

# THE MERTON GROUP

## *Feasibility Study Results*

*Town of Harrisville, NH*

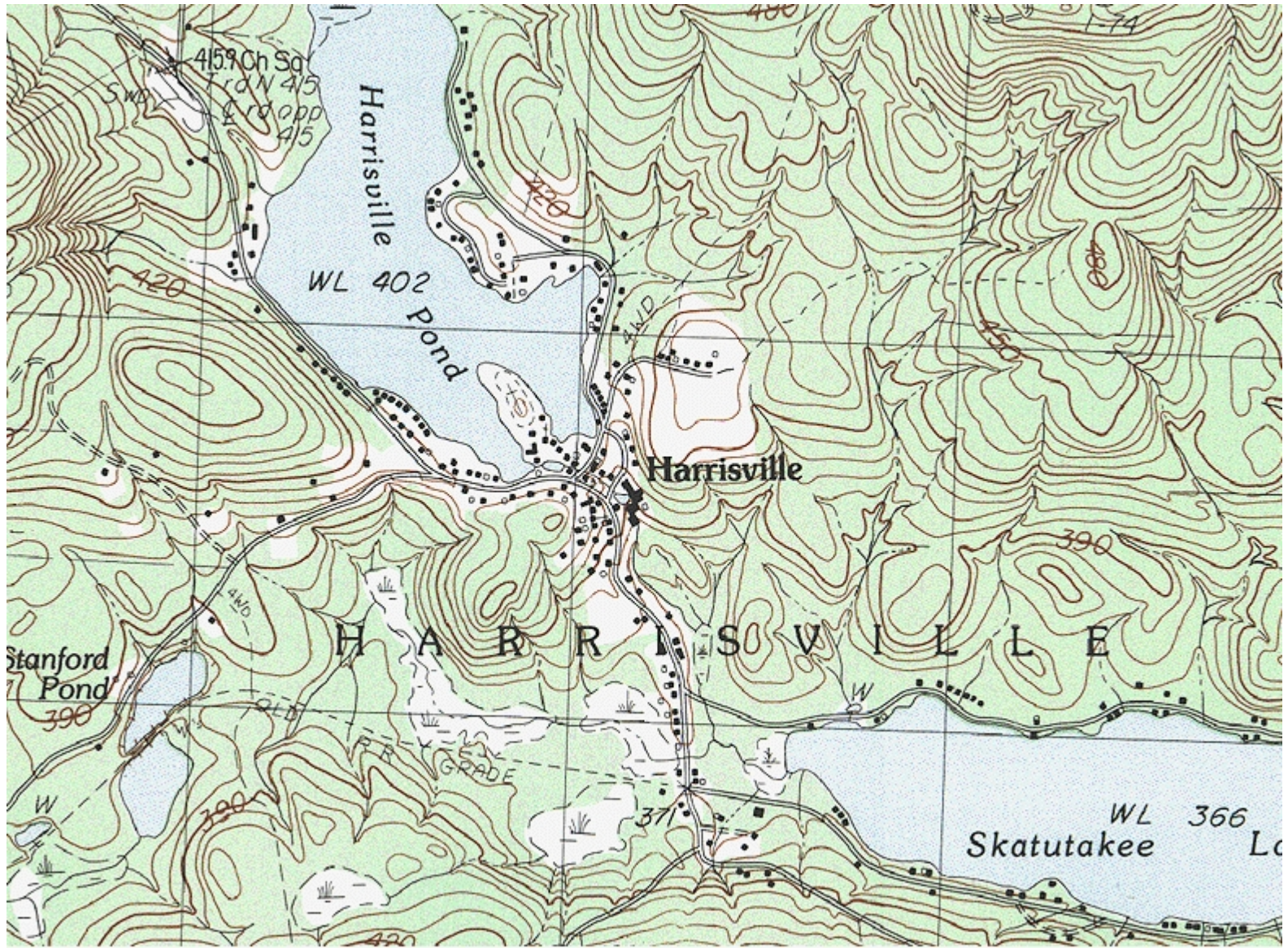
*May 20, 2004*

NOT FOR DISTRIBUTION OR ATTRIBUTION

# *Market Research Analysis*

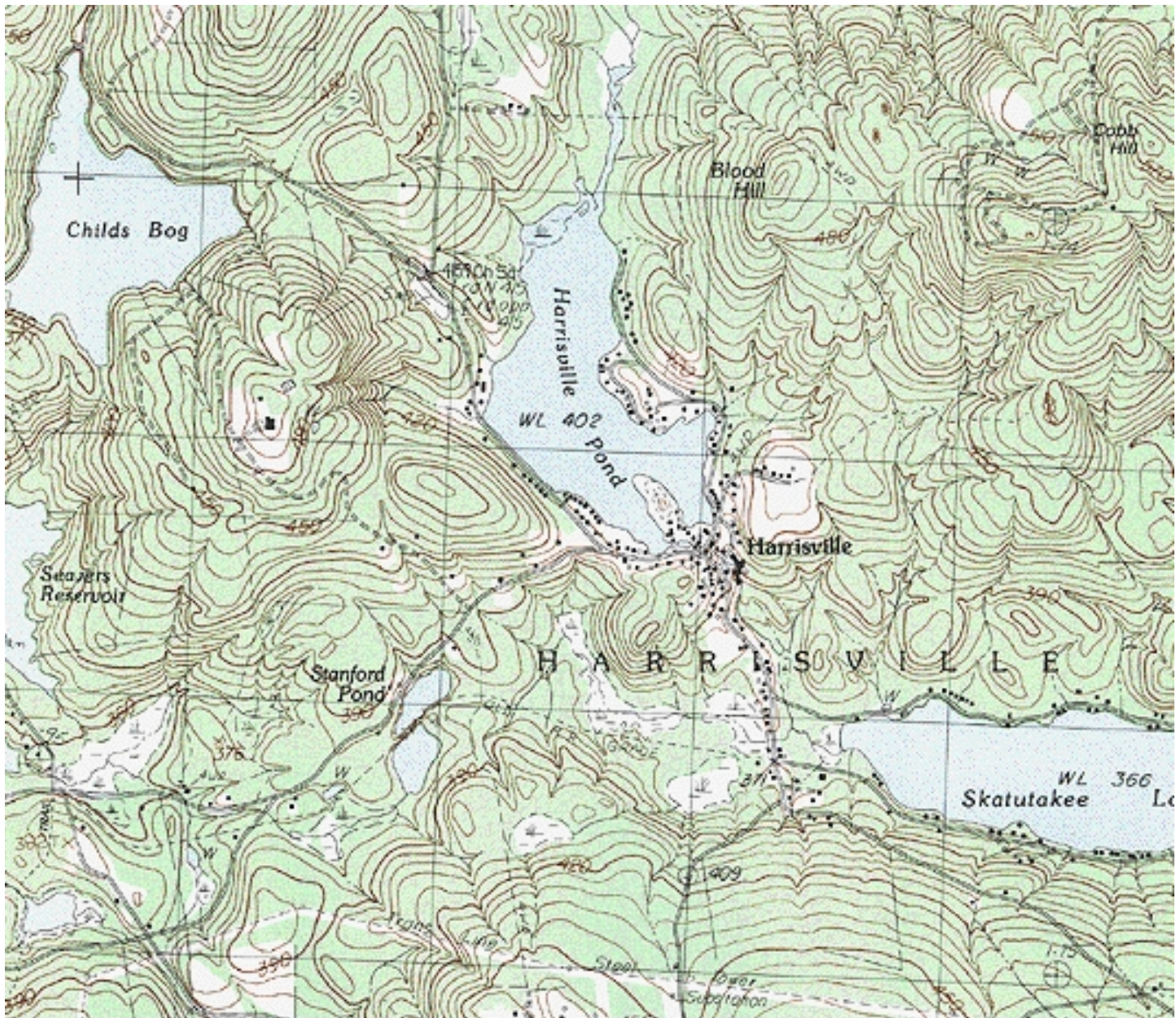
*Harrisville, NH*

*The Merton Group, LLC*



