

# Implementing Long Distance Service via VoIP

Two Case Studies  
Merit Annual Meeting  
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# *Presenters*

- Oakland University
  - Brian Paige, Sr. Network Systems Analyst
  - Ross Fourier, Network and Telecommunications Systems
- University of Michigan
  - Pradip Patel, IP Telephony Technical Lead
  - Sara Easler, Telecom Engineer
- Merit Network
  - Jennifer Hensley, Manager, Dedicated Connections

# *Long Distance Via VoIP*

- Generally uses traditional PBX to Identify Long Distance (LD) Calls
- LD calls are routed to a VoIP Gateway Device
- Gateway “packetizes” and compresses the voice call

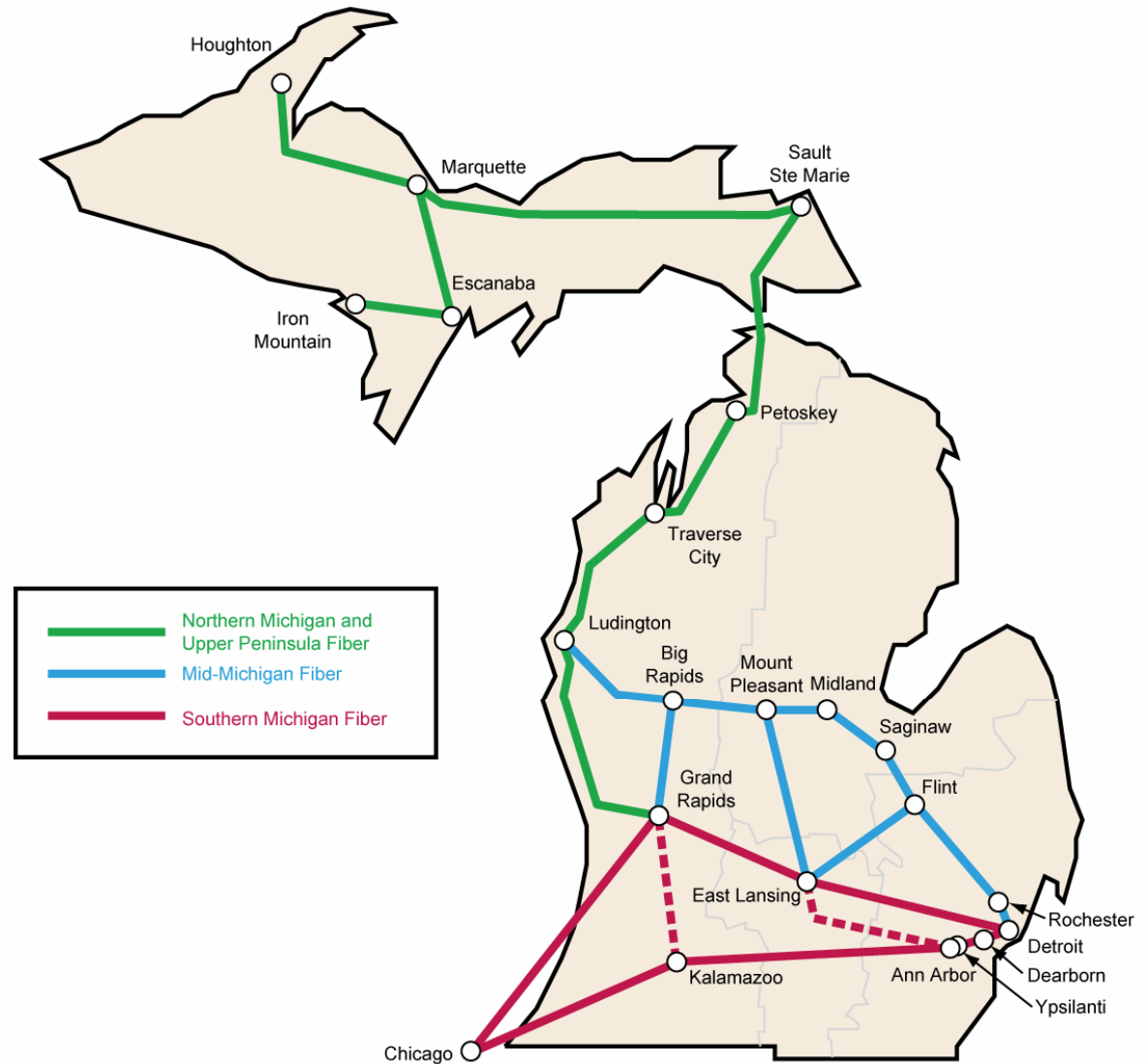
# *Long Distance Via VoIP, Continued*

- Packets are routed to an LD provider via the Internet backbone
- LD provider routes calls to the Public Switched Telephone Network (PSTN)
- Gateway can also route IP to IP calls directly

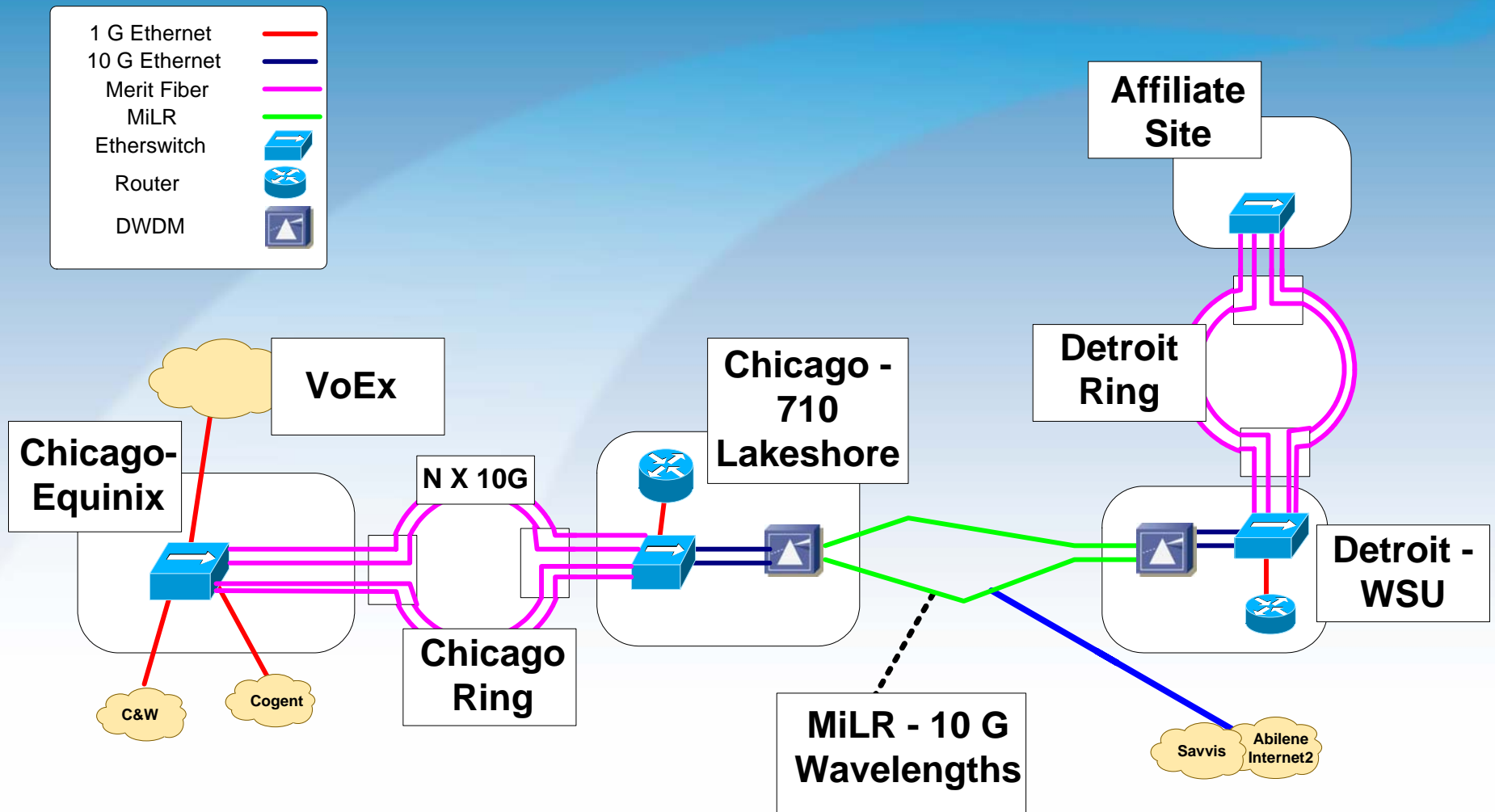
# *Advantages*

- Use of legacy telephony equipment, including handsets
- Migration path to full VoIP implementation if desired (additional features, more control)
- Greater utilization of installed local network
- Can provide future cost control
- Use of Merit backbone provides greater control over engineering and QoS

# Michigan High Performance Research & Education Backbone Network



# VoIP within Merit



# VoIP at the Member/Affiliate Site

