Trevor R. Roycroft

51 Sea Meadow Lane Brewster, MA 02631 508-896-0151 trevor@roycroftconsulting.org www.roycroftconsulting.org

Education

Ph.D., Economics, University of California, Davis, 1989.
M.A., Economics, University of California, Davis, 1986.
B.A., Economics, with honors, California State University, Sacramento, 1984.

Fields of Specialization

Industrial Organization and Regulation Public Finance Economic History

Experience

Independent Consult, June 1994 to present. Provides economic and policy research and analysis for clients. Presents expert testimony in state and federal venues. Performs economic and statistical studies of market conditions. Matters addressed include pricing plans, market structure analysis and competition, alternative regulatory frameworks, productivity growth, service quality, cost calculations, cost allocation, cost modeling, network unbundling, capital costs, wireless markets, and broadband policy. Dr. Roycroft has also provided expert testimony on economic damages.

Associate Professor, J. Warren McClure School of Communication Systems Management, Ohio University, September 1994 to November 2004. Granted tenure, Spring 2000. Conducted graduate and undergraduate courses in regulatory policy and law, and the economics of the telecommunications industry, as well as general education courses covering telecommunications technology, markets, policy, and the social impact of communications technology. Conducted research with a focus on the telecommunications industry. Provided academic advising to graduate and undergraduate students within the school and across the university. Served on department, college, and university committees.

<u>Interim Director</u>, J. Warren McClure School of Communication Systems Management, Ohio University, July 2000 to June 2002. Responsibilities included: program planning, evaluation, and assessment; recruiting faculty and staff; managing fiscal resources; administering the School's curriculum; and establishing and maintaining relationships with internal and external constituencies of the school.

Chief Economist/Acting Chief Economist/Assistant Chief Economist/ Principal Economist, Indiana Office of Utility Consumer Counselor, May 1991 to June 1994. Conducted research and prepared testimony, cross examination, and legal briefs to be presented before the Indiana Utility Regulatory Commission in major cases involving gas, water, electric, and telecommunications utilities. Prepared analysis and comments to be presented before the Federal Communications Commission. Advised Director of Utility Analysis and the Utility Consumer Counselor on policy issues; assisted in formulation of policy. Coordinated technical

Experience (continued)

analysis in major cases. Presented agency policy positions to outside groups. Supervised Economics and Finance Staff of eight professionals. Reviewed and provided extensive analysis of Economics and Finance Staff testimony.

<u>Visiting Assistant Professor</u>, Kenyon College, September, 1989 to May, 1991. Conducted courses in Introductory Economics (Macro and Micro), Economics of the Public Sector, Industrial Organization, and Economic Development in the Third World. Rendered college service on award and hiring committees.

<u>Lecturer</u>, California State University, Sacramento, Fall 1987, academic year 1988. Conducted courses in Intermediate Microeconomic Theory, Introductory Macroeconomic and Microeconomic Theory. <u>Teaching Assistant</u>, University of California, Davis, 1985-1988. Assisted the professor in conducting courses in Introductory Macroeconomic Theory, Introductory Microeconomic Theory, and Public Finance.

Research in Progress

Open Access: The Internet and Other Policy Accidents

"Benchmarking the Costs of Competition: What the FCC's Synthesis Model Says About the Prospects for Facilities-Based Local Exchange Competition."

Working Paper

"RBOC Performance and the Telecommunications Act of 1996." Under review.

Publications

"Empirical Analysis of Entry in the Local Exchange Market: the Case of Pacific Bell." Contemporary Economic Policy, Vol. 23, No. 1, January 2005.

"Internet Access," in Johnson, D. ed. Encyclopedia of International Media and Communications, Academic Press, April 2003.

"Internet Subscription in Africa: Policy for a Dual Digital Divide." (With Siriwan Anantho.) *Telecommunications Policy*, Vol. 27, Nos. 1-2, February/March 2003.

"The Impact of State and Federal Alternative Regulation Plans on the RBOCs--a State Level Analysis." in *Telecommunications for the 21st Century*. Special issue of *The International Journal of Development Planning Literature*. William Baumol and Victor Beker eds. Vol. 16, Nos. 1 & 2, January and April 2001.

"Trouble Reports as an Indicator of Service Quality: The Influence of Competition, Technology, and Regulation." (With Martha Garcia-Murrilo.) *Telecommunications Policy*, Volume 24, No. 10, November, 2000.