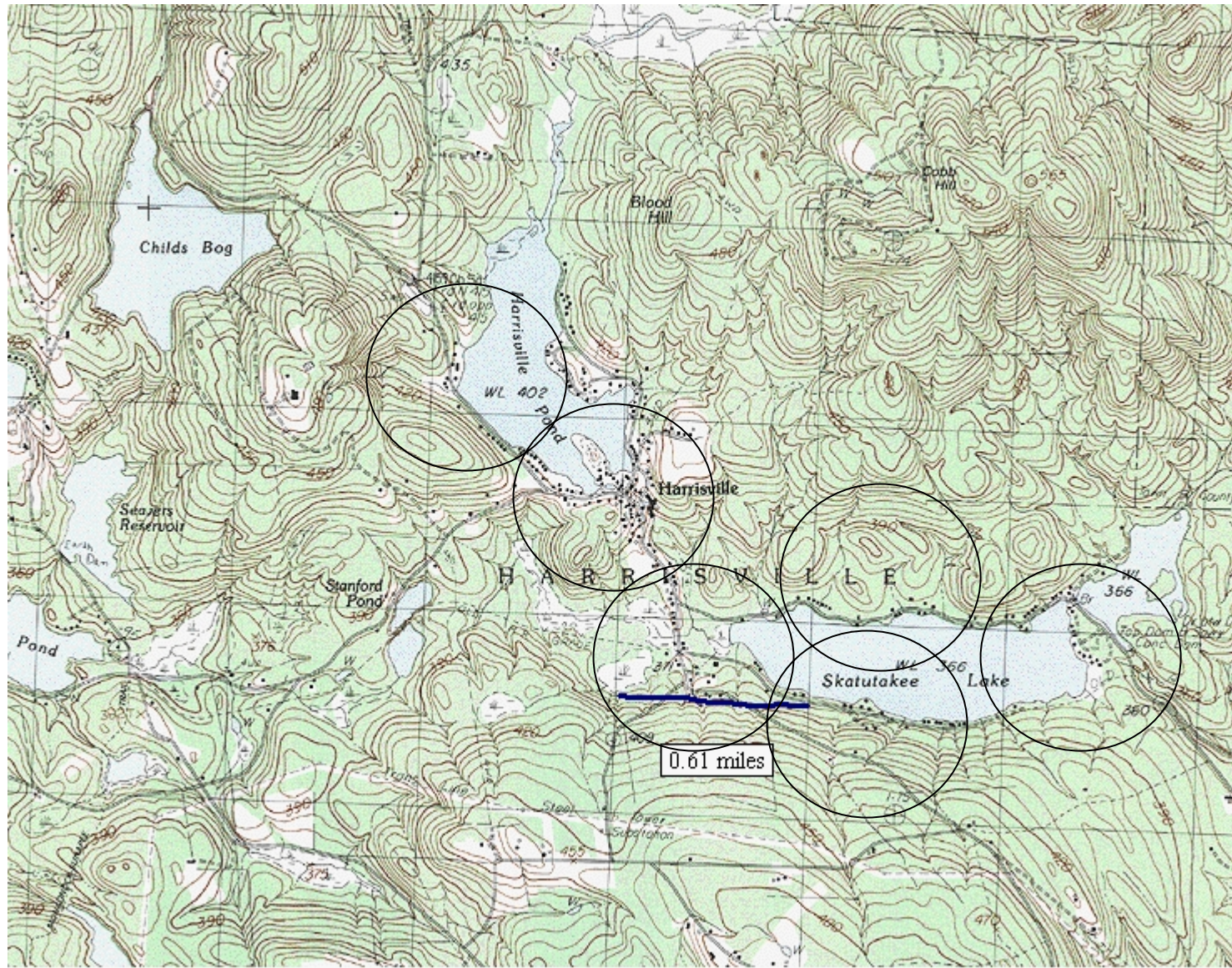
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# *Market*

# *Market Research Analysis*



# Objectives

*“Establish viability for conversion of users to MBN in wide enough user base to ensure bond coverage”*

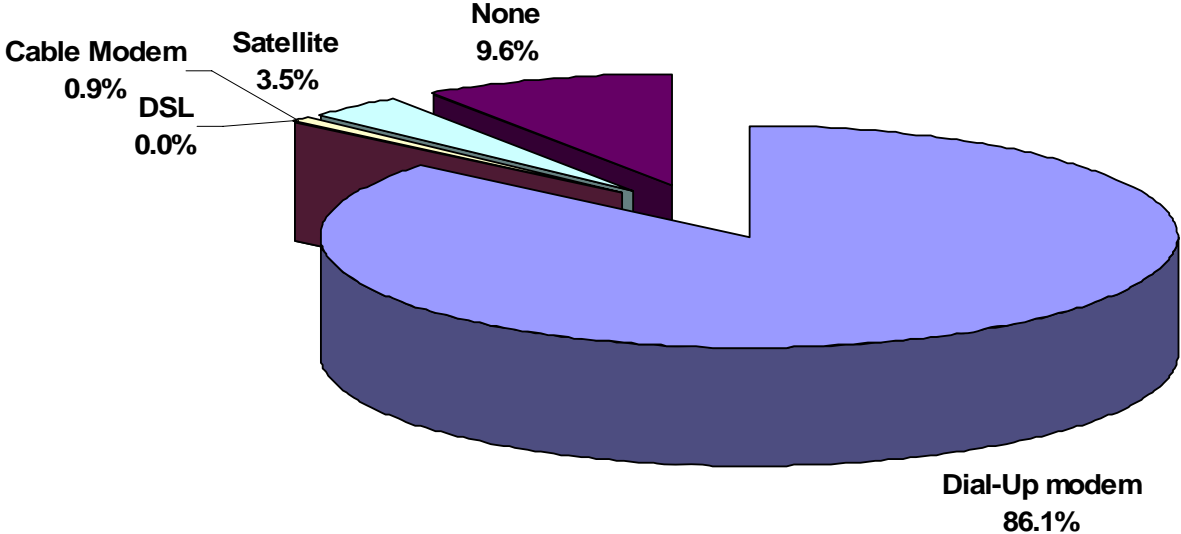
- Ascertain current use of Internet access & CATV by key demographics metrics (age, income, etc.)*
- Determine current ISP penetrations*
- Ascertain conversion rates to MBN for existing Internet and CATV users by key demographic metrics*
- Ascertain price points for MBN acceptance for different services (broadband Internet, CATV)*

