

# FCC Accomplishments Under Chairman Ajit Pai

## Bridging the Digital Divide

*Providing billions of dollars for rural broadband buildout, removing red tape, supporting precision agriculture, boosting telehealth, and more*

- **\$1.5 Billion for Rural Broadband in 45 States Through Connect America Fund Auction**—Completed the Connect America Fund Phase II reverse auction, which allocated \$1.488 billion to expand broadband to more than [700,000 rural homes and businesses](#) in 45 states.
- **More Funding for Small, Rural Carriers to Deploy Faster Broadband**—Reformed the high-cost universal service support program for some of the country’s smallest rural carriers, including providing \$4.91 billion for carriers to begin receiving funding through the Connect America Fund’s Alternative Connect America Cost Model (ACAM) in exchange for commitments to expand, deploy, and maintain broadband at 25/3 Mbps to [363,000 rural homes and businesses](#)—including 37,000 on Tribal lands—as well as \$657 million in additional support to carriers already receiving ACAM support in return for a commitment to serve an additional [106,000 rural homes and businesses](#) with 25/3 Mbps broadband.
- **Promoting Broadband Deployment in Puerto Rico and the U.S. Virgin Islands**—Allocated [\\$950 million in long-term funding](#) to expand, improve, and harden broadband networks in Puerto Rico and the U.S. Virgin Islands through the Uniendo a Puerto Rico Fund (Bringing Puerto Rico Together Fund) and the Connect USVI Fund.
- **Broadband on Tribal Lands**—Increased [support](#) for carriers providing communications services to Tribal communities. Created a [priority window](#) for Tribes to obtain free access to unassigned 2.5 GHz spectrum on rural Tribal Lands, [resulting](#) in over 400 license applications.
- **Broadband in Rural New York State**—Partnered with the state government to provide up to [\\$170 million](#) from the Connect America Fund to expand broadband deployment in unserved rural areas of New York State.
- **Quality Standards for Rural Broadband**—Ensured that carriers receiving Connect America Fund support remain accountable to consumers, taxpayers, and the Commission and are delivering the network performance they have committed to provide by implementing [performance testing procedures](#) for carriers that have committed to deploying fixed broadband networks to unserved Americans living in rural areas.
- **One-Touch Make-Ready**—Promoted broadband deployment and competition by [speeding up the process and reducing the costs](#) of attaching new network facilities to utility poles.
- **Removed Regulatory Barriers to Upgrading Networks**—Streamlined discontinuance rules and eliminated unnecessary [network change rules](#) that impede the deployment of next-generation networks.
- **Satellite Broadband Connectivity**—Paved the way for high-speed broadband to be provided by non-geostationary orbit satellite constellations. The FCC approved applications from [OneWeb](#) (June 2017 and August 2020), [Space Norway](#) (November 2017), [Audacy](#) (May 2018), [O3b](#) (May 2018), [SpaceX](#) (March 2018 and November 2018), [Karousel](#) (August 2018), [Kepler](#) (November 2018), [Telesat](#) (November 2017 and November 2018), [Theia](#) (May 2019), [ViaSat](#) (April 2020), and [Kuiper](#) (June 2020).
- **More Affordable Broadband for Rural Americans**—[Eliminated](#) a universal service rule that was unfairly driving up the cost of broadband for rural Americans served by certain small, rural carriers.

- **Rural Health Care & Telehealth**—“While the benefits of digital health care are clear, we’ve been too slow to embrace its potential,” [wrote](#) Chairman Pai and former Kennedy Administration FCC Chairman Newton Minow in the *Boston Globe*. Addressing this challenge has been a priority under Chairman Pai:
  - **Doubled Available Funding for Rural Health Care Program**—[Boosted](#) funding for the FCC’s Rural Health Care Program from \$400 million in 2017 by 43% and implemented automatic budget adjustments and allowed funds unused from prior years to be carried forward; acted to [fully fund](#) all eligible Rural Health Care Program services for the funding year 2019 with an additional \$42.19 million; for the 2020 funding year, announced the Commission would [carry forward](#) up to \$197.98 million in unused funds to provide \$802.7 million to meet growing demand for telehealth in rural America.
  - **Strengthened Rural Health Care Program**—[Ensured](#) program funds are disbursed efficiently and equitably through rules that promote transparency and predictability in the program’s administration and strengthen safeguards against waste, fraud, and abuse.
  - **Connected Care Pilot Program**—Working with Commissioner Carr, the Chairman presented [final rules](#) to stand up a broader, longer-term Connected Care Pilot Program. It will study how connected care could be a permanent part of the Universal Service Fund by making available up to \$100 million of universal service support over three years to help defray eligible health care providers’ costs of providing telehealth services to patients at their homes or mobile locations, with an emphasis on providing those services to low-income Americans and veterans.
  - **Rural Telehealth Initiative**—Signed a [Memorandum of Understanding](#) with the U.S. Department of Health and Human Services and U.S. Department of Agriculture to work together on the Rural Telehealth Initiative, a joint effort to collaborate and share information to address health disparities, resolve service provider challenges, and promote broadband services and technology to rural areas in America.
  - **National Cancer Institute Broadband Collaboration**—[Working](#) with the National Cancer Institute to study how increased connectivity in Appalachia can help address the burden of symptom management for cancer patients.
- **E-Rate Support for Connectivity Within Schools and Libraries**—Adopted [final rules](#) to fund internal connections and promote the deployment of Wi-Fi in schools and libraries across the country.
- **Lifeline Reforms**—Adopted [rules](#) to ensure that limited dollars are directed only toward qualifying low-income consumers. Launched the National Lifeline Eligibility Verifier in all states and territories including Washington, DC. Proposed [reforms](#) to ensure predictable increases in minimum standard for Lifeline mobile broadband service.
- **Broadband Deployment Advisory Committee**—Produced [model codes](#) to help guide state and local governments as they seek to accelerate broadband infrastructure deployment and investment.
- **Native Nations Communications Task Force**—Produced [Report](#) on Improving and Increasing Broadband Deployment on Tribal Lands, with recommendations aimed at closing the digital divide in Indian Country.
- **Precision Agriculture Task Force**—Launched a [new task force](#) to explore ways to enhance the productivity and efficiency of the nation’s farms and ranches through broadband-based technologies, working closely with the U.S. Department of Agriculture.
- **Seeing the Digital Divide Firsthand**—Chairman Pai [visited](#) 49 states and two U.S. territories, and traveled more than 15,000 road miles, to get a firsthand look at the digital divide facing Americans in big cities and small towns alike. Met with consumers, local, state, and Tribal officials, entrepreneurs, and many others about ways to accelerate broadband deployment, promote innovation, and close the digital divide.

