

OTA Summer Conference

Colorado Springs, Colorado June 4, 2025

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2024: A Look Back

S. 3321, Lowering
Broadband Costs on
Consumers Act
6 Republicans; 1

Democrat

Mann Fernandez Letter
5 Republicans;
17 Democrats

Third Strand Consult Report December 12, 2024

1 Congressional Briefing47 Senate meetings71 House meetings10 FCC Meetings

4 National Trades46 State Associations1 USF Working Group

Senate and House hearings on the Universal Service Fund



Our Returning Congressional Supporters

Senate

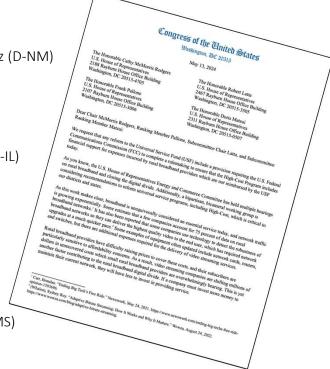
- Sen. Markwayne Mullin (R-OK)
- Sen. Mark Kelly (D-AZ)
- Sen. Mike Crapo (R-ID)
- Sen. Jim Risch (R-ID)
- Sen. Kevin Cramer (R-ND)
- Sen. Josh Hawley (R-MO)

House GOP

- Tracey Mann (R-KS)
- Rep. Jack Bergman (R-MI)
- Rep. Tom Cole (R-OK)
- Rep. Dusty Johnson (R-SD)
- Rep. John Rose (R-TN)

House Democrats

- Rep. Teresa Leger Fernandez (D-NM)
- Rep. Henry Cuellar (D-TX)
- Rep. Raúl Grijalva (D-AZ)
- Rep. Raja Krishnamoorthi (D-IL)
- Rep. Summer Lee (D-PA)
- Rep. Joe Neguse (D-CO)
- Rep. Terri Sewell (D-AL)
- Rep. Eric Sorenson (D-IL)
- Rep. Bennie Thompson (D-MS)



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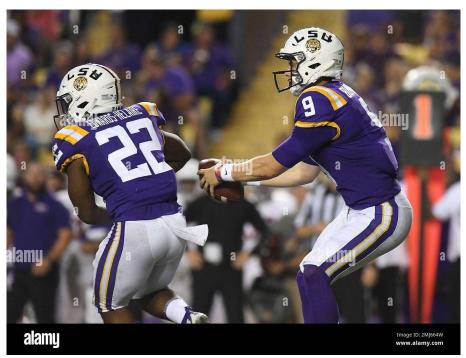
May 20, 2024 USF/ACP Lunch Briefing



- Panelists from Strand Consult, Nex-Tech,
 Benton Institute, Digital Progress Institute,
 Mana A Latina Organization, and
 Communication Workers of America
- ~ 50 attendees



