

**27TH ANNUAL  
TELECOMMUNICAITONS  
POLICY RESEARCH CONFERENCE**

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### SESSIONS BY TRACKS

<b>TRACK</b>	<b>SUN. 8:30AM</b>	<b>SUN. 10:30AM</b>	<b>SUN. 1:45PM</b>	<b>SUN. 3:45PM</b>	<b>MON. 8:30AM</b>	<b>MON. 10:30AM</b>
Electronic Commerce and Community	Pricing Structures (Plaza I)	Electronic Political Participation (Plaza I)	User Studies (Plaza I)	Privacy (Plaza I)	E-Commerce (Plaza I)	Regulation and Online Activities (Plaza I)
Policy Issues	Intellectual Property (Magnolia Room)	Vertical Foreclosure (Plaza II)	Policy Standards (Plaza II)	Privacy (Plaza I)	Inst. Design for Internet Governance (Magnolia Room)	Regulation and Online Activities (Plaza I)
Convergence and Competition	Evolution of Industry Structure (Plaza III)	Internet and Mass Media (Plaza III)	Strategies of Incumbents (Plaza III)	Local Access Competition (Plaza III)	Internet Inter-connection (Plaza III)	Statistical Analysis (Plaza III)
Pricing and Markets	Pricing Structure (Plaza I)	Vertical Foreclosure (Plaza II)	Policy and Standards (Plaza II) Or Strategies of Incumbents (Plaza III)	Local Access Competition (Plaza III) Or Tradeable Rights (Plaza II)	Developed Countries (Plaza II) Or E-Commerce (Plaza I)	Statistical Analysis (Plaza III) Or Policy Impacts on Investment (Plaza II)
Telecom and Broadcast Reg.	Developing Countries (Plaza II)	Universal Service: Social Perspective (Magnolia Room) Or Internet and Mass Media (Plaza III)	US & EU Regulatory (Magnolia Room)	International Trade (Magnolia Room)	Developed Countries (Plaza II)	Universal Service: Economic Persp. (Magnolia Room) Or Policy Impacts on Investment (Plaza II)
Int'l Issues (mini-track)	Developing Countries (Plaza II)		US & EU Regulatory (Magnolia Room)	International Trade (Magnolia Room)	Developed Countries (Plaza II)	

**27TH ANNUAL  
TELECOMMUNICAITONS  
POLICY RESEARCH CONFERENCE**

**Saturday, September 25, 1999**

1:00pm-7:00pm

**REGISTRATION  
LOCATION: UPPER FOYER**

**TUTORIALS:**

**LOCATION: MAGNOLIA ROOM**

2:15pm-4:00pm

**Session 1:**

**Intellectual Property Primer**

Chair:

Julie Cohen, Georgetown University

Presenter:

Peter Menell, University of California at Berkeley

4:15pm-6:00pm

**Session 2:**

**Recent Developments in Copyright and Database Protection**

Presenters:

Seth Greenstein, McDermott, Will & Emery

Bruce Joseph, Wiley, Rein & Fielding

5:30pm-6:30pm

**RECEPTION/CASH BAR  
LOCATION: OUTSIDE TERRACE**

6:30pm-7:30pm

**DINNER  
LOCATION: TERRACE BALLROOM**

7:30pm-9:00pm

**OPENING SESSION  
LOCATION: TERRACE BALLROOM**

**Welcoming Remarks by: Benjamin M. Compaine,  
Program Committee Chair**

**Plenary Session:**

**Restructuring Telecom for the New Millennium: Is  
Bigger Better?**

Chair:

Bill Rogerson, Northwestern University

**Panelists:**

Robert Crandall, Brookings Institution

Barbara Dooley, Commercial Internet Exchange  
Association

Esther Dyson, Edventure Holdings

Michael Katz, University of California at Berkeley

**Sunday, September 26, 1999**

7:30pm-4:00pm

**REGISTRATION**  
**LOCATION: LOWER FOYER**

7:30am-8:30am

**BREAKFAST**  
**LOCATION: TERRACE BALLROOM**

8:30am-10:00am

**SESSIONS**

**Location:**

**PLAZA I**

**Title:**

**Pricing Structures**

**Chair:**

Hal Varian, University of California at Berkeley

**Papers:**

**Pricing in Admissions Policy: Using Hold Options Over IP Networks**

Judith Molka-Danielsen and Ketil Danielsen, Molde College

**Consumers' Willingness to Pay for Intermediation: A Case Study of Peapod**

Karen Clay and Eric Wolff, Carnegie Mellon University

**One Size Doesn't Fit All: Improving Network QoS Through Preference-Driven Web Caching**

Yee Man Chan, Jonathan Womer, Jeff MacKie-Mason and Sugil Jamin; University of Michigan

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**Location:**

**PLAZA II**

**Title:**

**Developing Countries**

**Chair:**

Rajni Gupta, University of Toronto

**Papers:**

**Less News is Good News: Fifty Years of Communication Policy in a Volatile Democracy**

Amit Schejter, Tel Aviv University

**The Regulation of Internet Services in North Africa**

Andrea Kavanaugh, Virginia Polytechnic Institute & State University

**Expansion of Accessibility of Telecom. Infrastructure in Emerging Nations: The Case of Bangladesh**

L. Jean Camp and Brian Anderson, Harvard University

**Discussant:**

Heather Hudson, Univ. of San Francisco

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**Sunday, September 26, 1999**

8:30am-10:00am

(Continued)

**Location:** PLAZA III  
**Title:** Evolution Of Industry Structure  
**Chair:** William Sharkey, Federal Communications Commission

**Papers:** **Impacts of Mergers and Global Rivalry on Local Network Competition**  
Mark Jamison, University of Florida  
**Building and Delivering the Virtual World: Commercializing Services for Internet Access**  
Shane Greenstein, Northwestern University  
**Network Transmission and Storage: Vertical Relationships and Industry Structure**  
John Chung-I Chuang, University of California at Berkeley  
**The Industrial Organization of the U.S. Internet Service Provider Industry**  
Joseph Bailey, University of Maryland

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**Location:** MAGNOLIA ROOM  
**Title:** Intellectual Property  
**Chair:** Julie Cohen, Georgetown University

**Papers:** **Patent Scope and Innovation in the Software Industry**  
Julie Cohen, Georgetown University and Mark Lemley, University of Texas  
**Implications of Contractual Restriction of Software Use for Implementation of the Local Competition Policy of the Communications Act of 1996**  
David Rice, Roger Williams University  
**Patenting Speech**  
Dan Burk, University of Minnesota  
**A Historical Analysis of Copyright Liability**  
Matt Jackson, Pennsylvania State University

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10:00am-10:30am

**COFFEE BREAK**  
**LOCATION: FOYER**

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**Sunday, September 26, 1999**

10:30am-12:00pm

**SESSIONS**

**Location:**

**PLAZA I**

**Title:**

**Electronic Political Participation**

**Chair:**

Lorrie Faith Cranor, AT&T Labs-Research

**Papers:**

**Policy Ramifications of Information and Communications Technologies (ICTS)**

Paul Baker, George Mason Univ.

**The Political Economy of Electronic Democratic Forums: The Design of Californian Municipal Web Sites**

Christopher Weare, Juliet Musso and Matthew Hale; University of Southern California

**On-Line Voting: Calculating Risks and Benefits to the Community and the Individual**

James Brent and Linda Valenty, San Jose State University

**Discussant:**

Paul Craft, Florida Department of State

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**Location:**

**PLAZA II**

**Title:**

**Vertical Foreclosure**

**Chair:**

Sharon Black, University of Colorado

**Papers:**

**Market Foreclosure and Exclusivity Contracts When Consumers Have Switching Costs**

Tommaso Valletti, London School of Economics

**The Use of Financial Contracting to Control Downstream Firms: An Analysis of Silver King Communications**

Robert Kieschnick, University of Texas at Dallas and Michael Cichello, Michigan State University

