003).
- "A General Analysis of Exclusionary Conduct and Refusal to Deal -- Why Aspen and Kodak are Misguided," Antitrust Law Journal, (2001). (Reprinted in e-Commerce Antitrust & Trade Practices, Practising Law Institute, 2001.)
- "The Lessons from Microsoft," Business Economics, (January 2001).

- "Lessons from Halacha About Competition and Teaching," (with A. Weiss), Center for Business Ethics Social Responsibility, <http://besr.org/library/competition.html>, (March 2001).
- "The Choice of Organizational Form in Gasoline Retailing and The Costs of Laws Limiting that Choice," (with A. Blass), Journal of Law and Economics, (October 2001). (Reprinted in Franchise Contracting and Organization, edited by Francine Lafontaine, Elgar Publishing, (2005).
- "Should The Merger Guidelines Be Scrapped? Introduction to a Debate," in Symposium On The Antitrust Analysis Of Mergers: Merger Guidelines vs. Five Forces, 33 U. WEST L.A. L. REV. (2001).
- "Contracts that Lessen Competition -- What is Section 27 for, and How Has it Been Used?" (with David Goddard), in Mark N. Berry and Lewis T. Evans eds., *Competition Law at the Turn of the Century: A New Zealand Perspective*, Victoria University Press (2003).
- "Free Riding and Sales Strategies for the Internet," (with J. Chevalier), The Journal of Industrial Economics, (December 2001).
- "The Strategic Use of Tying to Preserve and Create Market Power in Evolving Industries," (with M. Waldman), The Rand Journal (Vol. 33, No. 2, Summer 2002).
- Interview, Economists' Roundtable, Antitrust Magazine, (Spring 2003).
- "Airline Networks and Fares," (with G. Bamberger), Handbook of Airline Economics, 2<sup>nd</sup> ed., Darryl Jenkins, ed., McGraw Hill (2003).
- "Intellectual Property, Antitrust and Strategic Behavior," (with R. Gertner), in eds. Adam Jaffee and Joshua Lerner, Innovation Policy and the Economy, Volume 3, MIT Press (2003).
- "The Relevance for Antitrust Policy of Theoretical and Empirical Advances in Industrial Organization," (Fall 2003), George Mason Law Review.
- "The Control of Externalities in Sports Leagues: An Analysis of Restrictions in the National Hockey League," (with A. Frankel and E. Landes), Journal of Political Economy, (February 2004).
- "An Empirical Investigation of the Competitive Effects of Domestic Airline Alliances," (with G. Bamberger and L. Neumann), Journal of Law and Economics, Vol. 47, No. 1, (April 2004, pp. 195-222).
- "Why Barriers to Entry are Barriers to Understanding," American Economic Review, (May 2004).
- "Using Economics to Improve Antitrust Policy," Milton Handler Lecture, Columbia Business Law Review, (June 2004).
- "The Proper Role for Antitrust in an International Setting," (Keynote address: Second Annual Conference of the International Competition Network (ICN), Merida City, Mexico (June 25, 2003), appears as Appendix to "Using Economics to Improve Antitrust Policy", Columbia Business Law Review (June 2004).
- "The Competitive Effects of Fannie Mae," (with D. Gross and R. Stillman) in Housing Matters: Issues in American Housing Policy, Fannie Mae (January 2002, reprinted 2004).

"Econometric Analysis of Telephone Mergers," (with H. Sider) pp. 373-395 in American Bar Association, Econometrics: Legal, Practical, and Technical Issues, (2005).

"How Economics Can Improve Antitrust Doctrine Towards Tie-in Sales," (with M. Waldman), Competition Policy International, (Spring 2005).

Preface to: "Law and Economics of the Mexican Competition Laws," by Francisco Gonzalez de Cossio (2005).

"Mergers," Palgrave Dictionary, (with J. M. Perloff), (forthcoming).

"Predation and the Entry and Exit of Low-Fare Carriers," (with G. Bamberger), in Advances in Airline Economics: Competition Policy and Antitrust, Darin Lee, ed., (forthcoming).

"Transaction Costs, Externalities and "Two-Sided" Payment Markets," (with A. Frankel), Columbia Business Law Review, No. 3, Vol. 2005.

"Antitrust and Regulation," (with R. Picker) in N. Rose ed., Economics of Deregulation, NBER, (forthcoming).

"Why Tie An Essential Good," (with Michael Waldman), in Hahn R. ed., Advances in Economic Theory with Public Policy Implications (tentative title), AEI-Brookings, (July 2005), (forthcoming).

"Theories of Tying and Implications For Antitrust," (with M. Waldman), in W. Collins ed. Issues in Competition Law and Policy, American Bar Association, (forthcoming).

"Barriers to Entry," in W. Collins ed. Issues in Competition Law and Policy, American Bar Association, (forthcoming).

#### UNPUBLISHED PAPERS

"Modeling the Housing Allowance Program," M.A. Thesis, Massachusetts Institute of Technology (September 1974).

"The Cost of Eliminating a Futures Market and The Effect of Inflation on Market Interrelationships," (1984).

"The Empirical Importance of Delivery Lags as an Explanation of Demand," (1984).

"Statistical Supplement to The Antitrust Economics of Credit Card Networks: Reply to Evans and Schmalensee Comment, 63 Antitrust Law Journal 903 (1995)," (with Alan Frankel), (May 1997).

"Competition, Monopoly, and Aftermarkets," (with M. Waldman), Working Paper No. 8086, National Bureau of Economic Research, (January 2001, revised March 2002).

"Product Variety and Demand Uncertainty," (with James D. Dana Jr.), (2004). NBER Working Paper 10594, (2004).

"Tying, Upgrades, And Switching Costs In Durable-Goods Markets," (with Michael Waldman), NBER Working Paper 11407, (2005).

"Antitrust and Not for Profits," (with G. David), mineo (2005).

### EXPERT TESTIMONIAL EXPERIENCE

Testimony of Dennis W. Carlton in Re: "Vertical Integration--An Overview, "Congressional Record Hearings on the Communications Act of 1978: Proceedings before the House on Bill H.R. 13105, August 3, 1978.

Testimony of Dennis W. Carlton in Re: Competitive Effects of the Proposed North Central-Southern Airline Merger: Proceedings before the Civil Aeronautics Board, Docket No. 33136, Exhibit NC/SO-T-7, October 13, 1978 and October 9, 1979 (with William M. Landes and Richard A. Posner).

Testimony of Dennis W. Carlton in Re: McNeilab, Inc.: Proceedings before the United States Department of Justice, Drug Enforcement Administration, Docket No. 78-13, March 13, 1980 and May 1980 (Oral).

Testimony of Dennis W. Carlton in Re: Acco Industries, Inc. v. Kresl Power Equipment, Inc.: In the U.S. Court of Appeals For the Seventh Circuit, Docket No. 80-2024, March 29, 1980.

Deposition, Testimony, and Rebuttal Testimony of Dennis W. Carlton in Re: Ethyl Corporation: Proceedings before the Federal Trade Commission, Docket No. 9128, November 10 & 11, 1980 (Deposition), November 13 & 14, 1980 (Testimony), February 20, 1981 (Rebuttal).

Deposition of Dennis W. Carlton in Re: Independence Tube Corporation v. Copperweld Corporation, Regal Tube Company, The Yoder Company v. David F. Grohne (counter-defendant): In the U.S. District Court for the Northern District of Illinois, Eastern Division, No. 76 C 4201, January 24, 1981.

Affidavit of Dennis W. Carlton in Re: Ellis Banking Corporation, Ellis First National Bank of Bradenton, and Ellis First Security Bank v. Barnett Banks of Florida, Inc., Barnett Bank of Manatee County, and Westside National Bank of Manatee County: In the U.S. District Court for the Middle District of Florida, Tampa Division, No. 81-693-Civ-T-H, July 28, 1981.

Deposition and Economic Report of Dennis W. Carlton in Re: Schneider Industrial Sales and Service Company, William Schneider and Mary Emily Schneider v. Acco Industries, Inc.: In the U.S. District Court for the District of New Jersey, April 19, 1982.

Deposition and Testimony of Dennis W. Carlton in Re: City of Batavia, et al. v. Commonwealth Edison Company: Proceedings before the U.S. District Court, Northern District of Illinois, Eastern Division, No. 76 C 4388, May 17, 18 & 25, 1982 (Deposition), July 22, 1982 (Testimony).

Deposition of Dennis W. Carlton in Re: M. K. Metals Inc., et al. v. National Steel Corporation: In the U.S. District Court for the Northern District of Illinois, Eastern Division, No. 79 C 1661, September 15, 1983.

Declaration and Deposition of Dennis W. Carlton in Re: Carter Hawley Hale Stores, Inc. v. The Limited, Inc., et al.: In the U.S. District Court, Central District California, No. CV 84 22000 AWT (JRX), April 21, 1984 (Declaration), April 23, 1984 (Deposition).