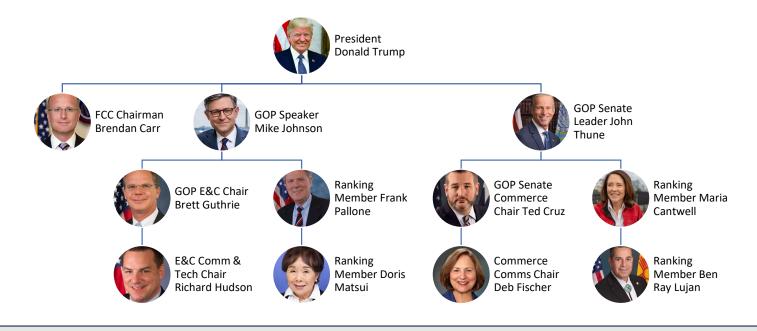
The Greatest Teams of All Time







A New Slate of Decision Makers: President, Vice President, FCC, and Congress



A returning President and a new 119th Congress



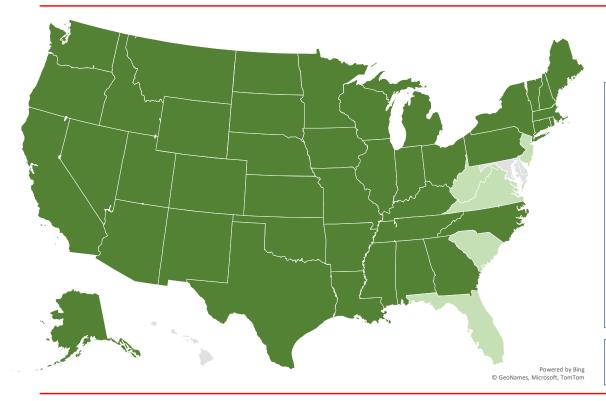
The 2025 Trump Legislative Agenda



- Immigration
- Taxes/Budget Reconciliation
- Energy
- Trade Tariffs
- American Manufacturing
- Pushing the edges of Executive Power



Small Independent Broadband Providers Overwhelmingly Endorse S. 1651, Lowering Broadband Costs on Consumers Act of 2025



New 2025 letter to Congress

- 410 service areas
- 337 companies
- 48 state associations
- 5 national associations
 - NTCA
 - WTA
 - US Telecom
 - Nat'l Tribal Telecom Assn.
 - Rural Wireless Assn
- Company Support
- Company + State Association Support



House Companion Bill Sponsors Secured

Hard Work Pays Off!

- After several years of cultivation, we've secured Randy Feenstra (R-IA) and Teresa Leger Fernandez (D-NM) to introduce the House companion legislation
- In June, we'll be gathering original cosponsors for Feenstra/Leger Fernandez companion bill





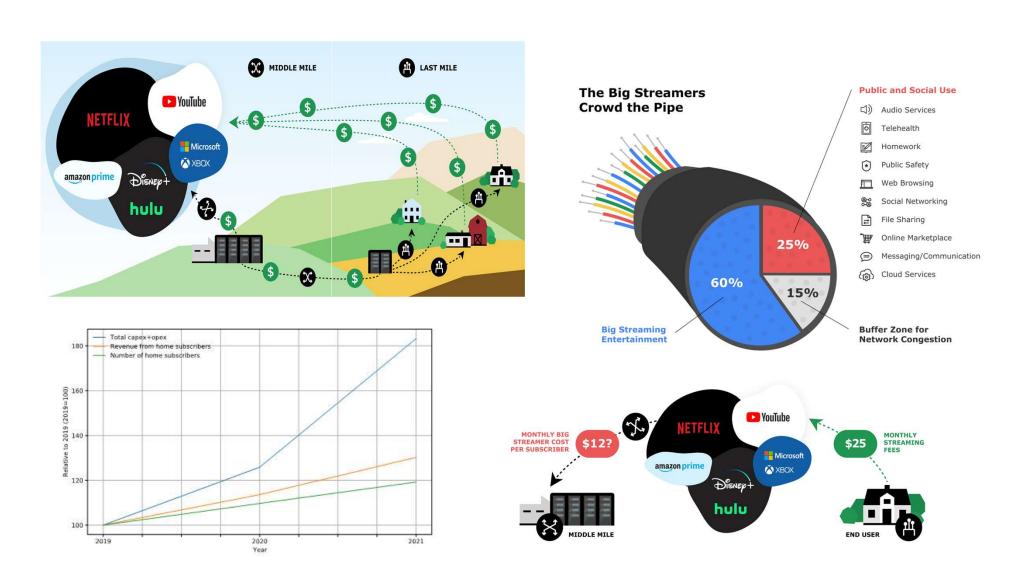




Dr. Roslyn Layton's Groundbreaking Research



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For \$50/m home broadband

Alphabet Google Music Google Project Stream Google Allo Google VR Google Generic Call Nest Google Home	Percentage of users 4% (0.75 GB)	50%	Alphabet	17%	
Google Stadia Google Messaging Google+ Hangout Google Meet YouTube Google Cloud Messaging Google Duo	53% (0.03 GB) 80% (2.2 GB)	40%	SLOUD EAMINE	9%	
Google Play Music Amazon Amazon Alexa Amazon Music Audible	Percentage of users 27% (0.02 GB) 8% (0.28 GB)	30%	Meta	8%	
Amazon Chime Amazon Interactive Video Amazon Luna Amazon Prime Apple	1% (3.4 GB) 43% (1.5 GB) Percentage of users	20% ———	NETFLIX	7% 6%	
Apple Game Center Apple TV+ FaceTime Apple Music Podcast Services	32% (0.33 GB) 43% (0.05 GB) 16% (0.8 GB)	10% ———	TikTok	5%	
Apple Siri iTunes Store audio	Advertising data is 25% of total network capacity	0%	Amazoi	4% 4% 2%	