"The Telecommunications Act--Law of Unintended Consequences?" *Public Utilities Fortnightly*, Volume 138, No. 3, February 1, 2000.

Publications (continued)

"Alternative Regulation and the Efficiency of Local Exchange Carriers--Evidence from the Ameritech States." *Telecommunications Policy*, Volume 23, No. 6, July, 1999.

"The Billy Goats Gruff. A Fairy Tale for the Third Anniversary of the Telecommunications Act of 1996." Info: The Journal of Policy, Regulation and Strategy for Telecommunications, Information and Media, Volume 1, No. 2, April, 1999.

"A Dynamic Model of Incumbent LEC Response to Entry Under the Terms of the Telecommunications Act of 1996." *Journal of Regulatory Economics*, Volume 14, November, 1998.

"Ma Bell's Legacy: Time for a Second Divestiture?" *Public Utilities Fortnightly.* Vol 136, No. 12, June 15, 1998.

"The Telecommunications Act of 1996: An Unfunded Mandate for the States." (With Phyllis Bernt.) Central Business Review, Volume XV, No. 2, Summer 1996.

Commissioned Reports

"Wireless Consumer Protection: A Model Bill for the States." AARP Research Center, September, 2003.

"The End of Telecommunications? An Epilogue to Tangled Web: The Internet and Broadband Open Access Policy." AARP Research Center, June, 2002.

Available at: http://research.aarp.org/consume/2002 10 tangled 1.html

"Tangled Web: The Internet and Broadband Open Access Policy." AARP Research Center, January, 2001. Available at: http://research.aarp.org/consume/d17331_tangled_1.html

Conference Papers

"The Impact of State and Federal Alternative Regulation Plans on the RBOCs--a State Level Analysis," July 1999. Presented at the Western Economic Association International Annual Meeting, San Diego, California.

"The Billy Goats Gruff. A Fairy Tale for the Third Anniversary of the Telecommunications Act of 1996," June, 1999. Presented at the Academic Seminar at the 1999 National Cable Television Association Convention, Chicago, Illinois.

"Alternative Regulation and the Efficiency of Local Exchange Carriers--Evidence from the Ameritech States." November, 1998. Presented at the 68th Annual Conference of the Southern Economic Association, Baltimore, Maryland.

"A Dynamic Model of Incumbent LEC Response to Entry Under the Terms of the Telecommunications Act of 1996." July 1998. Presented at the Western Economic Association International Annual Meeting, Lake Tahoe, Nevada.

Conference Papers (continued)

"Do We have the Bugs Out of Telephone Deregulation?" April 1998. Presented at the Law and Policy Division of the Broadcast Education Association, Las Vegas, Nevada.

"The Telecommunications Act of 1996 and Imposed Costs in the Local Exchange Market: A Dynamic Model of Incumbent Behavior." September 1997. Presented at the *Telecommunications Policy Research Conference*, Arlington Virginia.

"Towards an Advanced Information Infrastructure," August 1995. Presented to the National Association of Regulatory Utility Commissions' Annual Regulatory Studies Program at Michigan State University.

"Sorting, Bonding, and Barriers to Entry: Strategies of the Entry Concerned Firm," July 1990. Presented at the Western Economic Association Meetings, San Diego, California.

Additional Presentations

"Broadband Open Access." Presented to AARP's National Legislative Council. October, 2000. Washington, D.C.

"Telecommunications Policy, Markets, and Regulation-Who's On First?" Presented to the Maryland Office of Peoples' Counsel and Maryland Public Service Commission. October, 2000. Baltimore, MD.

"Broadband Open Access-Implications for the Internet and Consumers." November 1999. Panelist at the National Association of Utility Consumer Advocates Annual Convention. San Antonio, Texas.

"Validation of Proxy Cost Models." January 1997. Panel discussant at the Federal Communications Commission workshops on proxy cost models (CC Docket 96-45).

"Impact of the Telecommunications Act of 1996 on Telecommunications Managers." December 1996. Presented to members of the Association of Telecommunications Professionals. Columbus Ohio.

"Caveat emptor! Local competition, possible effects on prices and the reality of choice." October 1995. Presented at the Public Information Session on Telephone Competition. Dayton, Ohio.

"Cost Allocation in Network Industries," August 1995. Presented to the National Association of Regulatory Utility Commissions' Annual Regulatory Studies Program at Michigan State University.