Verified Statements and Testimony of Dennis W. Carlton in Re: Denver & Rio Grande Western Railroad v. Santa Fe Southern Pacific Corporation et al: Proceedings before the Interstate Commerce Commission, Docket No. 30400, August 28, 1984, November 14, 1984, and May 22, 1985, (Statements), and January 30, 1985 and June 19, 1985, (Testimony).

Affidavit of Dennis W. Carlton in Re: United States of America v. Western Electric Company, Inc. and American Telephone and Telegraph Company: In the United States District Court for the District of Columbia, December 19, 1984 (with William M. Landes).

Statement of Carlton in Re: To the National Telecommunications Information Administration (NTIA) Request for Comments in Connection with the Comprehensive Study of the Structure and Regulation of the U.S. Telecommunications Industry, March 29, 1985 (with DeMuth, Landes, and Rosenfield).

Deposition and Affidavit of Dennis W. Carlton in Re: L&W Industries, Inc. v. American Standard, Inc.: In the U.S. District Court, Eastern District of Wisconsin, Civil Action No. 81-C-1409, May 14, 1985 (Deposition), August 30, 1985 (Affidavit).

Testimony of Dennis W. Carlton in Re: E. I. Du Pont De Nemours and Company's Thebaine Import Application: Proceedings before the U.S. Department of Justice, Drug Enforcement Administration, Docket No. 84-51, May 31, 1985.

Testimony of Dennis W. Carlton in Re: Joint Application of Pan American World Airways, Inc. and United Airlines, Inc., Pacific Division Transfer Case: Proceedings before the U.S. Department of Transportation, Docket No. 43065, August 7, 1985 (with William M. Landes and Sam Peltzman).

Deposition of Dennis W. Carlton in Re: General Motors "THM 200" Transmission Litigation: Proceedings before the U.S. District Court, Northern District of Illinois, Eastern Division, No. 79 C 1249, 80 C 2151 and 85 C 4805, July 2, 1986.

Affidavit of Dennis W. Carlton in Re: Norwest Bank Fire Case: Proceedings before the U.S. District Court, Fourth Judicial District, State of Minnesota, Court File No. 83-08122, August 28, 1986.

Affidavit of Dennis W. Carlton in Re: Policy and Rules Concerning Rates for Dominant Carriers: Before the Federal Communications Commission, Washington, D.C., Docket No. 87-313, October 16, 1987.

Deposition of Dennis W. Carlton in Re: Research Institute for Medicine and Chemistry, Inc. v. Wisconsin Alumni Research Foundation: In the U.S. District Court, Western District of Wisconsin, Case No. 85-C-1060-D, October 20 & 21, 1986.

Affidavit and Deposition of Dennis W. Carlton in Re: United States Football League, et al. v. National Football League, et al.: In the U.S. District Court, Southern District of New York, 84 Civ. 7484 (PKL), November 24, 1986 (Affidavit), February 26, 1986 and December 4, 1986 (Deposition).

Verified Statements of Dennis W. Carlton in Re: Coal Trading Corporation, et al. v. The Baltimore and Ohio Railroad Co., et al.: Before the Interstate Commerce Commission, ICC Docket No. 38301S, December 16, 1986 and September 8, 1987.

Testimony of Dennis W. Carlton in Re: The Application of Pacific Bell, a Corporation, for Authority to Increase Certain Intrastate Rates and Charges Applicable to Telephone Services Furnished within the State of California, California Public Utilities Commission, Application No. 85-01-034, December 19, 1986 and January 22 & 28, 1987.

Deposition of Dennis W. Carlton in Re: John H. Torphy v. Touche Ross & Co., et al.: In the Circuit Court Dane County, State of Wisconsin, Case No. 82-CV-4033, August 25, 1987.

Deposition of Dennis W. Carlton in Re: Martin Exploration Management Company, et al. v. Panhandle Eastern Corporation, et al.: In the U.S. District Court for the District of Colorado, Civil Action No. 86-Z-804, May 5, 6 & 18, 1988.

Deposition of Dennis W. Carlton in Re: The Dow Chemical Company v. Halliburton Company and The Dow Chemical Company v. Mississippi Power & Light Company: In the U.S. District Court for the Northern District of Mississippi Greenville Division, No. GC-78-31-GD-D and No. GC-78-32-GD-D, June 16, 1988.

Statements and Testimony of Dennis W. Carlton in Re: Trailer Train Company et al., Approval of Pooling of Car Service With Respect to Flat Cars: Before the Interstate Commerce Commission, Finance Docket No. 27590. (Sub-No. 1), July 7 & 14, 1988 (Statements), July 25 & 26, 1988 (Testimony).

Testimony of Dennis W. Carlton in Re: Pontarelli Limousine, Inc. v. City of Chicago, Finance Docket No. 83-C-6716, September 25 & 26, 1989.

Deposition of Dennis W. Carlton in Re: Great Northern Nekoosa Corporation v. Georgia-Pacific Corporation: Before the United States District Court District of Connecticut, Civ. Action No. B-89-607-WWE, December 28, 1989 and January 15, 1990.

Testimony of Dennis W. Carlton in Re: The Matter of the Physicians and Surgeons Medical Malpractice Insurance Rates of St. Paul Fire & Marine Insurance Company: Before the State of Minnesota Office of Administrative Hearings for the Commissioner of Commerce, O.A.H. Docket No. 0-1004-3412-2, January 1990.

Deposition of Dennis W. Carlton in Re: Dale A. Ervin, et al. v. Amoco Oil Company, et al.: In the District Court, City and County of Denver, State of Colorado, No. 88-CV-11994, September 5, 1990.

Reply Affidavit of Dennis W. Carlton in Re: United States of American v. Western Electric Company Inc. and American Telephone and Telegraph Company: In the United States District Court for the District of Columbia, Civil Action No. 82-0192, January 10, 1991 (with George J. Stigler).

Testimony of Dennis W. Carlton in Re: Westreco, Inc. v. Commissioner of Internal Revenue: In the United States Tax Court, Washington, D.C. 20217, Docket No. 24078-88, January 29, 1991.

- Deposition, Testimony, and Rebuttal Testimony of Dennis W. Carlton in Re: In the Matter of Marathon Oil Company and Phillips Petroleum Company: Before the Department of Revenue, State of Alaska, Case No. 89314, April 23 & 24, 1991 (Deposition), March 28, 1991, June 19, 1991 (Testimony), July 22, 1991 (Rebuttal Testimony), October 3 & 4, 1991 (Oral).
- Deposition of Dennis W. Carlton in Re: Martin Exploration Management Company, et al. v. Panhandle Eastern Pipeline Corporation, et al.: In the U.S. District Court for the District of Colorado, Civil Action No. 91-N-110, February 5, 1992.
- Deposition, Affidavit and Testimony of Dennis W. Carlton in Re: United States of America v. Brown University, et al.: In the U.S. District Court For the Eastern District of Pennsylvania, Civil Action No. 91-CV-3274, February 18 & 19, 1992 (Deposition), April 28, 1992 (Affidavit), July 8 & 9, 1992 (Testimony).
- Deposition of Dennis W. Carlton in Re: United States of America, People of The State of California, et al. v. J. B. Stringfellow, Jr., et al.: In the United States District Court Central District of California, No. CIV 83-2501 JMI, March 10 & 11, 1992.
- Affidavit of Dennis W. Carlton in Re: SCFC ILC, Inc. d/b/a MountainWest Financial v. Visa U.S.A., Inc.: In the U.S. District Court for the District of Utah, Central Division, Civil No. 2:91-cv-047B, June 25, 1992.
- Deposition and Testimony of Dennis W. Carlton in Re: Adcom, Incorporated, Cutrone Communications, Incorporated, Great Southern Communications Incorporated, Nola Communications Incorporated and Conrad Communications, Incorporated v. Nokia Corporation, Nokia-Mobira Oy, Nokia-Mobira, Incorporated, Nokia, Incorporated, Nokia Data Communications and Cue Paging Corporation: In the United States District Court for the Eastern District of Louisiana, Civil Action Number 90-4088, November 3 & 4, 1992 (Deposition), February 9 & 10, 1993 (Testimony).
- Statement, Supplemental Statement and Deposition of Dennis W. Carlton in Re: City of Dillingham, et al. v. Western Pioneer, Inc., et al., and City of Nome v. Western Pioneer, Inc., et al.: In the United States District Court for the District of Alaska, No. A89-014 Civil (Consolidated for Pre-Trial Proceedings with No. N89-004 Civil), November 6, 1992 (Statement and Supplemental Statement), November 24, 1992 (Deposition).
- Verified Statement of Dennis W. Carlton in Re: Kansas City Southern Industries, Inc., The Kansas City Southern Railway Company and K&M Newco, Inc. -- Control -- MidSouth Corporation, MidSouth Rail Corporation, MidLouisiana Rail Corporation, SouthRail Corporation and TennRail Corporation, Before the Interstate Commerce Commission, Finance Docket No. 32167, May 1993.
- Verified Statements and Deposition of Dennis W. Carlton in Re: Union Pacific Corporation, Union Pacific Railroad Company and Missouri Pacific Railroad Company -- Control -- Chicago and North Western Holdings Corp. and Chicago and Northwestern Transportation Company: Before the Interstate Commerce Commission, Finance Docket No. 32133, May 24, 1993, June 21, 1993, and November 24, 1993 (Statements), March 17, 1994 and July 26, 1994 (Deposition).

