

The Dawn of 5G:

Paving the Road to Innovation by Accessing Unique Spectrum Resources, Streamlining Siting Policies, Securing Universal Service Funding, and Adopting Policies to Foster Certainty in an Evolving Market

Success of CCA's 2018 Advocacy

In 2018, Competitive Carriers Association (“CCA”) successfully navigated political and policy changes to advance competitive carriers’ priorities. As the leading voice for competitive carriers in policy discussions, CCA’s representation significantly improves regulatory decisions and policy directives for members from the Federal Communications Commission (“FCC” or “Commission”), Congress, the Administration, and other federal agencies.

Among other successes, CCA built upon prior advocacy efforts to preserve Universal Service support where necessary and encouraged Congress and the FCC to use accurate, standardized, and reliable data when making funding decisions. Specifically, CCA secured changes to the Universal Service Fund Mobility Fund II (“MF II”) proceeding by working alongside Congress and the Commission to base federal funding on accurate and reliable coverage maps. CCA also testified before Congress multiple times, highlighting the need to preserve and expand mobile broadband services in rural America. These efforts ensured that existing funding for CCA members was not terminated based on erroneous data, and that future funding will properly support the deployment of broadband to all Americans.

Additionally, CCA continued its work to improve equitable access to spectrum resources. CCA championed efforts to ensure all carriers can access the millimeter wave (“mmW”) spectrum necessary to deploy next-generation technologies and services, including advocacy that persuaded the FCC to adopt equitable procedures for Auction 101 (28 GHz) and Auction 102 (24 GHz). In addition, CCA joined industry advocates to encourage the Commission to promptly move 3.5 GHz spectrum into the marketplace in a manner that promotes investment and innovation for a variety of stakeholders. CCA likewise promoted the efficient and effective allocation of soon-to-be-available mid-band spectrum between 3.7 GHz and 24 GHz for the benefit of all services and users, while maximizing flexibility and innovation for next-generation wireless broadband services. In particular, CCA identified potential avenues for making the 3.7-4.2 GHz band available for terrestrial use, while protecting incumbent users currently providing critical services and protecting unique areas like Alaska. Further, CCA supported Congressional efforts leading to the enactment of RAY BAUM’s Act, including the MOBILE NOW Act.

CCA also was instrumental in securing relief from infrastructure siting barriers at the state and local level, and streamlining environmental and historic preservation review processes. CCA secured sweeping reform of infrastructure deployment policies that will help members deploy next-generation services. In particular, CCA consistently advocated at the Commission and Congress to create clear national standards for application review timelines, reasonable fees throughout the siting process, and common-sense exclusions from environmental and historical review, including Tribal review, where appropriate. CCA also served the remainder of its term on the FCC’s Broadband Deployment Advisory Committee (“BDAC”) Removing State and Local Barriers Working Group to develop a consensus report with industry, states, and localities that would reduce the burdens on carriers and government alike and help spur broadband deployment. Last year, the full BDAC voted on and approved the Removing State and Local Barriers Working Group’s recommendations, marking another step toward industry consensus to streamline infrastructure siting policies.

CCA additionally continued its efforts to ensure that policies are properly balanced to promote public safety and network resiliency. CCA advocated for thoughtful solutions that allow consumers to access information during disasters and emergencies, including through programs like the Wireless Emergency Alerts system. CCA also highlighted members' efforts to harden and recover networks in the wake of natural disasters and security breaches. Finally, CCA remained a Co-Chair of the FCC's North American Numbering Council's Nationwide Number Portability Issues Working Group, which continues to draft recommendations for the Commission on ways to achieve nationwide number porting.

As the industry verges on 5G network deployments, there is more work to do. Looking ahead, CCA will continue to promote a fair playing field for competitive carriers, and oppose anticompetitive policies and practices that stifle innovation and limit competitive providers' ability to bridge the digital divide as well as participate in the next era of technology deployment. For the United States to lead the world in 5G, consumers in both rural and urban areas must have access to reasonably comparable services, which will require access to critical inputs and a competitive legal and business landscape. CCA will ensure that Congress, the FCC, and the Administration continue to share common goals of closing the digital divide and expanding broadband as key drivers of economic growth, innovation, and opportunity.

