

MICHIGAN STATE UNIVERSITY College of **LAW**



FCC EXPLORER SEARCH APP

Adam Candeub, Professor of Law & Director of the Intellectual Property Law Program
Sherrod Blankner, Phlebas Consulting, Data Scientist & Software Developer

U.S. Law is Regulation

- Every year roughly
 - 80 fully decided Supreme Court decision
 - 200-500 laws, 3000-4000 pages
 - 3000-4000 final regulations, 100K+ Federal Register pages
- Entrepreneurs cannot track/influence the regulatory process



FCC: Innovation's Gatekeeper

- Regulates internet, spectrum, media
- Major decisions (Ds and Rs) made by partisan commissioner vote
- Individuals influence through comments and meetings with commissioners and FCC staff (“ex parte” meetings)



Why are ex parte letters interesting?

- To academics
 - We can connect ex parte to votes, regulatory outcomes
- To practicing regulatory lawyers
 - Know who is whispering in whose ear
- To clients
 - Who really is an insider
 - What the government relationship spend buys



Deliverables: Two Phases

PHASE I:

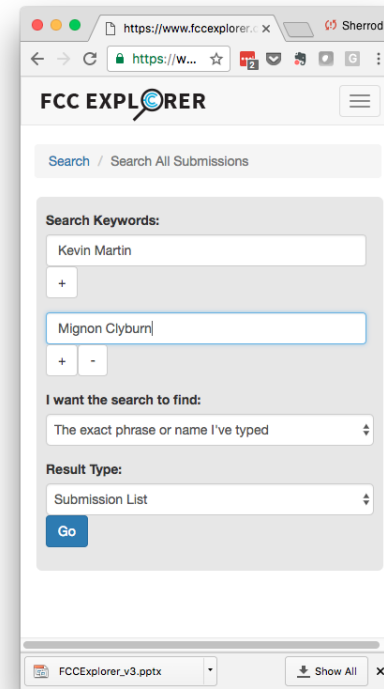
Single entity lookup
in FCC ex parte data



Example: Commissioner Kevin Martin Topics

PHASE 2:

Multi-entity comparisons
in FCC ex parte data



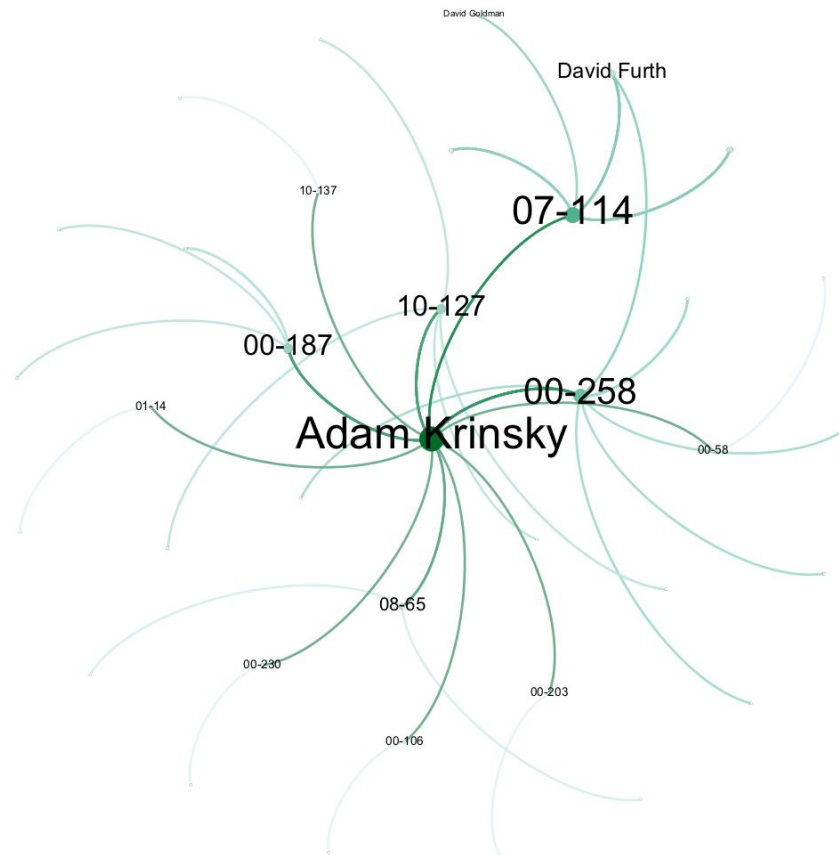
Example: Cross-section of Commissioners
Kevin Martin and Mignon Clyburn