- Verified Statement of Dennis W. Carlton in Re: Application of TTX Company and Certain Common Carriers by Railroad For Approval of Amendment of Pooling Agreement and Car Contract Extending Their Terms, Before the Interstate Commerce Commission, Finance Docket No. 27590 (Sub-No. 2), November 19, 1993.
- Deposition of Dennis W. Carlton in Re: Merck & Co., Inc. v. Alcon Laboratories, Inc., In the United States District Court for the District of Delaware, No. C.A. 92-691, December 14, 1993.
- Deposition and Affidavit of Dennis W. Carlton in Re: Northwest Airlines, Inc. v. American Airlines, Inc., Before the United States District Court, District of Minnesota, Fourth Division, C.V. No. 4-91-539, February 22 & 23, 1994, May 16 & 17, 1995, and July 8, 1997 (Deposition); and February 20, 1995 and May 9, 1996 (Affidavit).
- Testimony of Dennis W. Carlton in Re: Florida Power & Light Company: Before the Federal Energy Regulatory Commission, Docket Nos. ER93-465-000, ER93-507-000, ER-93-922-000, and EL94-12-000, April 5, 1994, October 19, 1994, and June 22, 1995.
- Testimony of Dennis W. Carlton in Re: The Matter of Touchfax Information Systems Inc. and Landis & Gyr Communications: Before the American Arbitration Association, No. 13-T-133-00260-93, May 10, 1994.
- Affidavit and Declaration of Dennis W. Carlton in Re: United States of America v. Western Electric Company, Inc., and American Telephone and Telegraph Company: Before the United States District Court for the District of Columbia, Civil Action No. 82-0192, February 28, 1994 (Affidavit with Kenneth J. Arrow), May 30, 1995 (Declaration with Kenneth J. Arrow).
- Affidavit and Testimony of Dennis W. Carlton in Re: Leonard R. Kahn v. Emerson Electric Co., a Missouri corporation; Hazeltine Corporation, a Delaware corporation; and Motorola, Inc., a Delaware corporation; John Doe corporations 1-x; and John Does 1-x, individually; Before the United States District Court, for the Eastern District of New York, 92 Civ. 3063 (ADS), October 20, 1994 (Affidavit with Alan S. Frankel), May 22, 1995 (Testimony with Alan S. Frankel).
- Deposition and Testimony of Dennis W. Carlton in Re: Federal Trade Commission v. B.A.T. Industries P.L.C., Brown and Williamson Tobacco Corporation; American Brands, Inc.; and American Tobacco Company, Before the United States District Court, Southern District of New York, C.V. No. 94 Civ. 7849, November 20, 1994 (Deposition), December 14, 1994 (Testimony).
- Affidavit, Supplemental Affidavit and Deposition of Dennis W. Carlton in Re: Weatherford Roofing Company v. Employers National Insurance Company and Employers Casualty Company et al: In the United States District Court for the District of Dallas County, Texas, 116th Judicial District, No. 91-05637, May 5, 1995 (Affidavit), May 9-10 & June 1, 1995 (Deposition), October 20, 1995 (Supplemental Affidavit).
- Affidavit of Dennis W. Carlton in Re: Airline Travel Agency Commission Antitrust Litigation: In the United States District Court for the District of Minnesota, No. 4-95-107, June 14, 1995.
- Declaration of Dennis W. Carlton in Re: Donnelly Corporation v. Gentex Corporation: In the United States District Court for the Western District of Michigan, Southern Division, Case No. 1:93 CV 530, October 20, 1995.
- Testimony of Dennis W. Carlton in Re: Hearings on Global and Innovation-based Competition, before the Federal Trade Commission October 25, 1995.

Report and Deposition of Dennis W. Carlton in Re: Brand Name Prescription Drugs Antitrust Litigation, In the United States District Court for the Northern District of Illinois, Eastern Division, MDL No. 997, November 20, 1995 (Report), December 18 & 19, 1995 (Deposition).

Expert Report and Deposition of Dennis W. Carlton in Re: Johnson Matthey v. General Motors (Antitrust Counterclaim), District Court for the Eastern District of Wisconsin, No. 93 C 0931, January 9, 1996 (Expert Report), February 14, 1996 (Deposition).

Brief of Evidence, Summary of Evidence, and Testimony of Dennis W. Carlton on Behalf of Defendants in Re: Shell (Petroleum Mining) Company Limited and Todd Petroleum Mining Company Limited v. Kapuni Gas Contracts Limited and Natural Gas Corporation of New Zealand Limited, In the High Court of New Zealand, Auckland Registry, Commercial List, CL 5/94, April 2, 1996 (Brief of Evidence), July 18, 1996 (Summary of Evidence), July 18-19, 1996 (Testimony).

Expert Report, Deposition, and Testimony of Dennis W. Carlton in Re: The Matter of the Arbitration Between Sprint Communications Company L.P. and Network 2000 Communications Corporation, Arbitration Case Number 57 181 0013 94, July 15, 1996 (Expert Report with H. Sider), August 12, 1996 (Deposition), September 27, 1996 (Testimony).

Testimony, Prepared Statement and Affidavit of Dennis W. Carlton on behalf of Sacramento Municipal Utility District in Re: Pacific Gas & Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company: Before the Federal Energy Regulatory Commission Technical Conference on Market Power & Transmission Pricing, Docket Nos. ER96-1663-000, EC96-19-000, EL96-48-000, September 12, 1996 (Testimony and Prepared Statement), January 16, 1997 (Affidavit with G. Bamberger).

Declaration of Dennis W. Carlton in Re: United States of America v. International Business Machines: In the United States District Court for the Southern District of New York, Civil Action No. 72-344 (AGS), November 12, 1996.

Expert Report, Affidavit Rebuttal and Deposition of Dennis W. Carlton in Re: Bell Atlantic Corporation and DSC Communications Corporation v. AT&T Corporation and Lucent Technologies Inc., Civil Action No. 5-96CV45, December 4, 1996 (Expert Report with R.E. Olley and D.S. Sibley), January 10, 1997 (Affidavit Rebuttal with R.E. Olley and D.S. Sibley), January 21, 1997 (Deposition).

Affidavit of Dennis W. Carlton in Re: Advanta Corp., Advanta National Bank U.S.A., and Advanta National Bank v. Visa U.S.A., Inc. and Mastercard International, Inc.: In the United States District Court for the Eastern District of Pennsylvania, Civil Action No. 96-CV-7940, January 21, 1997.

Deposition, Testimony, and Surrebuttal Testimony of Dennis W. Carlton in Re: In the Matter of Toys "R" Us, Inc.: In the United States of America Before the Federal Trade Commission, File No. 9278, March 16, 1997 (Deposition), April 16 and 25, 1997 (Testimony), June 3, 1997 (Surrebuttal Testimony).

Deposition of Dennis W. Carlton in Re: In the Matter of Theresa Aguilar, et al vs. Atlantic Richfield Corporation et al: In the Superior Court of the State of California In and For the County of San Diego, File No. 700810, September 30, 1997 (Deposition).

Report of Dennis W. Carlton in Re: Few Ready Mix Concrete Co., v. Transit Mix Concrete & Materials Co., et al: In the United States District Court for the Eastern District of Texas Lufkin Division, No. 9:96-CV-86, October 31, 1997 (with W. J. Lynk).

Verified Statement, Depositions, Verified Reply Statement, and Verified Rebuttal Statement of Dennis W. Carlton in Re: CF Industries, Inc. v. Koch Pipeline Company, L.P.: In the United States of America Before the Department of Transportation Surface Transportation Board, No. 41685, November 7, 1997 (Verified Statement), December 19, 1997 (Deposition), January 8, 1998 (Verified Reply Statement), February 3, 1998 (Deposition), February 20, 1998 (Verified Rebuttal Statement).

Expert Witness Report, Deposition and Affidavits of Dennis W. Carlton in Re: Industrial Silicon Antitrust Litigation: In the United States District Court for the Western District of Pennsylvania, No. 95-2104, January 9, 1998 (Expert Witness Report), February 10-11, 1998 (Deposition), April 8, 1998 (Affidavit), June 29, 1998 (Affidavit).