- **\$20 Billion Rural Digital Opportunity Fund**—Poised to [launch](#) the \$20.4 billion Rural Digital Opportunity Fund, which will be the FCC’s single biggest step yet to close the digital divide. The Phase I auction, which will start in October 2020, will target 10.4 million Americans in rural areas across the country where residents currently lack access to adequate broadband. It prioritizes bids for higher speed—up to 1 Gbps—and lower latency networks, and more than doubles the minimum speed from the FCC’s 2018 Connect America Phase II auction to 25/3 Mbps.
- **\$9 Billion 5G Fund for Rural America**—Proposed the [5G Fund](#), which would make up to \$9 billion in Universal Service Fund support available to carriers to deploy advanced 5G mobile wireless services in rural America (including up to \$680 million for deployment on Tribal lands). The Fund also would set aside at least \$1 billion specifically for deployments facilitating precision agriculture needs.
- **Approved Merger that Will Help Close Digital Divide and Promote 5G Deployment**—
  - Approved [merger](#) of T-Mobile and Sprint that will help to close the digital divide by bringing robust 5G deep into rural areas, with enforceable conditions requiring deployment of 5G network coverage to 99% of all Americans within six years.
  - DISH Network acquired Boost Mobile when it was divested as part of the transaction. DISH has committed to use its acquisition of Boost Mobile, along with 5G infrastructure investments, to deploy a competitive 5G wireless service using its long-held spectrum licenses.
- **Improved Data and Mapping**—[Established](#) the Digital Opportunity Data Collection to directly and aggressively address long-standing broadband mapping and data problems. The Commission also [proposed](#) the maximum fine possible against an ISP for apparently reporting inaccurate information that significantly inflated its broadband subscription numbers, failing to file required deployment data, making false statements to Commission investigators, and failing to respond to other inquiries.
- **Keeping Americans Connected During COVID-19 Pandemic**—Chairman Pai asked for and received commitments from over 800 companies and associations to take his Keep Americans Connected Pledge. This initiative ensured that Americans would not lose their broadband or telephone connectivity as a result of the exceptional circumstances during the pandemic. The pledge began on March 13, 2020 and was extended to June 30, 2020.
  - **COVID-19 Telehealth Program**—[Quickly built](#) and launched a new \$200 million COVID-19 Telehealth Program to help health care providers provide connected care services to patients at their homes or mobile locations in response to the pandemic. The program provided immediate support to eligible health care providers responding to the pandemic by fully funding their telecommunications services, information services, and a wide array of devices necessary to provide critical connected care services.
  - **Promoting Remote Learning**—Partnered with the Department of Education to [promote](#) the use of \$16 billion in funding from the CARES Act’s Education Stabilization Fund for remote learning.
  - **Ensuring Connectivity for Schools and Libraries**—[Waived](#) gift rules in the Rural Health Care and E-Rate programs to make it easier for broadband providers to support telehealth and remote learning efforts during the pandemic; [clarified](#) that schools and libraries that are closed due to the COVID-19 outbreak are permitted to allow the general public to use E-Rate-supported Wi-Fi networks while on the school’s campus or library property; [extended](#) key service implementation and filing deadlines to provide relief to program participants.
  - **Increased Funding Opportunities for Schools**—[Opened](#) second E-Rate funding window for schools so they can purchase additional bandwidth for this academic year to address needs resulting from the increasing shift to 1:1 student-to-device ratios in

- classrooms, live streaming of classroom instruction to students at home, and expanding use of cloud-based educational tools and platforms.
- **Waiving Lifeline Program Rules to Help Low-Income Consumers**—The FCC [acted](#) to help ensure that no current Lifeline subscribers are involuntarily removed from the Lifeline program during the pandemic by waiving several rules that could otherwise result in de-enrollment of subscribers. The FCC also waived Lifeline program rules to assist program participants potentially affected by the disruptions caused by the pandemic and aid community efforts to slow its spread.
  - **Additional Spectrum for Broadband**—Granted temporary authority to a number of [wireless companies](#) to use additional spectrum, including dozens of rural and suburban providers, in order to ensure that they are able to meet their customers' needs. Temporary spectrum access was also granted to support broadband services to the [Zuni tribe](#) in New Mexico and the [Navajo Nation](#), located within parts of Arizona, New Mexico, and Utah. The FCC granted AT&T temporary access to use additional spectrum to [serve](#) Puerto Rico and the U.S. Virgin Islands during the pandemic.
  - **Grant Healthcare Waiver Requests**—Granted waivers to [GE Healthcare](#), to expedite medical equipment such as wearable patient monitors, diagnostic testing systems, and portable x-rays from new suppliers during the pandemic, and to [MIT](#) to permit certification and marketing of the WiTrack system for remote patient monitoring.
  - **Zoom and WebEx Regulatory Relief**—Temporarily [waived](#) access arbitrage rules for a telecommunications company that carries traffic for two of the nation's largest conference calling providers to account for the massive increase in conference calls made by consumers using Zoom and WebEx to work and attend classes from home during the pandemic.
  - **Flexibility to Ensure Accessibility**—Granted Telecommunications Relay Service providers temporary [waivers](#) to better enable American Sign Language interpreters to work from home in order to maintain relay services during the pandemic for individuals who are deaf, hard of hearing, or deaf-blind, or have a speech disability.
  - **Streamlined Facilities Siting Review**—Established an electronic process for FCC licensees to apply for expedited Section 106 review or for emergency authorization to resume standard review for qualifying critical infrastructure projects during this pandemic.
  - **Supporting Consumers**—Kept Americans [informed](#) about the latest COVID-19 phone and text-based scams and provided tips to consumers to help them optimize their home networks during the pandemic.
  - **Additional Support for On-Campus Connectivity** – [Announced](#) a second filing window to allow schools to request additional E-Rate funding to address increased on-campus bandwidth needs due to unprecedented disruptions resulting from the pandemic.

