



# **Scott County Broadband (Fiber) Approach**

Minnesota Ultra High Speed  
Broadband Task Force

February 20, 2009

# What Prompted Scott County to Build

- **Growing operational need** -- for big broadband connections – internally, governmentally and, commercially
- **Increasing expense** – despite declining rates the overall expense (due to increased capacity needs) is increasing
- **Disparate access and options** among communities within County borders and the fundamental belief in a need to work towards leveling the playing field
- **Limiting integration and collaboration** – costs and bandwidth needs were stifling integration and many creative efforts – *progress fails as projects never get past bandwidth discussions and limitations*
- **Limited cooperation or options from private providers** – many would not disclose their fiber routes or capacities



# Broadband Strategy

## Scott County (Government) Role

- **Develop “trusted” communication and information networks** – locally, regionally, nationally (“blueprint” for interoperability)
- **Develop and support infrastructure for access to broadband** – fixed and mobile platforms (“blueprint” for infrastructure)
- **Adhere to industry direction, standards or guidelines** applicable to interoperable communication and information systems (“blueprint” for exchange)
- **Facilitate cooperation and coordination among public (State, Local and Regional) and private organizations** necessary to maximize shared benefits and reduce unnecessary duplication of efforts (“blueprint” for success)

# Guiding Principles

**Secure and Robust  
Government Network**

**Shared Infrastructure  
and Government  
Services**

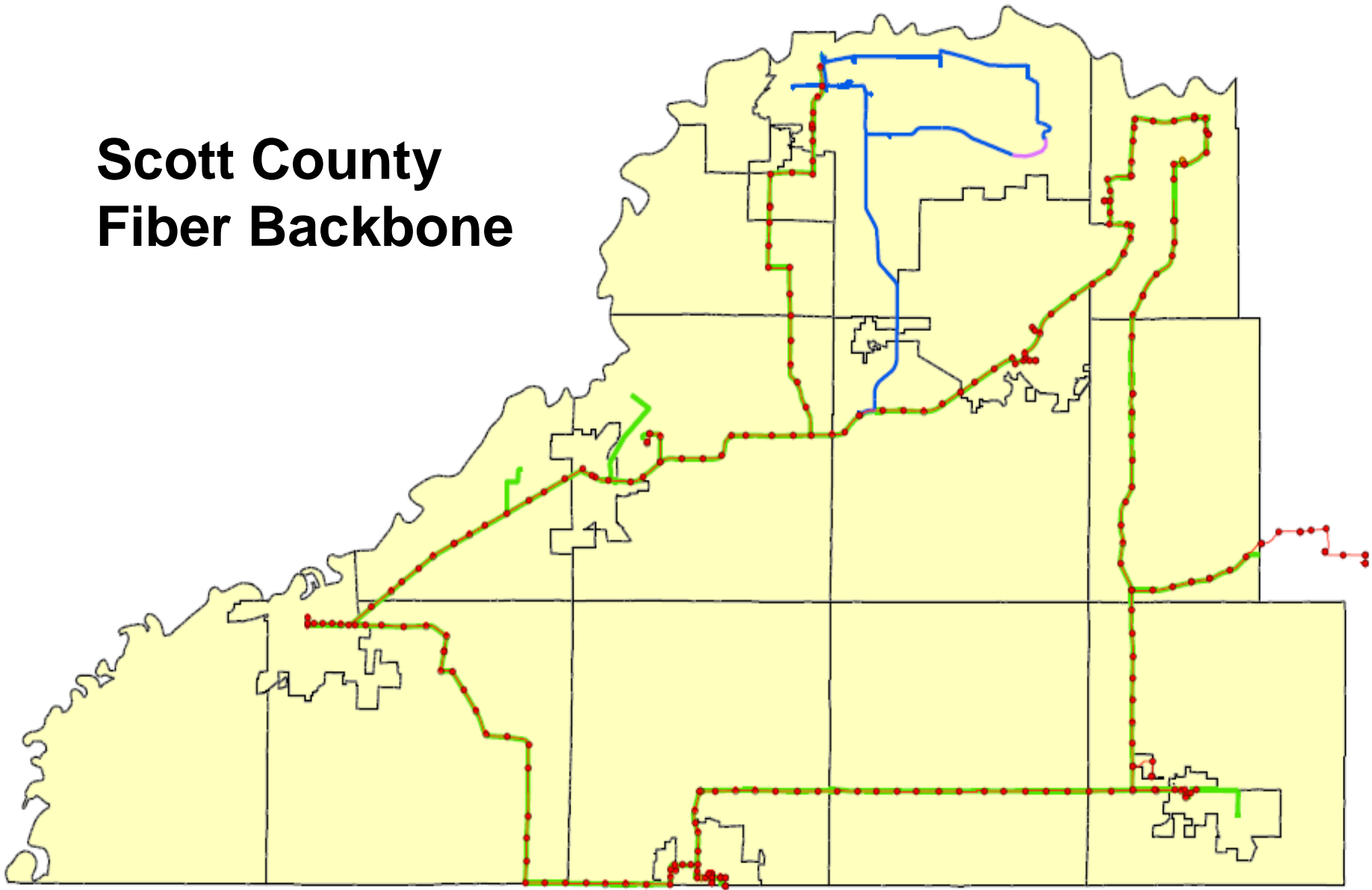
**High, Scalable  
Bandwidth**

**Open and Independent  
Architecture**



# Scott County Project & Outcomes

# Scott County Fiber Backbone



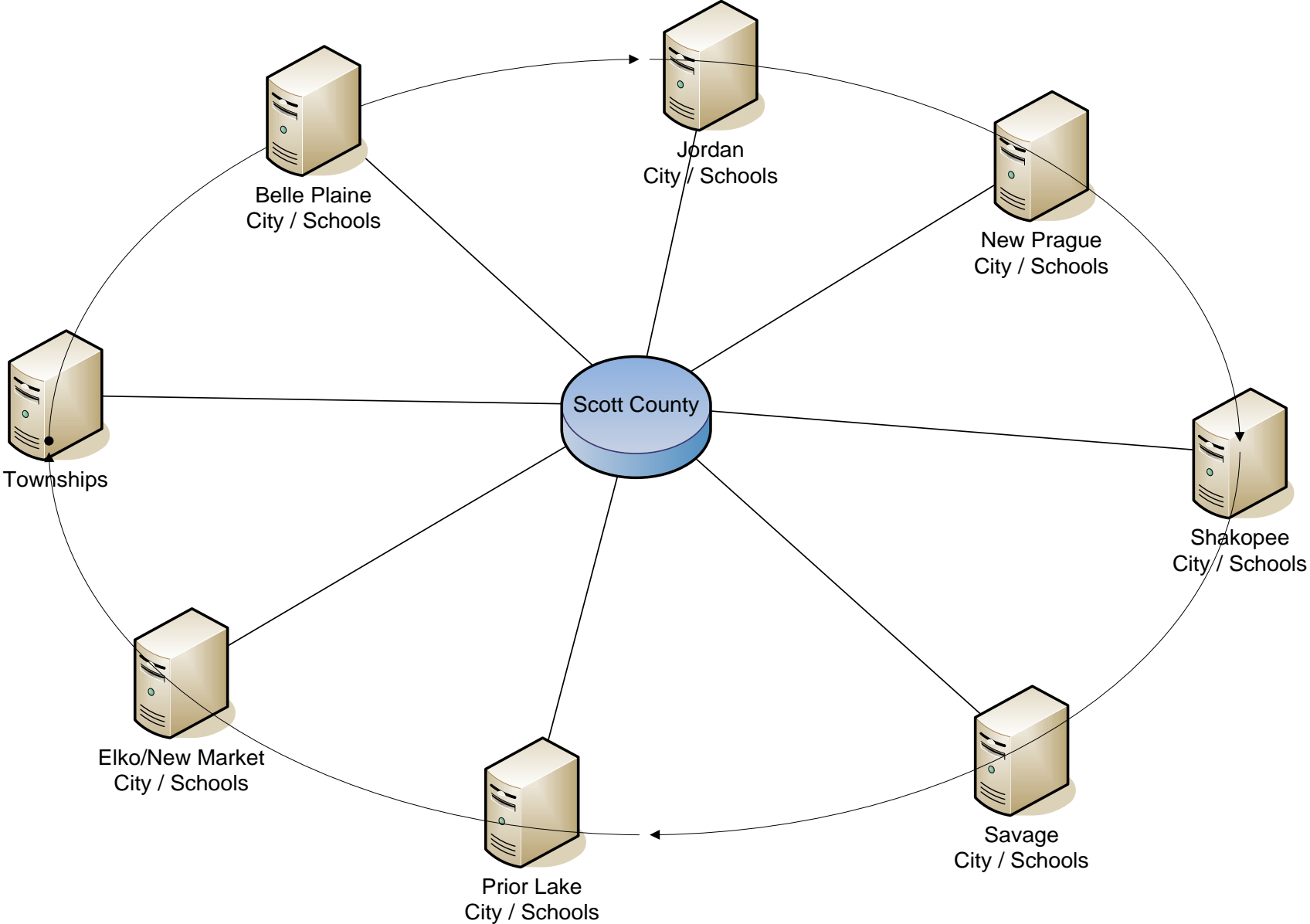
A detailed map of a metropolitan area, likely the Atlanta region, showing a network of roads and water bodies. A thick black line outlines a specific geographic boundary. Four black dots are placed at key locations along this boundary: one at the top center, one at the bottom left, one at the bottom center, and one at the bottom right. The text "Metropolitan Connection" is centered in the middle of the map.