Declaration, Affidavit (NY), Affidavit (FL) and Second Declaration of Dennis W. Carlton in Re: Applications of WorldCom, Inc. and MCI Communications Corporation for Transfer of Control of MCI Communications Corporation to WorldCom, Inc.: Before the Federal Communications Commission, CC Docket No. 97-211, January 25, 1998 (with H. Sider); Before the New York State Public Service Commission, No. 97-C-1804, February 16, 1998 (Affidavit with H. Sider); Before the Florida Public Service Commission, No. 971375-TP, February 27, 1998 (Affidavit with H. Sider); Before the Federal Communications Commission, CC Docket No. 97-211, March 19, 1998 (Second Declaration with H. Sider).

Expert Report and Deposition of Dennis W. Carlton in Re: Bepco, Inc., et al v. AlliedSignal Inc. and AlliedSignal Truck Brake System Co.: In the United States District Court for the Middle District of North Carolina, Winston-Salem Division, No. 6:96CV00274, February 3, 1998 (Expert Report), March 3, 1998 (Deposition).

Affidavit, Reports, Reply Affidavit, Reply Report, Prepared Statements and Testimony of Dennis W. Carlton in Re: The Merger of SBC Communications Inc. with Ameritech Corporation: Before the Federal Communications Commission, CC Docket No. 98-141, July 20, 1998 (Affidavit and Report), November 12, 1998 (Reply Affidavit and Reply Report), February 5, 1999 (Prepared Statements and Testimony as a Participant in the Round Table on the Economics of Mergers Between Large ILECS), April 13, 1999 (Report to the FCC on Supplemental Analysis of the Katz/Salop Hypothesis).

Report and Supplemental Report of Dennis W. Carlton in Re: Riverside Pipeline Company v. Panhandle Eastern Pipeline Company: In the U.S. District Court for the Western District of Missouri, No. 97-0642-CV-W-4, September 20, 1998 (Report with H. Sider), January 7, 1999 (Supplemental Report).

Statement of Dennis W. Carlton in Re: Enforcement Policy Regarding Unfair Exclusionary Conduct in the Air Transportation Industry: Before the Department of Transportation, Office of the Secretary, Washington, D.C., Docket No. OST-98-3713, September 24, 1998 (with G. Bamberger).

Report and Deposition of Dennis W. Carlton in Re: The Procter & Gamble Company, et al. vs. Amway Corporation, et al: In the U.S. District Court for the Southern District of Texas, Houston Division, January 8, 1999 (Report), February 9, 1999 (Deposition).

Responsive Direct Testimony, Prepared Answering Testimony (OK), Prepared Answering Testimony and Exhibits (FERC) of Dennis W. Carlton for Intervenor Oklahoma Gas and Electric Company in Re: Joint Application of American Electric Power Company, Inc., Public Service Company of Oklahoma and Central and South West Corporation Regarding Proposed Merger: Before the Corporation Commission of the State of Oklahoma, Cause No. PUD 980000444, March 29, 1999 (with G. Bamberger); United States of American Before the Federal Energy Regulatory Commission FERC Docket Nos. ER98-40-000, ER98-2770-000, ER98-2786-000, April 27, 1999 (with G. Bamberger).

Report and Declaration of Dennis W. Carlton in Re: Telnet Communications, Inc., et al. v. WorldCom, Inc., et al.: In the United States District Court for the Southern District of Texas, Houston Division, No. H-98-2020, March 30, 1999 (Report), April 28, 1999 (Declaration).

Expert Report, Deposition and Supplemental Report of Dennis W. Carlton in Re: United States of America vs. American Society of Composers, Authors and Publishers in the Matter of the Application of Turner Broadcasting Systems Inc. for the Determination of Reasonable License Fees: Before the United States District Court, Southern District of New York, Civ. 13-95 (WCC) (Referred to Magistrate Judge Dolinger), April 15, 1999 (Expert Report), July 28-29 and August 5, 1999 (Deposition), December 16, 1999 (Supplemental Report).

Declaration, Deposition and Reply Declaration of Dennis W. Carlton in Re: Visa Check/MasterMoney Antitrust Litigation: Before the United States District Court, Eastern District of New York, No. CV 96-5238 (JB) RLM), April 15, 1999 (Declaration), May 25, 1999 and June 1, 1999 (Deposition), August 1, 1999 (Reply Declaration).

Report and Deposition of Dennis W. Carlton in Re: Zeneca Limited, Zeneca Holdings Inc., and Zeneca Inc. v. Rhone-Poulenc Inc. and Rhone-Poulenc AG Company: In the United States District Court for the District of Delaware, No. 97-652-GMS, May 17, 1999 (Report), June 16, 1999 (Deposition).

Affidavit and Reply Affidavit of Dennis W. Carlton in Re: Andersen Consulting Business Unit Member Firms v. Arthur Andersen Business Unit Member Firms and Andersen Worldwide Societe Cooperative: Before the International Court of Arbitration of the International Chamber of Commerce, No. 9797/CK, June 2, 1999 (Affidavit), September 13, 1999 (Reply Affidavit).

Affidavit, Report, Rebuttal Report, Reply Report, Rebuttal Report and Testimony of Dennis W. Carlton in Re: The Commissioner of Competition and Superior Propane Inc. and ICG Propane Inc.: Before The Competition Tribunal, No. CT-98/2, August 17, 1999 (Affidavit and Report), September 14, 1999 (Rebuttal Report with G. Bamberger), September 19, 1999 (Reply Report with G. Bamberger), September 27, 1999 (Rebuttal Report to Professor Michael Ward with G. Bamberger), December 13-14, 1999 (Testimony with G. Bamberger).

Declaration of Dennis W. Carlton in Re: Merger of Qwest Communications International Inc. and U S WEST, Inc.: Before the Federal Communications Commission, CC Docket No. 99-272, October 18, 1999 (with Hal Sider).

Prepared Direct Testimony, Deposition and Cross-Examination of Dr. Dennis W. Carlton on behalf of Sierra Pacific Power Company in Re: United States of America Before the Federal Energy Regulatory Commission: Docket Nos. ER99-28-001, ER99-28-003, EL99-38-002 and ER99-945-002, November 17, 1999 (Prepared Direct Testimony), January 10, 2000 (Deposition), April 26 and May 1, 2000 (Cross-Examination).

Expert Report and Deposition of Dennis W. Carlton in Re: United States of America v. Northwest Airlines Corporation and Continental Airlines, Inc.: In the United States District Court for the Eastern District of Michigan, Southern Division, Civil Action No. 98-74611, January 27, 2000 (Expert Report), June 7, 2000 (Deposition).

Declaration and Ex Parte Declaration of Dennis W. Carlton in Re: Joint Applications of MCI WorldCom, Inc., and Sprint Corporation for Consent to Transfer Control: Before the Federal Communications Commission, CC Docket No. 99-333, February 18, 2000 (Declaration with H. Sider), May 10, 2000 (Ex Parte Declaration with H. Sider).

Testimony, Rebuttal Testimony and Cross-Examination of Dennis W. Carlton on behalf of Sacramento Municipal Utility District in Re: Application of Pacific Gas and Electric Company to Market Value Hydroelectric Generating Plants and Related Assets Pursuant to Public Utilities Code Sections 367(b) and 851: Before the Public Utilities Commission of the State of California, application No. 99-09-053, March 2, 2000 (Testimony), March 16, 2000 (Rebuttal Testimony), May 9, 2000 (Cross-Examination).

Affidavit, Deposition and Reply Affidavit of Dennis W. Carlton in Re: Gregory F. Daniel, M.D., et al., v. American Board of Emergency Medicine, et al: In the United States District Court for the Western District of New York, Civil Action No. 90-CV-1086A, March 3, 2000 (Affidavit), April 17 and 18, 2000 (Deposition), July 12, 2000 (Reply Affidavit).

Expert Report, Reply Expert Report, Deposition and Supplemental Report of Dennis W. Carlton in Re: CSX Transportation, Inc. V. Qwest Communications International, Inc.: In the United States District Court for the Middle District of Florida, Jacksonville Division, Civil Action No. 99-412-CIV-J-21C, July 19, 2000 (Expert Report), October 11, 2000 (Reply Expert Report), January 10-11, 2001 (Deposition), July 18, 2001 (Supplemental Report).

Reply Declaration of Dennis W. Carlton in Re: Joint Application of Northpoint Communications and Verizon Communications for Authority to Transfer Control of Blanket Authorization to Provide Domestic Interstate Telecommunications Services as a Non-Dominant Carrier: Before the Federal Communications Commission, Washington DC, Docket No. 00-157, October 17, 2000 (Reply Declaration with H. Sider).

Declaration and Reply Declaration of Dennis W. Carlton in Re: In the Matter of Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities: Before the Federal Communications Commission, Washington DC, Docket No. 00-195, December 1, 2000 (Declaration with K. Arrow and G. Becker), January 10, 2001 (Reply Declaration with K. Arrow and G. Becker).