## Promoting Innovation and Investment

*Accelerating 5G deployment, freeing up more spectrum, approving innovative technologies, and more*

- **Securing American Leadership in 5G Connectivity**
  - **5G FAST Plan**—Unveiled and executed the Facilitating America's Superiority in 5G Technology Plan.
  - **Held America's First 5G Spectrum Auctions**—Concluded successful 5G auctions in the [24 GHz and 28 GHz bands](#), raising more than \$2.7 billion in gross bids. Together,

- the FCC made 1,550 megahertz of spectrum available for 5G connectivity through these auctions.
- **Largest Ever Spectrum Auction**—The 5G spectrum auction in the upper [37 GHz, 39 GHz, and 47 GHz bands](#) made 3,400 megahertz of millimeter-wave spectrum available garnering over \$7.5 billion in net bids.
  - **Freeing Up More Low-Band Spectrum for 5G**
    - [600 MHz](#)—The post-broadcast incentive auction transition successfully reached the July 13, 2020 deadline established for television stations to move off their pre-auction channel assignments. Winning bidders for the valuable low-band airwaves sold in the ground-breaking broadcast incentive auction have already begun to deploy wireless mobile broadband services using this spectrum.
    - [800 MHz](#)—Adopted rules to enable ubiquitous broadband connectivity to be delivered using the 800 MHz cellular spectrum.
    - [900 MHz](#)—Transformed this band to enable broadband deployment by utilities and other industries.
  - **Freeing Up More Mid-Band Spectrum for 5G**
    - [2.5 GHz](#)—Modernized the outdated regulatory framework for the 2.5 GHz band to make more of this vital mid-band spectrum available for advanced wireless services, including 5G.
    - [3.1-3.55 GHz](#)—Proposed decisive [steps](#) toward making the 3.45-3.55 GHz band available for commercial use throughout the contiguous United States and removing the secondary, non-federal allocations from the 3.3-3.55 GHz band to make this mid-band spectrum available for advanced commercial services, including 5G.
    - [3.5 GHz](#)—Conducted the first ever mid-band 5G auction in the U.S., auctioning 70 megahertz of Priority Access Licenses in the 3.5 GHz band and raising more than \$4.54 billion in net proceeds.
    - [3.7-4.2 GHz](#)—Scheduled an auction to reallocate 280 megahertz of this mid-band spectrum, commonly called the “C-band,” for advanced wireless services, including 5G. The Chairman’s plan cleared the way to make this spectrum available for flexible use services years ahead of schedule.
  - **Freeing Up More High-Band Spectrum for 5G**
    - [26 and 42 GHz](#)—Working to free up another 2.75 gigahertz of 5G spectrum in these bands.
    - [70/80/90 GHz](#)—Initiated a proceeding to make more efficient use of additional millimeter-band spectrum resources, including for the provision of wireless backhaul for 5G and the deployment of broadband services to aircraft and ships.
  - **Freeing Up More Unlicensed Spectrum**
    - [5.9 GHz](#)—Launched a fresh look at the dramatically underused 5.9 GHz band and proposed to make available the lower 45 megahertz of the band for unlicensed uses like Wi-Fi and allocate the upper 30 megahertz for automotive safety technologies, including at least 20 megahertz for a new automotive communications technology, Cellular Vehicle to Everything, or C-V2X.
    - [6 GHz](#)—Opened up 1,200 MHz of spectrum in the 6 GHz band for unlicensed use, increasing the amount of mid-band spectrum available for WiFi by almost a factor of five.
    - [Above 95 GHz](#)—Adopted rules to expand access to 21.2 GHz of spectrum above 95 GHz for unlicensed use.
  - **Speeding Federal Environmental and Historic Preservation Review of Small Cells**—The FCC, led by Commissioner Brendan Carr, adopted new rules that [reduced regulatory impediments](#) to deploying small cells needed for 5G and help to expand the reach of 5G



for faster, more reliable wireless service. The D.C. Circuit mostly affirmed this action by the Commission.

