

DAS)))) ((((Simplified

University of Washington: 1.8 Million SF Hospital and 72,000 Rabid Fans Who Need Wireless

What is a DAS?

The way we work, play and live is changing because of mobile devices. Our productivity and mobility has improved because of devices and applications, however, mobile service quality can be compromised indoors. Coverage can suffer because RF (radio frequency) signals cannot penetrate metal structures, thick concrete walls, and energy-saving windows. Furthermore, recent building codes dictate a public-safety wireless system be installed for fire departments and police. Typically two separate systems are built to accommodate public safety and commercial cellular, but now facility owners have the option of one combined DAS (distributed antenna system) for all wireless technologies. This synergy leverages a shared infrastructure and lowers overall cost.

The University of Washington is one of the nation's premier public universities, serving over 75,000 students, faculty and staff. When DAS was needed for both their stadium renovation and medical center—at the same time—they turned to **DAS Simplified** for solutions that provided wireless communications critical to public safety and productivity.

The Challenge

UW's Medical Center is one of the largest in the nation, with 25,000 employees working in a building complex of almost two million square feet. A new DAS was planned to meet requirements for public safety, as well as to ensure a staff and patient-friendly environment.

Concurrently, UW decided to embark on a \$250 million renovation of Husky Stadium, with the daunting caveat that all construction would have to be completed in less than a year, including a new DAS to meet code requirements.



The Solution

Fortunately, UW had previous experience working with DAS Simplified, who won two separate contracts for the Medical Center and Husky Stadium.

Building surveys were completed and included the testing of signal strength on site in both facilities. Due to the stadium's tight construction timeframe, DAS Simplified elected to use pre-fabricated cable assemblies and components, all expertly fashioned in their controlled production center. Time on the job site was markedly reduced and installation was completed in days, once technicians were on site to install cable, antennas, and head-end equipment.

For the Medical Center, the system that DAS Simplified installed guaranteed the functionality of UHF (ultra high frequency) communications, pagers used by medical professionals, and 800 MHz radio systems. DAS Simplified guaranteed the wireless signal strength needed for these systems to operate in every corner of campus, 100% of the time.

In addition, DAS Simplified was tasked with integrating the two systems. At the time of stadium reconstruction, the Medical Center built a self-contained Sports Medicine clinic within the stadium, requiring very complex RF engineering such that the signals from the separate but adjacent DAS installations would not interfere with each other.

All aspects of the project were completed by DAS Simplified ahead of schedule, and without any request for change orders. Their engineering team interfaced directly with wireless carriers for approval of the system design, absolutely crucial since a DAS rebroadcasts their signal. Without carrier acceptance, end-users can be fined by the FCC.

The final steps were to install a UPS (uninterruptible power supply) to provide 8+ hours of equipment

operations in the event of a power outage, and also SNMP-based automated monitoring software to provide 24x7 system continuity. With a direct connection to DAS Simplified's Network Operations Center (NOC), this gives status of the customer's system to meet fire and municipal codes.

The 700 acre campus at the University of Washington offers students, staff, and visitors a multitude of environments and experiences, and today systems installed by DAS Simplified empower thousands of people in many ways. For the Medical Center, **a DAS means wireless devices and mobility to support ground-breaking, life-saving medical research and care.** For Husky Stadium during game time, **a DAS means enthusiastic fans can call, text, and share their experiences.** For both, a DAS ensures a safe and secure collegiate environment.

University of Washington
DAS Simplified solution
includes:

- AT&T
- Verizon
- Sprint
- T-Mobile
- 150 MHz Paging
- 450 MHz Radio
- 700 MHz Public Safety
- 800 MHz Public Safety
- 900 MHz Paging

Warranty & Maintenance:

- One year warranty
- Remote monitor & Control