Microsoft	Percentage of users
XBOX Games	22% (3.6 GB)
Xbox: Halo 5	2270 (3.5 GB)
WWE	
Xbox One	
MSN messenger	
MSN Games	
Microsoft Lync	
Microsoft Stream	
Xbox Live	21% (0.78 GB)
LinkedIn	
Microsoft Media Services	
Microsoft Teams	5% (0.75 GB)
Microsoft Kaizala	
msn video	
0.1	40/ (0.00.00)
Skype	1% (0.60 GB)
Filesharing and Cloud Gaming	Percentage of users
	Percentage of users 9% (20.4 GB)
Filesharing and Cloud Gaming	Percentage of users 9% (20.4 GB) Percentage of users
Filesharing and Cloud Gaming Netflix Netflix	Percentage of users 9% (20.4 GB) Percentage of users 78% (3.2 GB)
Filesharing and Cloud Gaming Netflix	Percentage of users 9% (20.4 GB) Percentage of users
Filesharing and Cloud Gaming Netflix Netflix Meta	Percentage of users 9% (20.4 GB) Percentage of users 78% (3.2 GB)
Filesharing and Cloud Gaming Netflix Netflix Meta Oculus Rift	Percentage of users 9% (20.4 GB) Percentage of users 78% (3.2 GB)
Filesharing and Cloud Gaming Netflix Netflix Meta Oculus Rift Oculus	Percentage of users 9% (20.4 GB) Percentage of users 78% (3.2 GB) Percentage of users
Filesharing and Cloud Gaming Netflix Netflix Meta Oculus Rift Oculus WhatsApp	Percentage of users 9% (20.4 GB) Percentage of users 78% (3.2 GB) Percentage of users 77% (0.09 GB) 84% (0.08 GB) 72% (0.85 GB)
Filesharing and Cloud Gaming Netflix Netflix Meta Oculus Rift Oculus WhatsApp Facebook Messenger	Percentage of users 9% (20.4 GB) Percentage of users 78% (3.2 GB) Percentage of users 77% (0.09 GB) 84% (0.08 GB)
Filesharing and Cloud Gaming Netflix Netflix Meta Oculus Rift Oculus WhatsApp Facebook Messenger Facebook	Percentage of users 9% (20.4 GB) Percentage of users 78% (3.2 GB) Percentage of users 77% (0.09 GB) 84% (0.08 GB) 72% (0.85 GB)
Filesharing and Cloud Gaming Netflix Netflix Meta Oculus Rift Oculus WhatsApp Facebook Messenger Facebook Instagram	Percentage of users 9% (20.4 GB) Percentage of users 78% (3.2 GB) Percentage of users 77% (0.09 GB) 84% (0.08 GB) 72% (0.85 GB) 75% (0.42 GB)
Filesharing and Cloud Gaming Netflix Netflix Meta Oculus Rift Oculus WhatsApp Facebook Messenger Facebook Instagram Disney+	Percentage of users 9% (20.4 GB) Percentage of users 78% (3.2 GB) Percentage of users 77% (0.09 GB) 84% (0.08 GB) 72% (0.85 GB) 75% (0.42 GB) Percentage of users

Top Edge Providers benefit from USF \$120 Billion per year Telecom Providers benefit \$50/month or \$600 per year

Company	2024 Total US ARPU	2024 digital service ARPU	
Alphabet	\$ 711.38	\$ 491.87	
Netflix	\$ 212.43	\$ 212.43	
Meta	\$ 148.90	\$ 148.90	
Disney+/Hulu	\$287.36	\$ 172.41	
Amazon	\$ 2,151.58	\$ 550.81	
Microsoft	\$ 972.22	\$ 571.43	
ByteDance	\$ 58.82	\$ 65.29	
Apple	\$,096.77	\$ 387.10	
Total	\$704.71	\$420.01	
20M USF ARPU	\$14,080,000,000	\$8,400,000,000	