- **Speeding State and Local Review of Small Cells**—The FCC, led by Commissioner Brendan Carr, [reformed rules](#) designed years ago for macro towers—not for 5G’s small cell facilities. Among other things, the reforms ban short-sighted municipal roadblocks that have the effect of prohibiting deployment of 5G and give cities a reasonable deadline to approve or disapprove small-cell siting applications. The Ninth Circuit recently affirmed this action by the Commission.
- **TV White Spaces**—Proposed targeted changes to White Space device rules to pave the way for improved broadband coverage for rural Americans by providing flexibility for these devices to more fully participate in the Internet of Things.
- **Restoring Internet Freedom**—[Restored](#) the longstanding, bipartisan light-touch regulatory framework that has fostered rapid Internet growth, openness, and freedom for nearly 20 years. This decision reversed the prior FCC’s 2015 imposition of heavy-handed, utility-style regulation on broadband providers.
- **Approving First LTE-U Devices**—[Authorized](#) the first-ever LTE for unlicensed devices in the 5 GHz band, a significant advance in wireless innovation. LTE-U allows wireless providers to deliver mobile data traffic using unlicensed spectrum while sharing the road with Wi-Fi.
- **Ligado**—Approved, without dissent and with conditions, Ligado’s application to deploy a low-power terrestrial nationwide network in the L-Band that will primarily support 5G and Internet of Things services. The [Order](#) will promote more efficient and effective use of our nation’s spectrum resources and ensure that adjacent band operations, including the Global Positioning System (GPS), are protected from harmful interference.
- **Approving Wireless Charging Tech**—Approved the first-ever wireless, “[power-at-a-distance](#)” charging technology, which is now available to consumers.
- **5G Open Radio Access Networks**—Hosted the FCC’s Forum on 5G Open Radio Access Networks. This forward-looking [forum](#) featured experts at the vanguard of the development and deployment of 5G network architecture. Open, interoperable, standards-based, and virtualized radio access networks offer an alternative to traditional cellular network architecture and could enable a diversity in suppliers, better network security, and lower costs.
- **Vehicular Radar**—[Expanded](#) the spectrum available for vehicular radars that are used for safety applications like collision avoidance and adaptive cruise control, among other things.
- **Updates to Aviation Safety Regulations**—[Proposed](#) to modernize the Commission’s rules to improve aviation safety, support the deployment of more advanced avionics technology, and increase the efficient use of limited spectrum resources.
- **Approving New Technologies Faster**—[Proposed](#) new rules to implement Section 7 of the Communications Act to require timely action by the Commission to evaluate petitions or applications proposing new technologies or services.
- **Innovation Zones**—Created the FCC’s first two [Innovation Zones](#), city-scale test beds for advanced wireless communications and network research, including 5G networks.
- **Experimental Licensing Website**—Launched new experimental licensing [website](#) for program licenses for research centers and universities.
- **Next Gen TV**—[Enabled](#) broadcasters to voluntarily use the Next-Generation Television standard, also known as ATSC 3.0. Several stations have already begun ATSC 3.0 broadcasting, and this year, dozens more are expected to do so as 20 compatible television models become available for consumers.
- **Small Satellites**—[Created](#) a new, optional streamlined application process designed for a class of satellites referred to as “small satellites.”
- **Improving GPS for American Consumers**—Authorized non-Federal GPS devices in the United States to access specific signals transmitted from the Global Navigation Satellite System (GNSS) known as [Galileo](#).

- **Earth Stations in Motion**—[Streamlined, consolidated, and harmonized](#) the rules governing earth stations used to provide satellite-based services on ships, airplanes and vehicles for geostationary satellite orbit satellite and [took steps](#) to facilitate the continued deployment of earth stations used to provide satellite-based services on ships, airplanes, and vehicles using non-geostationary orbit satellites.
- **Orbital Space Debris**—[Comprehensively updated](#) the FCC’s orbital debris mitigation rules to promote a safe environment for the operation of space-based communications services.
- **Artificial Intelligence and Machine Learning**—Hosted the FCC’s Forum on Artificial Intelligence and Machine Learning. This [forum](#) convened experts in the AI and machine learning fields to discuss the future of these technologies and their implications for the communications marketplace, and included demonstrations to enable the public to see these emerging technologies in action.

## Protecting Consumers and Enforcing the Law

*Combating illegal robocalls, strengthening rural call completion, improving accessibility, and more*

- **Robocall and Spoofing Enforcement**—Took a number of enforcement actions to combat illegal robocalls and spoofing:
  - Proposed a \$225 million [fine](#) against a Texas-based telemarketer that apparently made over 1 billion health insurance sales robocalls to American consumers, including many on the Do Not Call registry.
  - Issued a [\\$120 million fine](#) against a Florida-based time-share telemarketing operation for illegally spoofed robocalls.
  - Fined a telemarketer and his companies more than [\\$82 million](#) for illegal caller ID spoofing for making more than 21 million robocalls to market health insurance.
  - Proposed a more than [\\$37.5 million](#) fine against an Arizona-based company for apparently making millions of illegally-spoofed telemarketing calls that appeared to originate from consumers and other numbers not assigned to the company. This is the Commission’s first major enforcement action against a company that apparently commandeered consumers’ phone numbers.
  - Proposed a nearly [\\$10 million](#) fine against a robocaller for apparently illegal spoofing during a California election campaign.
  - Partnered with the FTC to successfully [demand](#) that gateway providers allowing COVID-19 pandemic-related scam robocalls into the United States cut off this traffic or face serious consequences.
- **Robocall Blocking By Default**—[Clarified](#) that voice service providers may block illegal and unwanted calls as the default before they reach consumers’ phones.
- **Anti-Spoofing Rules**—[Adopted](#) new rules banning malicious caller ID spoofing of text messages and foreign calls. These rules closed a loophole in the law that prevented the FCC from pursuing scammers sending spoofed text messages and international fraudsters making spoofed calls to Americans.
- **Combating Spam Robotext Messages**—To [protect consumers from spam and scam robotexts](#), issued a ruling making clear that wireless providers are authorized to stop unwanted text messaging through robotext-blocking, anti-spoofing measures, and other anti-spam features.
- **One Ring Scams**—Proposed rules aimed at better [protecting Americans](#) from one-ring scam calls, which occur when a call placed to a consumer’s phone rings just once, using international toll-generating numbers that charge large fees per minute when consumers call back.
- **Limiting Robocalls to Reassigned Numbers**—Authorized a [reassigned numbers database](#) to reduce unwanted robocalls that consumers receive.