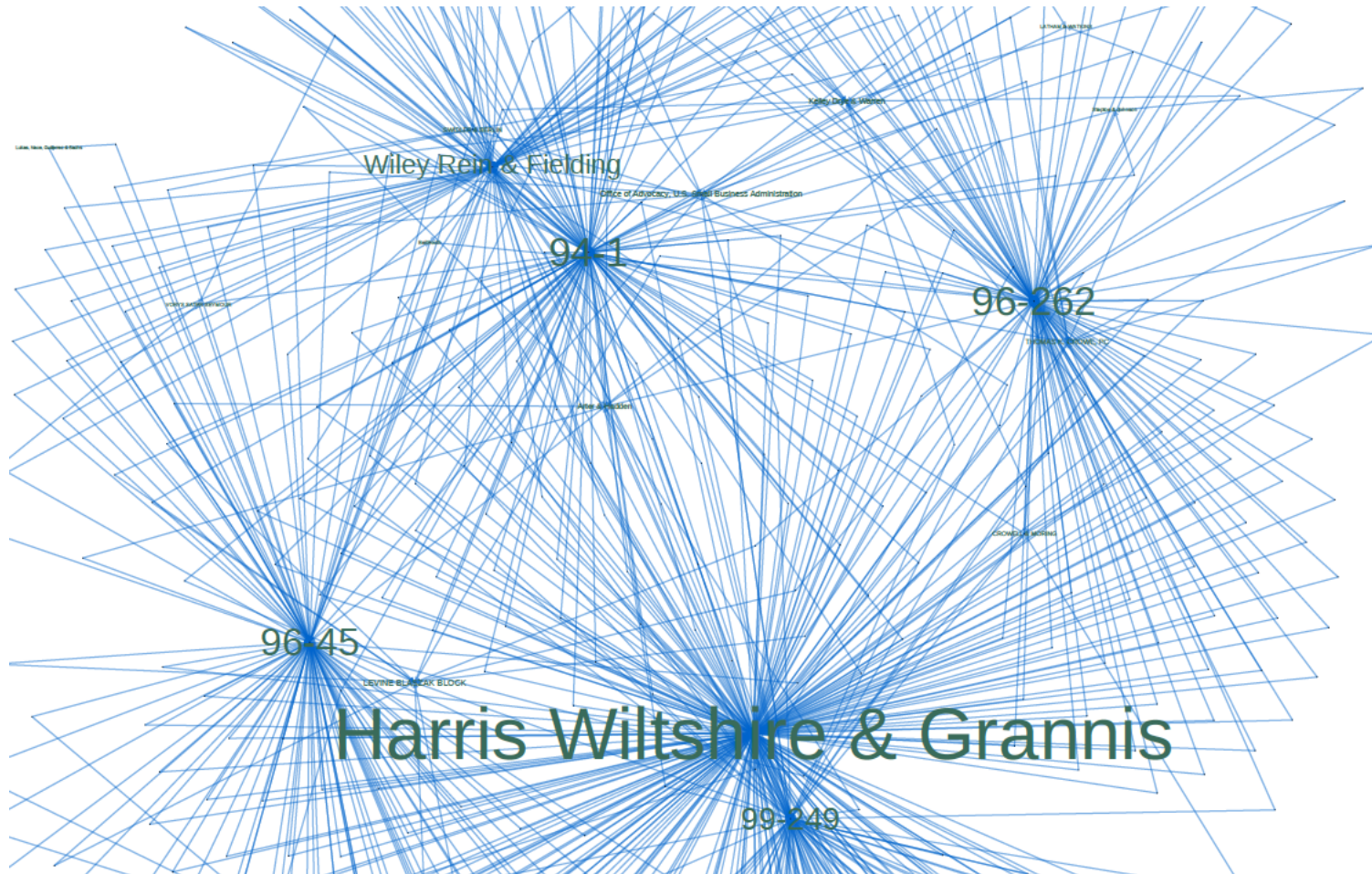
Phase I: Relativity Data

- Connecting proceedings to one entity

Example:
Proceedings
connected to
Adam Krinsky



Phase I: Entities Related to Proceeding



Phase I's Remaining Data Issues

- We want current FCC data (not just in Relativity database)
- We need to parse entities out of full-dataset
