2017 again proved to be another extremely productive year for the Phoenix Center, so much so that all of our many accomplishments and accolades cannot be summarized here.

As always, the Phoenix Center’s research in 2017 was prolific. To begin, the Phoenix Center issued eighteen (18) scholarly papers in 2017. We are also extremely proud to report that Phoenix Center scholars had five (5) papers published, or accepted for publication, in academic journals. Finally, Phoenix Center staff authored twenty-four (24) op-eds in various media outlets.

In 2017, the Phoenix Center also took steps to bolster our digital presence. Among other items, we authored several blogs on @LAWANDECONOMICS, the official blog of the Phoenix Center. We also participated actively on Twitter with our handle @lawandeconomics, and we are pleased to report that we have approximately 3,380 followers.

Once again, our efforts have not gone unnoticed. For example, Phoenix Center Chief Economist Dr. George Ford remains in the top 1% of authors downloaded on the Social Science Research Network, and I am not far behind in the top 1.4%. More importantly, the Phoenix Center’s webpage received nearly 1.5 million hits in 2017.

We also tried to contribute to the broader policy community. To this end, I was again proud to serve as the co-chair of Federal Communications Bar Association’s committee to oversee the FEDERAL COMMUNICATIONS LAW JOURNAL. In addition, I was honored to serve on the TPRC Program Committee. Moreover, George serves on the Federal Communications Commission’s Removing State and Local Regulatory Barriers BDAC Working Group.

We are again proud to report that we were able to make a significant contribution to the policy debate in 2017. For example, Congressman Bill Posey cited our research on the floor of the House of Representatives to support legislation to improve the peer review process at regulatory agencies; George was invited by the National Academies of Science to participate in a workshop on broadband competition; our research was a central citation in the FCC’s Business Data Services Order; the FCC again cited our paper “Competition After Unbundling” in its Annual CMRS Report to explain wireless market industry equilibrium; George and I were interviewed as “experts” for the GAO Set-Top Box Report; the NASA Administrator appointed to manage the National Space-based Positioning, Navigation, and Timing (PNT) Advisory Board invited George to speak at their 20th meeting in Redondo Beach, CA; and, perhaps most significantly, our research provided the primary citations in the Restoring Internet Freedom Order upon which the FCC relied to demonstrate that the costs of Title II reclassification outweighed the benefits.

Finally, the Phoenix Center again put on several fantastic programs of its own this year. First, we held a “teleforum” to talk about the FCC’s Restoring Internet Freedom Notice of Proposed Rulemaking. Second, we held our Sixth Annual Rooftop Policy Roundtable Discussion, where we had with a keynote presentation by FCC Commissioner Michael O’Rielly and an excellent interactive conversation over drinks and cigars. Finally, we held our Seventeenth Annual U.S. Telecoms Symposium with a keynote by NTIA Administrator David Redl to another standing-room only crowd.

Once again, not a bad year…

— Lawrence J. Spiwak, President
The Phoenix Center continued to publish a prodigious amount of scholarly research in 2017. As always, all of the Phoenix Center’s research is available free on the Phoenix Center’s web page and on the Social Science Research Network.

**PHOENIX CENTER POLICY PAPER SERIES**

The Phoenix Center’s POLICY PAPER SERIES seeks to provide an in-depth analysis of the current regulatory and political paradigms, as well as to provide constructive and well-reasoned solutions to the problems of the day. In 2017, the Phoenix Center issued the following POLICY PAPER:


**PHOENIX CENTER POLICY BULLETIN SERIES**

The Phoenix Center’s POLICY BULLETIN SERIES is designed to provide a forum for responding to discrete policy issues in a shorter format than our PHOENIX CENTER POLICY PAPER SERIES. The Phoenix Center published the following POLICY BULLETINS in 2017:

- **PHOENIX CENTER POLICY BULLETIN NO. 40, Skin in the Game: Interference, Sunk Investment, and the Repurposing of Radio Spectrum** (March 2017).
- **PHOENIX CENTER POLICY BULLETIN NO. 41, Safe Harbors and the Evolution of Music Retailing** (March 2017).
- **PHOENIX CENTER POLICY BULLETIN NO. 42, USTelecom and its Aftermath** (June 2017).