20M USF Households **\$14B**

\$95B Enterprise (\$19,000 x 5M)

School/library users (1-month ARPU) \$144 x 75 million **\$10.8B**



Big Tech Has a Free Ride and Walks Away With a Pot of Gold Under the Universal Service Fund Programs

Company	Estimated 2024 Total US ARPU	Estimated 2024 US digital service ARPU
Alphabet	\$ 711	\$ 492
Netflix	\$ 212	\$ 212
Meta	\$ 149	\$ 149
Disney+/Hulu	\$287	\$ 172
Amazon	\$ 2,152	\$ 551
Microsoft	\$ 972	\$ 571
ByteDance	\$ 159	\$ 65
Apple	\$ 1,097	\$ 387
Total	\$5,739	\$2,599
	\$114,789,284,400	\$52,323,886,804

Note: Calculated as estimated total US revenue divided by estimated total US users

USF funded users

1. 20M Households

ARPU: \$2,599/year

Annual revenue: \$52 billion

2. Enterprises in USF Areas

5 million enterprises

• Enterprise ARPU \$19,000/year

• Annual revenue: \$95 billion

3. Schools and Libraries

 75 million users having three visits/year totaling 225 million visits/year

Estimated ARPU: \$144/year

Annual revenue: \$32.4 billion

Estimated total annual revenue (\$52B+\$95B+\$32.4B) is \$180 Billion per year while telecom ARPU per person is about \$50/month or \$600/year

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Online advertising estimated revenue in the US -2024

2024		US Revenue	Market Share	Contribution
				0.8%
		USDB	Percent	USDM
	Total	\$258.67	100.00%	\$1,831.36
1	Alphabet	\$103.90	40.17%	\$831.20
2	Meta	\$59.50	23.00%	\$476.00
3	Amazon	\$28.40	10.98%	\$227.20
4	Linkedin	\$5.90	2.28%	\$47.20
5	Bing ads	\$7.80	3.02%	\$62.40
6	Snap inc	\$6.00	2.32%	\$48.00
7	Twitter	\$3.90	1.51%	\$31.20
8	Pinterest	\$2.60	1.01%	\$20.80
9	Yahoo	\$2.30	0.89%	\$18.40
10	The Trade Desk	\$3.60	1.39%	\$28.80
11	Taboola	\$0.90	0.35%	\$7.20
12	Outbrain	\$0.80	0.31%	\$6.40
13	Adobe Advertising Cloud	\$0.65	0.25%	\$5.20
14	Criteo	\$0.80	0.31%	\$6.40
15	Pubmatic	\$0.52	0.20%	\$4.16
16	Sizmek	\$0.26	0.10%	\$2.08
17	Sprinklr	\$0.13	0.05%	\$1.04
18	Adroll	\$0.26	0.10%	\$2.08
19	Buzzfeed	\$0.26	0.10%	\$2.08
20	Marin Software	\$0.10	0.04%	\$0.80
21	Adcolony	\$0.13	0.05%	\$1.04
22	InMobi	\$0.13	0.05%	\$1.04
23	Flurry	\$0.08	0.03%	\$0.64
24	Sharethrough	\$0.05	0.02%	\$0.40
25	Others	\$29.70	11.48%	\$237.60

Cloud estimated revenues in the US - 2024

	2024	US Revenue	Market Share	Contribution
				0.8%
		USDB	Percent	USDM
	Total	\$389.96	100%	\$3,119.68
1	Amazon Web Services	144.01	36.93%	\$1,152.08
2	Microsoft Azure	115.42	29.60%	\$923.36
3	Google Cloud	41.18	10.56%	\$329.44
4	IBM Cloud	16.47	4.22%	\$131.76
5	Oracle Cloud	14.39	3.69%	\$115.12
6	Alibaba Cloud	6.17	1.58%	\$49.36
7	Salesforce	12.35	3.17%	\$98.80
8	VMware	8.23	2.11%	\$65.84
9	DigitalOcean	4.12	1.06%	\$32.96
10	Linode	2.06	0.53%	\$16.48
11	Dropbox	2.06	0.53%	\$16.48
12	Box	1.65	0.42%	\$13.20
13	SAP	3.3	0.85%	\$26.40
14	Cisco	4.12	1.06%	\$32.96
15	Rackspace Technology	3.3	0.85%	\$26.40
16	Cloudflare	2.89	0.74%	\$23.12
17	Fastly	1.65	0.42%	\$13.20
18	Zoho	1.65	0.42%	\$13.20
19	Contentful	1.24	0.32%	\$9.92
20	MongoDB Atlas	2.06	0.53%	\$16.48
21	Trello	0.82	0.21%	\$6.56
22	Notion	0.82	0.21%	\$6.56

