Community-Wide Wireless and Banner Update
Community-Wide Wireless
NMU’s TLC Program

- 9,000 Notebook computers
- 1,100 Web-based and web-enhanced courses
- One reason for our success is our network Infrastructure
Network Infrastructure

• Network backbone
  – NMU installed 15,000+ port routed network

• Wired network connections (100 mbps to 1,000 mbps)
  – Open areas, student and university lounges, classrooms, lobbies, hallways, residence halls, and apartments

• Dial-In network connections (56 kbps)
  – 6,300 commuter students
  – 304 local lines
  – 24 accessible lines throughout the State
Network Infrastructure

- Wireless network access (11 mbps to 54 mbps)
  - Campus-wide access
  - Community-wide access – expanding access into the community
- Potential high speed access to our 6,300 commuter students and faculty/staff
Community-Wide Wireless
Previous Discussion
**NMU Benefit**

- Reach large commuter population (potential of over 6,000 students)
- Improve efficiency and speed of connectivity from off campus
- Attract students
- Extended access to educational resources
- Further implement web-based services enabling further streamlining of processes and cost of services
  - No more paper transactions – assured access by all
- Eliminate majority of dial-in lines
Identified Coverage Area

• First,
  – GIS map of living locations of students
  – Target large student population areas

• Next
  – City of Marquette
  – The Upper Peninsula at large
Update
How are we progressing?

• Current access in area
  – NMU radio and television towers in the area
  – Public library
  – City offered access to sites around the city
    (positive relationship on project)
Pictures from Community Wireless
Wireless Coverage

NMUCLC COVERAGE MAP
“How To”
End-user guide to accessing the
NMUCLC Wireless Network
Northern Michigan University Connected Learning Community (NMUCLC)
NMUCLC Video

• “How to” instructional video
  – Utilizing media serve to develop instructional video on how to install equipment to access the wireless network off campus
  – Goes along with user guide
• **Current (past year)**
  – Test phase for security and quality of service
  – Worked with city on access to sites in Marquette
  – Have not yet marketed access
  – Developed contacts with local RF businesses

  • Students, faculty, and staff can contact to provide, install, and maintain equipment at a reasonable cost
**NMUCLC Communication**

(continued)

- **Future**
  - Communicating/marketing
    - Completing “how to” NMUCLC video and instructional manual
    - Ability for local businesses and landlords to provide access to students, faculty and staff information
    - Students, faculty, and staff how to setup at home
    - Study idea of “NMU WiFi” signs throughout city
  - Expanding coverage and quality of service
Summary of Current/Future Setup

• Current
  – Wireless network
    • Installed and continuing to expand 802.11a/b/g in the community
    • Approx. 200 times faster off campus access than current modem/dial-in
    • Equipment will be reusable and based on standards
  – Secured wireless access
    • Created virtual private network (VPN)

• Future
  – Expand reach of 802.11
  – 802.16 when prices drop to build a bigger highway
  – Mesh networking technology
  – Cell network for fringe areas
NMUCLC
Community-wide Wireless
Coming your way in
Fall 2004
Banner Update

The journey continues
**Banner Update**

- **Initial Goals**
  - Implementation timeline of 20 mos.
  - Project budget of $2.6 million
  - Ability to implement disaster recovery
  - System software maintenance savings
  - 24 x 7 access to system
  - Elimination of social security number as primary student identification
  - Greater flexibility in development of reports and applications
Banner Update (continued)

• All Banner Modules Implemented
  – Human Resources – January, 2004
  – Financial Aid – February, 2004
  – Admissions – February, 2004
  – Registration – March, 2004
  – Alumni – May, 2004
  – Accounts Receivable – July, 2004
Banner Update (continued)

• Third-party software installed
  – InfoPrint Solutions (June 2003)
  – Database development/administration tool – TOAD (June 2003)
  – CoreCash – cashiering system (July 2003)
  – E-business – TouchNet Suite (July/August 2003)
    • E-bill
    • Payment Gateway
    • Web Check
    • Payment Plans
Banner Update (continued)

• Upgrades completed to 3rd party software required for Banner:
  – STARS – telephone billing system (May 2004)
  – TouchNet Suite (July/August 2004)
  – CoreCash (from IA Plus connection to Banner) (July 2004)
**Banner Update** (continued)

- Updates completed to 3rd party software interfaces required for Banner:
  - Academic Computing
  - Alumni Telemarketing
  - Bookstore
  - Conference and catering
  - Dining Services
  - E-mail
  - Facilities
  - Health Center
  - Housing
  - Library
  - MicroRepair/HelpDesk/Asset Management
  - Motor Pool
  - Parking Management
  - Postage system
  - Printing Services
  - Warehouse
  - WebCT
  - WildCat Express Card – BlackBoard System
**Banner Update (continued)**

- **System infrastructure:**
  - Replaced mainframe with P650 Unix System
  - Installed robotic tape backup system
  - Retrained staff:
    - Systems staff (for Unix)
    - Application programmers (for SQL/database)
    - Operators (to do server maintenance on Intel Systems)
  - Disaster recovery:
    - Installed Storage Area Network (SAN)
    - Installed backUp P650 Unix System
      - Utilizing for running standard and ad hoc query reporting
• **Future Goals**
  - **Short-term** (August/September 2004)
    • Complete conversion of data
      - Student academic history information
      - Document images
  - **Long-term goals** (2004/2005)
    • Reporting infrastructure
      - Recode reports
      - Complete transition from SSN to new NMU identification number
    • Workflow
    • Tuning of new Banner administrative systems
Banner Goal Update

- **Goal Achievement**
  - On time
    - 20 months vs. 60 months for last conversion
  - Within budget
    - Costs are within $2.6 million budget
    - Including additional third party software and equipment not initially included in plan
      - Printing infrastructure
      - Robotic tape back up system
      - Web-based time entry system
**Banner Goal Update** (continued)

- **Goal Achievement** *(continued)*
  - Disaster recovery plan
    - Implemented disaster recovery plan
    - Able to cover costs of disaster recover from savings in SCT implementation
    - Disaster recovery systems (server and SAN)
  - 24 x 7 access to system is now available
Banner Goal Update

• Goal Achievement (continued)
  – Operational savings
    • $300,000 per year in annual system software maintenance savings obtained
  • Staff savings
    – One operator position
    – Retrained staff to perform functions not previously addressed
Banner Goal Update (continued)

• Goal Achievement (continued)
  – Completing transition from SSN to new NMU identification number as primary identification
    • AQIP goal (one of three major goals)
  – Real time updates across systems
  – Ability to implement electronic Workflow
Questions???