- We need a web interface with multi-entity search capabilities



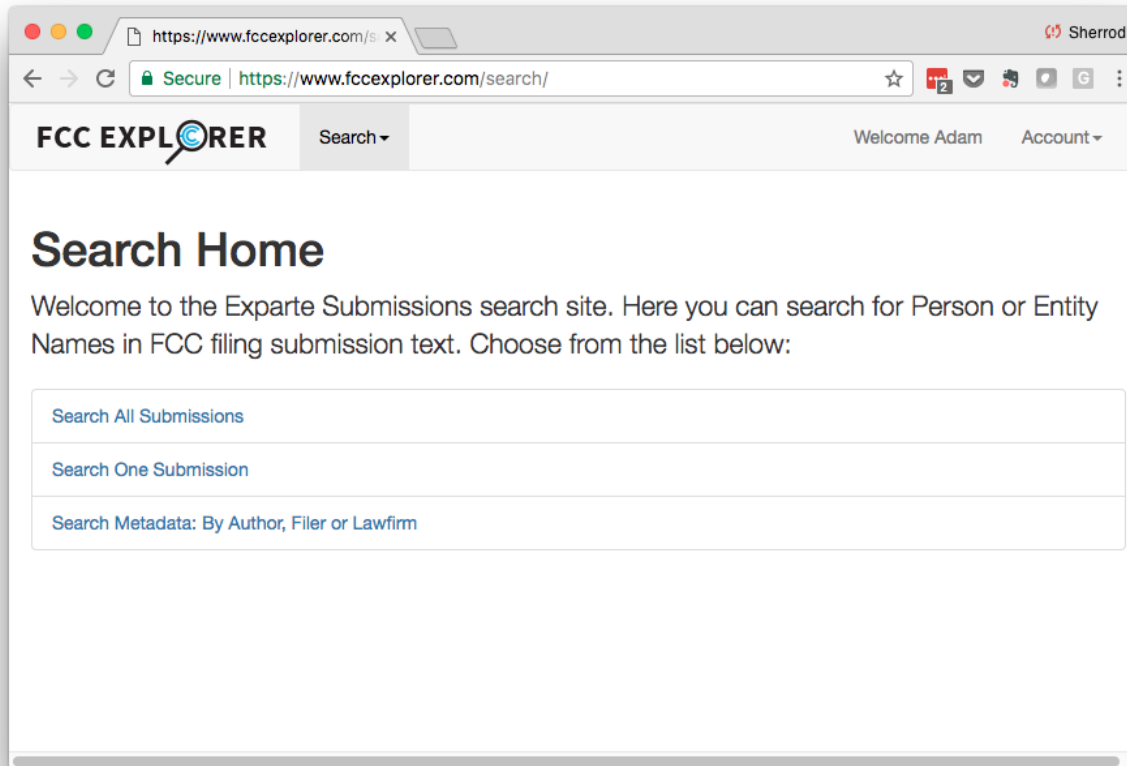
Phase 2: A Leap Forward

FCC EXPLORER

check us out at www.fccexplorer.com



Phase 2: Web Search Capabilities



Phase 2: Extracting Entity Names And Submission Metadata

Submission ID: 5000300532

Raw Text from API:

Office of the MayorThe City of HarrisburgCity Government CenterHarrisburg, PA 17101-1678Stephen R. ReedMayorJune 22, 1998Ms. Magalie Roman SalasSecretaryFederal Communications Commission1919 M Street, NW - Room 222Washington, DC 20554 /Ex Parte Letter Re: Cases FL 91-171/ FO 91-301Dear Secretary Salas:Enclosed are two (2) copies of an ex parte presentation in the above referenced proceeding.SRR/psr-jAttachmentsStephen R. ReedMayorRECEIVEDOffice of the MayorJune 23, 1998The City of Harrisburg, PA 17101-1678June 23, 1998Honorable William Kennard, ChairFederal Communications Commission1919 M Street, NW - Room 814Washington, DC 20554Ex Parte Filing in cases FO 91-171; FO 91-301Dear Chairman Kennard:We write to strongly urge that the FCC reject the proposed change in theEmergency Alert System (EAS) rules. Such changes would literally prevent people watching local TV stations on a cable system from receiving emergency announcements from their local public safety authorities. Since more people are watching programs televised by cable carriers than ever before, this seems a bizarre - even dangerous proposition. There is no basis for such a preemption of state and local public safety authorities, particularly against their will. All viewers of cable channels should get emergency announcements from their local public safety authority. Otherwise, public safety is measurably harmed. We ask that you reject the proposed change, including any proposal to preempt franchise provisions on local emergency alerts. Municipalities are charged with protecting the public safety. They have trained public safety authorities on duty 24 hours a day with an obligation and duty to notify the public of emergencies. Where they have felt it necessary (such as when TV station announcements were inadequate or need supplementing) municipalities require all channel local alert systems in their cable franchises. It is a violation of Federalism, common sense and the FCC's statutory duty to turn this vital public safety function over to a private party who has no obligation, training or authority on public safety matters. Broadcasters supporting the proposed rule claim that their emergency alerts are superior to those of state and local public safety authorities. That has not been the experience of most in the emergency management field. Moreover, this is a decision for each municipal safety authority to determine on a case by case basis, as reflected in their cable franchise. This decision cannot be turned over to a private party with no public safety obligation. Honorable William Kennard June 23, 1998 nju-2,6'99grif\ROCC-41Alert systems deal with emergency where public safety authorities have determined that the public needs to be informed immediately. The fact that emergency alerts from public safety authorities may occasionally overlap those of private parties (such as broadcasters) is a minor problem, if it is a problem at all. The NAB's proposed rule is unacceptable because it virtually guarantees a substantial reduction in the number of people receiving emergency announcements from their local public safety authority. Emergency information on TV stations can be helpful but typically apply mainly to weather. Local emergency alerts are also used for other types of emergencies, such as hazardous material spills, gas leaks, prison escapes, street and bridge closings and local snow emergencies. TV stations typically do not cover these events. In part, this is because TV stations serve hundreds of communities. They don't cover local emergencies which affect only one community. Cable systems are often the best or only means for municipalities to alert their residents to local emergencies which reflect local conditions. The Cable Act allows communities in franchise renewals to require cable systems to meet community needs. Local emergency alert systems are a part of meeting such needs. These provisions of the Cable Act cannot be preempted. We believe that any attempt at preemption would violate principles of Federalism and the U. S. Constitution due to public safety matters being of vital local concern. We appreciate your consideration of these views. SRR/psr-jcc: Commissioner Harold Furchtgott-Roth Commissioner Michael Powell Commissioner Gloria Tristani Commissioner Susan Ness Mr. John Logan Ms. Magalie Roman Salas

Submission ID: 5000300532

Parsed Entity Names (Cleaned up)

Mayor The City Harrisburg Magalie Roman NW William Kennard Chair Federal Communications Commission 1919 NW Parte Filing FCC Emergency Alert System EAS Federalism NAB Local Cable Act Michael John Logan Ms Magalie Roman Salas



Phase 2: How do two people or topics intersect in the FCC?

Search for the intersection of Commissioner Michael Powell and the topic “Intercarrier Compensation”

In this case, 75 submissions where the two intersect.

The screenshot shows the FCC Explorer search interface. The search bar contains the keywords 'Michael+Powell' and 'Intercarrier+Compensation', with red arrows pointing to each. Below the search bar, the search criteria are set to 'The exact phrase or name I've typed' and the result type is 'Submission List'. The search results show 75 results on page 1. The first two results are visible in the table below.