- **Call Authentication to Combat Spoofed Robocalls**—[Mandated](#) the implementation of SHAKEN/STIR, a caller ID authentication framework to combat illegal caller ID spoofing. [Proposed](#) expanding mandate to intermediate providers and requiring providers to either upgrade or actively work to develop a non-IP authentication solution in their non-IP networks.
- **Hospital Robocall Protection Group**—[Established](#) a new federal advisory committee to issue best practices on how voice service providers can better combat unlawful robocalls made to hospitals, how hospitals can better protect themselves from such calls, how the Federal Government and State governments can help combat such calls.
- **First Cross-Border SHAKEN/STIR Call**—[Completed](#) the first official cross-border call using the SHAKEN/STIR framework with Ian Scott, Chairperson and CEO of the Canadian Radio-television and Telecommunications Commission.
- **Illegal Robocalls Report**—[Issued](#) the agency’s [first-ever report](#) on illegal robocalls, outlining the steps the FCC has taken through enforcement, policy and regulatory improvements, and partnerships with public and private stakeholders to combat unwanted calls.
- **Working with Partners to Combat Robocalls**—Co-hosted with the Federal Trade Commission an [expo](#) on robocall blocking technologies as well as a [policy forum](#). Partnered with AARP and other consumer-facing organizations to host town hall events focused on robocall education.
- **Spoofing Education Campaign**—Conducted a [campaign](#) to raise awareness of spoofed calls and unwanted call protection tips, pursuant to RAY BAUM’S Act, that reached over 1 million consumers.
- **Protecting Consumers’ Data**—Proposed over [\\$200 million](#) in fines against the nation’s four largest wireless carriers for apparently selling access to their customers’ location information without taking reasonable measures to protect against unauthorized access to that information.
- **Cramming & Slamming**—Established clear [new rules](#) to stop unauthorized switches of consumers’ chosen telephone company, ban misrepresentations made during sales calls, and prohibit unauthorized charges on their phone bills. The FCC also proposed a [\\$5.3 million fine](#) against a phone company for apparently switching consumers from their preferred carrier without permission, misleading consumers, and fabricating evidence in response to the FCC’s concerns.
- **Rural Call Completion**—Adopted new measures and proposed others to better tackle the problem of [call completion](#) and ensure that calls are completed to all Americans, including those in rural areas. Reached a [\\$40 million settlement](#) with T-Mobile to conclude an FCC investigation into the company’s failure to correct problems with the delivery of calls to rural consumers and the insertion of false ring tones with respect to hundreds of millions of calls. [Released a report](#) that found rules have been effective in improving rural call completion.
- **Access Arbitrage Reform**—Adopted [reforms](#) to eliminate wasteful arbitrage schemes that exploit the system of intercarrier compensation between local and long-distance service providers and ultimately cost consumers \$60 to \$80 million annually.
- **Rural Phone Rates**—[Repealed](#) the high-cost program’s rate floor rule and thus ended the federal mandate that raised the telephone rates paid by many rural Americans.
- **Rural Road Tours**—Launched a series of [rural tours](#) by FCC staff to provide direct outreach and education to rural areas. Topics of focus include robocalls, digital adoption, and bread-and-butter consumer issues, such as understanding your phone bill.
- **Accessibility Through Speech Recognition**—Promoted greater technology accessibility for those with disabilities by clearing the way for [reliable, fully-automated speech recognition technology](#) for Internet Protocol Captioned Telephone Service (IP CTS)—while ensuring these services meet strong standards of functionality.
- **Video Relay Services Interoperability**—Ensured interoperability of video relay services (VRS) by [incorporating technical standards](#) and establishing an interoperability testing laboratory. Also [authorized direct video communications](#) between sign-language users and customer service call centers.



- **Telecommunications Relay Services**—Took on waste, fraud, and abuse in the TRS Fund by completing the [VRS User Registration Database](#); authorizing a similar [User Registration Database](#) for IP CTS; adopting rules to [prevent unnecessary use of telephone captions](#); and [prohibiting give-aways of unrelated products](#) to VRS users.
- **More Video-Described Programming**—[Increased](#) the amount of video-described programming that certain broadcast stations and cable channels must provide to consumers. Proposed [expanding](#) video description requirements to 40 additional local television markets over the next four years.
- **Increased Accessibility to Live News**—Spurred improved accessibility to live news programming on smaller stations by hosting a [forum](#) and engaging with stakeholders of the Commission’s Disability Advisory Committee to develop an accessibility toolkit for stations.
- **Hearing Aid Compatibility**—[Updated](#) volume control standards for hearing aid compatible (HAC) devices and [required](#) wireless service providers to provide enhanced information on their websites regarding these devices.
- **TV Rescan Consumer Help Center**—[Launched](#) a call center dedicated to helping viewers of over-the-air television rescan their TVs during the transition of local TV channels to new frequencies following the Commission’s broadcast incentive auction.
- **Addressing Inmate Calling Rates and Charges**—Took a [major step](#) toward comprehensively reforming rates and charges for the inmate calling services within its jurisdiction.
- **Enforcement of Broadcast Rules**
  - **Sinclair Broadcast Group**—[Entered](#) into a Consent Decree imposing a \$48 million penalty—the FCC’s [largest civil penalty ever](#) issued to a broadcaster—on Sinclair Broadcast Group.
  - **Political File Compliance**—[Entered](#) into Consent Decrees with the largest broadcasters requiring compliance plans to ensure adherence to the political file rules contained in the Communications Act.
  - **Good Faith in Retransmission Consent**—[Proposed](#) the maximum forfeitures permitted by the Communications Act against eight broadcaster TV station groups that failed to engage in good-faith retransmission consent negotiations.