SaaS estimated revenues in the US - 2024

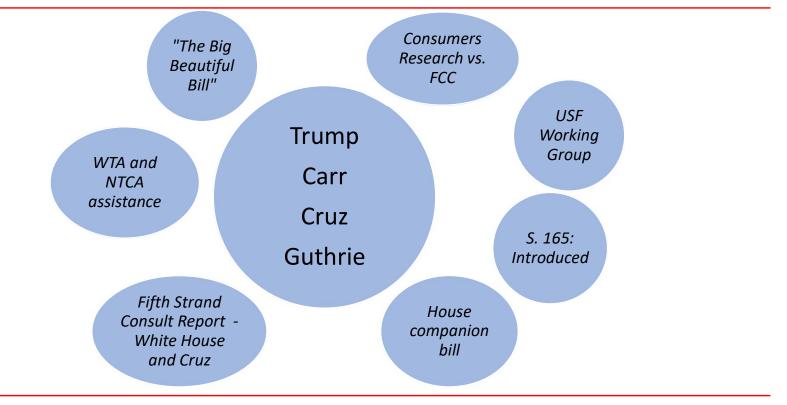
		US Revenue	Market Share	Contribution
				0.8%
		USDB	Percent	USDM
	Total	100.19	100.00%	801.52
1	Salesforce	\$31.96	31.90%	255.68
2	Microsoft	\$27.56	27.51%	220.48
3	Adobe	\$12.97	12.95%	103.76
4	ServiceNow	\$5.79	5.78%	46.32
5	SAP	\$4.05	4.04%	32.40
6	Zoom Video Communications	\$2.32	2.32%	18.56
7	Shopify	\$1.97	1.97%	15.76
8	Atlassian	\$1.85	1.85%	14.80
9	Hubspot	\$1.74	1.74%	13.92
10	Docusign	\$1.51	1.51%	12.08
11	Monday.com	\$1.27	1.27%	10.16
12	Dropbox	\$1.16	1.16%	9.28
13	ServiceTitan	\$0.93	0.93%	7.44
14	Square	\$0.81	0.81%	6.48
15	Mailchimp	\$0.70	0.70%	5.60
16	Freshworks	\$0.58	0.58%	4.64
17	Asana	\$0.46	0.46%	3.68
18	Zendesk	\$0.46	0.46%	3.68
19	Intercom	\$0.35	0.35%	2.80
20	Basecamp	\$0.35	0.35%	2.80
21	Gusto	\$0.35	0.35%	2.80
22	Grammarly	\$0.35	0.35%	2.80
23	Cloudflare	\$0.35	0.35%	2.80
24	BigCommerce	\$0.35	0.35%	2.80

Subsea cables estimated revenues in the US - 2024

	2024	US Revenue	Market Share	Contribution
				0.8%
		USDB	Percent	USDM
	Total	2.53	100%	\$20.26
1	ubCom	0.76	30.00%	\$6.08
2	Alcatel Submarine Networks	0.63	25.00%	\$5.06
3	NEC Corporation	0.38	15.00%	\$3.04
4	Huawei Marine (HMN Tech)	0.25	10.00%	\$2.03
5	Fujitsu	0.13	5.00%	\$1.01
6	Ciena	0.13	5.00%	\$1.01
7	Nokia	0.10	4.00%	\$0.81
8	Xtera Communications	0.08	3.00%	\$0.61
9	Others	0.08	3.00%	\$0.61



Where are we today with USF reform?





Thank you, Tom Karalis and OTA!

- Sent letters to FCC
- Sent letters to Members of Congress
- Endorsed multiple pieces of federal legislation
- Personally lobbied key decision makers





We've achieved so much... Let's keep the momentum!