Mob Museum Increases Cell Signal by 25% in Dead Zones

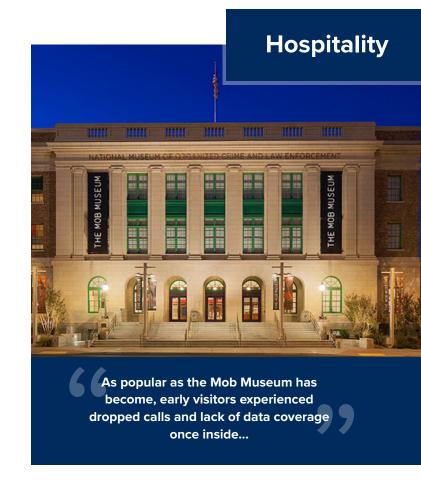
The Mob Museum in downtown Las Vegas is a popular attraction with tourists visiting Sin City. The museum captures the rich history of desert mobsters like Bugsy Siegel and Frank Costello who played an integral part in the early development of Las Vegas casinos. As popular as the Mob Museum has become, visitors experienced dropped calls and lack of data coverage once inside the 44,000-square-foot building, despite the excellent service in downtown Las Vegas.

THE CHALLENGE

Built in 1933 as the Las Vegas Post Office and Courthouse, the building that currently houses the museum was constructed of notoriously cellular unfriendly materials, including brick, concrete and steel, which caused a poor quality cell signal indoors. The museum's existing cellular amplifier system was rendered virtually useless by the problematic building materials. Due to the strong outside signal, the existing booster system wouldn't activate because it didn't recognize that the signal needed enhancing.

THE SOLUTION

In need of a viable solution, the Mob Museum got in touch with a WilsonPro Certified Installer to help them overcome their unique signal challenges and design a custom cellular connectivity solution. The installer used a spectrum analyzer to narrow down the issues with signal strength before designing a cellular coverage solution. With the results, the WilsonPro dealer designed a split-signal approach with two separate antennas. With one antenna tuned for 700 MHz/800 MHz and the other for 1900 MHz/2100 MHz, the combined system gathered signals from all major carriers, which were then joined together through a diplexer.



THE RESULTS

The installer found the signals on the 1900/2100 frequencies overloaded the booster, but by using the split approach they were able to separate out the strongest frequencies. The new system captured signals outside of the building, then distributed and boosted them inside, providing complete cellular service for guests of the museum. "Once we installed the boosters, cell signal significantly increased. We saw a 25% increase in cellular service where we had none," said Ryan Markus, technology manager at the Mob Museum.