## Enhancing Public Safety

*Improving emergency alerts, strengthening 911 calling, protecting national and network security, and more*

- **Protecting National Security of the Communications Supply Chain**—[Prohibited the use](#) of the Universal Service Fund to purchase equipment or services from any company that poses a national security threat to the integrity of U.S. communications networks or the communications supply chain; [designated](#) Chinese companies Huawei and ZTE as companies covered by this rule; and took additional actions to address national security threats to federally funded networks.
- **China Mobile**—[Denied](#) China Mobile’s application to provide telecommunications services in the United States because it is vulnerable to exploitation, influence, and control by the Chinese government.
- **Protecting National Security of the Communications Ecosystem**—Scrutinized four [Chinese government-controlled entities](#) providing telecommunications services in the U.S., issuing Orders to Show Cause against: China Telecom Americas, China Unicom Americas, Pacific Networks, and ComNet. These actions directed the companies to explain why the Commission should not start the process of revoking their domestic and international section authorizations enabling them to operate in the United States.

- **Suicide Prevention Hotline**—Established [988](#) as a new, nationwide, 3-digit number for a suicide prevention and mental health crisis hotline and required all voice service providers to direct 988 calls to the existing National Suicide Prevention Lifeline by July 16, 2022. During the transition to 988, Americans who need help should continue to contact the National Suicide Prevention Lifeline by calling 1-800-273-8255 (1-800- 273-TALK).
- **Undersea Cables**—[Improved](#) the outage reporting obligations of submarine cable licensees to promote national security while streamlining the reporting process.
- **Improving Accuracy of Mobile Phone Alerts**—[Adopted](#) new rules to improve the geographic targeting of Wireless Emergency Alerts, a system that delivers critical warnings and information to the public on their wireless phones, and took [action to promote further progress](#) on this potentially life-saving initiative.
- **Vertical 911 Location Accuracy to Better Locate Callers in Multi-Story Buildings**—[Adopted](#) rules that will help first responders locate people who call 911 from wireless phones in multi-story buildings. The new rules will help emergency responders determine the floor level of a 911 caller, which will reduce emergency response times and ultimately save lives. Subsequently [rejected a request to weaken the new rules](#) and instead built upon them so that the benefits of vertical location accuracy will ultimately reach all Americans, not just those in the largest markets.
- **Kari’s Law (Enabling Callers to Reach 911 Without First Dialing an Access Code Like “9”)**—Enacted [rules](#) to help ensure that people who call 911 from multi-line telephone systems—which commonly serve hotels, office buildings, and campuses—can reach 911 directly and be more quickly located by first responders.
- **911 Calling**—[Adopted](#) rules to ensure that “dispatchable location” information—such as the street address, floor level, and room number of a 911 caller— is conveyed with 911 calls, regardless of the technological platform used, so that first responders can be quickly dispatched to the caller’s location.
- **State 911 Fees**—Issued annual [reports](#) to Congress on the collection and distribution of 911 fees by states, including identifying where 911 funding was diverted for non-911 purposes. Between 2012 and 2018, states diverted over \$1.275 billion in 911 fees to non-911 purposes. At its September meeting, the Commission will consider a Notice of Inquiry that explores steps the Commission or others could take to combat this practice.
- **911 Outages**—[Fined](#) AT&T Mobility over \$5 million for rules violations associated with two nationwide 911 outages that took place in 2017. Fined [CenturyLink and West almost \\$600,000 collectively](#) for rules violations associated with an August 2018 911 outage. These settlements also required the companies to make important changes to their systems to avoid future outages and improve notification to 911 call centers if an outage does occur. Convened stakeholders to participate in a [workshop](#) on improving situational awareness during 911 outages. Also conducted an investigation and issued a [report](#) on a nationwide CenturyLink outage that disrupted 911 service for millions of Americans in 2018, including lessons learned.
- **Hurricane Recovery**—Chairman Pai visited hurricane-stricken areas to assess the damage and restoration progress first-hand, including meeting with local officials and residents in [Texas](#) after Hurricane Harvey, [Florida](#) after Hurricane Irma, two visits to [Puerto Rico](#) and one to the [U.S. Virgin Islands](#) after Hurricane Maria, and [Florida](#) after Hurricane Michael. The Commission issued 1,031 grants of special temporary authority (STAs) and 23 waivers and processed 257 Requests for Assistance or Information to facilitate restoration efforts and provided [\\$116 million in immediate and short-term relief](#) to support the restoration of communications networks in Puerto Rico and the U.S. Virgin Islands following Hurricane Maria.
- **Disaster Response**—Monitored network outages and published daily communications status reports after Hurricanes [Sally](#), [Laura](#), [Isaias](#), [Harvey](#), [Irma](#), [Maria](#), [Michael](#), [Florence](#), and [Dorian](#); a [derecho](#) in the Midwest; [power shutoffs](#) in California; and [earthquakes](#) in Puerto Rico. Worked with government partners and industry to support communications service restoration and

conducted after-incident [investigations](#). Proposed new rules to [provide](#) other federal and state agencies with access to detailed communications outage data to support more effective restoration efforts during disasters while also preserving the confidentiality of that data.

