



The Bottom Line of Airport Coverage and Capacity Systems

Churn—what a costly word for wireless operators! With acquisition costs soaring above \$300 per subscriber, keeping customers satisfied correlates directly with the bottom line. Operators spend an enormous amount of time and money building and expanding their macro networks, upgrading services, and promoting themselves, and can ill afford customer dissatisfaction and possible desertion due to neglect of strategic indoor locations. Maintaining a steady customer base is crucial for financial success—and the best way for operators to do so is by providing reliable coverage where their customers are, both indoor and outdoor.



But how do operators decide where to dedicate valuable resources in providing customers access to their networks? A good starting point is to decipher the places that customers most want to use their mobile phones. In an airport, travelers spend significant time waiting for planes to leave, sitting through delays, and waiting to be picked up. In all cases, there is little to do but call friends and loved ones; make local travel arrangements; or pass time by playing video games, checking emails, or surfing the Internet. The wireless operators that provide travelers the coverage and capacity to do these things in the airport are the ones that keep their customers connected and happy.

Dallas-Fort Worth (DFW) International Airport has tapped Andrew multiple times to provide indoor wireless coverage. Andrew most recently furnished the new Terminal D, its parking structure, and the Grand Hyatt Hotel with an ION™-B fiber distributed antenna system to extend wireless coverage to customers. The ION-B utilizes head-end equipment that interfaces with multiple, co-located, operator base stations. The ION-B converts radio frequency (RF) signals from the base

stations into light frequencies and then transmits them via composite fiber cables to remote units which do the inverse of the head-end equipment by reconverting the signals to RF, as well as amplifying them. The signals then pass through short lengths of coaxial cable to omni-directional antennas that radiate signals to mobile phones. Signals emanating from the mobile phones follow the same path, but in reverse.

Thanks to Andrew, travelers journeying through DFW enjoy clear wireless signals when and where they want them. Upon arrival, passengers can place calls to loved ones to let them know they landed safely. While waiting for a plane, customers can call a friend or download mobile phone video games. Before departing, travelers can check in at the office or surf the internet. When customers are able to make these important calls, they are happy with their wireless operators. When customers are happy with their wireless operators, they are less likely to churn. Improved customer satisfaction, increased network usage, and reduced churn – that's the bottom line.



Andrew previously installed multi-operator, multi-band, multi-technology indoor coverage systems in all of DFW's other terminals. "Ensuring adequate communications systems was something we understood to be important to today's traveler," said Ali Nemat, manager of information technologies, DFW International Airport. "Having worked with Andrew Corporation in the past, we knew they could design and install a top-notch system within a short time-frame." Some of the other locations where Andrew's indoor coverage and capacity systems currently are being utilized include Chicago O'Hare, Boston Logan, Austin Bergstrom, Raleigh-Durham, Hartsfield-Jackson, Philadelphia, and Denver international airports.