# *Implementation*

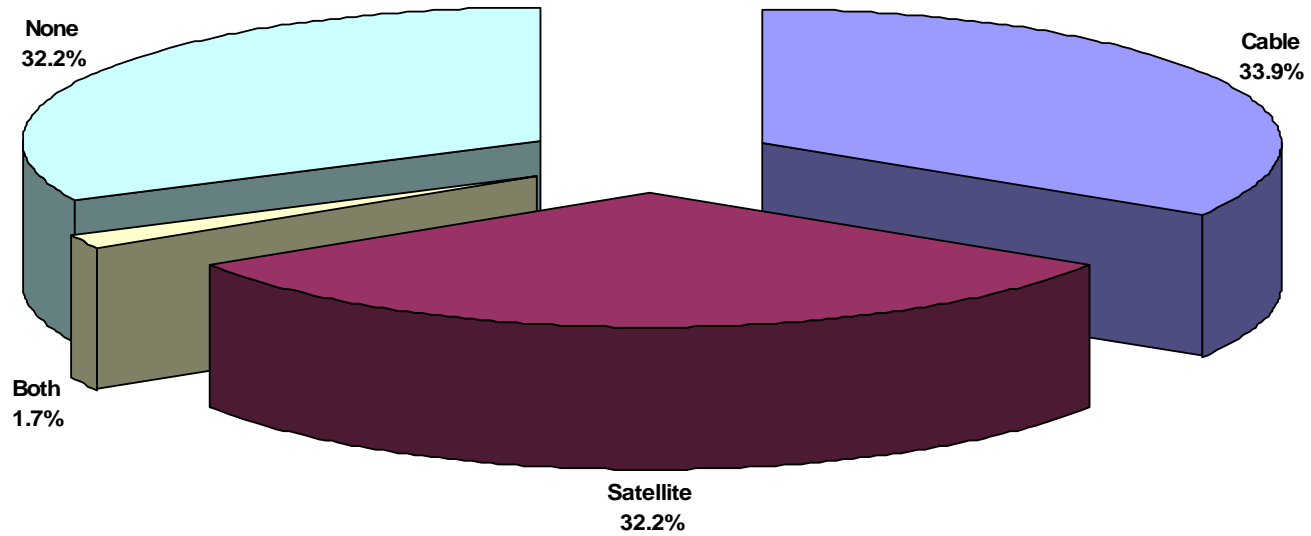
- *Survey questionnaire mailed by the town to 500 residences in April 2004; each of two forms (different price points)*
- *400 questionnaires completed and returned by 5/8/04: high response rate*
- *All responses used in analysis; provides more than sufficient accuracy level*
- *Accuracy level from sample size better than +/- 4%*



