

Technology Services and F&S Expand Wireless Access on Campus

From the Beckman Institute on the north to the Water Survey Research Center on the south, and in hundreds of places in between, the Urbana campus has never been more connected. Thanks to 4,470 new wireless access points, installed in 243 buildings, the Wi-Fi system can accommodate more concurrent connections with fewer drops in service than ever before. And that's a necessity for a campus that at its daily peak has approximately 45,000 devices connected to Wi-Fi simultaneously.

"That's like the entire population of Urbana checking Facebook at the same time," said Brian Mertz, media, information and communications manager for Technology Services. "Wi-Fi tickets to our help desk used to be among the top five requests every year, and that has completely fallen off since the upgrade began.

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Technology Services and F&S collaborated on the \$8.4M Wireless Ex-

pansion and Upgrade Project, which was funded by colleges and units.

Beginning with the Siebel Center for Computer Science and finishing with the Krannert Center for the Performing Arts, nearly 6.25 million square feet of Wi-Fi coverage was added to the campus in less than 30 months.

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Increasing Wi-Fi coverage initially became a necessity in 2007 when the iPhone was introduced Metz said. Before that, there were only about 500 access points on campus.

"That's when wireless shifted from a luxury to something everyone need-

ed to have," Mertz said. "Faculty and students became increasingly dependent on mobile communications."

The most recent upgrade was completed in May, ahead of schedule and under budget. Technology Services performed wireless reviews of individual buildings to locate spaces that lacked sufficient wireless coverage and created blueprints detailing where new access points should be added and where existing ones could be moved to extend signal and improve throughput.

F&S then installed conduit boxes, brackets, and cable trays to house all the new wiring. Technology Services completed the work, installing the Ethernet cabling and hardware and testing the system.

"This is the first time our two units have come together to do a project like this, and we proved we could do it very effectively," F&S Director of Construction Services Dave Dowler said. "It went great. Technology Services was very thorough in their planning. That allowed us to be very efficient."

Even with 11,176 total access points on campus, the future could include even more, such as adding access points outside on the Main Quad and other areas.

"We are ahead of a lot of universities who only in the last year or two tried to find an answer to this growing problem," Mertz said. "I think it was great that F&S, Technology Services, and the deans saw this as an issue three years ago and came together to find a solution. This was truly an Illinois project." ^



For more on the campus wireless access expansion project, visit:
go.illinois.edu/wirelessupgrade