**Metropolitan  
Connection**

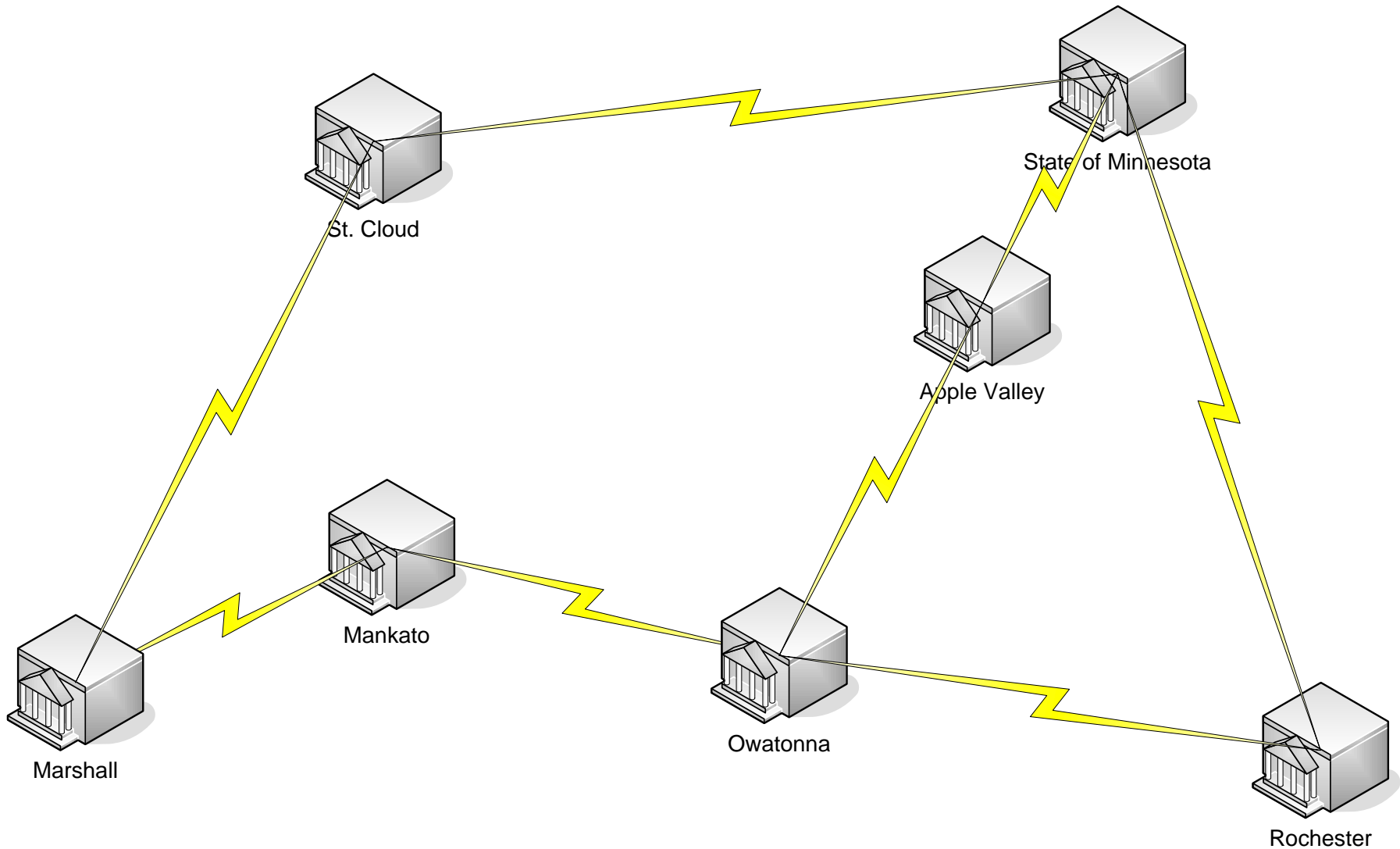
# Scott County Southern Route<sup>5</sup>