Report, Rebuttal Report, Deposition, Testimony, and Supplemental Report of Dennis W. Carlton in Re: Rambus Inc. v. Infineon Technologies AG, Infineon Technologies North America Corp., Infineon Technologies, Inc., Infineon Technologies Holding North America Corp., and Infineon Technologies Corp.: In the United States District Court for the Eastern District of Virginia, Richmond Division, Civil Action No. 3:00CV524, December 20, 2000 (Report), January 19, 2001 (Rebuttal Report), February 6, 2001 (Deposition), May 3, 2001 (Testimony), February 13, 2004 (Supplemental Report).

Reports, Rebuttal Reports, Deposition and Declaration of Dennis W. Carlton in Re: Micron Technology, Inc. v. Rambus Inc.: In the United States District Court for the District of Delaware, Civil Action No. 00-792, March 28, 2001 (Report), April 13, 2001 (Rebuttal Report), April 18, 2001 (Deposition), and August 17, 2001 (Report), September 17, 2001 (Rebuttal Report), Declaration (October 1, 2001).

Expert Report, Deposition and Testimony of Dennis W. Carlton in Re: Amgen Inc. v. Ortho Pharmaceutical Corp.: Endispute Arbitration, Chicago, Illinois, August 31, 2001 (Expert Report), November 27-28, 2001 (Deposition), May 9-10, 2002 (Testimony).

Testimony of Dennis W. Carlton in Re: Empirical Industrial Organization Roundtable: Before the Federal Trade Commission, Matter No. P015602 (September 11, 2001).

Expert Report of Dennis W. Carlton in Re: Artemio Del Serrone, et al. v. Philip Morris Companies, Inc., et al.: In the Circuit Court for the County of Wayne, State of Michigan, No. 00-004035 CZ, December 19, 2001.

Expert Report and Deposition of Dennis W. Carlton in Re: Cigarette Price-Fixing Litigation and related cases, Holiday Wholesale Grocery Company, et al. v. Philip Morris Incorporated, et al.: In the United States District Court for the Northern District of Georgia, Atlanta Division, No. 1:00-CV-0447-JOF, MDL No. 1342, December 19, 2001 (Expert Report), January 23, 2002 (Deposition).

Expert Report and Deposition of Dennis W. Carlton in Re: Flat Glass Antitrust Litigation: In the United States District Court for the Western District of Pennsylvania, No. 97-550, MDL NO. 1200, December 20, 2001 (Expert Report), February 4-6, 2002 (Deposition).

Expert Report, Supplemental Expert Report, and Deposition of Dennis W. Carlton in Re: Symbol Technologies et al v. Lemelson Medical et al and Cognex Corporation v. Lemelson Medical et al: In the United States District Court, District of Nevada, CV-S-01-701-PMP (RJJ) and CV-S-01-702-PMP (RJJ), December 14, 2001 (Expert Report), May 7, 2002 (Supplemental Expert Report), October 3, 2002 (Deposition).

Declaration and Reply Declaration of Dennis W. Carlton in Re: Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services: Before the Federal Communications Commission, Washington DC, CC Docket No. 01-337, FCC 01-360, March 1, 2002 (Declaration with H. Sider), April 22, 2002 (Reply Declaration with H. Sider and G. Bamberger).

Declaration, Deposition, Reply Declaration, and Preliminary Injunction Hearing Testimony of Dennis W. Carlton in Re: Sun Microsystems Inc. v. Microsoft Corporation: In the United States District Court, Northern District of California, San Jose Division, Civil Action No. C 02-01150 RMW (PVT), March 8, 2002 (Declaration), June 27, 2002 (Deposition), August 9, 2002 (Reply Declaration); In the United States District Court for the District of Maryland, Northern Division, MDL No. 1332, December 4, 2002 (Preliminary Injunction Hearing Testimony).

Declaration of Dennis W. Carlton in Re: In the Matter of Applications for Consent to the Transfer of Control of Licenses, Comcast Corporation and AT&T Corp., Transferors, to AT&T Comcast Corporation, Transferee: Before the Federal Communications Commission, Washington, D.C., MB Docket No. 02-70, April 26, 2002

Declaration of Dennis W. Carlton In Re Shirley Robinson, et al., v. Bell Atlantic Corporation d/b/a Verizon Communications, et al., United States District Court Eastern District of Kentucky, Lexington Division, Case No. 01-98, August 30, 2002 (with R. Gertner).

Expert Report and Deposition of Dennis W. Carlton in Re: Duramed Pharmaceuticals, Inc. v. Wyeth-Ayerst Laboratories, Inc.: In the United States District Court, Southern District of Ohio, Western Division at Cincinnati, Civil Action No. C-1-00-735, August 19, 2002 (Expert Report), September 24, 2002 (Deposition).

Affidavit of Dennis W. Carlton in Re: USG Corporation, a Delaware Corporation, et al. In the United States Bankruptcy Court for the District of Delaware, Case No. 01-2094 (RJN), August 20, 2002 (Affidavit).

Expert Report, Expert Rebuttal Report, and Deposition of Dennis W. Carlton in Re: Sarah Futch Hall, d/b/a Travel Specialist, et al., on behalf of themselves and all others similarly situated v. United Airlines, Inc., et al.: In the United States District Court for the Eastern District of North Carolina Southern Division, No. 7:00-CV-123-BR(1), October 4, 2002 (Expert Report), November 13, 2002 (Expert Rebuttal Report), November 21, 2002 (Deposition).

Initial Report and Deposition of Dennis W. Carlton in Re: Sunrise International Leasing Corp., v. Sun Microsystems Inc.: In the United States District Court for the District of Minnesota, Civil Action No. 01-CV-1057 (JMR/FLN), March 27, 2003 (Initial Report with H. Sider), July 30, 2003 (Discovery Deposition).

Declaration and Reply Declaration of Dennis W. Carlton Before the Federal Communications Commission, Washington DC, in Re: Matter of Section 272(f) (1) Sunset of the BOC Separate Affiliate and Related Requirements, 2000 Biennial Regulatory Review Separate Affiliate Requirements of Section 64.1903 of the Commission's Rules, WC Docket No. 02-112, CC Docket No. 00-175, June 30, 2003 (Declaration with H. Sider and A. Shampine), July 28, 2003 (Reply Declaration with H. Sider and A. Shampine).

Economic Analysis, Response and Economic Analysis of Dennis W. Carlton, "Economic Analysis of the News Corporation/DIRECTV Transaction," submitted to the Federal Communications Commission, MB Docket No. 03-124, July 1, 2003 (Economic Analysis with J. Halpern and G. Bamberger); September 8, 2003 (Response with J. Halpern and G. Bamberger); October 2, 2003 (Economic Analysis to DOJ with J. Halpern and G. Bamberger).

Supplemental Declarations of Dennis W. Carlton in Re: Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services: Before the Federal Communications Commission, Washington DC, CC Docket No. 01-337, FCC 01-360, July 11, 2003 (with H. Sider), September 3, 2003 (with H. Sider).

Expert Report and Deposition of Dennis W. Carlton In Re: D. Lamar DeLoach, et al. v. Philip Morris Companies, Inc., et al. (R.J. Reynolds Tobacco Co.), In the United States District Court for the Middle District of North Carolina, Greensboro Division, Case No. 00-CV-1235, October 2, 2003 (Expert Report), October 30, 2003 (Deposition).

Report of Dennis W. Carlton on behalf of Verizon, November 18, 2003 (with K. Arrow, G. Becker, and R. Solow).

Report and Deposition of Dennis W. Carlton In Re: Francis Ferko and Russell Vaughn as Shareholders of Speedway Motorsports, Inc. v. (NASCAR) National Association for Stock Car Auto Racing, Inc., International Speedway Corporation, and Speedway Motorsports, Inc.: In the United States District Court Eastern District of Texas Sherman Division, Case No. 4:02cv50, Honorable Richard A. Schell, December 15, 2003 (Report), January 21-22, 2004 (Deposition).

Declaration, Deposition, and Rebuttal Declaration of Dennis W. Carlton In Re: CSC Holdings, Inc. v. Yankees Entertainment and Sports Network, LLC., before the American Arbitration Association, Arbitration Proceeding, Case No 13 181 02839 03, January 23, 2004 (Declaration), February 5, 2004 (Deposition), February 24, 2004 (Rebuttal Declaration).

Expert Report, Deposition, Expert Report, Deposition and Testimony of Dennis W. Carlton In Re: Jamsports and Entertainment, LLC v. Paradama Productions, Inc., d/b/a AMA Pro Racing, Clear Channel Communications, Inc., SFX Entertainment, Inc., d/b/a Clear Channel Entertainment SFX Motor Sports, Inc., d/b/a Clear Channel Entertainment-Motor Sports, In the United States District Court for the Northern District of Illinois Eastern Division, Case No. 02 C 2298, March 8, 2004 (Expert Report), April 19 and 20, 2004 (Deposition), September 28, 2004 (Expert Report), October 4, 2004 (Deposition), March 11, 14, 2005 (Trial Testimony).