**Microsoft vs. Netscape: Policy for Dynamic Models Anti-trust and Intellectual Property Rights Revisited**

David Allen, Harvard University

**Aftermarkets in Innovation**

Doug Lichtman, University of Chicago

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**Sunday, September 26, 1999**

10:30am-12:00pm

(Continued)

**Location:** PLAZA III  
**Title:** Internet And Mass Media  
**Chair:** Jonathan Levy, Federal Communications Commission

**Papers:** **Newspaper Online Services: A Successful Business? Lessons Learned from Videotext Failure**  
Ya-Ching Lee, Indiana University at Bloomington  
**Electronic Commerce and Free Speech**  
Jessica Litman, Wayne State University  
**Mergers, Divestitures and the Internet: Is Ownership of the Media Industry Becoming Too Concentrated?**  
Benjamin Compaine, Harvard University

**Discussant:** Eli Noam, Columbia Institute for Tele-Information

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**Location:** MAGNOLIA ROOM  
**Title:** Universal Service: Social Perspective  
**Chair:** Ingo Vogelsang, Boston University

**Papers:** **Universal Service Policy and Community Development**  
John Horrigan, National Research Council  
**Expanding the Menu: An Informed Choice Model of Universal Service for an Integrated Digital Environment**  
Jorge Schement and Scott Forbes, Penn State Univ.  
**Rural Internet Connectivity**  
Sharon Strover, University of Texas at Austin  
**The Rural Differential: An Analysis of Population Demographics in Areas Served by Rural Telephone Companies**  
Vicki Hobbs and John Blodgett, University of Missouri-Columbia

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12:00pm-1:30pm

**LUNCH**  
**LOCATION: PLAZA BALLROOM B**

**Lunch Plenary:** **The Open Source Revolution: Towards a World of Reliable Software**  
**Speaker:** Brian Behlendorf, Collab.Net and The Apache Software Foundation

**Sunday, September 26, 1999**

1:45pm-3:15pm

**SESSIONS**

**Location:**

**PLAZA I**

**Title:**

**User Studies**

**Chair:**

Ken Anderson, MediaOne

**Papers:**

**The Impact of the Internet on Community**

**Involvement: A Network Analysis Approach**

Andrea Kavanaugh, Virginia Polytechnic Institute & State University

**Internet Adoption and Usage in China**

Xueping Du, Pennsylvania State University

**Policy Challenges for Conflict Monitoring Networks**

Anton Ivanov, FEWER and Kirsten Foot, University of Pennsylvania

**The Death of Cities? The Death of Distance?**

**Evidence from the Geography of Commercial**

**Internet Usage**

Jed Kolko, National Bureau of Economic Research

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**Location:**

**PLAZA II**

**Title:**

**Policy And Standards**

**Chair:**

Walter S. Baer, RAND/USC

**Papers:**

**Consumer Access Equipment Standards: Market or Government Solutions?**

Edward Gallick, FERC; Andrew Wise and Kiran Duwadi; Federal Communications Commission

**The DVD vs. DIVX Standard War: Network Effects and**

**Empirical Evidence of Vaporware**

David Dranove, Northwestern University and Neil Gandal, Tel Aviv University and CEPR

**Standards WARS: The Use of Standard Setting as a Means of Facilitating Cartels Third Generation**

**Wireless Telecommunications Standard Setting**

David J. Salant, Peter Grindley; LECG, Inc. and Leonard Waverman; LECG Ltd, and London Business School

**The Law of Opposite Numbers: Standards**

**Dynamics and the Global Logic of Software**

Phil Agre, University of California, Los Angeles

Sunday, September 26, 1999

1:45pm-3:15pm

(Continued)

Location:

**PLAZA III**

Title:

**Strategies Of Incumbents**

Chair:

Nicholas Economides, Stern School of Business

Papers:

**Number Pooling: Is it Worth the Cost?**

Susan McMaster, PHB Hagler Bailly

**Strategic Challenges of New Entrants in Australian and New Zealand Telecommunications Markets**

Kellie Caught, M.A. Shadur and R. Kienzel; Queensland University of Technology

**Competition's Effect on Investment in Digital Infrastructure**

Glenn Woroch, University of California, Berkeley

**Competition Between Firms that Bundle Information Goods**

Scott Fay and Jeff MacKie-Mason, University of Michigan

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Location:

**MAGNOLIA ROOM**

Title:

**US And EU Regulatory**

Chair:

Luigi Prosperetti, Univ. of Milan-Italy

Papers:

**The Irony of Telecommunications Deregulation:**

**Assessing the Role Reversal in U.S. and EU Policy**

Barbara Cherry, Michigan State University

**Mandatory Resale Rules in Long Distance Markets:**

**Regulation Searching for an (Economic)**

**Justification**

Jim Speta, Northwestern University

**Reforming TV Regulation for the Digital Era: An International/Cross-Industry Perspective**

Hernan Galperin and Francois Bar, Stanford Univ.

**A Comparative Institutional Analysis of Communications Regulation**

Christopher Marsden, Univ. of Warwick and Harvard Univ.; and Campbell Cowie, BBC

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Sunday, September 26, 1999

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3:15pm-3:45pm

**COFFEE BREAK**  
**LOCATION: FOYER**

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3:45pm-5:15pm

**SESSIONS**

**Location:**

**PLAZA I**

**Title:**

**Privacy**

**Chair:**

Joel Reidenberg, Fordham University Law School

**Papers:**

**Knowledge Gaps in the Public Understanding of E-Commerce**

Peter Lunt, University College London

**The Implications of Users' Privacy Perception on Communication and Information Privacy Policies**

Anne Adams, University College of London

**Beyond Concern: Understanding Net Users' Attitudes About Online Privacy**

Lorrie Faith Cranor; AT&T Labs-Research, Joseph Reagle; Massachusetts Institute of Technology, and Mark Ackerman, University of California, Irvine

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**Sunday, September 26, 1999**

3:45pm-5:15pm

(Continued)

**Location:** PLAZA II  
**Title:** Tradeable Rights  
**Chair:** Howard Shelanski, Federal Communications Commission

**Papers:**

**Completing the Transition to Digital Television**  
Coleman Bazelon, Congressional Budget Office

**The Resolution of Digital Television: How the Focus of HDTV and Must-Carry are Hindering the Return of the Analog Television Spectrum**  
Cory Allen and Elena Larsen; University of Pennsylvania

**A "Smart Market" for Trading of Radio Spectrum**  
Martin Taschdjian, MediaOne International and Mark Bykowsky, Automated Credit Exchange

**A Market-Based Mechanism for Universal Service Obligations**  
Jon Peha, US Congress and Carnegie Mellon University

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**Location:** PLAZA III  
**Title:** Local Access Competition  
**Chair:** Marvin Sirbu, Carnegie-Mellon Univ.

**Papers:**

**TELCOMP - A Model for Determining the Viability of Local Exchange Competition**  
Joseph Weber; Jeffrey Rohlfs and Calvin Monson, Strategic Policy Research, Inc.

