

# Every1Online (Meta Mesh) Update

**February 11, 2021**

# What is Meta Mesh?

- Originally founded in 2012 as PittMesh LLC
- Non-profit Internet Service Provider
- Goal is to bridge the digital divide by getting broadband internet service to people who need it without burdening them with a monthly bill
- *Mission: To bridge the Digital Divide in a meaningful and permanent way by building Community Wireless Networks in Pittsburgh and around the world*

# Partnership

- Carnegie Mellon University
  - CS Pathways Outreach Program
- University of Pittsburgh
  - Graduate School of Public and International Affairs
  - Pitt IT
  - School of Computing and Information
- Meta Mesh Wireless Communities (WISP)
- KINBER (Pennsylvania's Statewide network)



University of  
Pittsburgh

Carnegie  
Mellon  
University



Every1online

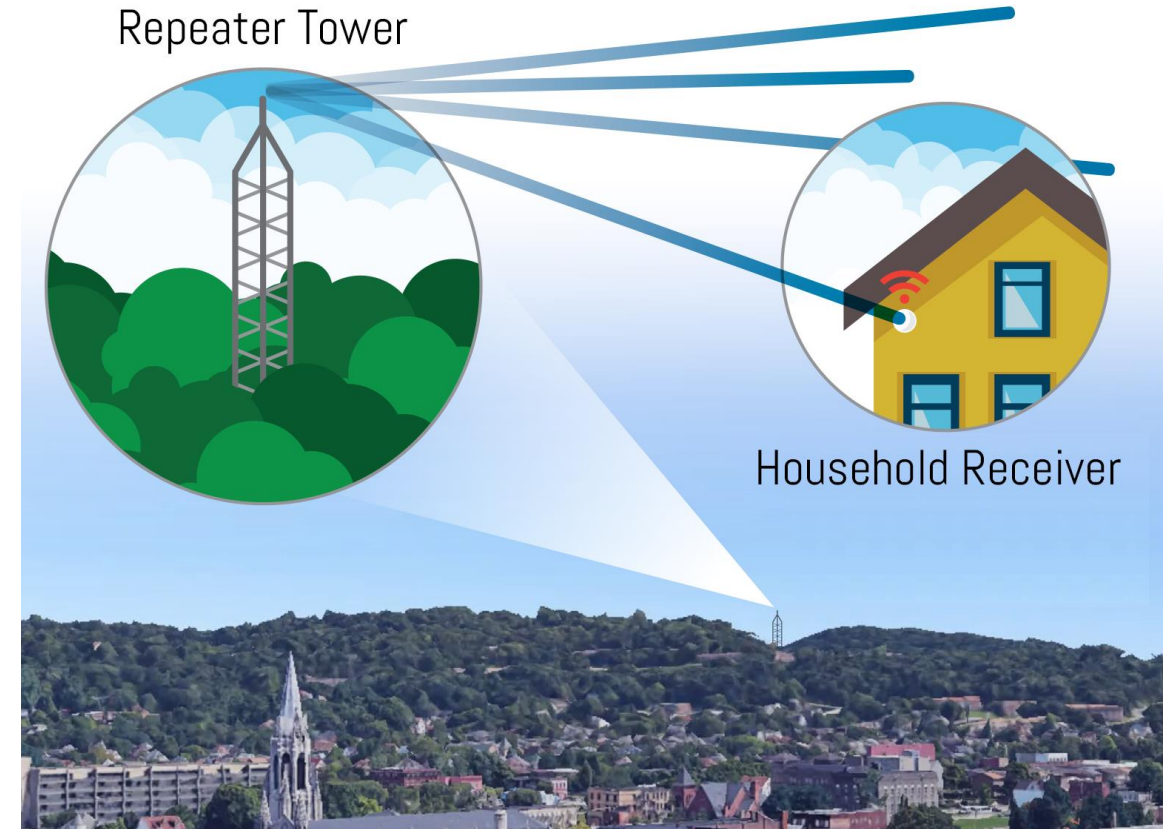
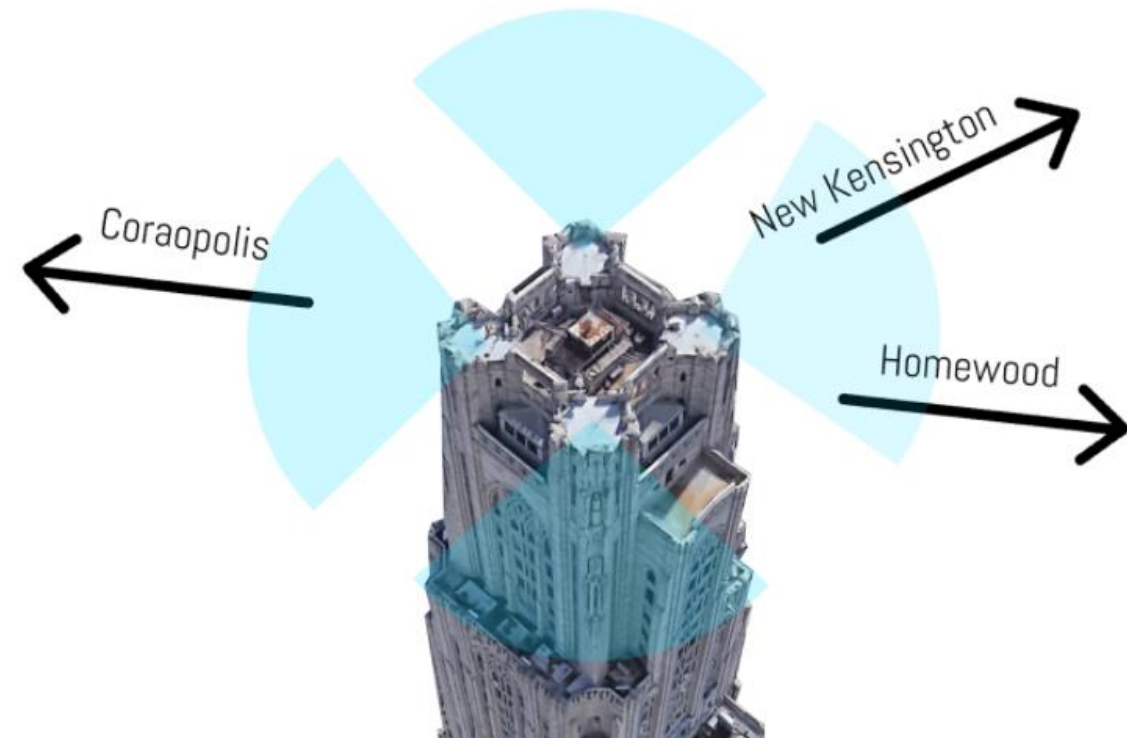
A Project by  
META MESH  
Wireless Communities

Pitt Information Technology

# Funding Model

- Donations
  - Pitt IT Funded the fiber connection to KINBER
- Grant Funded through CS Pathways program at CMU
  - Hopper Dean Foundation - \$200,000
  - R.K. Mellon Grant - \$100,000
- Neighborhood Partners
- Funding is used for Infrastructure
  - Antenna on Cathedral of Learning
  - Relay Towers in the Communities
  - End user equipment based on need

# Meta Mesh Installation



# Initial Communities

- New Kensington
  - AM Radio Tower (WMNY)
- Coraopolis
  - Water Tower
- Homewood
  - Duquesne Light Pole
  - Possible Second Location (Church Tower)





# New Kensington (WMNY)



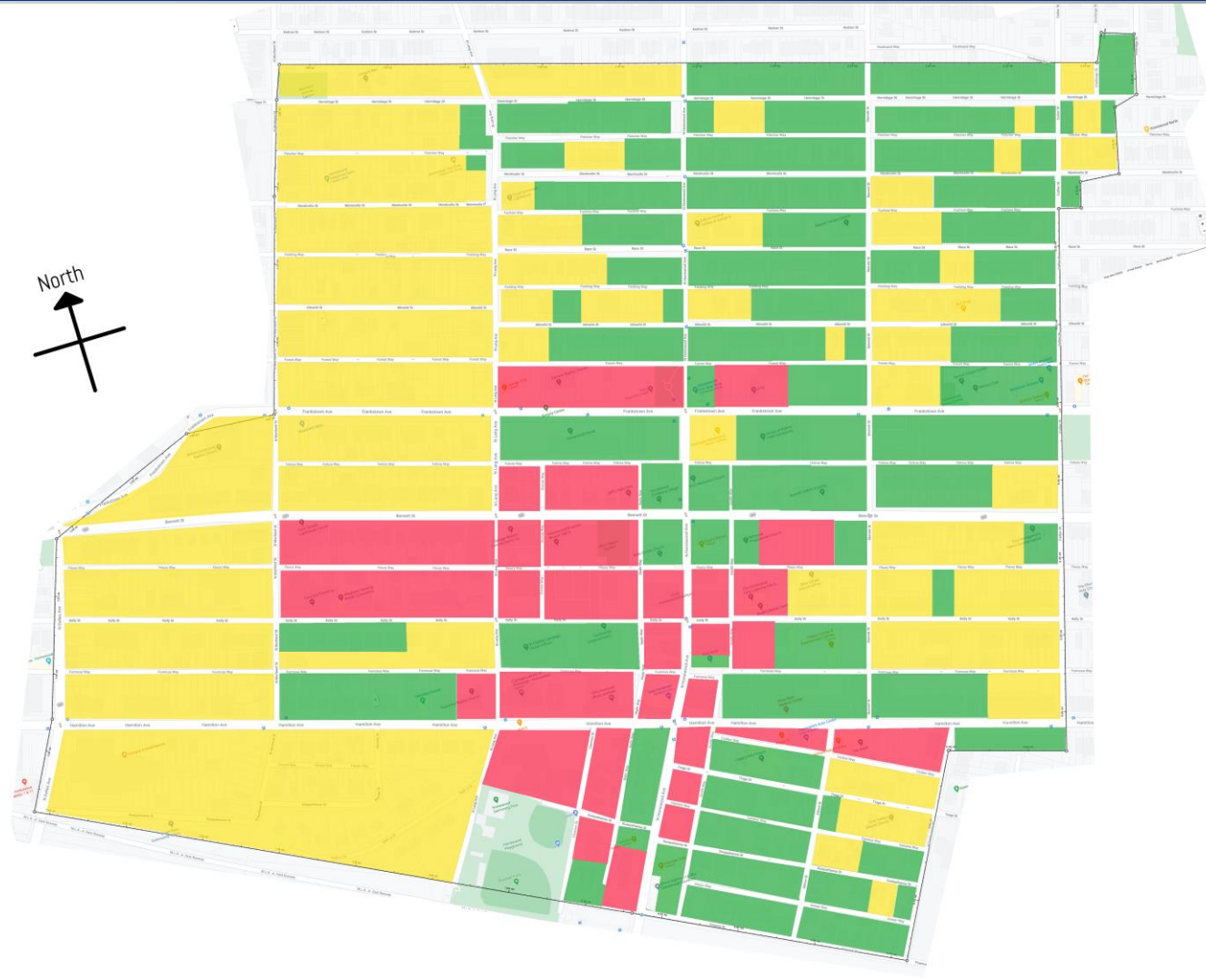


# Coraopolis Water Tower





# Homewood Coverage Map



# Customer Premise Equipment (CPE)



# Current Status

- Coraopolis
  - Waiting for final approval from Water Authority
- New Kensington
  - Secured a tower climber
  - Engineering drawings are approved
  - In process of scheduling a date with Radio Station
- Homewood
  - Working through last few issues with Duquesne Light regarding power
- Allentown (Pittsburgh) Test Site
  - Adjusted aiming on Cathedral of Learning
  - Obtaining between 500 and 600 Mbps
  - Working with RF Engineer to fine tune for more bandwidth

# Bandwidth

Affordable options	The Meta Mesh Network	Verizon: Fios Internet Only Plan	Comcast: Internet Essentials Plan
How it works	<p>We work with you to come up with a plan that works for your neighborhood and your wallet.</p> <p>The Meta Mesh Network is installed and maintained by Meta Mesh's local network team.</p> <p>As a non-profit, we secure grants and fundraise to pay for projects. Upgrades are written into the initial grant.</p>	<p>Verizon does not offer a need-based affordable plan.</p> <p>Rather, their Fios Internet Only Plan is the cheapest option for all patrons.</p>	<p>To qualify for the cheapest plan, users must be eligible for public assistance programs such as the National School Lunch Program, Housing Assistance, Medicaid, SNAP, SSI and others.</p> <p>Users cannot be an existing Xfinity Internet customer and have not subscribed to Comcast Internet within the last 90 days.</p> <p>Users must have no outstanding debt to Comcast that is less than one year old.</p>
Download Speed	50 Mbps	200 Mbps	25 Mbps
Upload Speed	25 Mbps	200 Mbps	3 Mbps
Monthly Service Cost	<b>\$10/month</b> (per household) <u>suggested donation</u> for maintenance costs.	<b>\$39.99/month, plus taxes.</b>	<b>\$9.95/ month, plus taxes.</b>
Hardware Cost	Equipment and installation are fully funded	Rent a modem/router for <b>\$15/mo.</b> or purchase it for a one-time price of <b>\$199.99.</b>	No activation fees and no equipment rental fees



# Pitt IT

- Coordinated the Installation of Antennas on Cathedral of Learning
- Funded the connection to KINBER for Internet access
- Consulting on network design
- Supporting through the Community Help Desk
- Installation Technician Volunteers