Specifically, the Commission and Congress remain focused on unleashing valuable spectrum resources for 5G and next-generation technologies, especially in the mid- and high-band spectrum ranges, and CCA will continue to make sure that their efforts provide equitable access to spectrum. Federal funding through programs like MF II, as well as streamlined infrastructure siting policies, also will top the list of CCA's and the Administration's 2019 priorities. At the same time, recent natural disasters, such as Hurricane Michael, and the wildfires and mudslides in California, continue to spark interest in providers' ability to harden and recover networks in the wake of catastrophic events and public safety protocols. Globally, the Administration maintains an emphasis on safeguarding the integrity and reliability of communications networks from vulnerabilities and cyber-attacks, and each new privacy headline prompts new calls to action. In each area, CCA will be vigilant in advocating for policies that promote our members' ability to compete and thrive, and will continue to participate on relevant industry working groups including partnering with federal agencies as appropriate.

Together, these issues frame an early narrative for DC policymakers and CCA's 2019 priorities. CCA looks forward to ongoing collaboration with its members, the Administration, the FCC, and Congress, to welcome the dawn of 5G and inspire policies for a robust mobile ecosystem as industry verges on a new era of technology.

CCA 2019 Advocacy Agenda

SPECTRUM

Throughout 2019, a variety of low-, mid-, and high-band spectrum will play an important role in ensuring that competitive carriers can continue to deliver vital communications services as consumers' demand for data increases.

Spectrum Frontiers. As the 28 GHz (Auction 101) auction concludes and the 24 GHz (Auction 102) auction begins, CCA will continue to urge the FCC to auction high-band spectrum as soon as possible, including bands that are currently allocated for terrestrial use like the 37 GHz, 39 GHz, and 47 GHz bands. The FCC, NTIA, and Congress must continue to focus on enabling next-generation networks and the Internet of Things ("IoT") by freeing-up additional spectrum for licensed wireless use in the mmW bands.

Mid-Band Spectrum. The FCC and other federal agencies continue to focus on potential licensed and unlicensed terrestrial use of spectrum bands between 3.7 GHz and 24 GHz.

C-Band/6 GHz. The FCC has recently focused on spectrum at 3.7-4.2 GHz, 5.925-6.426 GHz, and 6.425-7.125 GHz. Based on member feedback and coordination, CCA supports exploration of licensed and unlicensed use of these bands, and allocating as much of this spectrum as possible for terrestrial deployment, while accommodating incumbents providing critical services in existing hard-to-serve areas.

3.5 GHz. In addition to exploration of other mid-band opportunities, the FCC hopes to auction 3.5 GHz spectrum in the near-term. In the wake of the FCC's 2018 item to redefine the 3.5 GHz licensing regime, CCA will continue to coordinate with members and industry to identify auction procedures that expeditiously bring this spectrum to market.

2.5 GHz. Last year, the Commission released a Notice of Proposed Rulemaking seeking comment on ways to modernize the 2.5 GHz Educational Broadband Service ("EBS") spectrum band. CCA will continue to support the Commission's proposal to make unused licenses available for commercial use, and to grant additional flexibility to EBS licensees to promote more intensive and efficient use of spectrum, while maintaining existing users' deployment strategies.

L-Band/1-2 GHz. CCA will continue to support the Commission's efforts to provide a terrestrial service in frequency bands allocated for satellite operations, such as the L-Band, or spectrum between 1-2 GHz. Releasing this spectrum will enable more efficient use of the mid-bands, which is necessary to meet sharply escalating consumer demand for broadband services and to prepare for the deployment of 5G.

Spectrum Horizons. CCA will work with members to identify areas of interest and opportunity in high-band spectrum ranges such as 95 GHz and above, which is a new priority for the FCC and the Administration. Competitive carriers must have access to a robust portfolio of spectrum resources to deploy next-generation wireless broadband and, eventually, 5G networks, and these proceedings represent a prime opportunity to ensure CCA's members' voices are heard.

600 MHz/Incentive Auction Relocation. On March 30, 2017, the first-of-its kind 600 MHz incentive auction concluded, and CCA continues to work with all stakeholders to facilitate a successful post-auction transition to safely and expeditiously clear 600 MHz resources to serve consumers.