**PHOENIX CENTER POLICY PERSPECTIVES**

The Phoenix Center’s POLICY PERSPECTIVES SERIES is designed to provide a forum for its individual staff members to express their personal views on current policy developments. The Phoenix Center published the following POLICY PERSPECTIVES in 2017:

- **PHOENIX CENTER POLICY PERSPECTIVE NO. 17-05: “Regulatory Revival” and Employment in Telecommunications** (June 12, 2017).
- **PHOENIX CENTER POLICY PERSPECTIVE NO. 17-06: Below the Belt: A Review of Free Press and the Internet Association’s Investment Claims** (June 20, 2017).
- **PHOENIX CENTER POLICY PERSPECTIVE NO. 17-08: Reclassification and Investment:...**
PHOENIX CENTER PUBLICATIONS

A Statistical Look at the 2016 Data (July 13, 2017).


ACADEMIC PUBLICATIONS

In 2017, the Phoenix Center had five of its papers published, or accepted for publication, in academic journals:

• Private Solutions to Broadband Adoption: An Economic Analysis, 69 FEDERAL COMMUNICATIONS LAW JOURNAL 1 (2017) (originally released as PHOENIX CENTER POLICY BULLETIN No. 38).


OP-EDS:

The Phoenix Center had the following op-eds published in 2017:

• Trump Cabinet Brings Fresh Take on Labor Policy, THE HILL (January 11, 2017).

• Stopping the Surface Transportation Board from Running off the Rails, THE HILL (January 18, 2017).

• Ajit Pai Can Restore Regulatory Humility to the FCC, THE HILL (January 27, 2017).

• There’s Only One Choice for FTC Chair, and She’s Already Got the Job, THE HILL (February 15, 2017).

• If We Want Jobs and Economic Growth, Cut the Regulatory Budget, THE HILL (February 28, 2017).


• The Ugly Truth About Obama’s “Net Neutrality”, REAL CLEAR POLICY (May 18, 2017).

• The Real Story Behind Internet Regulation, REAL CLEAR POLICY (June 29, 2017).

PHOENIX CENTER PUBLICATIONS

- Revisiting the “Virtuous Circle” Two Years Later, BLOOMBERG BNA (July 10, 2017).

- Rate Regulation By Any Other Name, BROADCASTING AND CABLE (July 17, 2017).


- Not Ready to Ride Into the Sunset: Chairman Wheeler and the Fight for Internet Regulation, BLOOMBERG BNA (August 10, 2017).

- The Law, the Public Interest, and the FCC – A Critique of Title II Comments from Eleven Democratic Congressmen, BLOOMBERG BNA (August 25, 2017).

- Overbroad Safe Harbors – A Threat to a Healthy Internet, BLOOMBERG BNA (August 30, 2017).

- Public Broadband Projects Can Leave Taxpayers Holding The Bag, AL.COM (August 30, 2017).


- Obama’s Policies are Still Threatening the Freight Rail Industry, THE HILL (October 13, 2017).

- Repurposing Spectrum for Mobile Broadband Is Great, But Interference Issues Must Be Resolved First, BLOOMBERG BNA (October 16, 2017).

- Congress Needs to Stop the Net Neutrality Definitional Merry-Go-Round, BLOOMBERG BNA (November 6, 2017).


@LAWANDECONOMICS BLOG:

In 2017, the Phoenix Center published the following items on @LAWANDECONOMICS, the official blog of the Phoenix Center:

- A Bit of Perspective on the Alleged Forthcoming Privacy Apocalypse (March 30, 2017).


- In Response to Criticisms of Phoenix Center Research on Net Neutrality (September 14, 2017).

CONTRIBUTING TO THE PUBLIC DIALECTIC

2017 provided fertile soil for those interested in policy research. In this section, we highlight some (but not all) of what we at the Phoenix Center found to be the interesting policy issues of 2017 and where we believe we added constructively to the debate.

Network Neutrality

Perhaps no issue dominated the debate in 2017 then the politically-charged issue of net neutrality. As always, the Phoenix Center’s substantive research played a major role in the discussion.

