

**ILLINOIS STATE  
UNIVERSITY**

**BOARD OF  
TRUSTEES**

**Resolution No. 2023.07/38  
Authorization for Campus  
Wireless Upgrade – Phase 1**

**Resolution**

Whereas, wireless device mobility throughout the Illinois State University campus is an important competitive advantage to attract and retain quality students and faculty as well as to facilitate university operations, and

Whereas, the current density of wireless coverage on campus is not sufficient to support the multiple devices utilized by students, faculty and staff, and

Whereas, extensive wireless coverage provides for students to collaborate and learn, assists in providing innovative ways of teaching, and assists staff in modernizing operations, and

Whereas, a University campus wireless upgrade will more adequately provide high density wireless coverage in key underserved locations and better serve academic and administrative activities.

Therefore, be it resolved that the Board of Trustees authorizes total expenditures not to exceed \$650,000 for the necessary hardware, software, and related costs to upgrade wireless coverage throughout campus.

Board Action on: \_\_\_\_\_  
Motion by: \_\_\_\_\_  
Second by: \_\_\_\_\_  
Vote:           Yeas: \_\_\_\_\_ Nays: \_\_\_\_\_

Postpone: \_\_\_\_\_  
Amend: \_\_\_\_\_  
Disapprove: \_\_\_\_\_  
Approve: \_\_\_\_\_

ATTEST: Board Action, July 28, 2023

\_\_\_\_\_  
Secretary / Chairperson

**Board of Trustees  
Illinois State University  
Authorization for Campus Wireless Upgrade – Phase 1**

In 2014, the Illinois State University Board of Trustees approved a resolution for a campus-wide wireless coverage project. The goal of that project was to extend wireless network coverage across campus. Since then, there has been a demand for additional coverage due to the increase in the number of devices per person that connect to wireless resources.

In 2022, the Board of Trustees approved Phase I of the Campus-wide Network Upgrade. This project was to begin the replacement of the underpinning wired network infrastructure on campus as it approaches the end of its useful life and vendor-specific support.

Technology Solutions is requesting Board of Trustees approval to begin the first of a strategic two-phase upgrade project for the wireless network. The requested upgrades will provide the ISU community with increased reliability, efficiency, security, and network speeds that will provide scalability. The strategic design of this request includes a planned use full life of approximately seven (7) years to avoid costly shorter refresh cycles.

This resolution supports the 1<sup>st</sup> of a multi-year (two phase) upgrade project designed by Technology Solutions staff. The tentative schedule of buildings (12 in total) mirrors that of the 2022 Campus-wide Network Upgrade approval, listed here:

Felmley Hall of Science	Felmley Science Annex
Science Lab Building	Stevenson Hall
Turner Hall	Milner Library
Student Fitness Center	Student Services Building
Hovey Hall	ROTC
Uptown Crossing	Alumni Center

It is expected that the 2<sup>nd</sup> phase will be brought forth for potential BOT approval in the spring/summer of 2024. The current estimated cost of completing both phases is \$1.3 million over the next three years and will reach some 60 buildings.

The total number of wirelessly connected devices, applications, and data resources supported by ISU’s network has increased significantly over the last decade and is expected to continue to grow dramatically. The campus Wi-Fi network serves over 40,000 concurrent devices during peak times for an 18% increase since 2015. The Wi-Fi network has also seen a 67% increase in the amount of bandwidth consumed per day since 2016. Each year there is a measurable increase in the amount and number devices connecting to ISU’s network.

Many student devices no longer natively support a wired network connection, making the wireless network an essential teaching and learning tool. Investment in the wireless network is essential to support the demands of existing and new initiatives such as Engineering and Cybersecurity, Wi-Fi 6E, AR/VR, and growth in the use of operations technology such as environmental sensors.

Approval of the Campus Network Upgrade project will further enhance the University’s competitive advantage and support Educate•Connect•Elevate Goal I.D.5, to “Ensure a safe and secure physical and virtual environment” as well as Goal II.C.3 to “Utilize technological solutions that enhance productivity and creativity.” It will also serve as a critical component of the University’s next-generation technology infrastructure as an upgraded campus network is a core building block for ISU’s digital transformation efforts to better meet campus business needs through the use of modern technology.

The Campus Wireless Upgrade is a critical IT infrastructure upgrade that will continue to support the University’s mission of teaching and learning. All students, faculty, staff, and guests of the University will see the benefits of such an upgrade. The networking team at Illinois State has the expertise and the willingness to operate a robust and highly flexible wireless network for the campus community. This first phase is estimated to not exceed \$650,000 and should be completed by June 2024.

**Source of Funds:** General Revenue Funds