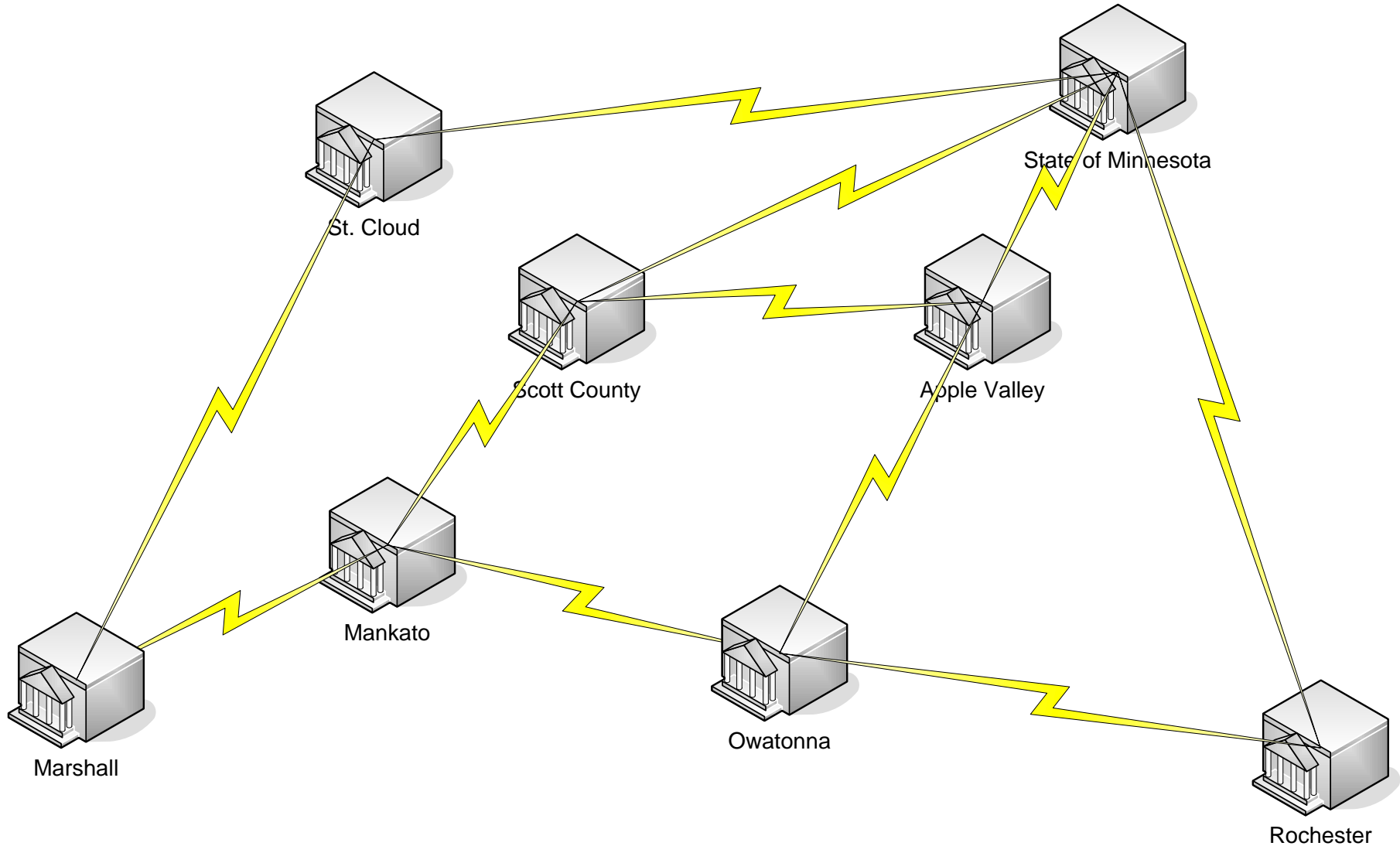
# Local Government Network



# MNET -- Minnesota's Network for Enterprise Telecommunications High Capacity Backbone



# MNET -- Minnesota's Network for Enterprise Telecommunications High Capacity Backbone



# Outcomes

- A robust, high capacity and highly redundant voice, data, video and radio (800 MHz) shared, secure and scalable network that interconnects all of the educational and governmental entities with a presence in Scott County
- An **immediate** return on the investment of taxpayer dollars – we are spending less for substantially more:
  - The annual bond payment for the construction of the backbone is \$35,000 less than the annual cost of our previous leased lines.
  - OET spends less to operate the backbone than they did to lease lines in Scott and Dakota Counties
  - The costs for Scott County's school districts per megabit of internet service went from an average of \$58.00 to \$6.83 per megabit for all school districts. **The net effect was a tripling of availability (100 to 300 megabits) at a fraction of the cost (\$5,800 to \$2,049 a month).**
- Enhanced connectivity and broadband access at lower rates – commercially (***via enhanced competition***) and governmentally (***via public ownership/partnerships***)

# Thoughts Relative to State Broadband Policy

- **Recognize the legitimacy of local governments (Counties, Cities) as participants** – when and where appropriate government needs to play either a supportive or at times a driving role
- **Truly level the playing field by removing ALL of the barriers and obstacles that keep legitimate private or government participants from being involved**
- **Pay as much attention to under-served areas as to un-served areas**
- **Don't forget that affordability is as important as availability**
- **The target should be a full broadband fiber structure throughout all of Minnesota** – and government can be a conduit, along with private industry, to get us there