Affidavit in Reply, Second Affidavit, and Testimony of Dennis W. Carlton In Re: The Matter of an Appeal from Determinations of the Commerce Commission Between Air New Zealand Limited Between Qantas Airways Limited and The Commerce Commission, In the High Court of New Zealand Auckland Registry Commercial List Under The Commerce Act 1986, CIV 2003 404 6590, June 7, 2004 (Affidavit), July 6, 2004 (Second Affidavit), July 13-16, 2004 (Testimony).

Expert Report and Deposition of Dennis W. Carlton in Re: J.B.D.L. Corp. d/b/a Beckett Apothecary, et al., v. Wyeth-Ayerst Laboratories, Inc., et al., Civil Action No. C-1-01-704. CVS Meridian, Inc., and Rite Aid Corp., v. Wyeth, Civil Action No. C-1-03-781, in the United States District Court for the Southern District of Ohio Western Division, July 7, 2004 (Expert Report), September 3, 2004 (Deposition).

Declaration of Dennis W. Carlton on behalf of Bellsouth Telecommunications, Inc., in the matter of AT&T Corp., v. Bellsouth Telecommunications, Inc., before the Federal Communications Commission, Washington, DC 20554, July 20, 2004 (with H. Sider).

Expert Report, Sur-Reply Expert Report, Deposition, Affidavit and Supplemental Report of Dennis W. Carlton in Re: Flat Glass Antitrust Litigation: In the United States District Court for the Western District of Pennsylvania, Master Docket MISC No. 97-550, relates to Jeld-Wen, Inc. Docket No. 2-99-875, July 6, 2004 (Expert Report), September 9, 2004 (Sur-Reply Expert Report), November 1-2, 2004 (Deposition), July 20, 2005 (Affidavit), August 16, 2005 (Supplemental Report).

Expert Report, Declaration and Deposition of Dennis W. Carlton (T-Mobile, Sprint PCS, AT&T Wireless, Cingular, Verizon Wireless Reports) in Re: Wireless Telephone Services Antitrust Litigation: In the United States District Court Southern District of New York, 02 Civ. 2637, December 20, 2004 (Expert Report), February 9, 2005 (Deposition).

Declaration, Testimony, Reply Declaration/Rebuttal, Joint Applicants' Statement, Ex Parte, Rebuttal Testimony and Rejoinder Testimony of Dennis W. Carlton in Re: In the Matter of the Proposed Merger of AT&T Corp.,(AT&T) and SBC Communications Inc. (SBC), Before the FCC, February 21, 2005\_(Declaration with H. Sider); Before the New Jersey Public Utility Commission, May 4, 2005 (Testimony with H. Sider); Before the FCC, May 9, 2005 (Reply Declaration/Rebuttal with H. Sider); Before the Pennsylvania Utility Commission, May 12, 2005 (Joint Applicants' Statement with H. Sider); Before the FCC, June 28, 2005 (Ex Parte with H. Sider); Before the Pennsylvania Public Utility Commission, July 15, 2005 (Rebuttal Testimony with H. Sider); Before the Pennsylvania Public Utility Commission, August 5, 2005 (Rejoinder Testimony with H. Sider).

Expert Report of Dennis W. Carlton in Re: In the matter of Echostar Satellite, L.L.C., v. Fox Television Holdings, Inc., Fox/UTV Holdings, Inc., News Corporation: Before the American Arbitration Association, Case No. 71 472 E 00690 04, March 2, 2005 (with G. Bamberger).

Declaration, Reply Declaration, Proprietary Report and Redacted Reports of Dennis W. Carlton in Re: In the matter of Verizon Communications Inc., and MCI, Inc., Applications for Approval of Transfer of Control, Before the FCC (Federal Communications Commission), Washington, DC 20554, WC Docket No. 05-75, March 10, 2005 (Declaration with G. Bamberger and A. Shampine), May 24, 2005 (Reply Declaration with A. Shampine), August 5, 2005 (Proprietary and Redacted Report with G. Bamberger and A. Shampine), September 9, 2005 (Redacted Report with G. Bamberger and A. Shampine).

Expert Report, Deposition, Affidavit, and Supplemental Report of Dennis W. Carlton in Re: Celanese Ltd., et al. v. JO Tankers AS, et al, April 8, 2005 (Expert Report); and May 6, 2005 (Deposition); June 10, 2005 (Affidavit); October 10, 2005 (Supplemental Report).

Affidavit of Dennis W. Carlton in Re: In the matter of Beatrice C. Romero vs. Philip Morris Price Fixing Allegations: In the United States First District Court State of New Mexico County of Rio Arriba, April 15, 2005.

Deposition, Expert Reports, Written Direct Examination, Deposition and Trial Testimony of Dennis W. Carlton in Re: United States of America v. Philip Morris USA Inc. (f/k/a Philip Morris Incorporated), et al., In the United States Court for the District of Columbia, Civil Action No. 99-CV- 2496 (GK), September 10, 2002 (Deposition); April 29, 2005 (Expert Report); May 3, 2005 (Written District Examination); May 10, 2002 (Expert Report); May 23, 2005 (Written Direct Examination); May 23, 2005 (Deposition), June 2, 2005 (Trial Testimony).

Declaration of Dennis W. Carlton in Re: Covad Communications, et.al. v. Bell Atlantic, et. al., Civil Action No.:1:99-CV-01046, June 10, 2005 (Declaration).

Deposition of Dennis W. Carlton in Re: 2003 NPM Adjustment Proceeding Master Settlement Agreement in Re: 2003 NPM Adjustment Proceeding pursuant to Master Settlement Agreement, November 22, 2005 (Deposition), October 10, 2005 (Expert Submission), January 30, 2006 (Expert Final Submission).

Expert Report and Deposition of Dennis W. Carlton in Re: Fresh Del Monte Pineapples Antitrust Litigation In the United States District Court for the Southern District of New York, Civil Action No. 03-CV-10230 (RMB), February 3, 2006 (Expert Report); February 22, 2006 (Deposition).

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**EDUCATION**

Ph.D., UNIVERSITY OF WISCONSIN, Madison, Wisconsin: Economics, 1980.

M.A., UNIVERSITY OF WISCONSIN, Madison, Wisconsin: Economics, 1978.

B.A., UNIVERSITY OF ILLINOIS, Urbana, Illinois: Economics, 1976.

**EMPLOYMENT**

LEXECON, Chicago, Illinois (October 1985 - present): 1985-90: Economist; 1990-1999:  
Vice President; 1999-current: Senior Vice President.

U.S. COMMISSION ON CIVIL RIGHTS, Washington, D.C., (August 1984 - October  
1985): Co-Director: Project on Minority Income Trends.

OFFICE OF POLICY: U.S. DEPARTMENT OF LABOR, Washington, D.C., (May 1982 -  
August 1984): Economist.

PRESIDENT'S TASK FORCE ON FOOD ASSISTANCE (on leave from U.S. Department  
of Labor), Washington, D.C., (September 1983 - February 1984): Research  
Associate.

OFFICE OF RESEARCH AND EVALUATION; BUREAU OF LABOR STATISTICS,  
Washington, D.C., (September 1980 - May 1982): Economist.

UNIVERSITY OF WISCONSIN, Madison, Wisconsin (1978 - 79): Teaching Assistant.

UNIVERSITY OF WISCONSIN, Madison, Wisconsin (1976 - 78): Science Writer.

## FIELDS OF SPECIALIZATION

Applied Microeconomics  
Econometrics  
Industrial Organization  
Telecommunications  
Labor Economics

## ARTICLES

- "Have Mergers of Large Local Exchange Carriers Led to Discrimination Against Rivals? An Empirical Investigation" July 2002 in Econometrics: Legal, Practical and Technical Issues, American Bar Association Section on Antitrust Law (2005) (with Dennis Carlton and Tom Steward).
- "Recent Developments in U.S. Antitrust Enforcement," The United States Antitrust Review, October 1999 (with Gustavo Bamberger).
- "Market Power and Vertical Restraints in Retailing: An Analysis of FTC v. Toys 'R' Us," in The Role of the Academic Economist in Litigation Support, edited by Daniel Slotje (1999), with Dennis Carlton.
- "The Competitive Effects of Line-of-Business Restrictions in Telecommunications," Managerial and Decision Economics (1995), with Kenneth Arrow and Dennis Carlton. (Reprinted in R. Higgins and P. Rubin, eds., Deregulating Telecommunications: The Baby Bells' Case for Deregulation, Wiley Series in Managerial Economics, 1995.)
- "Applications of Economic Theory and Econometric Methods to Merger Review in the United States," (paper presented to European Commission Merger Task Force, 1992), with A. Rosenfield and W. Bishop.
- "Unemployment Incidence and Duration: 1968-1982," American Economic Review (June 1985).
- "The Pay Gap and Occupational Segregation: Implications for Comparable Worth," Proceedings of the Industrial Relations Research Association (1985), with June O'Neill.
- "Work-Related Accidents and the Production Process," Journal of Human Resources (Winter 1985).
- "Labor Force Participation and the Relative Earnings of Black and White Males: 1940-80," with Andy Sparks, (paper presented at the World Congress of the Econometric Society, 1985).