**Dominant Firm Pricing with Price-Cap Regulation and Fringe Competition: An Economic Analysis of Local Telephone Pricing**  
Jaison Abel, Ohio State University

**Availability of Broadband Internet Access: An Empirical Analysis**  
Sharon Eisner Gillett and William Lehr, MIT

**National Divergence in Developing Broadband Internet Access: The Specifics of the German Case**  
Volker Wittke and Heidemarie Hanekop, University of Goettingen

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**Location:** MAGNOLIA ROOM  
**Title:** International Trade  
**Chair:** Douglas Galbi, Federal Communications Commission

**Papers:**

**Squaring the Circle: Rebalancing Tariffs Whilst Promoting Universal Service in Jamaica**  
Geoffrey Myers , Office of Utilities Regulation

**Implications of International Accounting Rate Reform for Developing Countries**  
Yun-Mee Lee, Korea Telecom Research Laboratories

**Global Telecommunications, Electronic Commerce, and the World Trade Organization: Considerations on the "Millenium Round"**  
William Drake, The Carnegie Endowment for International Peace

**Dominant Carrier Market Power in United States International Telephone Markets**  
Scott Savage, Gary Madden; Curtin University of Technology and James Alleman, University of Colorado

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6:00pm

**RECEPTION**  
**LOCATION: OUTSIDE TERRACE**

7:00pm-9:00pm

**LUAU**  
**TERRACE BALLROOM**

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Monday, September 27, 1999

7:30pm-12:00pm

**REGISTRATION**  
**LOCATION: LOWER FOYER**

7:30am-8:30am

**BREAKFAST**  
**LOCATION: TERRACE BALLROOM**

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8:30am-10:00am

**SESSIONS**

**Location:**

**PLAZA I**

**Title:**

**E-Commerce**

**Chair:**

Phil Agre, Univ. of California

**Papers:**

**Strategic Use of the Internet by Small-and-Medium  
Sized Firms: An Exploratory Study**

Bert Sadowski, Carleen Maitland and Jochem van  
Dongen; SEPA, TU Delft

**Pricing and Bundling Electronic Information  
Goods: Field Evidence**

Jeff MacKie-Mason, Juan Riveros and Robert Gazzale,  
University of Michigan

**Will E-commerce Compete More with Traditional  
Retailing or Direct Marketing?**

Michael Ward, University of Illinois

**Community Level Socio-Economic Impacts of  
Electronic Commerce**

Charles Steinfield, Delft University of Technology and  
Pamela Whitten, Michigan State University

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**Monday, September 27, 1999**

8:30am-10:00am

(Continued)

**Location:** PLAZA II  
**Title:** Developed Countries  
**Chair:** Martin Cave, Brunel University

**Papers:** **Experimenting with Regulatory Shortcuts in Europe**  
Luigi Prosperetti, University of Milan-Italy; Michela Cimattorbus and Cinzia Dalla Torre, MCI WorldCom Italy  
**Economic Analysis of Interconnection Charge Policy**  
Jeffrey Rohlfs, Strategic Policy Research, Inc.  
**Universal Service in Europe - Talk Is Cheap But Data Is Not**  
Richard Cawley, European Commission  
**Competition and the Pricing of Telecommunications Services in the European Union**  
Johannes Bauer and Hyun-Oh Yoo, Michigan State University

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**Location:** PLAZA III  
**Title:** Internet Interconnection  
**Chair:** John Hayes, Charles River Associates  
**Papers:** **When Internet Peers Become Customers: The Consequences of Settlement-based Interconnection**  
Rob Frieden, Pennsylvania State University  
**Cost/Benefit Tradeoff of Quality of Service Mechanisms in Integrated Services Networks**  
Martin Weiss and Junseok Hwang, University of Pittsburgh  
**The Information Interchange: Interconnection on the Internet**  
Michael Kende and Jason Oxman, Federal Communications Commission  
**Competitive Effects of Internet Peering Policies**  
Bridger Mitchell, Padmanabhan Srinagesh; Charles River Associates Inc. and Paul Milgrom, Stanford University

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**Monday, September 27, 1999**

8:30am-10:00am

(Continued)

**Location:** MAGNOLIA ROOM  
**Title:** Institutional Design For Internet Governance  
**Chair:** Diane Cabell, Fausett, Gaeta & Lund

