



March 13, 2024

AT&T Network Outage: Impact on Public Safety Services

In the “early hours” of February 22, 2024, AT&T’s wireless network suffered an outage, affecting communications nationwide. AT&T has not provided a definitive time that the outage started. It disrupted AT&T Mobility (wireless) service for some of its 220 million Mobility subscribers for several hours. At 10:00 a.m. (CT), AT&T publicly reported on the network outage on its website, stating that some customers were experiencing service disruptions, three-quarters of its Mobility customers were able to access its wireless network around 5 a.m. (CT), and the company was working to restore service to its remaining customers. At 2:10 p.m. (CT), AT&T reported it had restored service to all affected customers. At 6:46 p.m. (CT), the company stated “we believe that today’s outage was caused by the application and execution of an incorrect process used as we were expanding our network, not a cyberattack,” and it was continuing its assessment.

The outage affected wireless communications across the nation, as well as some services that depend on AT&T’s wireless network, such as electronic payments, connected car technologies, ride-hailing services, parking meters, and fire alarms. The outage also affected public safety communications, including AT&T customers’ ability to connect to 911 and the FirstNet network, a federally funded public safety network, built and operated by AT&T in partnership with the First Responder Network Authority, an agency under the Department of Commerce.

This In Focus provides an overview of the outage’s impact on public safety communications, Federal Communications Commission (FCC) outage rules, and issues for Congress.

Outage Impact on 911

The impact on customers’ ability to reach 911 services varied among jurisdictions. In Oldham County, KY, emergency service officials reported 911 lines were disabled. Kings County, WA, officials reported that AT&T customers were having trouble connecting to 911. The Charlotte-Mecklenburg, NC, Police Department reported some AT&T customers were briefly unable to contact 911, though the outages did not appear to disrupt the ability of its 911 center to receive calls. The Prince William County, VA, Department of Communications reported that 911 service was not disrupted; however, calls from AT&T phones did not transmit location information.

Local public safety officials notified people about 911 service disruptions and highlighted alternative means for contacting 911. The San Francisco, CA, Emergency Management Department informed callers via social media to use landline phones or Wi-Fi calling or to ask neighbors, friends, or family to contact 911. The Flagler County, FL, Sheriff’s Office recommended texting 911. Oldham

County, KY, provided a 10-digit number for emergency assistance. Some media sources, such as the *Washington Post*, shared alternatives for contacting 911, such as using Wi-Fi calling, the SOS feature available on certain Apple iPhones, wireless service from a different provider, or a voice over internet protocol (VoIP) app, such as Zoom or WhatsApp.

The efficacy of these alternatives is varied. For example, fewer than 30% of U.S. households have landline phones and do not rely solely on mobile service; about 47% of U.S. 911 centers cannot receive texts; and the FCC has reported on limitations to calling 911 over Wi-Fi.

Using a VoIP service to call 911 operates differently from landline or mobile calls to 911. Some services, such as Zoom, require users to preregister their location and send 911 calls to the center authorized to serve that location; if a caller is in a different location, the 911 call may not be routed to the appropriate call center. WhatsApp does not provide access to emergency services, per its service terms.

The iPhone SOS feature allows users to call for help, but it is not available on all iPhones. Like VoIP, SOS operates differently from 911 calling. When calling 911 in SOS mode, an iPhone caller receives a text response with a short multiple-choice questionnaire about the emergency. The answers are sent to a 911 center as a text. If the 911 center cannot receive texts, an emergency services relay center interacts with the caller via text and calls the 911 center to relay the information. Apple specifies the limitations of its service—that SOS is a text-only service; users cannot make voice calls and can only text with the 911 center or through a relay center; messages may take longer to send and receive than regular texts; and users must have an unobstructed line-of-sight connection to a cell tower, which means foliage, buildings, or other obstructions could slow or prevent messages from being sent or received.

While alternative connection methods were conveyed by local officials and media during the outage, in many cases limitations and caveats about the efficacy of reaching 911 using these alternative methods were not.

First Responder Network Authority (FirstNet)

In P.L. 112-96, Congress established the FirstNet Authority to deploy and operate a nationwide network for public safety agencies at all levels of government. The law was passed in response to interoperability issues experienced by public safety during the September 11, 2001, terrorist attacks. In 2017, FirstNet awarded a 25-year, \$6.5 billion contract to AT&T to deploy, manage, maintain, and operate the network. In December 2023, FirstNet confirmed and validated that AT&T had successfully completed the initial

five-year buildout on time and within budget. The network currently serves more than 23,000 public safety agencies and organizations. In February 2024, FirstNet, with AT&T, announced a 10-year, \$8 billion initiative to expand network coverage and improve network services.