"Comment on McIntyre: Estimating Long-Term Labor Market Flows from CPS Data,"  
Proceedings: Conference on Applications of Gross Flow Data, U.S. Bureau of the  
Census (1985).

"The Changing Makeup of the Military and the Effect on Labor Force Data," Monthly Labor  
Review (July 1984), with Cheryl Cole.

"Accuracy of Response in Labor Market Surveys: Evidence and Implications," Journal of  
Labor Economics (October 1983), with Wesley Mellow.

"Safety and Productivity in Underground Coal Mining," Review of Economics and Statistics  
(May 1983).

"Economic Incentives and Safety Regulation," American Economist (Summer 1983).

"Consumers and Product Safety: Market Processes and Imperfections," Policy Studies  
Journal (February 1983), with Eugene Smolensky.

### REPORTS

The Economic Progress of Black Men in America, U.S. Commission on Civil Rights (1986).

Economic Status of Americans of Eastern and Southern European Ancestry, U.S.  
Commission on Civil Rights (1986).

Report of the President's Task Force on Food Assistance, Curran Press, Alexandria, Virginia  
(1984).

### MISCELLANEOUS

University-Industry Dissertation Fellowship, University of Wisconsin, 1979-80.

#### Referee for:

Journal of Human Resources  
Journal of Industrial Economics  
Journal of Labor Economics  
Journal of Law and Economics  
Journal of Legal Studies

National Commission on Employment Policy

National Science Foundation  
Policy Studies Journal  
Review of Economics and Statistics  
Social Science Research Council  
U.S. Department of Health and Human Services  
Antitrust Law Journal

## TESTIMONIAL EXPERIENCE

In the matter of Arbitration of Nextel Partners, Inc. and Nextel Partners Operating Corp., against Nextel Communications, Inc. and Nextel WIP Corporation, International Institute for Conflict Prevention and Resolution, CPR No. G-05-33H. Declaration, (August 8, 2005), Supplemental Declaration (August 22, 2005), on behalf of Nextel Partners, Inc. and Nextel Partners Operating Corp.

Joint Application of SBC Communications Inc., AT&T Corporation, and its Certified Pennsylvania Subsidiaries, AT&T Communications of Pennsylvania, LLC, TCG Pittsburgh, and TCG Delaware Valley, Inc., for Approval of Merger, Pennsylvania Public Utility Commission Docket No. A-311163F0006, A-310213F0008, A-310258F0005. Direct Testimony (May 11, 2005), Rebuttal Testimony (July 15, 2005), Rejoinder Testimony (July 18, 2005), on behalf of SBC and AT&T, (with Dennis Carlton).

In the Matter of Proposed Merger of SBC Communications and AT&T Corp., New Jersey Board of Public Utilities. Direct Testimony (May 4, 2005), Rebuttal Testimony (June 5, 2005), on behalf of SBC and AT&T, (with Dennis Carlton).

In the Matter of SBC Communications Inc. and AT&T Corp., Application for Approval of Transfer of Control, Federal Communications Commission, WC Docket No. 05-65. Declaration (February 21, 2005), Reply Declaration (May 10, 2005), Ex Parte Presentations (June 28, 2005, July 6-7, 2005, and July 18, 2005), on behalf of SBC and AT&T, (with Dennis Carlton).

In the Matter of AT&T Corp. v. BellSouth Telecommunications, Inc., Federal Communications Commission, File No. EB-04-MD-010. Declaration (July 20, 2004), on behalf of BellSouth Telecommunications, Inc., (with Dennis Carlton).

FoodComm International v. Patrick James Barry et al., United States District Court for the Northern District of Illinois. Expert Report (December 2003), Deposition (January 28, 2004), on behalf of FoodComm International, (with David Gross).

In the Matter of Section 272(f)(1) Sunset of the BOC Separate Affiliate and Related Requirements, Federal Communications Commission, WC Docket No. 02-112 and CC Docket 00-175, 2000 Biennial Regulatory Review of Separate Affiliate Requirements of Section 64.1903 of the Commission's Rules. Declaration (June 30, 2003), Reply Declaration (July 28, 2003), on behalf of Qwest, Verizon and SBC, (with Dennis Carlton and Allan Shampine).

Report to the Civil Rights Division of the U.S. Department of Justice, Racial Differences in Citations for Traffic Violations in Cleveland, Ohio, (June 27, 2003) on behalf of the U.S. Department of Justice, (with David Gross).

Sunrise International Leasing Corporation v. Sun Microsystems, Inc., United States District Court for the District of Minnesota, No. 01-CV-1057 (JMR/FLN). Affidavit (January 2003, relating to discovery issues), Affidavit (March 2003, relating to damage issues, with Dennis Carlton), on behalf of Sun Microsystems.

Mesler v. Prudential Insurance, et al., Circuit Court of Cook County, Illinois, No. 99 L 37. Expert Report (November 2002), Deposition Testimony (January 30, 2003 and March 6, 2003), on behalf of Prudential Insurance, et al.

MHC Financing Limited Partnership v. City of San Rafael, United States District Court for The Northern District of California. Expert Report (September 13, 2002), Supplemental Report (September 30, 2002), on behalf of MHC, (with Daniel R. Fischel).

In the Matter of Inquiry Concerning High-Speed Access to Internet over Cable and Other Facilities, Federal Communications Commission, Docket GN No. 00-185. Joint Declaration (May 2002), on behalf of Verizon, (with K. Arrow, G. Becker, D. Carlton, R. Gertner, D. Fischel, J. Kalt, and G. Bamberger).

In the Matter of Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services, Federal Communications Commission, CC Docket No. 01-337, FCC 01-360. Declaration (March 2002), (with Dennis Carlton), (May 2002, and July 2003), on behalf of Verizon, (with Dennis Carlton and Gustavo Bamberger).

White-Janes v. Chicago Board of Education, U.S. District Court for the Northern District of Illinois, Eastern Division, CA No. 00C-6128. Expert Report (March 2002), Supplemental Report (April 2002), Deposition Testimony (May 2002), and Supplemental Report (November 2002), on behalf of White-Janes.

Dean Foods, Kraft Foods, Ralston Purina Company, Nabisco, Inc. and McKee Foods v. Eastman Chemical, et al., United States District Court, Northern District of California, San Francisco Branch. Declaration (February 2002), Reply Declaration (May 2002), Supplemental Declaration (June 2002), on behalf of Dean Foods, et al.

Forest Laboratories, Inc. v. G.D. Searle and Co., U.S. District Court for the Northern District of Illinois, Eastern Division, CA No. 98C-5170. Expert Report (April 2001), on behalf of Forest Laboratories, (with David Gross).

In the Matter of Auction Houses Antitrust Litigation. United States District Court Southern District of New York, Master File No. 00 Civ 0648 (LAK). Declaration (February 2001), on behalf of Sotheby's Holdings Inc., (with William Landes).

In the Matter of Joint Application of Northpoint Communications and Verizon Communications for Authority to Transfer Control of Blanket Authorization to Provide Domestic Interstate Telecommunications Services as a Non-Dominant Carrier, Federal Communications Commission, CC Docket No. 00-157. Reply Declaration (October 2000), on behalf of Verizon and Northpoint, (with Dennis Carlton).

Gray et. al. v. Monarch Luggage Company, Inc., 99 C 04345. Expert Report (August 2000), on behalf of Howard Cassandra Gray.

Erickson v. Alpha Therapeutic, et. al., USDC for the Northern District of Illinois Eastern Division - 99C 0426. Expert Report (July 2000), on behalf of Alpha Therapeutic, et. al.

Vitamin Antitrust Litigation, United States District Court for the District of Columbia, MDL No. 1285. Expert Report (June 2000) (with William M. Landes relating to discovery issues), Expert Report (May 2002) (with William M. Landes and Gustavo Bamberger relating to damages), Reply Expert Report (July 2002) (with William M. Landes and Gustavo Bamberger relating to damages), Declaration (August 2002) (with William M. Landes and Gustavo Bamberger relating to present value calculation), Deposition Testimony (August 7-8, 2002 and August 27, 2002), Declaration (November 2002) (with William Landes and Gustavo Bamberger relating to niacin damage issues), on behalf of opt-out plaintiffs.