Submission ID	Proceeding Name	Proceeding Description	Keyword Context	Date Received
5508541691	96-98	IMPLEMENTATION OF THE LOCAL COMPETITION PROVISIONS IN THE TELECOMMUNICATIONS ACT OF 1996	...mediate Board oMCIT Chairman Michael Powell IXCs MARKET LECs Circuit Mich... ...uestions Support Blair Levin Intercarrier Compensation Questions WCOM Incumbent Loca...	2002-11-14T00:00:00
5508541690	01-338	In the Matter of Review of the Section Unbundling Obligations of Incumbent Local Exchange Carriers	...y Americas Net Debt Chairman Michael Powell OR1 IXCs MARKET LECs Circuitnications CSfBis Blair Levin Intercarrier Compensation Questions WCOM	2002-11-14T00:00:00



Phase 2: What did the parties talk about?

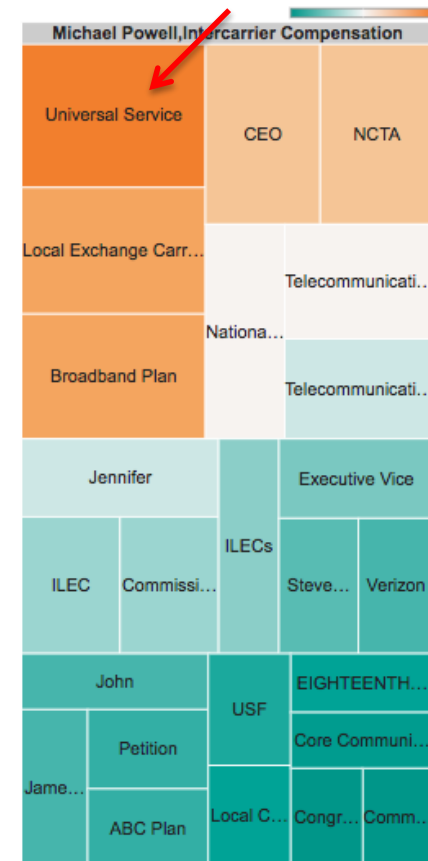
Within the intersection of Michael Powell and “Intercarrier Compensation”, what are the top 25 topics discussed?

In this case: Universal Service, Local Exchange Carriers, Broadband, Telecommunications Act, etc.

Relationships

Number of Occurrences	Topic
43	Universal Service
38	Local Exchange Carriers
38	Broadband Plan
34	CEO
34	NCTA
28	National Cable
28	Telecommunications Association
25	Telecommunications Act
25	Jennifer
22	ILEC
22	Commissioner Michael Copps
21	ILECs
20	Executive Vice
18	Steve Morris
17	Verizon

Data Visualization



Phase 2: Data Issues

Nature of entity parser technology introduces some unimportant (garbage) hits.

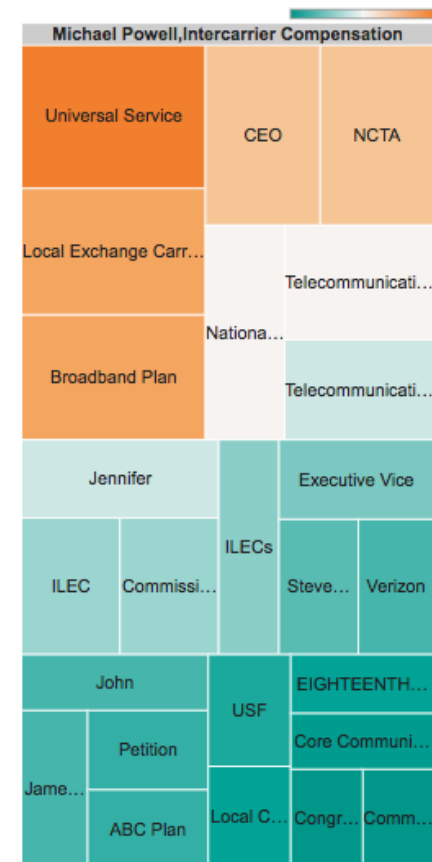
Example: CEO, Jennifer, Executive Vice

Entity parser can't tell difference between an important name like "Verizon" and a generic name in the text, like "Jennifer."