On the legal side, the Phoenix Center continued to highlight the significant due process issues raised by the FCC’s controversial 2015 Order to reclassify broadband internet access as a common carrier telecommunications service under Title II of the communications Act of 1934.

On the economics side, the Phoenix Center introduced into the debate the need for a counterfactual to accurately measure the effects of reclassification. That is, rather than simply focus on whether short-term capital expenditures rose or fell since 2015, we explained that the proper question to ask is what is the “counterfactual”—i.e., what would investment been “but for” the regulatory in intervention?

The Phoenix Center also continued to provide public peer review of so-called economic analysis performed by others which claimed that reclassification actually had a positive effect on investment. In each case, we found that such studies mailed to meet minimum standards of professionalism and could not be relied upon for policy purposes.

We are very appreciative that the Federal Communications Commission recognized the value of our work. Indeed, the Phoenix Center’s research provided the primary citations upon which the FCC relied to find that the costs of reclassification outweighed the benefits in the Restoring Internet Freedom Order.

Spectrum Repurposing

For many years, policymakers have sought to develop mechanisms to repurpose spectrum from low to high-value uses. In 2017, the Phoenix Center again offered some contributions to this important task.

For example, Phoenix Center President Larry Spiwak authored an op-ed where he floated the idea of a spectrum “rocket docket” at the FCC consistent with Section 7 of the Communications Act. In 2018, we plan to flush out this idea further.

However, to facilitate spectrum repurposing, interference issues often (but not always) need to be resolved. To help the Commission think through this issue in more detail, the Phoenix Center issued a paper entitled Skin in the Game: Interference, Sunk Investments and the Repurposing of Radio Spectrum where we set out an economic framework for resolving interference disputes. This paper did not go unnoticed. Shortly after the paper was released, the NASA Administrator appointed to manage the National Space-based Positioning, Navigation, and Timing (PNT) Advisory Board invited Phoenix Center Chief Economist Dr. George Ford to present our research at their 20th meeting in Redondo Beach, CA.

Municipal Broadband

Municipal broadband again featured heavily in the Phoenix Center’s research agenda in 2017. Among other activities, the Phoenix Center conducted a detailed financial analysis on the municipal
broadband system in Opelika Alabama which, in turn, sparked an invitation from the Alabama legislature to have Phoenix Center Chief Economist Dr. George Ford testify about his research.

Merger Review

Analysis of telecom industry mergers—and the process by which they are adjudicated by the government—has long been a popular research topic at the Phoenix Center, and 2017 was no exception. For example, on the legal side, Phoenix Center President Larry Spiwak authored an op-ed praising the FCC for taking demonstrable steps to reduce rent extraction during merger reviews. And on the economic side, Phoenix Center Chief Economist Dr. George Ford authored a detailed econometric analysis analyzing the effectiveness of the behavioral conditions imposed in the Comcast-NBCU merger.

Cost Per Regulator

In 2011, the Phoenix Center released a paper entitled Regulatory Expenditures, Economic Growth and Jobs: An Empirical Study that empirically demonstrated how responsible cuts to the federal regulatory budget would produce significant GDP growth and private sector job creation. In so doing, our study provided empirical evidence to support what most Americans already intuitively know: reducing the size of the regulatory state is a promising means for cutting spending and growing the economy.

Given the Trump Administration’s stated policy goal of reducing the regulatory burden on the American economy, shortly after President Trump was inaugurated we released an update to our 2011 paper entitled What is the “Cost per Regulator” on GDP and Private Sector Job Creation? An Update on Prior Research. Again, our results were significant. Among other findings, our updated empirical analysis revealed that: (1) A ten percent (10%) reduction in the regulatory budget—or about $5.6 billion—will produce an additional $1.2 trillion in GDP annually over the next five years, or $244 billion annually; (2) On average, a ten percent (10%) reduction in the regulatory budget implies a $45 gain for every $1 decline in the regulatory budget; (3) A ten percent (10%) reduction in the regulatory budget—which implies a return to pre-Obama Administration levels—leads to an increase of three (3) million new private-sector jobs annually; and (4) On a “cost per regulator” basis, one regulator costs the U.S. economy the equivalent of 138 private sector jobs per year under current conditions. Each regulator costs the U.S. economy $11 million annually. We are proud to report that immediately after we released this update, the WASHINGTON TIMES featured our paper in its lead editorial.