Information on the outage's impact on FirstNet service is sparse and varies across jurisdictions. In Charlotte, NC, police officials reported computers inside police cars were down for about an hour. A deputy police chief in Athens, GA, stated the department's mobile data (in-vehicle) terminals were out of service, affecting their ability to dispatch. Medstar Mobile Healthcare, a nonprofit in-home health care organization in Fort Worth, TX, reportedly lost the ability to communicate with field units, causing the service to revert to radio dispatching. The University of Virginia Health System in Charlottesville, VA, directed users to connect to its Wi-Fi network to regain connectivity lost through FirstNet. The Los Angeles Police Department, however, reported no adverse impacts.

AT&T reportedly prioritized FirstNet restoration. In response to the outage, the FirstNet CEO reported that services were restored around 5:00 a.m. (CT), several hours after service initially affected some FirstNet public safety subscribers. Under its contract, AT&T is required to provide FirstNet with an after-action report. While FirstNet recognized networks can and do fail, it also committed, as the agency charged with overseeing the FirstNet network, to establishing an After-Action Task Force to assess the outage and impact, learn from it, prevent future outages, and improve response so it may, in the event of any future outages, "understand the impact faster and surge to communicate with the public safety community."

Investigations

In addition to the AT&T after-action report and assessment by FirstNet, the FCC, Department of Homeland Security (DHS), and Federal Bureau of Investigation (FBI) are also conducting investigations. House Energy and Commerce leaders issued a statement saying they are working to understand the cause and impact and to ensure steps are taken to prevent future outages.

FCC Rules on Outages

FCC rules require wireless service providers to notify the FCC within 120 minutes of discovering that they have experienced an outage of at least 30 minutes. For any outage that affects a 911 call center, they are required to notify the designated contact person at the center as soon as possible and convey all available information that may be useful in managing the outage's effect on the center and its callers. Outage information is confidential; however, recent rules allow state and local emergency management agencies access to outage information filed with the FCC. The FCC's Enforcement Bureau can investigate outages and issue fines for noncompliance with FCC rules, such as rules related to outage notification and to delivery of 911 calls.

Impact on AT&T

In addition to the investigations and potential enforcement actions, the outage may also affect AT&T's request to the California Public Utilities Commission to end its

obligations to continue to offer landline service as a carrier of last resort. The state, and other states faced with similar requests, may take outages into account when making decisions on landline service changes.

Issues for Congress

After past outages, some Members asked the FCC to investigate, enforce rules, and make recommendations to prevent future outages. Some Members have called for greater transparency and accountability for service providers after outages. Congress has also held hearings to address the increasing number of reported outages.

Emerging technologies, such as 5G wireless service, require the integration of software into wireless networks, which may present additional risks. Congress may seek to assess and address these potential new risks. Some security experts have urged enhanced planning, increased public awareness, and public-private partnerships to assess and address risks. Options for Congress in this area may include establishing outage reporting requirements or directing agencies, such as the Cybersecurity and Infrastructure Security Agency in DHS, to identify risks, strengthen communication network resiliency, and provide recommendations to Congress.

In 2022, the FCC adopted a Mandatory Disaster Response Initiative (MDRI). It replaced the voluntary Wireless Network Resiliency Cooperative Framework (Framework), proposed by industry in 2016 and accepted by the FCC in lieu of a regulatory framework. The MDRI includes many of the same provisions as the voluntary Framework, requiring wireless providers to enable roaming when a network is down, where technically feasible; establish mutual aid agreements; enhance municipal preparedness; increase consumer readiness; and improve public awareness and stakeholder communications regarding restoration times. While the MDRI includes many elements that may have been useful during the recent outage, under current rules, the MDRI is triggered only in certain scenarios—primarily in response to large-scale emergencies that require federal assistance. Options for Congress may include expanding when certain MDRI provisions, such as mandatory roaming, may be invoked. One issue raised by this option would be the potential costs of added regulatory requirements, which could be passed on to consumers.

After the outage, public safety experts emphasized the need for police and fire agencies that use FirstNet to maintain their land mobile radio (LMR) systems as an alternative communications method. Some public safety stakeholders oppose recent calls to reassign spectrum in the 4.9 GHz band from local public safety agencies to FirstNet, arguing that local control of spectrum is necessary to provide robust public safety communications. The allocation of spectrum in the 4.9 GHz band, and how it would best support public safety, may be an issue of interest to Congress. Congress may also consider proposals, such as in H.R. 3565, to increase funding for 911 centers to improve network resiliency.

Jill C. Gallagher, Specialist Telecom Policy

Colby Leigh Rachfal, Specialist in Telecommunications
Policy

Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.