**Papers:** **Semi-Private International Rulemaking: Lessons Learned from the WIPO Domain Name Process**  
Michael Froomkin, University of Miami  
**Institutional Designs for Internet Governance: Current Prospects for ICANN**  
Jonathan Zittrain, Harvard Law School  
**Discussant:** Milton Mueller, Syracuse University

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10:00-10:30am **BREAK**  
**LOCATION: LOWER FOYER**

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10:30am-12:00pm **SESSIONS**

**Location:** PLAZA I  
**Title:** Regulation And Online Activities  
**Chair:** Robert Pepper, Federal Communications Commission

**Papers:** **The Internet: Implications for Regulation and Public Policy**  
Aniruddha Banerjee and Agustin Ros, National Economic Research Associates, Inc.  
**Internet Data Management: Policy Barriers to an Intermediated Electronic Market in Data**  
Thomas Lee, Massachusetts Institute of Technology  
**In a World Without Borders: The Impact of Taxes on Internet Commerce**  
Austan Goolsbee, University of Chicago  
**Hardware-Based ID, Rights Management, and Trusted Systems**  
Jonathan Weinberg, Wayne State University  
**Will Tomorrow Be Free? Application of State Action Doctrine to Private Internet Providers**  
Irina Dmitrieva, University of Florida at Gainesville

**Monday, September 27, 1999**

10:30am-12:00pm

(Continued)

**Location:** PLAZA II  
**Title:** Policy Impacts On Investment  
**Chair:** Martin Taschdjian, MediaOne International

**Papers:** **A Post-Modem Regulatory Policy for Telecommunications**  
Martin Taschdjian, MediaOne International  
**Basic Local Telephone Rates: Comparing Plans for Restructuring**  
Stephen McDowell and Kostadin Kostadinov, Florida State University  
**Competition as a Turbulent Process**  
Johannes Bauer, Michigan State University  
**Telecommunications, the Internet, and the Cost of Capital**  
William Lehr, Columbia University and Massachusetts Institute of Technology; R. Glenn Hubbard, Columbia University

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**Location:** PLAZA III  
**Title:** Statsitital Analysis Of Producer And Regulator Behavior  
**Chair:** Shane Greenstein, Northwestern University

**Papers:** **Organizing and Engaging in Nonmarket Activity: A Transactional Analysis of Corporate Lobbying at the Federal Communications Commission**  
John de Figueiredo, Massachusetts Institute of Technology and Emerson Tiller, University of Texas at Austin  
**An Empirical Examination of Entry Patterns in Local Telephone Markets**  
James Zolnierok, James Eisner and Ellen Burton, Federal Communications Commission

(Con't next page)

**Monday, September 27, 1999**

10:30am-12:00pm

(Continued)

**A Taxonomy of Communications Demand**

Steven Lanning, Lucent Technologies; W. Russell Neuman, University of Pennsylvania; Shawn O'Donnell, Massachusetts Institute of Technology

**A Financial Understanding of Telecommunication Takeovers: The Effect of Takeover Characteristics on the Shareholders' Wealth**

Seongcheol Kim, Dong-Woon Kim and Cho-kyoung Park, Michigan State University

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**Location:**

**MAGNOLIA ROOM**

**Title:**

**Universal Service: Economic Perspective**

**Chair:**

Bridger Mitchell, Charles River Associates

**Papers:**

**Universal Service in the United States and Canada: Funding High-Cost Areas**

Timothy Tardiff, NERA and Willie Grieve, TELUS Communications Inc.

**Local Access Over Analog Cellular Networks: Implications for Universal Service Funding and Commercial Mobile Radio Service Carriers**

Alan Boyer, HAI Consulting

**Winners and Losers from the Universal Service Subsidy Battle**

Gregory Rosston, Stanford University and Bradley Wimmer, UNLV

**An Economist's Perspective on Universal Residential Telephone Service**

Michael Riordan, Columbia University

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12:00pm-1:30pm

**LUNCH**

**LOCATION: TERRACE BALLROOM**

Conference Adjournment