Intellectual Property

Intellectual Property continues to be one of the fastest growing areas of the Phoenix Center’s research agenda. In 2017, we covered a wide range of intellectual property topics with some very innovative research.

Among other research initiatives, we issued two papers on copyright safe harbor, and authored another paper on fair use. We also had three other papers on intellectual property published in referred academic journals, including the prestigious SOUTHERN ECONOMIC JOURNAL. Again, our research did not go unnoticed, and Phoenix Center Chief Economist Dr. George Ford was invited by an assortment of policymakers in Pacific Rim countries to make multiple trips to Asia, Australia and New Zealand to present his research.
Due Process

In 2017, the Phoenix Center again focused on the need for regulatory agencies to protect the due process of the entities they regulate. For example, we were delighted that Congressman Bill Posey cited our research on the floor of the House of Representatives to support legislation to improve the peer review process at regulatory agencies. Similarly, with “clticivism” now getting out of control at regulatory agencies, Phoenix Center President Larry Spiwak authored an op-ed in THE HILL proposing some modest procedural reforms to curb abuse in the public comment process.

Reciprocal Switching for Freight Railroads

In a somewhat new area of interest, the Phoenix Center initiated some preliminary research into the issue of reciprocal switching in the freight rail industry. To this end, not only did we author two op-eds on the topic dissecting the Surface Transportation Board’s logic, but Phoenix Center President Larry Spiwak testified before the STB at a “listening session” to present our thoughts.

Aggregates

Natural aggregates—including crushed stone, sand and gravel—are a basic raw material used for residential, business, and government construction projects, as well as in agriculture, and chemical and metallurgical processes. To better understand the effect of the U.S. aggregates industry on the economy and jobs, the Phoenix Center authored an economic “Scorecard” entitled The Economic Impact of the Natural Aggregates Industry: A National, State, and County Analysis. Our Scorecard demonstrated that the positive effects of the aggregates industry on the U.S. economy are substantial.

According to our Scorecard, quarries—producers of the essential raw materials needed for any construction project—are significant contributors to the economic wellbeing of the United States. The industry generates $27 billion in annual sales and employs 100,000 skilled workers earning above-average salaries. Additionally, the industry supports $122 billion in national sales, $32 billion in national earnings (i.e., wages) and between 364,000 and 600,000 jobs across a wide range of occupations and industries.

Our Scorecard also revealed that each job in the aggregates industry supports an additional 4.87 jobs throughout the economy. These jobs are widely spread across industries and occupations. Each dollar of earnings (i.e., wages) creates another $4.19 of earnings in other sectors, and each dollar of sales in the industry produces another $3.47 of sales in other industries. The effects of the aggregates industry are both large and diverse. Sizable effects on employment and output are found also at the state and county levels.

With potential infrastructure legislation expected in 2018, we correspondingly expect our work to expand in this area.

Conclusion

As policy debates have become increasingly politicized over the years, we still believe (perhaps over-optimistically) that, in the end, substance matters. The policy choices we face are hard, and they should be treated with the respect and analytical rigor they deserve. Hopefully, the Phoenix Center has contributed positively towards restoring some of this analytical rigor to the dialectic.
**CONFERENCES AND SYMPOSIUM**

**Phoenix Center Teleforums**

The Phoenix Center’s Teleforum Series allows us both to walk through our relevant research and to hold discussions with industry experts about pressing policy issues of the day.

In May 2017, the Federal Communications Commission issued a *Notice of Proposed Rulemaking* to roll-back the Obama Administration’s 2015 decision to reclassify broadband internet access as a common carrier telecommunications service under Title II of the Communications Act of 1934. To discuss this various issues raised by the NPRM, the Phoenix Center held a Teleforum with a panel of experts. Joining Phoenix Center President Larry Spiwak and Phoenix Center Chief Economist Dr. George Ford were Russ Hanser, Partner – Wilkinson Barker Knauer, LLP; and Angela Giancarlo, Partner – Mayer Brown.

**Rooftop Policy Roundtable**

This June, the Phoenix Center held our Sixth Annual Rooftop Policy Roundtable Discussion where we facilitated a set of interactive conversations on the roof of the University Club to a standing-room only crowd over drinks and cigars. This year’s theme was *What to Do About Title II?*, where we explored the legal, economic and policy issues of the FCC’s *Restoring Internet Freedom NPRM* as well as the broader net neutrality debate. To start the event, we were privileged to be joined by FCC Commissioner Michael O’Rielly for a keynote discussion, after which we had a broader discussion with a panel of experts including Jonathan Spalter – President and CEO, USTelecom, Bryan Tramont – Managing Partner, Wilkinson Barker Knauer; Professor Tim Brennan – UMBC, and Hank Hultquist, Vice President – AT&T.

**Phoenix Center Annual Telecoms Symposium**

On December 5, 2017, the Phoenix Center held its Seventeenth Annual U.S. Telecoms Symposium to another standing-room crowd. As always, the discussions were both informative and lively.

The Symposium began with a panel entitled *Is Schumpeterian ‘Creative Destruction’ Still Possible in Today’s Regulatory Environment?* Joining us for this discussion were Dr. Wayne Leighton – Chief, Office of Strategic Planning and Policy Analysis, FCC; Jeff Blum – SVP and Deputy General Counsel, DISH; Adam Thierer – Senior Research Fellow, Mercatus Center; and Admiral Thad Allen (Ret.) – Senior Executive Advisor, Booz Allen and the 23rd Commandant of the United States Coast Guard.

Building on this discussion, our next panel was entitled *Continuing Legal Implications of the Open Internet Debate*, where we were joined by Chris Wright – Partner, Harris, Wiltshire & Grannis and former General Counsel, Federal Communications Commission; Jonathan Nuechterlein – Partner, Sidley Austin and former General Counsel, Federal Trade Commission; Angela E. Giancarlo – Partner, Mayer Brown and former Chief of Staff, FCC Commissioner Robert McDowell; and Thomas Navin – Partner, Wiley Rein and Former Chief, FCC Wireline Competition Bureau.

As always, our Symposium ended with the presentation of the Phoenix Center’s Annual Jerry B. Duvall Public Service Award. The Duvall Award does not seek to recognize the recipient’s personal politics; policymaker who most demonstrated the “political courage in, and contribution of analytical rigor to, the United States telecoms policy debate.” This year, it was our privilege to bestow our Duvall Award upon National Telecommunications and Information Administration Administrator David Redl. Given Mr. Redl’s long career in public service, we could think of nobody who epitomized this standard more in 2017.
YEAR IN PICTURES
MISSION STATEMENT

The Phoenix Center for Advanced Legal & Economic Public Policy Studies is a non-profit 501(c)(3) educational and research organization that studies broad public-policy issues related to governance, social and economic conditions, with a particular emphasis on the law and economics of telecommunications and high-tech industries.

Founded in 1998, the Phoenix Center’s mission is to provide independent assessments of the economic and material implications of regulatory and economic policy in the U.S. and abroad.

The Phoenix Center achieves this goal by providing an honest and credible voice in the public dialectic by supporting objective, solutions-based academic research to the forefront that is unencumbered by political hyperbole or agendas and is instead well grounded in fact, law and economic theory.

Long-Term Goals:

(1) The Phoenix Center’s seeks to remind stakeholders that it is crucial to avoid political hyperbole and instead approach public policy with the analytical rigor and solemnity it deserves.

(2) The Phoenix Center seeks to promote public confidence in the democratic process, government’s institutions and in the free enterprise system.

(3) The Phoenix Center seeks to foster an environment where citizens can openly and vigorously debate today about what kind of a world they want to live in tomorrow.

The “ideal of democracy rests on the belief that the view which will direct government emerges from an independent and spontaneous process. It requires, therefore, the existence of a large sphere independent of majority control in which the opinions of the individuals are formed.”

— Friedrich von Hayek