



University of Rochester Students' Association
Projects and Services Committee

Project Proposal:
URWireless

Compiled By: Bradley Halpern
Date: 3/1/2009

P&S Committee Co-Chairs
Eric Weissmann
Kirstin Barry

SA Senate Leadership
Speaker: Harrell Kirstein
Deputy Speakers: Alvin Lomibao
Kierstin Hughes



Projects and Services Committee

UR Wireless

- In response to an overwhelming opinion from the student population, the purpose of this proposal is to iterate improvements and prioritize expansion efforts that will eventually lead to a 100% wireless campus.
- With technological improvements, it is important to recognize that a sizable number of wifi connections are from mobile and pocket devices rather than laptop computers. To that effect, many connections are also more data intensive, requiring higher bandwidth for direct server connections, two-way video streaming, remote client management, and other data intensive applications than in the past.
- Considerations for prioritization include: student opinion, available ethernet access, number of kiosks present, academic worth, and popularity.

The Expansion Plan:

1. Todd Union – Currently no wireless access available. Our primary concern is music and theater facilities, which are both academic and non-academic, as post office facilities are partially serviced by a new computer kiosk system.
2. Frederick Douglass – A main dining facility and common study space for students; existing partial coverage is not sufficient.
3. Tiernan Residence Hall – This is the only remaining freshmen dormitory lacking wireless access.
4. Southside Living Area – Furthest from campus, students in Southside housing have limited access to computer facilities and wireless on campus.
5. Residences: Ideally all remaining dorms would be made wireless concurrently.
 - a. Quad Housing
 - b. Towers Housing – Due for renovation pending economic stability
 - c. Hill Court Housing
6. Fraternity Housing
7. Spurrier Gymnasium
8. Meliora Improvements
9. Hutchison Improvements
10. Morey Improvements
11. Harkness Improvements
12. Outdoor Areas – It is important to note that wireless users demand a steady connection as they move from one part of campus to another. To prioritize for rollout, however, the order of importance would be as follows:
 - a. Residential Quad
 - b. Science Quad
 - c. Sue B. Circle and Area across from Library Lot
 - d. Dandelion Square
 - e. Tunnels
13. All other University Buildings and Outdoor Spaces – A True “Wireless Campus” would ultimately allow for all students to have two wireless devices on 100% of the University property.



Projects and Services Committee

The Improvement Plan:

- Wilson Commons Wireless – Wireless signals are often lost in populated areas including Starbucks, the Gowen Room, Hirst Lounge, Wilson 121/122, PepsiCo Plaza (“The Pit”)
- Authentication Method and Interface –
 - o Ideally, the current Cisco Authentication System would be supplemented or replaced by a MAC address identifying or similar system, removing the need for students to login when connecting from one of their primary wireless devices.
 - o If the interface is retained, better defaults/tab/enter functionality as well as a “Save Login” would help. Having the cursor default to the NetID field, with tabbing enabled to the password field, and submission via the enter key would remove several of the repetitive login steps.
 - o Also, the authentication should not time out when applications are still utilizing a connection.
- Residential Improvements –
 - o Residential Life Building wireless is sometimes unstable, especially at peak hours. Infrastructure should be in place for at least 1.5 wireless devices on average per person to be in use optimally at any given time.
 - o For residences, wireless access in lounges only *would* be considered an improvement. Though not complete, it would allow for convenient collaboration of students in public spaces when wiring in is unrealistic.
 - o Pending further research by University Networking, the SA requests that IT compile an easy-to-follow guide on securing wireless networks, which would be distributed to all students buying wireless routers in the campus Computer Store. The instructions should correspond specifically to the model router(s) sold in the store, and also be available in a generic version online. Lastly, IT should amend any rules currently in place prohibiting the use of wireless routers in residence buildings which are not adequately equipped with wifi service, provided certain agreeable precautions are met (SSID displayed, WEP or better secured, MAC address registered, Channel set to Auto, etc). Students should understand that they administer and use wireless service at their own risk.

