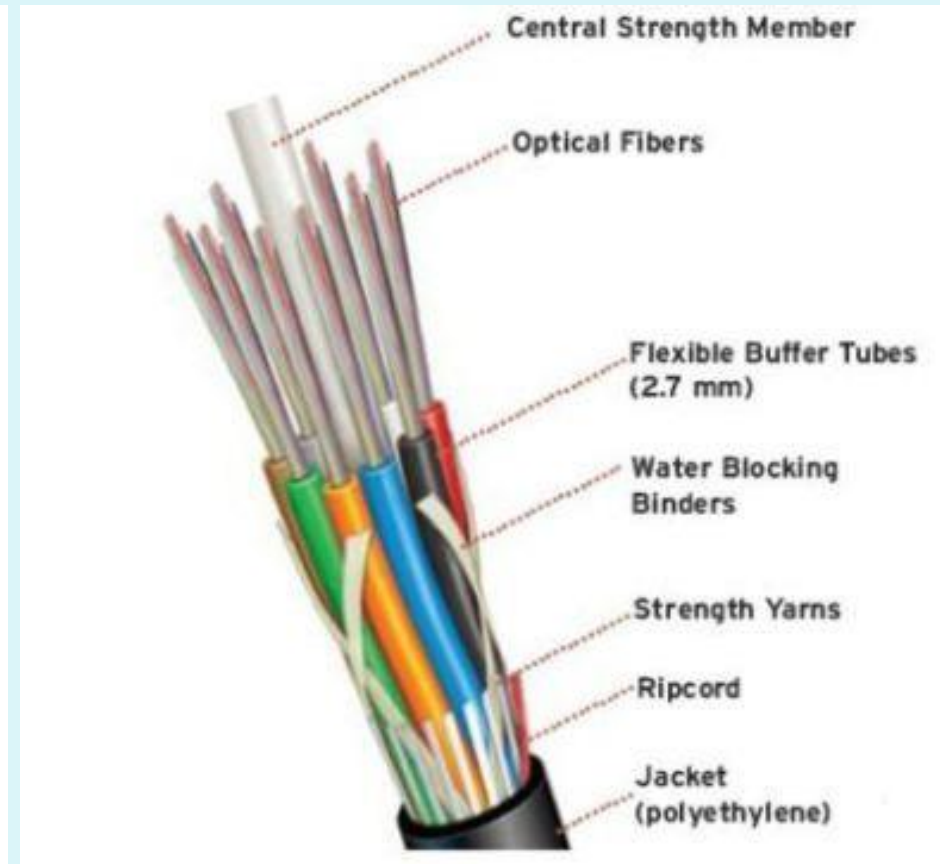


City of Milwaukee
DOA - ITMD
March, 2015

Public Facility Communications Program



Capital Program Funding Elements

- Copper cable – small projects for remote facility connections
- Fiber optic cable –
 - extend network: Housing Authority, libraries, water booster stations, remaining City buildings
 - network redundancies: critical facilities
- Phone hardware – upgrade, maintain phone system
- Network hardware – upgrade, maintain core networks

2015-2016 Capital Projects

- S 27th St construction project – avoidance, diverse paths, and traffic cabinets
- Zoo Interchange project – avoidance, diverse paths, and expansion
- Stadium Freeway project – avoidance and diverse paths
- I-43/94 Howard Ave to Valley Bridge project – avoidance and diverse paths

2015-2016 Capital Projects - cont



- Coordinated construction avoidance and system expansion
 - MPD Concordia Substation and Bgemagen Hall

2015-2016 Capital Projects - cont

- Planned sites to extend fiber network
 - Traffic Cabinets
 - Broadway Street bridge house
 - MacArthur Square parking structure
 - Bluemound Water Booster Station
 - Alder Water Booster Station
 - Tippecanoe Library
 - Forest Home Library
 - Mill Road Library

Cabling Condition

- Copper
 - 556 Active repair tickets
 - 2014 – 43 added, 12 closed
 - 2013 – 57 added, 14 closed
 - 2012 – 79 added, 69 closed
 - 2011 – 112 added, 33 closed
 - 2010 – 137 added, 70 closed
- Fiber
 - 3 fibers with damage in need of repair
 - 5 planned construction cuts in need of restoration

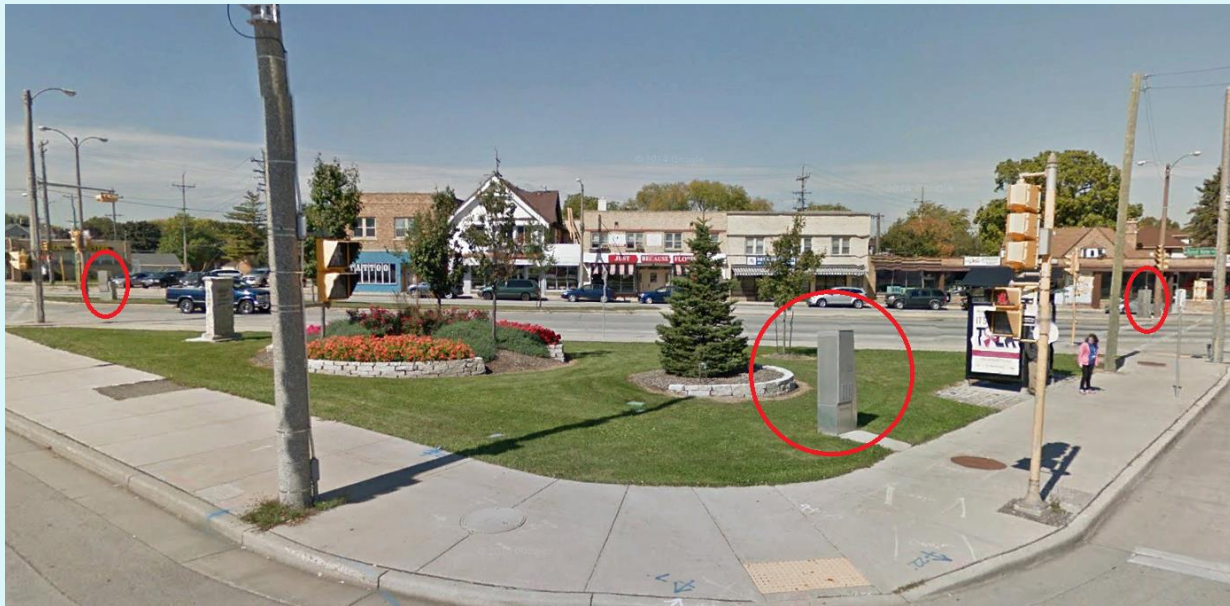
Migration off of Copper Cable

- Copper migration strategy
 - Installation of phone gateways and IP phones
 - Removal of drive standards
 - Fiber optic for traffic control cabinets



Migration off of Copper Cable - cont

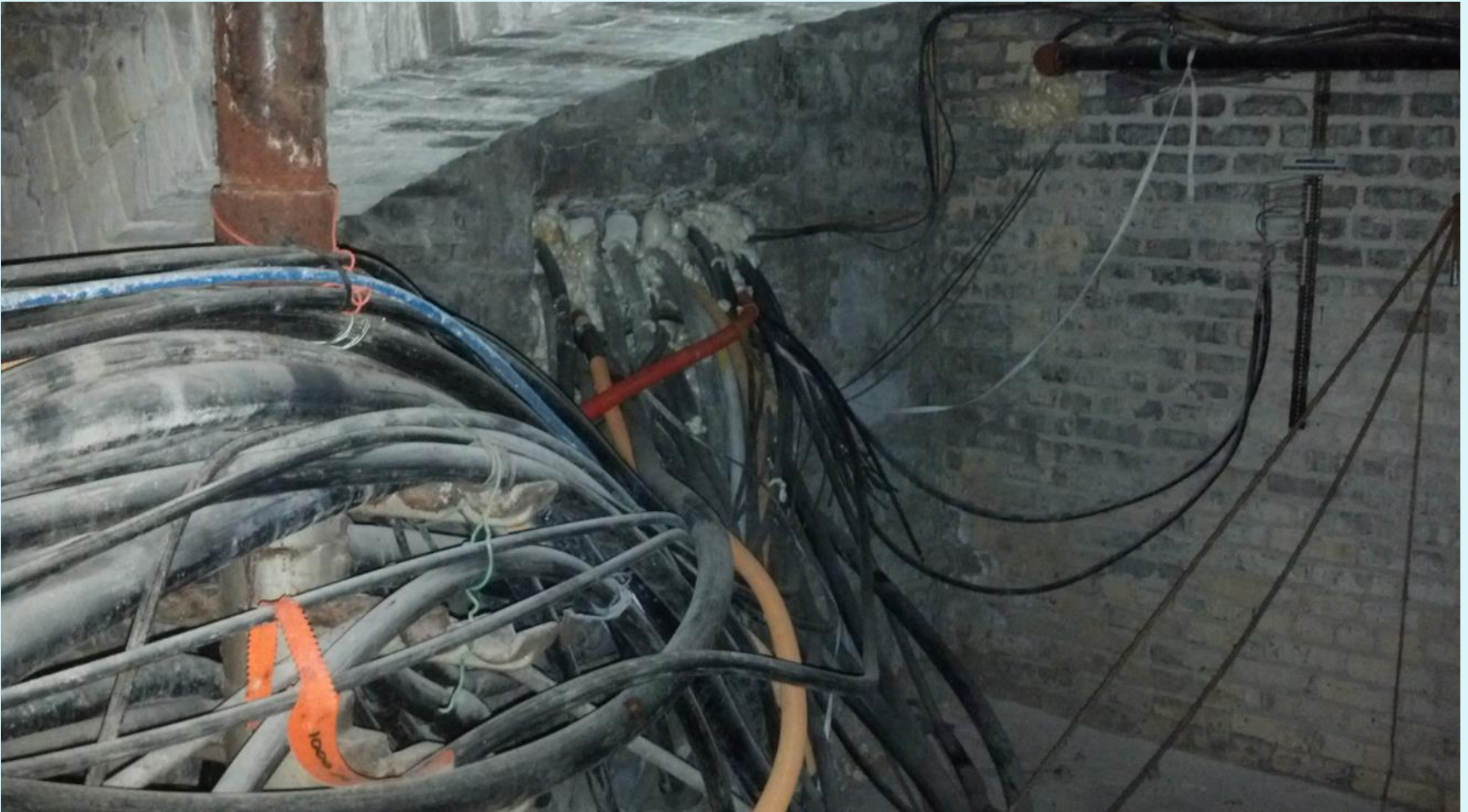
- Fiber optic for traffic cabinets
 - Eliminate copper technologies
 - Remote visibility
 - Piggyback funding for communications



City Hall Foundation – Communications Impacts

- Copper lines
 - 1650 pairs to service City Hall
 - 2176 pairs to service other locations
 - Reduce pairs to service other locations to ~1000
- Fiber lines
 - 144 strands to service City Hall
 - 82 strands to service other locations
 - Update fiber facilities

City Hall Foundation – Communications Impacts - cont



The need for diverse facilities - 2014