Secondary Market Transactions. CCA will continue to defend members' interest before the FCC and Congress in preventing harms that can arise from anti-competitive consolidation. The Commission and Administration should closely examine the impact of potential transactions on competition and take appropriate steps to protect against saturation of all spectrum resources, including by rigorously applying spectrum screens and other tools to prevent spectrum aggregation.

Other Unique Spectrum Bands. As noted, the FCC and Administration have turned focus to identifying unique spectrum resources for broadband use. For example, the Commission has launched proceedings regarding potential innovative uses for spectrum in the 5.9 GHz and 6 GHz ranges. CCA will continue to monitor these proceedings and solicit member feedback on potential ways to engage.

INFRASTRUCTURE

Historic/Environmental Review & State/Local Siting Barriers. Infrastructure siting reform is critical to overcome a key barrier to broadband deployment, and will continue to be a primary policy focus for the FCC and

Congress in 2019. The Commission, in particular, will continue to defend its 2018 items to streamline and expedite infrastructure deployment through a variety of rulemaking proceedings including Orders to address historic and environmental review procedures, and siting policies at the state and local levels. CCA will continue to steadfastly defend the Commission's recent actions in these rulemaking proceedings as litigation progresses in federal court. CCA also will continue to work with members and the FCC to identify areas where similar relief can be extended to macro deployments. In parallel, CCA will work to shape any infrastructure packages that may emerge in Congress.

Twilight Towers. Last year, the FCC sent a draft Program Comment to the Advisory Council on Historic Preservation ("ACHP"), which tentatively concludes that "Twilight Towers," or towers for which construction commenced after March 16, 2001 and before March 7, 2005, are excluded from Section 106 review, provided that certain conditions are met. CCA supported the FCC's proposed Draft Program Comment and conditions for exemptions. ACHP has yet to vote on the draft Program Comment. CCA will continue to encourage all stakeholders, including ACHP and the Commission, to work together to address Twilight Tower reform.

Federal Lands. CCA's active participation in the FCC's rulemakings and Congress' legislative efforts shaped the discussion on how to reduce siting barriers stemming from historic and environmental review, state and local authorities, as well as Federal land managing agencies. CCA remains steadfast in its collaboration with Congress and agencies like the Department of Interior, the Department of Commerce, and the FCC, as well as other stakeholders, to implement common-sense siting standards and procedures on federal lands.

UNIVERSAL SERVICE FUND

Mobility Fund II. Many CCA carrier members rely on the Universal Service Fund ("USF") to deploy, maintain and upgrade broadband networks in hard-to-serve and high-cost areas that might not otherwise present a business case for deployment. In the wake of 2018 advocacy accomplishments to ensure accurate and reliable coverage maps for areas deemed eligible for federal funding, CCA's advocacy efforts will continue to focus on outstanding issues related to MF II, including ways to collect data that efficiently establishes where federal funding is necessary to deploy mobile broadband networks. The MF II program should be executed in a manner that reflects Congressional intent and actual consumer mobile experience utilizing accurate, standardized data to direct support to areas that need it most.

Contribution Reform. The USF contributions base is not sustainable. CCA urges the Commission and Congress to explore options for comprehensive contribution reform, including expanding the base where possible to reflect today's and tomorrow's network uses.

PUBLIC SAFETY & NEXT-GENERATION 911

Wireless Emergency Alerts. Recent natural disasters such as Hurricane Michael and the California wildfires renewed the FCC's and Congress' focus on fortifying public safety protocols across the United States. CCA will continue to collaborate with the Commission and Congress to enact policies that are technologically feasible and ensure that consumers receive accurate and timely information in times of disasters and emergencies. CCA will continue to highlight the marketplace challenges that smaller carriers face in accessing devices or technologies, and recommend that any implementation deadlines appropriately reflect those challenges.

Network Resiliency. CCA continues to monitor network resiliency requirements from Congress and the FCC to ensure these efforts balance public safety needs without unduly burdening carrier resources. Congress and the FCC remain closely engaged on how and to what extent providers harden their communications networks in the wake of disasters and emergencies, and CCA will continue to highlight its members efforts to promote network resiliency.

Location Accuracy. CCA will continue to advocate for policies that upgrade next-generation 911 services, including text-to-911 and enhanced outdoor and indoor location accuracy requirements, without creating burdensome or cost-prohibitive requirements that could inhibit the deployment of emergency services in rural areas. CCA also will aid members when navigating upcoming mandatory 911 compliance certification filings to promote the advancement of next-generation emergency services.

