

# Technological Evolution: How Atlanta Modernizes its Emergency Response with Cloud-Native Technology



**Executive Summary:** This case study explores the journey of 911 services in Atlanta, Georgia, and their transformation through the adoption of Carbyne Atlanta Universe, by moving their emergency response system into the cloud, they have positioned the call center as an innovator in emergency response, breaking away from limitations and embracing a future that is faster, more efficient, and safer for its citizens. It showcases challenges faced by 911 operators and how innovative technology has revolutionized their operations to provide more efficient and effective emergency response.

## The Need for Technological Evolution:

911 operators often found themselves dealing with public misconceptions about their capabilities, shaped by popular media portrayals. Recognizing the need for technological evolution in the 911 space, operators stressed the importance of keeping pace with rapidly advancing technology to provide better assistance to citizens in distress.

**Carbyne Universe Integration:** Atlanta needed to upgrade their system, so they chose Amazon Web Services (AWS) Public Sector Partner Carbyne. Universe was introduced as a game-changing technology in the 911 emergency services landscape because it promised to bring a multitude of tools to 911 call centers, call takers, dispatchers, and field responders. Its core features included seamless integration of video and photos, including images from a caller's gallery, and the introduction of silent chat for improved communication. Carbyne leverages S3, EC2 and Cloudfront to deliver real time, low latency WebRTC video for 911 and non 911 use cases that allows our customers to reduce dispatch time and resolution of emergencies.

**Advantages of Silent Chat:** The advantages of silent chat over traditional text-based 911 services enable operators to send outbound messages to callers and receive read receipts, enhancing communication during emergency situations.


**Real-Life Incident:** A real-life incident described in the case study involved a caller who had been in a car accident and was unable to speak. Using Carbyne Universe, the operator could instantly access the caller's location and even view live video footage of the accident scene. This technology provided vital information for emergency responders, eliminating the need to wait for confirmation from EMS.

**Enhancing Responses to Critical Incidents:** The potential benefits of Carbyne Universe during critical incidents, such as active shooter situations is having the ability for people on the scene to send immediate photos and videos to 911 operators was seen as a significant advantage. This feature could expedite response times and improve situational awareness.

## About Carbyne



Carbyne is an Amazon Web Services (AWS) justice and public safety customer and partner, provides 911 call handling systems, offering a cloud-native software as a service (SaaS) platform with two main product offerings for public safety clients: Carbyne Universe and Carbyne APEX.



**Seamless Implementation and Positive Outcomes:** Operators shared their experiences with the seamless implementation of Carbyne Atlanta Universe. They found the technology easy to maneuver and straightforward, reducing the learning curve associated with new technologies. This streamlined approach was seen as a major step toward the future of emergency response.

**Embracing Technological Advancements:** After implementing Carbyne Universe, Atlanta embraced new technology in the 911 services domain. They emphasized the importance of staying open to technological advancements that simplify their jobs and ultimately assist in delivering better emergency services to the community.

**Moving Forward:** Carbyne Universe has brought about a significant transformation in 911 services, bridging the gap between public perception and the reality of emergency response capabilities. The technology's successful integration has positioned Atlanta's 911 services on the right side of history, promising more efficient and effective emergency response operations for years to come.

**Conclusion:** Carbyne Universe has emerged as a catalyst for change in the 911 services industry. This case study demonstrates how innovative technology can reshape and enhance emergency response services, ensuring that citizens receive the assistance they need promptly and effectively. The integration of Carbyne Universe represents a positive step forward in the evolution of 911 services in Atlanta, setting a precedent for the wider industry.

Carbyne Universe is moving Atlanta in the right direction with technology upgrades. The ability to share Live Video and Photos and use Silent Chat will not only help the callers, it will help the dispatchers and the first responders by providing better situation awareness.

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