- **Blue Alerts**—[Adopted](#) a Report and Order creating a dedicated Blue Alert event code in the Emergency Alert System so that state and local agencies have the option to notify the public of threats to law enforcement and to help apprehend dangerous suspects.
- **Emergency Alerting**
  - Issued rules to promote more effective local emergency alert tests and public service announcements, and help prevent false alerts.
  - Issued reports on the [2019](#) and [2017](#) nationwide emergency alerting (EAS) tests, and the [2018](#) nationwide test of EAS and Wireless Emergency Alerts (WEA).
  - Adopted [new rules](#) that increase the effectiveness of the EAS by establishing a streamlined electronic database to replace paper-based filing requirements by combining the existing EAS Test Reporting System with new features for filing State EAS Plans.
  - [Investigated](#) the Hawaii Emergency Management Agency’s January 13, 2017 false emergency alert about a missile attack, recommended steps to prevent alert originators from issuing false alerts, hosted a public [roundtable](#) to encourage awareness and understanding of lessons learned from Hawaii’s false alert, as well as to promote a continued dialogue among stakeholders.
  - Hosted a public [workshop](#) to promote the use of multilingual emergency alerting, multilingual capabilities of EAS and WEA, alternative methods for delivering emergency information to the non-English speaking public, and real-world examples demonstrating the use of these tools during disasters.
- **Protecting Against Threatening Callers**—[Granted](#) an emergency waiver to Jewish Community Centers and telecommunications carriers that serve them to allowed these entities and law enforcement agencies to access the caller-ID information of threatening and harassing callers.
- **Tracking Threatening Phone Calls**—[Adopted](#) new rules to allow law enforcement authorities to access blocked caller ID information when needed to identify and thwart threatening callers, and allow non-public emergency services to obtain blocked Caller ID information of callers requesting their assistance.
- **Contraband Phones in Prisons**—[Eliminated](#) and streamlined certain rules to make it easier for correctional facilities to adopt technological solutions to contraband phones in prisons and [convened](#) a stakeholder meeting to address the serious threats posed by the use of contraband wireless devices in correctional facilities nationwide.
- **Interference and Equipment Marketing Issues**—An important FCC priority is to resolve instances of interference and ensure that radio frequency equipment is not designed to be capable of causing harmful interference. Pursuant to this mission, the FCC has:
  - Issued a [\\$2.8 million fine](#) against HobbyKing for marketing drone equipment that apparently did not meet FCC rules on radio transmissions and power levels.
  - Proposed a nearly \$600,000 fine against a company that had apparently been marketing [wellness devices](#)—such as humidifiers—that did not comply with FCC equipment authorization rules for radio frequency devices.
  - Warned a [Bitcoin](#) miner against using its equipment at power levels which were reportedly interfering with mobile phone services.
  - Reached settlements of [\\$61,000](#) and [\\$54,000](#) with companies for marketing LED signs used in digital billboards and elsewhere without complying with FCC rules for radio frequency devices.
  - Warned against marketing of [fishing buoys](#) that use radio frequencies reserved for marine navigation safety communications.
- **Confronting Pirate Broadcasting**—Moved [aggressively](#) to combat illegal broadcasts. For example, proposed maximum statutory fines against [two](#) apparent Boston-area pirate radio

operators. Overall, the Enforcement Bureau has taken [hundreds](#) of actions against radio pirates across the nation over the last three years.

- **Accessibility**—Promoted efforts to ensure real-time text capability of Public Safety Answering Points by hosting a [Real-Time Text Education Day](#) so that direct text emergency communications are available for individuals with disabilities as well as hostages and others unable to use their voices.
- **Addressing Diameter Security Issue**—[Announced](#) that the wireless communications industry has made significant progress in addressing security risks associated with the Diameter protocol, a critical component of telecommunications infrastructure. Chairman Pai had previously charged a federal advisory committee with development of recommendations to mitigate these risks, which have been widely adopted.

## Transparency and Process Reforms

*Providing drafts of agenda items to the public, establishing the Office of Economics and Analytics, and more*

- **Making Agenda Items Available to the Public**—Began releasing draft items to the public [three weeks before they are voted on](#) at the Commission’s monthly open meetings. Previously, meeting items were not made available to the public until after the final vote.
- **Consumer-Friendly Policy Fact Sheets**—Instituted a process to [release](#) a one-page fact sheet that summarizes each draft meeting item in question to make it more accessible to Americans. Worked with then-Commissioner Mignon Clyburn in a bipartisan manner to make this a reality.
- **Creating Office of Economics and Analytics**—Established and stood up the [new office](#) to better incorporate economics and data into the FCC’s work.
- **Getting Things Done**—At the 44 Open Meetings during Chairman Pai’s leadership, the FCC has voted and adopted 260 items, more than double the previous Administration over the same time period. At the previous 44 Open Meetings, the FCC voted and adopted 117 items in open meetings.
- **Finding Consensus**—Chairman Pai has restored the collaborative and consensus-based tradition of FCC decision making. Under Chairman Pai, the Commission has voted over 80% of items on the monthly meeting agenda with bipartisan support and over 70% without dissent. Under the previous Administration, fewer than 50% of agenda items were voted without dissent.
- **Transparency Dashboard**—Launched [an online dashboard](#) to provide the public with more information on the agency’s work, bringing to fruition a proposal Chairman Pai first introduced in 2013 as a Commissioner.
- **Enforcing Equal Employment Opportunity Rules**—To improve the Commission’s enforcement of its equal employment opportunity rules, the agency [shifted](#) staff responsible for enforcing the EEO rules from the Media Bureau to the Enforcement Bureau.
- **Diversity in Media**—[Re-chartered](#) the FCC’s Advisory Committee on Diversity and Digital Empowerment. Also hosted a [workshop](#) to help small business entrepreneurs navigate corporate supplier diversity programs and identify successful strategies utilized by diverse entrepreneurs who do business with corporate entities. The FCC also hosted a Symposium on Media Diversity, which featured Chairman Pai as the [keynote](#) speaker.
- **Fraud Division**—[Created](#) a Fraud Division within the Enforcement Bureau dedicated to investigating and prosecuting fraud in the Universal Service Fund.
- **Diversity Internships**—Partnered with Commissioner Starks to [create](#) the Early Career Staff Diversity Initiative to advance equitable opportunities for underrepresented undergraduate, graduate, and law school students.