"Incremental Cost Methodology in Telecommunications," June 1995. Presented to the Ohio Office of Consumers' Counsel.

"Regulatory Issues Connected with the Implementation of the Clean Air Act Amendments of 1990," August 1993. Presented at the Indiana Bar Association's Utility Law Section Summer Meetings.

Additional Presentations (continued)

"Consumer Perspectives on the Ameritech Customer's First Plan," August 1993. Presented at the Ameritech Regional Regulatory Committee Ad Hoc Working Group Meeting.

"Consumer Perspectives on Universal Telecommunications Service," December 1992. Presented at the

Indiana Utility Regulatory Commission Workshops on Regulatory Flexibility in Telecommunications.

Honors

Competitive paper finalist. The Academic Seminar at the 1999 National Cable Television Association Convention, Chicago, Illinois. Paper title: "The Billy Goats Gruff. A Fairy Tale for the Third Anniversary of the Telecommunications Act of 1996."

Courses Taught

Competition and Market Structure in Network Industries, Ohio University
Communication Regulatory Policy, Ohio University
Applications of Common Carrier Regulation, Ohio University
Introduction to Common Carrier Regulation, Ohio University
Introduction to Communication Systems Management, Ohio University
Consumer Issues in Communication Systems Management, Ohio University
Topical Seminar (New Technologies and Telecommunication Policy), Ohio University
Topical Seminar (The Telecommunications Act of 1996), Ohio University
Special Studies in Communication Systems Management, Ohio University
Economics of the Public Sector, Kenyon College
Industrial Organization, Kenyon College
Economic Development in the Third World, Kenyon College
Intermediate Microeconomics, California State University, Sacramento
Microeconomic Principles, Kenyon College; California State University, Sacramento
Macroeconomic Principles, Kenyon College; California State University, Sacramento

Service

Faculty Advisor, University College, *Ohio University*, 1998-2004
Member, Baker Fund Committee, *Ohio University*, 2003-2004
Member, College of Communication Curriculum Committee, *Ohio University*, 2003-2004
Chair, College of Communication Dean's Evaluation Committee, *Ohio University*, 2003-2004
Faculty Advisor, Communication Week, *Ohio University*, 1994-2002

Faculty Advisor, Students in Communication Systems Management, Ohio University, 1994-1996

Member, University General Education Review Committee, Ohio University, 1998-1999

Member, College of Communication Curriculum Committee, Ohio University, 1998-2000

Member, College of Communication Graduate Committee, Ohio University, 1997-2002

Member, University Calendar Review Task Force, Ohio University, 1996-1997

Member, Outstanding Civil Service Award Committee, Ohio University, 1995-1996

Member, Mathematics Department Search Committee, Kenyon College, 1990-1991

Member, Williams Memorial Award Committee, Kenyon College, 1989-1991

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Professional Membership

American Economic Association

Ph.D. Dissertation Supervision

"The Examination of Strategic Interactions in One Local Access Telephone Market, the Effects on Expected Price for Access and Universal Access." Judith Ann Molka-Danielsen. School of Information Sciences, Telecommunications Program, University of Pittsburgh, 1998.

Referee Service

Telecommunications Policy Utilities Policy Journal of Economic Studies Communications of the Association for Information Systems

Expert Testimony Presented

California (On behalf of The Utility Reform Network [TURN])

PUCC Cause No.	<u>Title</u>	Topic
Rulemaking 05-04-005 (May 31, 2005)	Order Instituting Rulemaking to Assess and Revise Regulation Telecommunications Utilitie	Local exchange Competition and Policy of
Applications: 01-02-024 01-02-035 02-02-031 02-02-032 02-02-034 02-03-002 (February 7, 2003 [Reply De (March 12, 2003 [Rebuttal D		TELRIC Compliance of UNE Rates. Progress of local exchange competition.
Rulemaking 93-04-003 Investigation 93-04-002 (Phase II) (July, 2001)	Permanent Line Sharing Phase II	Pricing and Cost Allocation for the High Frequency Portion of the Local Loop in the NGDLC Environment.
Rulemaking 93-04-003 Investigation 93-04-002 (Phase I) (June, 2001)	Permanent Line Sharing Phase I	Pricing and Cost Allocation for the High Frequency Portion of the Local Loop.

Canadian Radio-Television and Telecommunications Commission (On Behalf of Action Réseau Consommateur, et al.)