Project Managers

Students' Association

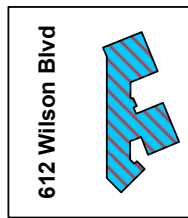
- IT Coordinator, Bradley Halpern – bradley.halpern@rochester.edu
- Projects and Services Chairperson, Eric Weissmann
- Projects and Services Chairperson, Kirstin Barry
- Speaker of the Senate, Harrell Kirstein

University IT

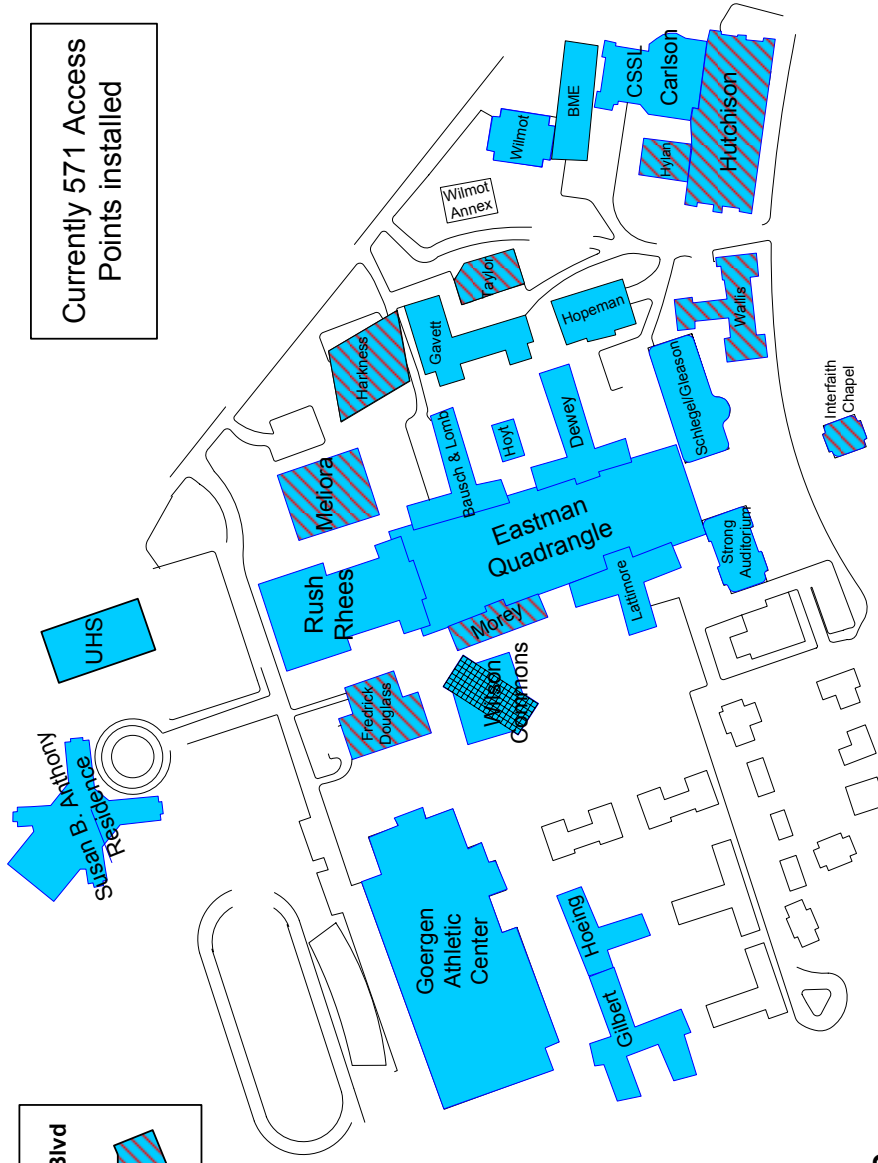
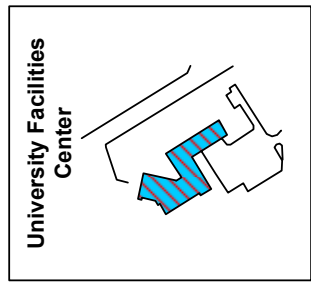
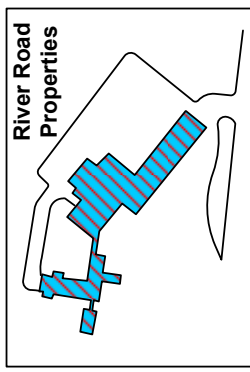
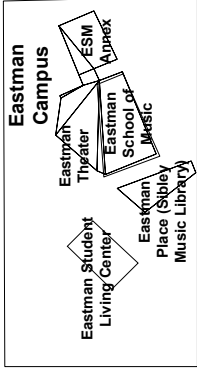
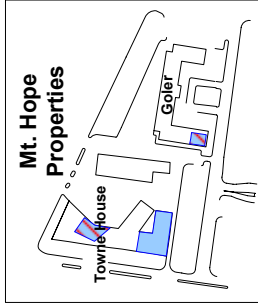
- Director of Networking and Communications– Kate Crowley
- Assistant Director, University IT – Joe Pasquarelli



UNIVERSITY OF ROCHESTER



Currently 571 Access Points installed



Coverage Key

- Full
- Partial

UNIVERSITY OF ROCHESTER

INFORMATION TECHNOLOGY