NETWORKS

Nationwide Number Portability. Nationwide number portability (“NNP”) remains a key issue affecting the competitive health of the modern mobile wireless market. CCA therefore supports the FCC’s efforts to identify innovative solutions to facilitate NNP and promote competition between providers, for the benefit of consumers in all areas of the United States. In 2019, CCA will continue to collaborate with members and industry through its position as a Co-Chair of the North American Numbering Council’s NNP Issues Working Group to produce recommendations that provide much-needed certainty for the NNP landscape ahead.

Cybersecurity/Supply Chain. CCA continues to monitor Congressional, FCC, and Administration activity on cybersecurity and supply chain vulnerabilities, encouraging lawmakers to note the limitations and availability of resources when it comes to carrier compliance of certain regulations. As an industry partner with the Department of Homeland Security’s NCC Communications Information Sharing and Analysis Center (“COMMS-ISAC”), CCA has access to federal reporting resources on cybersecurity attacks and events.

Privacy. CCA has served as a strong voice for members as concerns about network and user privacy evolve, including highlighting the importance of protecting small carriers from undue compliance burdens, and promoting uniform privacy and data security rules across the Internet ecosystem. As the Administration, Congress, and the FCC increase their attention on broadband privacy, CCA will work to support an appropriate balance that instills consumer confidence without harming innovation or overwhelming members with unwieldy regulations. CCA will work to promote smart policies and ensure that carriers have access to resources and data for effective network management techniques.

CDMA Sunset/Tech Transitions. Verizon has announced plans to retire 2G and 3G CDMA networks on December 31, 2019. As a result, consumers currently using CDMA devices that are not VoLTE capable will not be able to access voice services, including 9-1-1, when roaming in areas where Verizon has the only CDMA coverage available today. CCA will continue to consult with members to identify an appropriate path forward.

Restoring Internet Freedom. The FCC’s 2017 Order restored broadband Internet access service to its Title I information service classification. Since that time, the politics surrounding the Restoring Internet Freedom Order have been a consistent source of partisan debate. CCA will continue to monitor whether and how various stakeholders will challenge the Commission’s Order. As in past years, CCA’s primary objective in this proceeding is to ensure CCA carrier members can reasonably and effectively manage their networks when necessary.

Roaming. Consumers expect their devices to connect wherever they live, work or travel. Nevertheless, competitive carriers often experience challenges reaching fair and equitable data roaming agreements. CCA will continue to support pro-competitive roaming policies to ensure carriers can provide customers with ubiquitous service even when they are outside of the area covered by their “home” provider’s network.

DEVICES

Access. Access to devices remains paramount for smaller carriers. Recognizing that the two largest mobile carriers dominate the ecosystem and that members struggle to equitably access premium devices, CCA offers

business and policy solutions to ensure members have access to the devices consumers demand through the CCA Device Hub and Data Services Hub. CCA also continues to explore innovative partnership arrangements through its Business Innovation Group.

Hearing Aid Compatibility. CCA was party to the Hearing Aid Compatibility (“HAC”) Consensus Proposal adopted by the Commission in December 2016. In 2019, CCA will ensure a careful balance is struck between the goal of hearing aid compatibility for all wireless handsets and the need to encourage continued innovation, to provide members the most certainty possible in meeting the FCC’s compliance and reporting requirements. CCA continues to participate in policy and regulatory discussions surrounding HAC advancements.

Real-Time Text. CCA also will continue to advise the Commission with respect to real-time text and text telephone technology regulations to create policies that provide ubiquitous access for disabled individuals without unduly burdening carriers.

Interoperability. As the Commission moves forward in its Spectrum Frontiers, Mid-Band, and Spectrum Horizons proceedings, and in reallocating new spectrum bands, CCA will work to ensure device interoperability where appropriate.

Robocalls. CCA continues to monitor developments in robocall technology, including the STIR/SHAKEN method, and will urge that any robocall rules or legislation should provide members with regulatory certainty and necessary resources to implement innovative solutions. CCA also will continue to spur discussions between members to help achieve regulatory goals with business solutions offered by CCA Associate Members.