CRTC Case No.	<u>Title</u>	Topic
Public Notice	Price Cap Review	Price cap regulation and productivity
CRTC 2001-37	and Related Issues	growth. Accommodative entry policy.
(August, 2001)		pomoj.

Colorado (On behalf of AARP)

CPUC Docket No.	<u>Title</u>	Topic
04A-411T	In the Matter of Qwest Corporation Application	Analysis of local exchange market.
(February, 2005)	For Service Reclassification And Deregulation	

Kansas (On behalf of the Citizens' Utility Ratepayer Board [CURB])

KCC Docket No.	<u>Title</u>	Topic
05-SWBT-997-PDR	In the Matter of SWBT's Application for Price	Analysis of local exchange market.
(May, 2005)	Deregulation of Certain Residential and Business Services	, , , , , , , , , , , , , , , , , , ,

Indiana (On behalf of the AARP and Citizens Action Coalition of Indiana)

IURC Cause No.	<u>Title</u>	Topic
42405	SBC Indiana's Request for	Analysis of local competition,
(October, 2003)	Alternative Regulation	Price Cap Regulation and Productivity
41911 (July, 2001)	Commission's Investigation of Ameritech Indiana Service Quality	Service Quality Performance.
40785-S1, 40849,	Approval of Settlement	Service quality, Advanced Services
41058 (January, 2001)	Agreement between Ameritech And other Parties	Deployment, Alternative Regulation.
40785-S1, 40849, 41058 (August, 2000)	Approval of Settlement Agreement between Ameritech And other Parties	Service quality, Alternative Regulation, Cost of Service, Cost Modeling, Compliance with §254(k)of the Telecommunications Act of 1996.
40785-S1 (September, 1999)	Commission's Investigation Ameritech Indiana's Compliance With Section 254(k) of the Telecommunication Act	Economic Cost of Service/ Cost Allocation.

Indiana (On behalf of the AARP and Citizens Action Coalition of Indiana, continued)

IURC Cause No.	<u>Title</u>	<u>Topic</u>
40849		
(November, 1997)	Commission's Own Motion On Ameritech Indiana's Request for Interim Relief	Interim and Permanent Alternative Regulation/Rate Design.
40849 (September, 1997)	Ameritech Indiana Request for Interim Relief	Interim Alternative Regulation/ Rate Design.

Ohio (On behalf of the Ohio Consumer's Counsel)

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PUCO Case Nos.	<u>Title</u>	Topic
02-1280-TP-UNC (May, 2004)	SBC Ohio's TELRIC Costs for Unbundled Network Elements	TELRIC cost modeling, Local Competition.
98-1082-TP-AMT (December, 1998)	SBC/Ameritech Request for Approval Merger	Sharing of cost saving. Total factor productivity growth. of
96-899-TP-ALT (December, 1997)	Cincinnati Bell Alternative Regulation	Price Cap Regulation/ Rate Rebalancing/ Rate Design.
94-2019-TP-ACE (May, 1995)	MFS INTELENET	Financial, Managerial, and Technical Ability to Provide Local Exchange Service.
93-487-TP-ALT and 93-576-CSS (September, 1994) Maryland (On behalf of the	Ohio Bell: Alternative Regulation he Maryland People's Counsel)	Incremental Costs/ Fully Distributed Costs/ Alternative Regulation.
MPSC Docket No.	<u>Title</u>	Topic

MPSC Docket No.	<u>Title</u>	Topic
8730 (Rebuttal Testimony)	Bell Atlantic ISDN Tariff	ISDN pricing and cost of service.
(November, 1996)	Proposal	

Maryland (On behalf of the Maryland People's Counsel, continued)

MPSC Docket No.	<u>Title</u>	Topic
8730 (Direct Testimony) (October, 1996)	Bell Atlantic ISDN Tariff Proposal	ISDN pricing and cost of service.
8715 (Rebuttal Testimony) (April, 1996)	MCI Request for Alternative Regulation for Atlantic Maryland	Price Cap Regulation, Cost Allocation and Bell Loop Cost Recovery.
8715 (Direct Testimony) (March, 1996)	MCI Request for Alternative Regulation for Atlantic Maryland	Price Cap Regulation, Cost Allocation and Bell Loop Cost Recovery.

Indiana (On behalf of the Indiana Consumer Counselor) *Testimony prepared, but not filed due to case settlement.

