**Illinois State**

**University**

Board of

**Trustees**

**Resolution No. 2015.07/26**

**Approval of ResNet Network   
 Upgrades**

**Resolution**

Whereas, the current network infrastructure supporting Illinois State University residence halls is outdated and insufficient to handle the network bandwidth demands of students, and

Whereas, density of wireless coverage in campus residence halls is not sufficient to support the multiple devices used by students, and

Whereas, wireless device mobility throughout the Illinois State University residence halls is an important competitive advantage to attract and retain quality students, and

Whereas, a University residence hall network and wireless equipment upgrade will provide high density network coverage in student rooms and study areas and better serve administrative activities:

Therefore, be it resolved that the Board of Trustees authorizes total expenditures not to exceed $1.8 million for the necessary hardware, software and related costs to upgrade network and wireless coverage in residence halls throughout campus.

Board Action on: Postpone:

Motion by: Amend:

Second by: Disapprove:

Vote: Yeas: Nays: Approve:

ATTEST: Board Action, July 24, 2015

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Secretary/Chairperson

**Board of Trustees**

**Illinois State University**

**Supplemental Information for Approval of ResNet Network Upgrades**

The current network and wireless infrastructure in the on-campus residence halls is nearly ten years old and no longer able to meet the student demand for network connectivity. Administrative Technologies has observed a steady increase in bandwidth consumption each semester over the previous five years which has led users to experience a slower overall network, especially at peak times. The current wireless design, created before the explosion of tablets and smartphones, does not provide adequate wireless coverage and is insufficient to meet the connectivity requirements of students who bring multiple devices to campus. Specifically, the Watterson complex has reached maximum network capacity and currently saturates its link to Internet and on-campus resources each night during the academic calendar.

Since 2012, there have been over 4,000 incident tickets logged through the Technology Service Center of reported issues with network performance in the residence halls. If replacement and upgrading of current equipment does not occur, the quality of student connectivity will continue to diminish and potentially become untenable.

Approval of the ResNet Network Upgrade project will further enhance the University’s competitive advantage and support *Educating Illinois* - *Goal 4, Strategy 2* to *“Build a modern IT infrastructure that supports the achievement of the University's mission and goals.”* The upgrade would greatly improve the ISU student experience, which could assist in the recruitment and retention of students. In addition, ISU staff hours spent troubleshooting current network issues caused by outdated and insufficient equipment would be reduced.

The underserved high traffic areas that will be targeted by this upgrade include Hewitt, Manchester, Wilkins, Haynie, Wright, and Watterson Halls. These residence halls require an upgrade of networking infrastructure to include: switches and routers located in data closets and distribution centers, and wireless access points.

Similar to the ongoing campus-wide wireless upgrade project approved by the Board on May 9, 2014, students will directly benefit from the improved network. At the conclusion of this project, all residence halls will be equipped to handle 10 Gbps of network traffic – a tenfold increase from current limits. The new wireless design will augment coverage and allow for an increased capacity of wireless devices to meet the current and projected near term bandwidth requirements of student usage.

The upgrade project is estimated to cost $1.8 million and take one year to complete.

Source of Funding: Residence Halls Reserves