## Eliminating and Modernizing Outdated Regulations

*Getting rid of outdated rules and regulations while updating others for the digital age*

- **Modernization of Media Regulations Initiative**—Initiated a [modernization](#) of media regulations by launching a review of the Commission’s rules applicable to media entities to see which rules should be modified or repealed. This resulted in nineteen proceedings, including:
  - **Modernizing Children’s Television Programming Rules**—[Updated](#), under Commissioner O’Rielly’s leadership, children’s TV programming rules to reflect the current state of the video marketplace.
  - **Cable Leased Access**—[Eliminated](#) government mandate that cable operators make leased access available on a part-time basis and [adopted](#) a simplified tier-specific rate formula that reflects current regulations and better approximates the value of a particular channel..
  - **Requirement to Have Paper Copies of Regulations**—Eliminated rules [requiring](#) certain broadcast and cable entities to maintain paper copies of the Commission’s regulations.
  - **Paper Filing Requirement for Broadcast Station Contracts**—[Eliminated](#) the nearly 80-year-old requirement that broadcasters routinely file paper copies of station contracts and certain other documents with the Commission.
  - **Cable Rate Regulations**—Adopted and proposed changes to the Commission’s existing [complex cable rate regulation framework](#).
  - **Delivery of Cable Notices**—[Adopted](#) new rules that allow cable operators to deliver notices to their customers via email, reducing costs and paper waste for both cable operators and consumers.
  - **Cable Data Collection Form 325**—Eliminated the [Annual Report of Cable Television Systems](#), first developed in 1966, because operational and technological changes that occurred over time made the form increasingly obsolete.
  - **Channel Lineup Disclosure Rules**—[Eliminated](#) a rule adopted in 1972 that requires cable operators to keep in their local office a current listing of the channel lineups that each cable system delivers to its subscribers. Also eliminated the requirement that certain cable operators make their channel lineup available through their Commission-hosted online public inspection file.
  - **License Display Rules**—[Eliminated](#) a rule from the 1930s that required broadcasters to post at certain locations copies of their broadcast licenses.
  - **Broadcast EEO Mid-Term Report**—[Eliminated](#) the Broadcast Mid-Term Report filing requirement as that paperwork had become redundant and unnecessary.
  - **Radio Duplication Rule**—Eliminated the radio duplication rule for both the AM and FM services, which restricted the duplication of programming on commonly owned broadcast radio stations operating in the same service and geographic area, to provide broadcasters greater flexibility in times of crisis and facilitate simulcasting by AM stations voluntarily transitioning to a digital signal.
  - **Common Antenna Siting**—Repealed an outdated and unnecessary World War II era rule regarding antenna siting for broadcasters.
  - **Broadcast Application Public Notices**—[Eliminated](#) a requirement that broadcaster applicants give public notice in newspapers of the filing of an application, and adopted rules that would provide more useful notice on the air or online and promote public participation in the licensing process.
- **Removed Unnecessary Regulation of Transport Services and Facilities**—Largely [eliminated](#) unnecessary pricing regulation of lower-speed, legacy transport offered by price-cap incumbent carriers to spur competition and investment in next-generation networks.



- **Removed Outdated Legacy Voice Service Regulations**—Granted price cap carriers [relief](#) from two 1996-era regulatory obligations (analog voice grade copper loop unbundling requirements and avoided cost resale requirements) that impede the transition to next-generation networks and services.
- **Nationwide Number Portability**—To pave the way for nationwide number portability, [modified](#) antiquated rules that are not applicable to today’s integrated all-distance services, impeded nationwide number portability, and frustrated efficient use of the telecommunications network.
- **Payphone Rules**—[Eliminated](#) outdated and costly payphone audit requirements that were no longer necessary in light of marketplace and technological changes.
- **Removed Unnecessary Accounting Requirements for Carriers**—[Reduced and streamlined](#) accounting rules for carriers (such as eliminating the requirement that larger carriers keep two sets of books, one for regulatory accounting and one for financial accounting) to allow carriers to refocus scarce resources toward expanding and modernizing their networks.
- **Tariff Rules Modernization**—[Eliminated](#) and updated tariffing rules to better align them with the reality of easy electronic access to tariff filings.
- **Traffic and Revenue Reports**—[Eliminated](#) the annual international Traffic and Revenue Reports, which the FCC hadn’t used for years.
- **Old Cellular Rules**—[Eliminated](#) obsolete and unnecessary regulatory burdens applicable to the Cellular Service and other Part 22 licensees to allow these licensees to focus resources on investment in new technologies and services to meet increasing consumer demand.
- **Personal Radio Service Rules**—[Amended](#) the Personal Radio Services rules to update, modernize, and reorganize the rules.
- **Public Inspection Requirements**—[Eliminated](#) outdated public inspection file rules that required broadcasters to maintain paper files even though they are now available online, and required cable operators to maintain and allow public inspection of the location of a cable system’s principal headend
- **Non-Profit Broadcasters**—Relaxed [third-party fundraising restrictions](#) to permit many noncommercial television and radio stations to air limited fundraisers for the benefit of other non-profit organizations. Also eased the reporting burden for volunteer board members of noncommercial broadcasters.
- **Main Studio Rule**—[Eliminated](#) an outdated, nearly 80-year-old requirement that each AM, FM, and television broadcast station have a fully-staffed main studio located in or near its local community.
- **Cable Franchising Rules**—[Prohibited excessive franchise fees](#) and made clear that local governments may not regulate most non-cable services, including broadband Internet access service, offered over a cable system.
- **Noncommercial Education and Low Power FM Comparative Selection**—[Updated](#) rules for issuance of permits for new NCE and LPFM stations to improve comparative selection procedures, reduce confusion among future applicants, expedite the initiation of new service to the public, and eliminate unnecessary applicant burdens.
- **Low Power FM Technical Rules**—[Modernized](#) rules to provide LPFM stations additional technical flexibility.
- **FM Translator Interference Rules**—[Streamlined](#) the rules relating to interference caused by FM translators to expedite the translator complaint resolution process.
- **Set Top Box and CableCARD Rules**—[Terminated](#) a proceeding proposing unnecessary regulations of navigation devices used to access multichannel video programming and eliminated rules concerning CableCARD modules which no longer serve a useful purpose.