

# WiMAX Prototyping in Metro Detroit: Deployment Status

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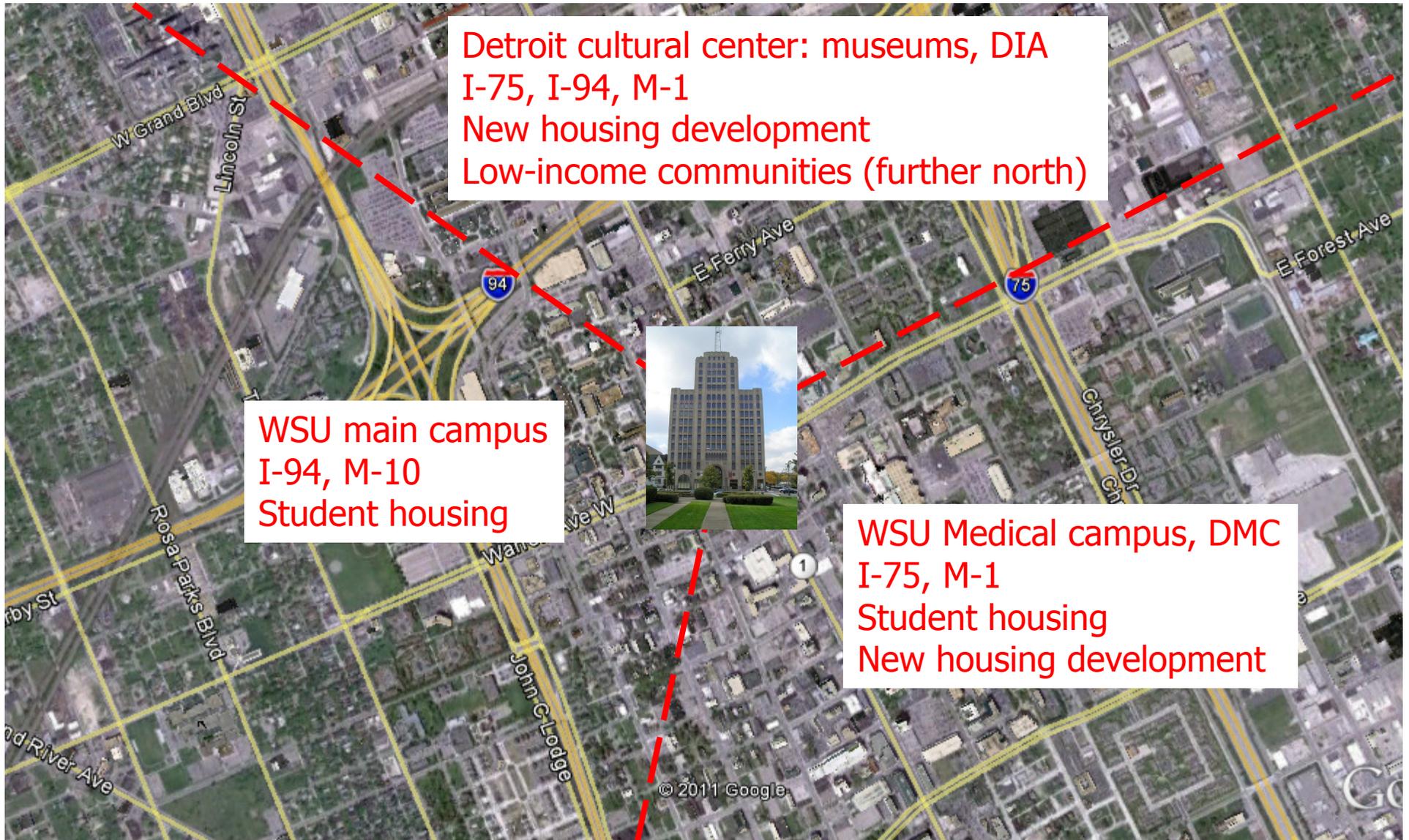
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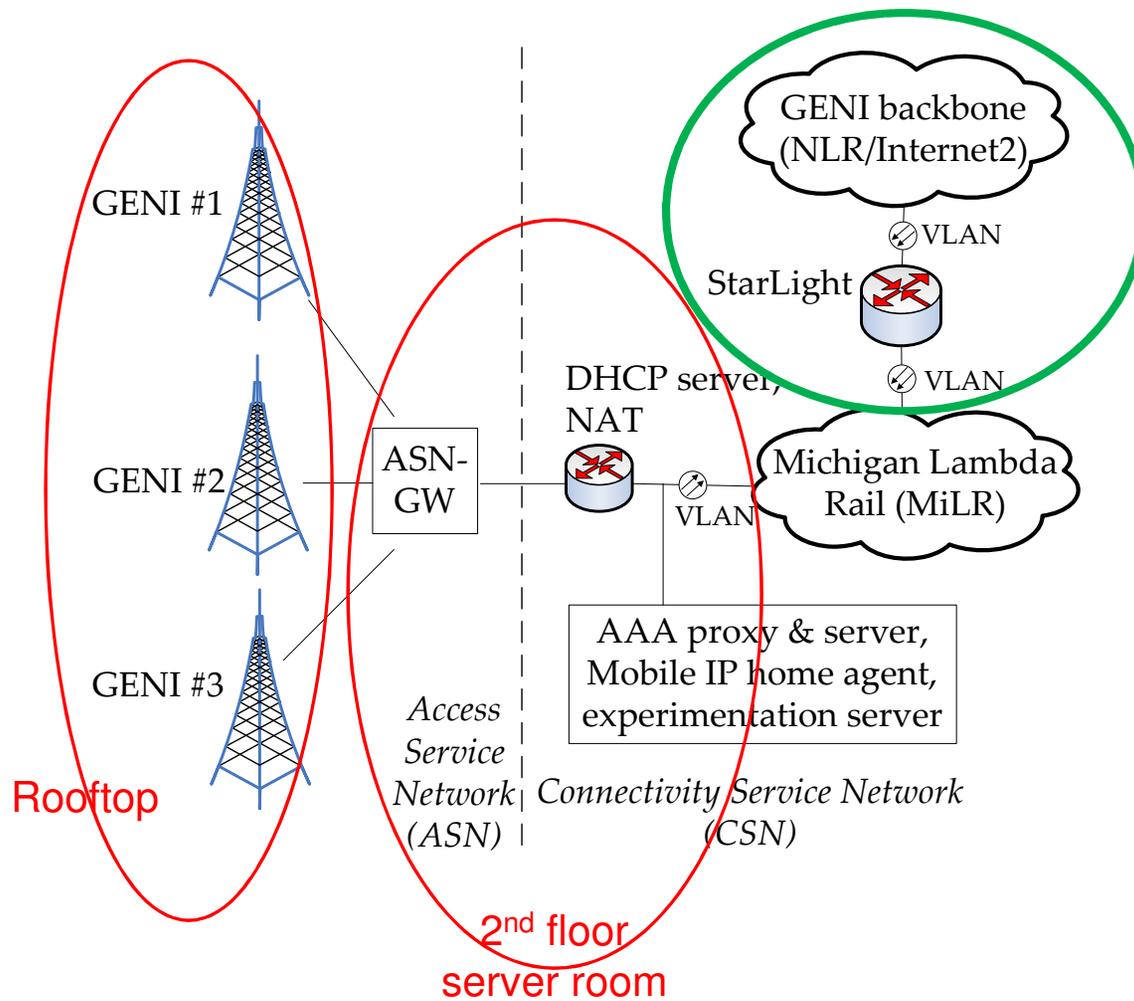


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# Deployment site: Rooftop of the Maccabees building



# System architecture



## Current status

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- Spectrum loan from Clearwire: done
  - 10MHz band: 2591MHz – 2601MHz (belongs to 2510 Mid band of 2560MHz~2630MHz)
  - Current loan valid until March 1, 2013; to be renewed annually afterwards
  
- WiMAX network equipment
  - Being in touch with facilities and campus IT on deployment logistics
  - Received three WiMAX base stations and accessories on 06/25/2012
  - Now working with facilities and campus IT on concrete action items
    - Equipment purchase:
      - mounting masts, networking, electricity
      - Servers, laptops (+ USB dongles through UWM)
    - Contracting roof-mount and installation

## Plan for rest of Year 1 & Year 2

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- By end of Year 1
  - Complete installation and measurement study of the WiMAX network
    - Time to get OMF running?
  - Connect the WiMAX network to GENI backbone via VLAN
  - One source of uncertainty: re-roofing work on the deployment site until mid/late August
    - Exploring mechanisms for deploying WiMAX network in parallel
    - (No need to worry about re-roofing in the coming 20-30 years 😊)
  
- Year 2
  - Incorporating OpenXC vehicular sensing and infotainment platform
  - Enabling handoff between different base stations/sectors

Backup Slides

# Context of deployment