Relationships

Number of Occurances	Topic
43	Universal Service
38	Local Exchange Carriers
38	Broadband Plan
34	CEO
34	NCTA
28	National Cable
28	Telecommunications Association
25	Telecommunications Act
25	Jennifer
22	ILEC
22	Commissioner Michael Copps
21	ILECs
20	Executive Vice
18	Steve Morris
17	Verizon

Data Visualization



Phase 2: How many times did an author, filer or lawfirm submit to the FCC?

Introduction of Metadata Search into FCC Explorer.

Find out how many times and on what topics an author, filer, or law firm has submitted.

Example: Wiley, Rein & Fielding law firm has 352 Submissions

Number of Results: 352, Page 1

Submission ID	Metadata	Proceeding Name	Proceeding Description	Keyword Context	Date Received
5508230026	Authors: David E. Hilliard Filers: Time Domain Corporation Law Firms: Wiley Rein & Fielding LLP	98-153	In the Matter of Revision of Part of the Commission's Rules Regarding Ultra-Wideband	Maglie Roman Paul Withington Domain Corporation Parte Notice Domain David theGPS Wiley Rein Jeffrey Ross Technology JuliusKnapp Kneeland Youngblood Richard Wiley UWB NPRM Ed Thomas Rachel Reinhardt Franca GPS LI Mr. Caton William Please Bruce Franca Time Domain Deputy Chief of OET Time David E Knapp Ralph Petroff Deputy Chief of NWWASHINGTON Chiefofthe Docket Jim Baker	2001-02-06T00:00:00
5508230024	Authors: Robert L. Pettit Filers: Time Domain Corporation Law Firms: Wiley Rein & Fielding LLP	98-153	In the Matter of Revision of Part of the Commission's Rules Regarding Ultra-Wideband	Naval Facilities Domain Corporation FCC ReCelVed Power NSWC Naval DoD SPCS Technology MCM IFCC Proposal FCC NPAU Objective Infantry Navy Aircraft Occupational Safety ZOO WLANS MHz Tank Automotive IONES	2001-02-06T00:00:00



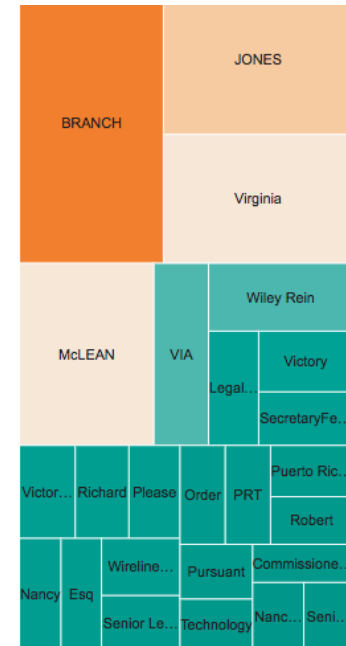
Phase 2: What topics did an author, filer or law firm discuss with the FCC?

Example: top 25 topics in Wiley Rein & Fielding submissions.

Data issues: lots of unimportant hits.

Important words further down the list.

315	BRANCH
224	JONES
191	Virginia
191	McLEAN
78	VIA
76	Wiley Rein
45	Legal Advisor
45	Victory
41	SecretaryFederal Communications
40	Victory Nancy
39	Richard
38	Please
37	Nancy
36	Esq
36	Wireline Competition Bureau
35	Senior Legal Advisor
35	Order
35	PRT
33	Puerto Rico Telephone Company
32	Robert



What's Ahead? (Phase 3)

- Metadata slicing incorporated into website
 - Rankings (gamification)
 - Search by proceeding, bureau
- Data cleaning challenges
- Behind-the-scenes data concerns



Metadata Gamification: Top Hits

All Time Top Author:

