Developing a Robust Network

Information Resources & Technology has implemented several major infrastructure projects in recent years that have significantly improved the University’s network amid the skyrocketing use of mobile devices and the exponential growth in data-rich content, and we're working to further boost speed and reliability.

One of the most significant improvements was a more than fourfold increase in the University's internet bandwidth, which served as a major widening of the pipes through which data is transmitted.

We also replaced and installed new wireless infrastructure in student housing and upgraded network technology for the entire University.

These efforts were completed to boost download speeds, increase performance of cloud-based applications and improve response times for students, faculty and staff logged into the University's network.

Adding Internet Bandwidth

A fast, stable network is critical for the University’s operations, so we have taken steps that will dramatically increase network speed and reliability.

Wireless Upgrades in Student Housing

One of our top priorities is providing a high-speed connection for students who rely on the University's network for everything from research to entertainment.

Increasing Internet Bandwidth

Boosting Speed, Capacity
We took the first step toward more than quadrupling internet bandwidth last spring, when we boosted the connection from 3 gigabits per second to 5 gigabits per second.

In November, we finished the more than fourfold increase in the University’s internet bandwidth. The University is now served by 13 gigabits per second of internet bandwidth, which means students, faculty and staff now have a significantly wider pipe through which they can send and receive data.

**Ensuring Consistent Coverage**

We are also putting multiple backup measures in place to ensure consistent coverage throughout the University. This work included adding a second internet service provider to keep the University’s network running if one service fails.

**Infrastructure Improvements**

We are constantly evaluating and implementing ways to improve network infrastructure throughout the University, whether through large-scale upgrades or more targeted repairs.

**Strengthening the Network’s Core**

Among the behind-the-scenes work we have recently completed is a major six-month project to replace the technology that powers the heart of the University’s network. The upgrade of the University’s core network was designed to maintain around-the-clock connectivity for students, faculty and staff.

By installing the latest version of Cisco equipment and advanced fiber-optic cabling, we outfitted the University’s core network with the equipment needed to support the technological demands of a growing population.

**Creating a Secure Digital Environment**

As the University welcomes more students and community and corporate partnerships, the multiple backup systems and security measures installed on the core network will ensure research projects and entrepreneurial ventures are conducted in a secure, managed environment that is available day or night.

In an effort to ensure students who live on campus have a reliable and fast connection to the internet, during the 2016-2017 winter break we performed a major upgrade of the wireless network infrastructure in five residence halls: Evergreen, Laurel, Mullica and Oak halls, as well as the Edgewood Park Apartments. More than $220,000 in technology was replaced and installed in those buildings to boost wireless internet capacity and speed.

The upgrades included the installation of new wireless hardware that allows more users to access the internet at higher speeds and the relocation of existing devices to optimize capacity.

We also completed wireless network improvements in the Townhouses during summer 2017, and we have similar wireless improvements underway at the Rowan Boulevard Apartments.