

# The Quilt

## A Collaboration of U.S. Research and Education Networks



# The Quilt

**The Quilt** is a non-profit collaboration of our country's advanced regional research and education networks. Created in 2000, The Quilt is a member-powered, vibrant forum where leaders from these networks come together to exchange knowledge, experience and ideas to collectively advance networking for research & education.

**The Quilt** aims to influence the national agenda on information technology infrastructure, with particular emphasis on networking for research and education. Through this coalition, Quilt members collaborate to promote the delivery of networking services at lower cost, higher performance and greater reliability and security.

**Quilt members** are our country's not-for-profit networking organizations serving research and education with similar missions to; support research and education, collaborate, manage advanced networks, provide advanced networking services and further knowledge and innovation.



# OARnet

## Accelerating Ohio's Future

THE QUILT



**OARnet**

An **OH·TECH** Consortium Member

# OARnet Backbone Connections

## LEGEND

- 88 Higher Education Campuses
- 76 Higher Education Regional Campuses
- 23 K-12 Education ITCs
- 15 Local Governments or State of Ohio Agencies
- 30 Industry Partners
- 6 Health Care Facilities
- 9 Public Broadcast Stations



# Impact: OARnet's Network

## Middle Mile Connections Pre-BTOP Funding



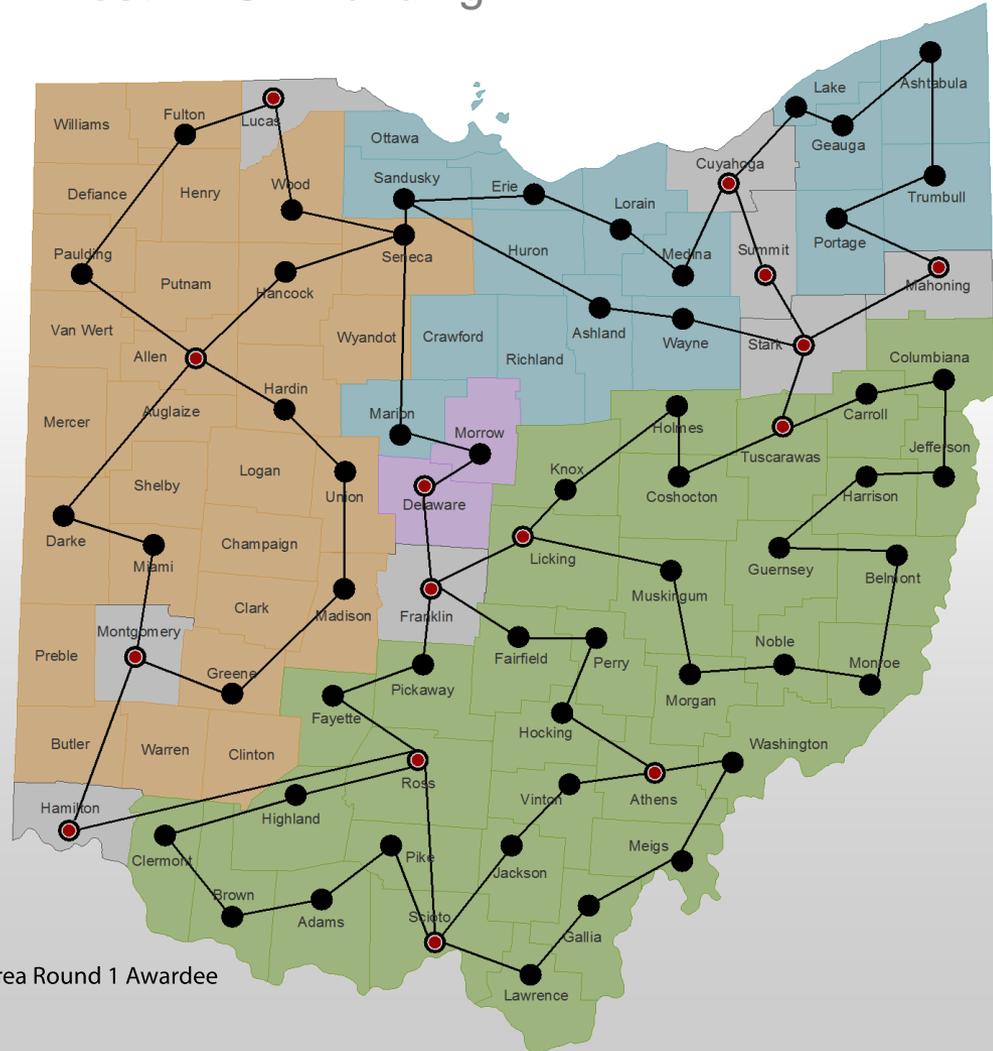
- OARnet Middle Mile PoPs
- ARRA Middle Mile Expansion PoPs
- OARnet/OMMC Middle Mile PoPs

Com Net, Inc.    Horizon Telecom    OneCommunity

Interconnection Counties (Large Urban Areas)

Consolidated Electric Area Round 1 Awardee

## Middle Mile Connections Post-BTOP Funding



# Middle Mile Community Anchor Institutions

## As Provided by OMMC Partners



K-12 Schools	622
Libraries	166
Medical/Healthcare	353
Community Colleges	25
Public Housing	476
Public Safety	407
Other Higher Ed Institutions	19
Other Community Support Orgs.	612
Other Gov. Facilities	722
<b>Total CAI</b>	<b>3,424</b>



K-12 Schools	705
Libraries	165
Medical/Healthcare	279
Community Colleges	12
Public Housing	377
Public Safety	322
Other Higher Ed Institutions	16
Other Community Support Orgs.	504
Other Gov. Facilities	488
<b>Total CAI</b>	<b>2,868</b>



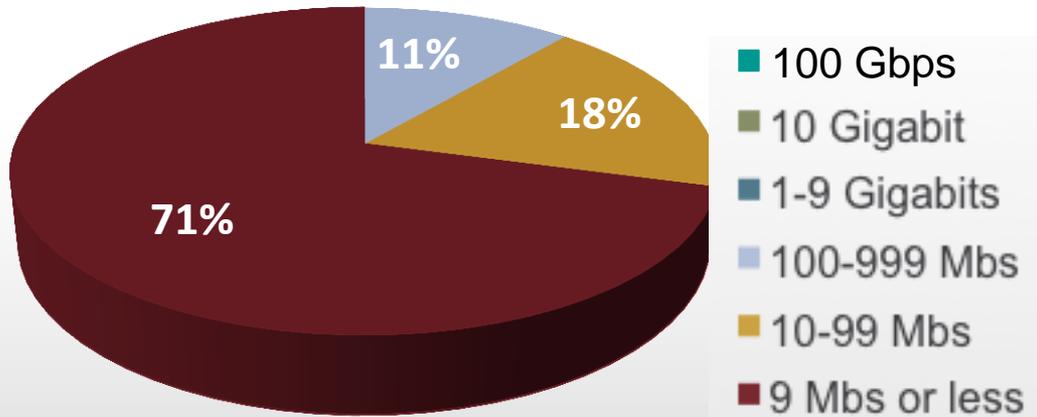
K-12 Schools	1,403
Libraries	94
Medical/Healthcare	189
Community Colleges	39
Public Housing	0
Public Safety	74
Other Higher Ed Institutions	14
Other Community Support Orgs.	29
Other Gov. Facilities	36
<b>Total CAI</b>	<b>1,878</b>



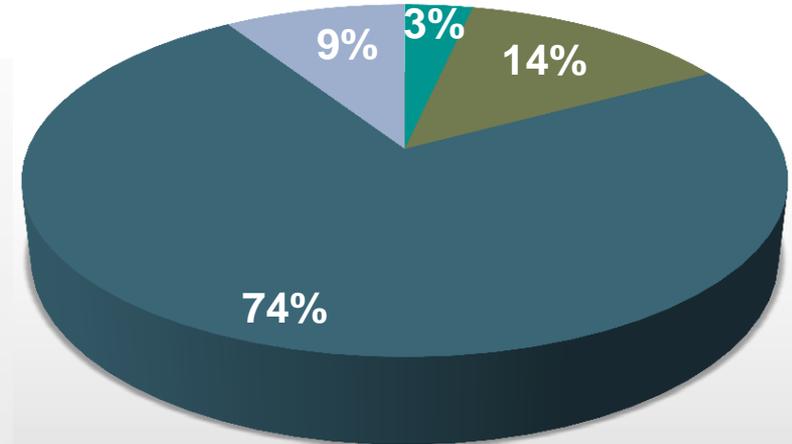
# Last Mile Connections

Change in last-mile connections to higher education organizations

Prior to OARnet Implementation 2003



Current OARnet Connections 2012

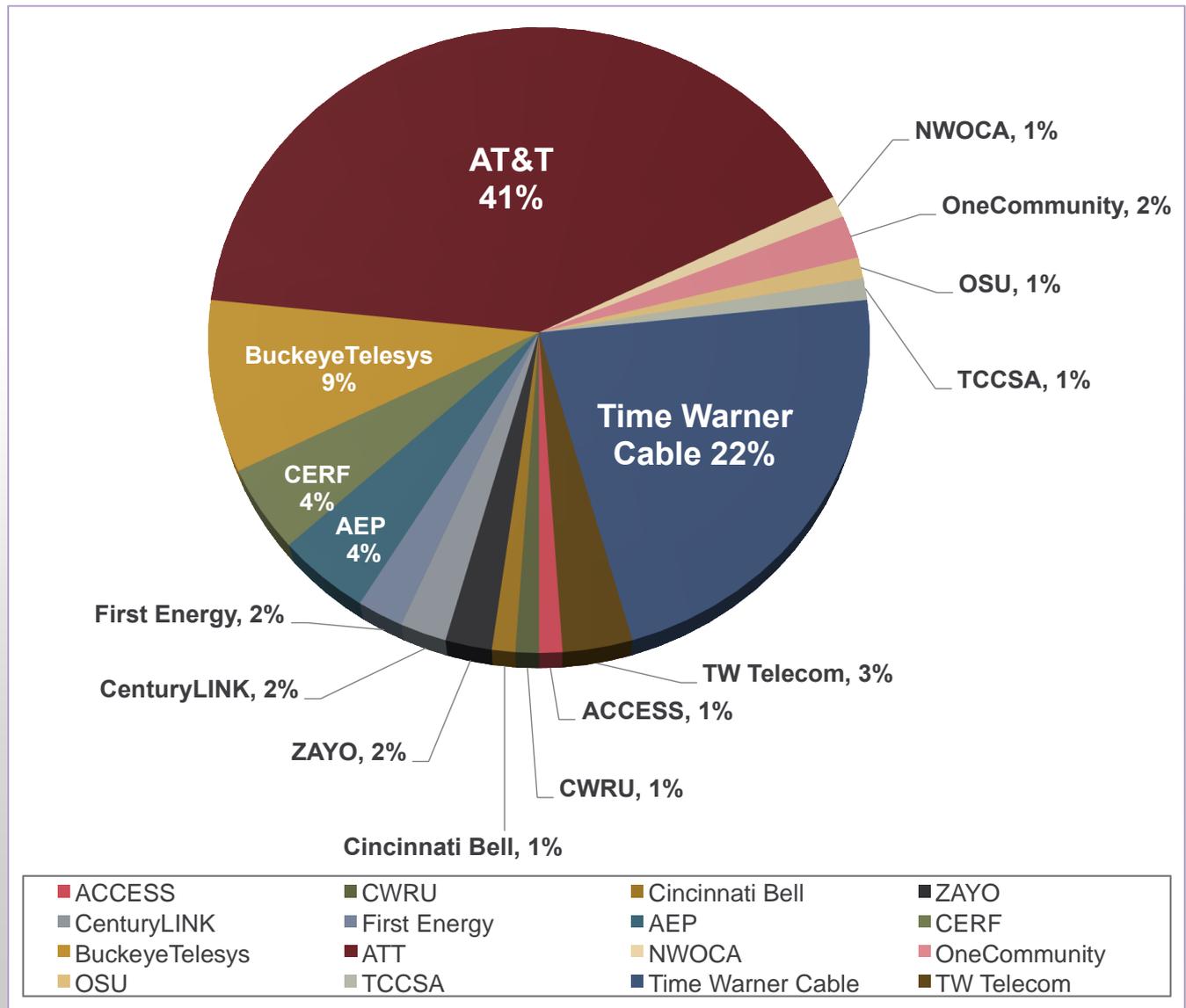


Capacity	Prior to OARnet Implementation 2003	Current OARnet Connections 2012
<b>100 Gigabits (pending)</b>	<b>0</b>	<b>3</b>
10 – 99 Gigabits	0	12
1 Gigabit – 9 Gigabits	0	65
100 Mbs – 999 Mbs	10	8
10 Mbs – 99 Mbs	16	0
9 Mbs or less	63	0

Updated May 21, 2013



# Last Mile Connection by Service Providers



# Ohio E-Rate Support

- Federal E-Rate program available to:
  - Eligible K-12 schools
  - Public libraries
- Provides discounts on:
  - Telecommunication services
  - Internet access
  - Internal connections hardware
  - Maintenance costs
- Ohio Department of Education provides planning, support and information to program applicants and recipients

**FY2012/July 1, 2012–June 30, 2013**

Total funding received to date - \$74M

**FY2013/ July 1, 2013–June 30, 2014**

Total funding requested - \$123M

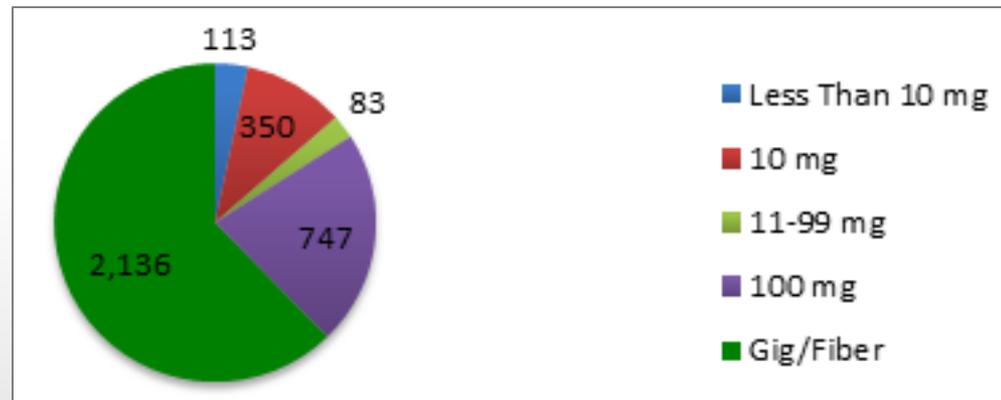
Priority 1 Requests - \$85.8 mil

Priority 2 Requests - \$37.3 mil



# Status of K-12 Building Connectivity in Ohio

- 85% of the school buildings are at, or exceed newly recommended capacity of 100Mbps per building
- Based on the most recent data, 546 buildings fall into the restricted and severely restricted categories
- 113 buildings fall into the most severe category of less than 10mbps per building.



# K-12 Building Connections, by Type