John Nakahata,
HARRIS, WILTSHIRE & GRANNIS LLP
Former FCC Chief of Staff

Number of Submissions	Author Name
1921	John T. Nakahata
1327	Thomas Jones
1219	Michael R. Romano
725	John Kuykendall
709	John P. Janka
682	Daniel Mitche
659	Various
566	David Honig
516	Mitchell F. Bre
515	Michele C. Far
494	Ruth Milkman



All Time Top Filer:

Verizon

Number of Submissions	Filer
5059	Verizon
2828	At&t
2007	National Telecommunications Cooperative Association
1433	United States Telecom Association
1401	National Cable & Telecommunications Association
1269	CTIA - The Wireless Association
1145	Sprint Nextel Corporation
1126	T-Mobile USA, Inc.
948	BellSouth
914	Public Knowledge



Metadata Gamification: Top Hits, cont.

All Time Top Ex Parte Proceedings:

- 02-277, 2002 Biennial Regulatory Review (> 9000 Submissions)
- 96-45, Universal Service (> 5000 Submissions)
- 10-90, Broadband Plan (> 4500 Submissions)

U.S. Telecommunications Act of 1996



encourage deployment of advanced telecom capabilities, including broadband to all Americans
Goal: "intramodal" competition – voice over circuit switched net, local/long distance



emerging "intermodal" competition –
wireless vs wireline
VoIP vs wireline and wireless
IPTV vs cable TV



growth in broadband Internet access to U.S. homes

Number of Submissions	Proceeding Name	Proceeding Description
9337	02-277	2002 Biennial Regulatory Review-Review of the Commission's Broadcast Ownership Rules and Other Rules Adopted Pursuant to Section of the Telecommunications Act of 1996
5252	96-45	FEDERAL-STATE JOINT BOARD ON UNIVERSAL SERVICE
4716	10-90	In the Matter of Connect America Fund A National Broadband Plan for Our Future High-Cost Universal Service Support. .
4260	09-51	In the matter of a National Broadband Plan for Our Future.
4120	01-92	Developing a Unified Intercarrier Compensation Regime.
3893	05-337	In the Matter of Federal -State Joint Board on Universal Service High-Cost Universal Service Support. . .
2902	01-338	In the Matter of Review of the Section Unbundling Obligations of Incumbent Local Exchange Carriers



2017 Proceeding with the Most Submissions

Proceeding #10-90, In the Matter of Connect America Fund A National Broadband Plan for Our Future High-Cost Universal Service Support. (>300 Submissions)

Top Filers in Proceeding 10-90

Number of Submissions	Filer Name
42	NTCA-The Rural Broadband Association
12	Hughes Network Systems
11	WTA - Advocates for Rural Broadband
9	Lifeline Connects Coalition
8	New York State

Top Authors in Proceeding 10-90

Number of Submissions	Author Name
35	Michael R. Romano
12	Jennifer A. Manner
12	L. Charles Keller
12	Gerard J. Duffy
9	John M. Beahn



Michael Romano

Michael R. Romano • 3rd
 Sr. Vice President - Industry Affairs & Business Development
 NTCA-The Rural Broadband Association • Georgetown University Law Center

Hughes Network Systems



Jennifer Manner

Jennifer Manner • 3rd
 Senior Vice President, Regulatory Affairs at EchoStar Corporation
 EchoStar Corporation • Georgetown University

MICHIGAN STATE UNIVERSITY COLLEGE OF LAW



NTCA: How many meetings with each Commissioner in 2017?

#10-90, National Broadband Plan



Michael R. Romano
NTCA



Commissioner
Ajit Pai
15 meetings



Commissioner
Jessica Rosenworcel
3 meetings



Commissioner
Michael O'Rielly
15 meetings



Commissioner
Mignon Clyburn
15 meetings



Commissioner
Brendan Carr
3 meetings



Most powerful tool ever developed to tease apart regulatory ecosystem

- Possible Uses
 - Measure special interest influence
 - Evaluate lawyer/lobbyist effectiveness
 - Determine *agency* effectiveness
- *Democratizes* insider regulatory information



Funding



QUESTIONS? FEEDBACK?



(517) 432-6906

candeub@law.msu.edu

415-225-9159

blankner@gmail.com