IURC Cause No.	<u>Title</u>	Topic
40611 (June, 1997)	Ameritech Indiana Approval of Statement of Generally Available Terms	Analysis of TELRIC studies.
39853 (March, 1994)	Teleport Communications Group of Indiana, Inc.	Authority to provide intraLATA and interLATA Private Line Services.
39705 (January, 1994)	Indiana Bell Telephone	Alternative Regulation/ Competition/Infrastructure Deployment/Imputation.
39474 (May, 1994)	Indiana Payphone Association v. Indiana Bell Telephone	Imputation/separate subsidiary.
39755 (September, 1993)	GTE North Inc./GTE Intelligent Network Service Inc.	Divestiture of Assets/Policy.
39718 (August, 1993)	Ameritech Advanced Data Services	Affiliate Relationships.

Indiana (On behalf of the Indiana Consumer Counselor, continued)

IURC Cause No.	Title	Topic
39475 (March, 1993)	Indiana Payphone Association	Dial-Around Compensation.
38269-S4 (February, 1993)	IntraLATA Toll Compensation	Toll Rate Deaveraging.
39369 (February, 1993)	IURC Investigation into Access Charge Parity	Access Charge Parity/Recovery of Non-Traffic-Sensitive Costs/Policy.
39618 (January, 1993)	IURC Investigation into Special Access Collocation	Collocation Policy.
39385 (October, 1992)	Indiana Bell Telephone: Competition and Pricing Flexibility	Evaluation of Competition in Dedicated Communications Market/Policy.
39353*	Indiana Gas Company	Temperature Normalization Tracker/Demand Side Management/Reproduction Cost of Rate Base/Capital Costs.
39314 (September, 1992)	Indiana Michigan Power Co.	Clean Air Act Amendments /Demand Side Management.
39221 (January, 1992)	American Telecommunications Corporation	Financial Viability.
39215 (January, 1992)	Indiana American Water Co.	Reproduction Cost of Rate Base/Capital Costs.
39166 (November, 1991)	Indiana Cities Water Co.	Reproduction Cost of Rate Base/Capital Costs.
39164/39165 (October, 1991)	Ohio Valley Gas Corp.	Reproduction Cost of Rate Base/Capital Costs.
39017*	IURC Investigation into Indiana Bell Earning	Reproduction Cost of Rate Base/Capital Costs.

Comments Filed

Federal Communications Commission (On Behalf of National Association of Utility Consumer Advocates)

In the Matter of Federal-State Joint Board on Universal Service, CC Docket 96-45. Affidavit addressing application of forward-looking economic cost methodology to rural ILECs with 100,000 or more access lines. (December 14, 2004.)

Federal Communications Commission (On behalf of AARP)

In the Matter of Inquiry into High-Speed Access to the Internet Over Cable and Other Facilities. GN Docket No. 00-185, FCC No. 00-355. "Tangled Web: The Internet and Broadband Open Access Policy." (January 10, 2001).

Indiana Utility Regulatory Commission (On behalf of the Indiana Consumer Counselor)

A Comprehensive Approach to Local Exchange Competition in Indiana (October, 1995).

Indiana Utility Regulatory Commission (On behalf of the Indiana Consumer Counselor, continued) Comments of the Office of Utility Consumer Counselor to the Telecommunications Regulatory Flexibility Committee (1993).

New York Public Service Commission (On behalf of Independent Telephone Companies [NYNEX and Rochester excluded])

Proceeding on Motion of the Commission to Examine Issues Related to the Continued Provision of Universal Service and to Develop a Regulatory Framework for the Transition to Competition in the Local Exchange Market: "Comments on Compensation Arrangements Related to Module 2" (April, 1995).

Maine Public Service Commission (On behalf of Independent Telephone Companies [NYNEX excluded])

Inquiry Into the Provision of Competitive Telecommunications Services (Chapter 280), Docket 94-114: "Reply Comments to the 'Preliminary Proposal for a Revision and Restructuring of the Access Charge Provision of Chapter 280" (June, 1995).

Federal Communications Commission (On behalf of the Indiana Consumer Counselor)

Comments of the Indiana Office of Utility Consumer Counselor on the Ameritech Customers First Plan (1993).

Reply Comments of the Indiana Office of Utility Consumer Counselor on the Ameritech Customers First Plan (1993).

June 2005