Gas City, Ltd. v. Indiana Department of Transportation, Circuit Court of St. Joseph County, Indiana. Affidavit (March 2000), on behalf of Gas City.

In the Matter of Joint Application of MCI WorldCom and Sprint for Consent to Transfer Control, Federal Communications Commission, CC Docket No. 99-333. Declaration (February 2000), Ex Parte Declaration (May 2000), on behalf of SBC, (with Dennis Carlton).

In the Matter of Merger of Qwest Communications International Inc. and U S WEST, Inc., Federal Communications Commission, CC Docket No. 99-272. Declaration (October 18, 1999), Ex Parte Comments (February 2000), on behalf of Qwest and U S WEST, (with Dennis Carlton).

In the Matter of the Merger of SBC Communications Inc. with Ameritech Corporation. Federal Communications Commission, CC Docket No. 98-141. Affidavit and Report (July 1998), Reply Affidavit and Reply Report (April 1999) Ex Parte Report (April 1999), on behalf of SBC and Ameritech, (with Dennis Carlton).

Riverside Pipeline Co., v. Panhandle Eastern Pipeline Co., United States District Court for the Western District of Missouri, Case No. 97-0642-CV-W-4. Expert Report (September 1998) on behalf of Panhandle Eastern Pipeline Co., (with Dennis Carlton).

Lemon, Myer, Duncan et. al. v. International Union of Operating Engineers, et al., United States District Court for the Eastern District of Wisconsin, Case No. 97-C-0857. Affidavit (September 1998), Affidavit (December 1999), Deposition (February 2000), Supplemental Report (March 2000), on behalf of International Union of Operating Engineers.

In the Matter of Application of WorldCom, Inc., Corp., for Approval to Transfer Control of MCI Communication to WorldCom, Inc., Department of Public Service of the State of West Virginia. Testimony (June 17, 1998), Oral Testimony (July 2, 1998), on behalf of WorldCom.

In the Matter of the Application of WorldCom, Inc. and MCI Communications Corporation for Approval to Transfer Control of MCI Communications Corporation to WorldCom, Inc., Department of Public Service Regulation, Public Service Commission of the State of Montana, Docket No. D97.10.191. Testimony (May 12, 1998), on behalf of WorldCom.

Application of WorldCom, Inc. for Approval to Transfer Control of MCI Communications Corporation to WorldCom, Inc., Public Utilities Commission of the State of Colorado, in re Docket No. 97A-494T. Testimony (March 26, 1998), Cross-Examination (April 2, 1998), on behalf of WorldCom.

Petition of WorldCom, Inc. for Approval to Transfer Control of MCI Communications Corporation to WorldCom, Inc., Florida Public Service Commission, Docket No. 971375-TP. Affidavit (February 27, 1998), on behalf of WorldCom, (with Dennis Carlton).

In the Matter of Application of WorldCom, Inc. for Approval to Transfer Control of MCI Communications Corporation to WorldCom, Inc., New York State Public Service Commission, Case 97-C-1804. Affidavit (February 16, 1998), on behalf of WorldCom, (with Dennis Carlton).

In the Matter of Applications of WorldCom, Inc. and MCI Communications Corporation for Transfer of Control of MCI Communications to WorldCom, Inc., Federal Communication Commission, CC Docket No. 97-211. Declaration (January 25, 1998), Second Declaration (March 19, 1998), on behalf of WorldCom and MCI, (with Dennis Carlton).

Shuller v. United States, U.S. District Court for the Eastern District of Pennsylvania, Civil Action No. 97-3820. Expert Report (February 1998), on behalf of U.S. Department of Justice.

Smith v. Amtrak, Circuit Court of Cook County, IL, Case 92 L 10525. Deposition (November 1997), Trial Testimony (January 1998), on behalf of Smith.

Johnson and Lehl v. City Colleges of Chicago, U.S. District Court for the Northern District of Illinois Eastern Division Case No. 96 C 0862. Expert Report (July 1997), Deposition Testimony (October 1997), on behalf of City Colleges of Chicago.

Gelumbauskas v. Precision Gear, U.S. District Court, Northern District of Illinois Eastern Division, Case No. 96 C 0862. Expert Report (April 1997), on behalf of Gelumbauskas.

Galvan v. U.S. Industries, Deposition Testimony (January 1997), Expert Report (December 27, 1996), on behalf of U.S. Industries.

Sprint Communications Company L.P. v. Network 2000 Communications Corporation, Expert Report (July 15, 1996), Deposition Testimony (July and August 1996), Affidavit (November 9, 1996), on behalf of Sprint, (with Dennis Carlton).

Beazer East v. CSX Transportation, Inc., U.S. District Court for the Western District of Pennsylvania, Case No. 93 0861. Expert Report (May 1996), Deposition Testimony (June 1996), on behalf of CSX.

Report to National Association of Independent Insurers, Response to the National Association of Insurance Commissions Staff: Analyses of the Availability and Affordability of Urban Insurance, (May 1996).

Carbon Dioxide Industry Litigation, U.S. District Court for Central District of Florida MDL940. Expert Report (October 1994) (with William M. Landes), Supplemental Report (May 1995) (with William M. Landes and Richard Leftwich), Deposition Testimony (July 1995), on behalf of opt-out plaintiffs.

AVR, Inc. v. Cemstone Products Corp., U.S. District Court, District of Minnesota, Third Division, File CIV 3-92-551. Expert Report (October 1994), Supplemental Affidavits (December 1994 and January 1995), on behalf of Cemstone.

W. Borysiewicz v. M. Gilblair, Circuit Court of Cook County, Illinois. Deposition Testimony (August 1994), and Trial Testimony (September 1994) on behalf of Borysiewicz.

NAACP et. al. v. American Family Mutual Insurance Co., U.S. District Court, Eastern District of Wisconsin, Civil Action No. 90-C-0759. Deposition Testimony (July 1994 and November 1994), on behalf of American Family.

G. Bowan v. The Sales Force Companies, U.S. District Court for The Western District of Missouri, Case No. 92-0496-CV-W-2. Affidavit (February 1993), on behalf of Sales Force.

Wisconsin Central Transportation Corporation -- Continuance in Control -- Fox Valley and Western Ltd., Finance Docket 32036, Interstate Commerce Commission. Expert Report (September 1992), on behalf of Wisconsin Central, (with Andrew M. Rosenfield).

Castaneda v. Baron Wire and Steel Inc., Circuit Court of Cook County, Illinois, Municipal Department, Second District. Deposition Testimony (February 1992), on behalf of Castaneda.

Morgan v. ServiceMaster, U.S. District Court for the Northern District of Illinois, Case No. 89-C-0581. Report (September 1991), on behalf of ServiceMaster, (with Sherwin Rosen).

Sepich v. Mueller, U.S. District Court for the Central District of Illinois, U.S. District Court, Case No. 88-2353. Report (March 1991), on behalf of Mueller, (with Sherwin Rosen).

N. Savakis v. Beatrice Company, U.S. District Court for the N.E. District of Illinois Eastern Division, No. 89 C5790. Expert Report (June 1990), on behalf of Beatrice.

Times Herald Printing Company v. A.H. Belo Corp. and Dallas Morning News Company, District Court of Harris County Texas, 280th Judicial District. Deposition Testimony (April 1990), on behalf of Dallas Morning News.

Turner v. IDS Financial Services, Inc., U.S. District Court for the District of Minnesota, File No. 88-521. Report (November 1989), on behalf of IDS.

McLendon et al. v. Continental Group et. Al., U.S. District Court for the District of New Jersey, Civil Action No. 83-1340 (SA). Trial Testimony (February 1989), Testimony before Special Master (February 1990), Testimony before Special Master (August 1990), on behalf of Continental Group, (with Sherwin Rosen).

Application of Illini Carrier L.P. to provide natural gas transportation services, Testimony (April 1988), on behalf of Illini Carrier.

## **Appendix 2**

# SAMPLE SURVEY FORM

CLLI  Lex/FTI Inspecto  Company Inspector

MSA:  Category  Type

Street:  City:  State:  Zip:

Building\_Sqft  Lat1:  Long1  Lat2:  Long2:  # Floors

Primary\_Tenants

Facility types:  Pop  Central Office  Local Nod  Cable Headen  Regen/Repeater Hut

External\_Inspection  EXTERNAL: > 5 Clec

Clec1:  Method1  Lat1  Long1  Distance1:

Clec2:  Method2  Lat2  Long2:  Distance2

Clec3:  Method3  Lat3:  Long3:  Distance3

Clec4:  Method4  Lat4:  Long4:  Distance4

Clec5:  Method  Lat5  Long5:  Distance5:

Internal\_Inspection  INTERNAL: > 5 Clec

Clec1:  Method1  Connection1

Clec2:  Method2  Connection2

Clec3:  Method3  Connection3

Clec4:  Method4  Connection4

Clec5:  Method5  Connection5

Comments:

Date:  Time: