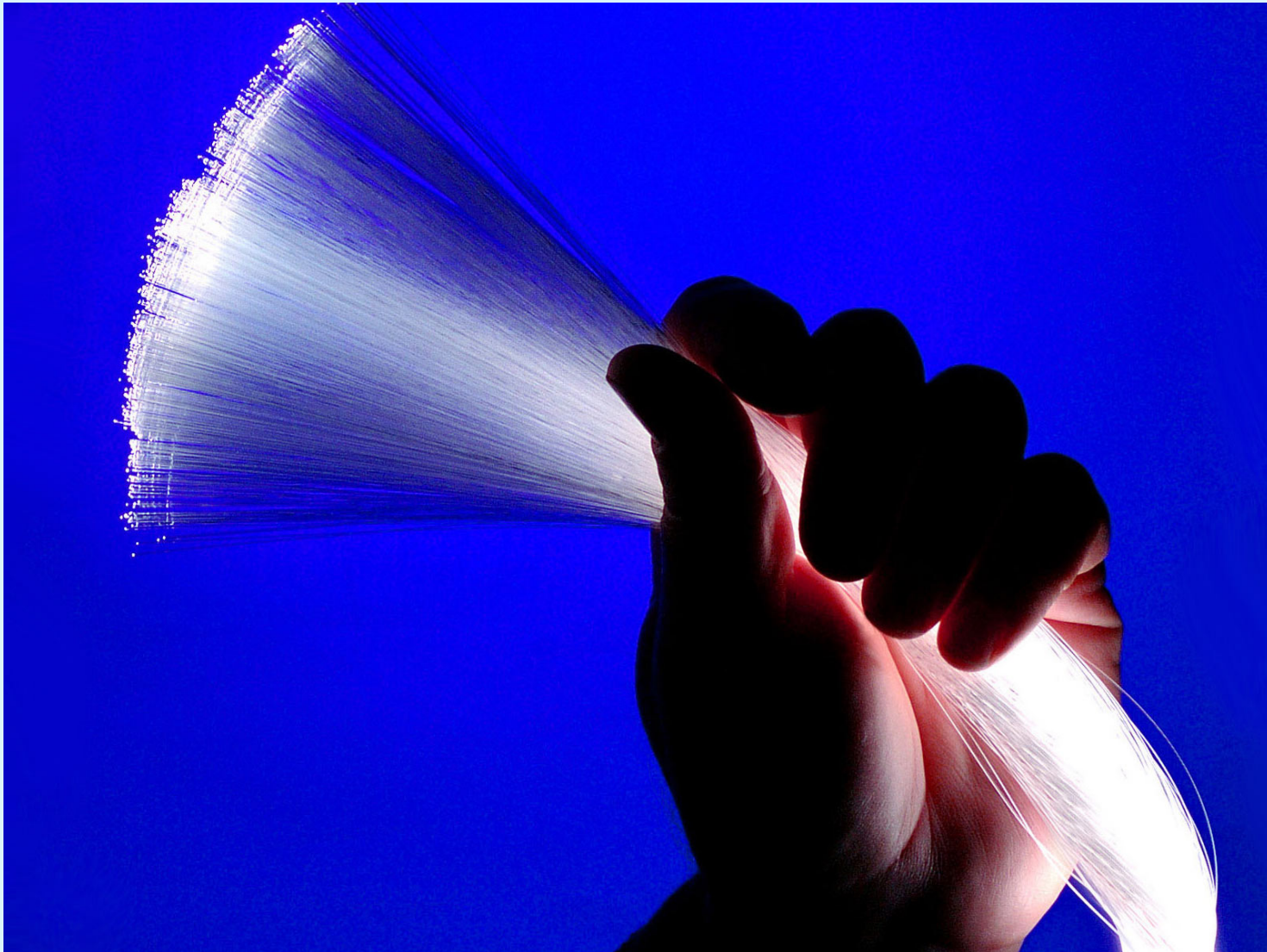


City of Milwaukee
Department of Public Works
February, 2012

Public Safety Communications Program



DPW Communications

- Design, install, operate, maintain City Wide Area Network
- Copper, fiber cables
- Call boxes
- Phone system
- Network hardware
- Leasing of Conduit – \$725,000 in 2011

Capital Program Funding Elements

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

2012-2013 Capitol Projects

- Phone System Upgrade - 2012
- Fiber Optic Cables to Water Booster Facilities – 2012
- Diverse path restoration and creation for bridge repairs and Zoo Interchange construction – 2012 and 2013

Previous Questions - Copper Cable

- Copper migration strategy
 - fiber optic cable provides more reliable service, higher bandwidth capacities, and lower overall maintenance costs
 - existing copper cabling can cost-effectively serve the needs of low-bandwidth, remote sites
 - For new systems, use of copper beyond the nearest City network presence will not be allowed, unless exceptional circumstances require it
 - For existing systems, they are to be migrated to fiber or copper to the nearest City network presence as the systems are upgraded or replaced

Previous Questions - Copper Cable

- Cable Maintenance
 - \$380,000 in 2010
 - \$310,000 in 2011

The need for diverse facilities



Previous Questions – DOT Resource Sharing

- Original agreement in March of 2005, updating in 2012
 - Connect to DOT at I-43 at Locust St
 - Connect to DOT at Greenfield Ave
 - Connect to DOT Operations Center
 - Connect to DOT at Port of Milwaukee
 - Utilize DOT to serve Miller Park

Previous Questions – DOT Resource Sharing

- As part of Zoo Interchange construction:
 - Establishing connection at I-94 and 84th St
 - Establishing connection at I-894 and Beloit Rd
 - Providing conduit to DOT at I-94 and Hawley Rd
- DOT traffic cameras utilized by DPW and MPD
- DOT road sensors utilized by DPW

Previous Questions – Outsourcing

- Previous studies in 1989 and 1996
 - 1989 – recommended City-maintained network and fiber-optic backbone
 - 1996 – implemented recommendations to lease conduit space and resource-sharing with local organizations
- Maintaining our own facilities provides flexibility, responsiveness, and seamless design