**Internet Access**

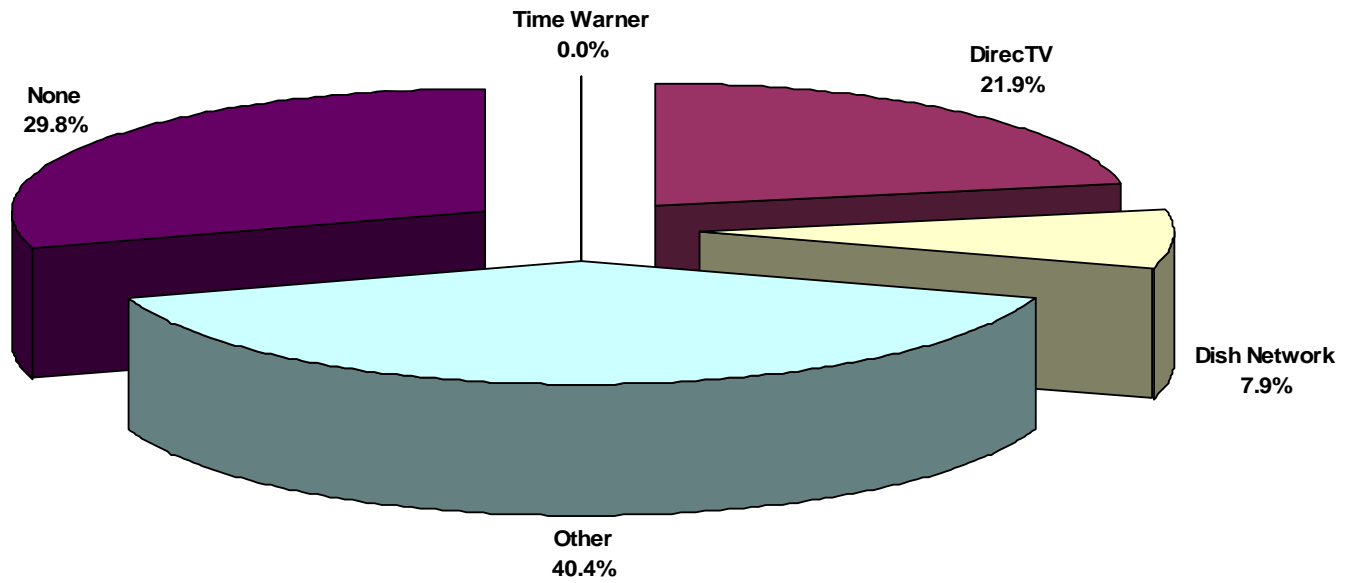


## Video Services

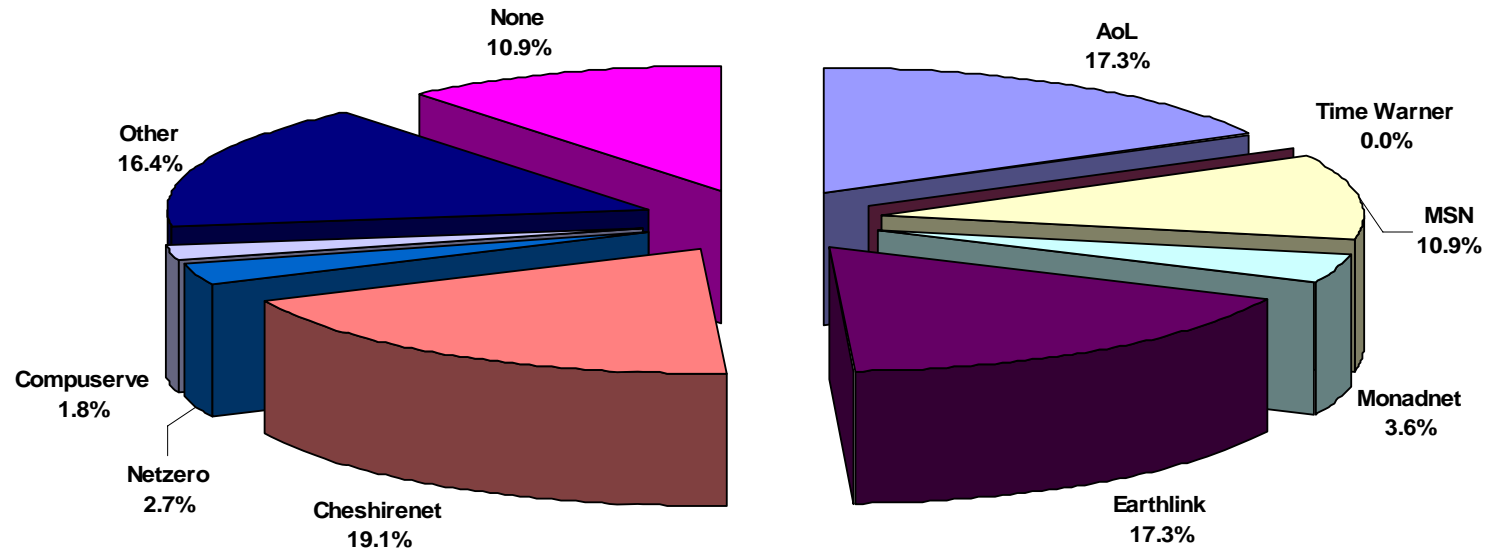




## Video Service Providers

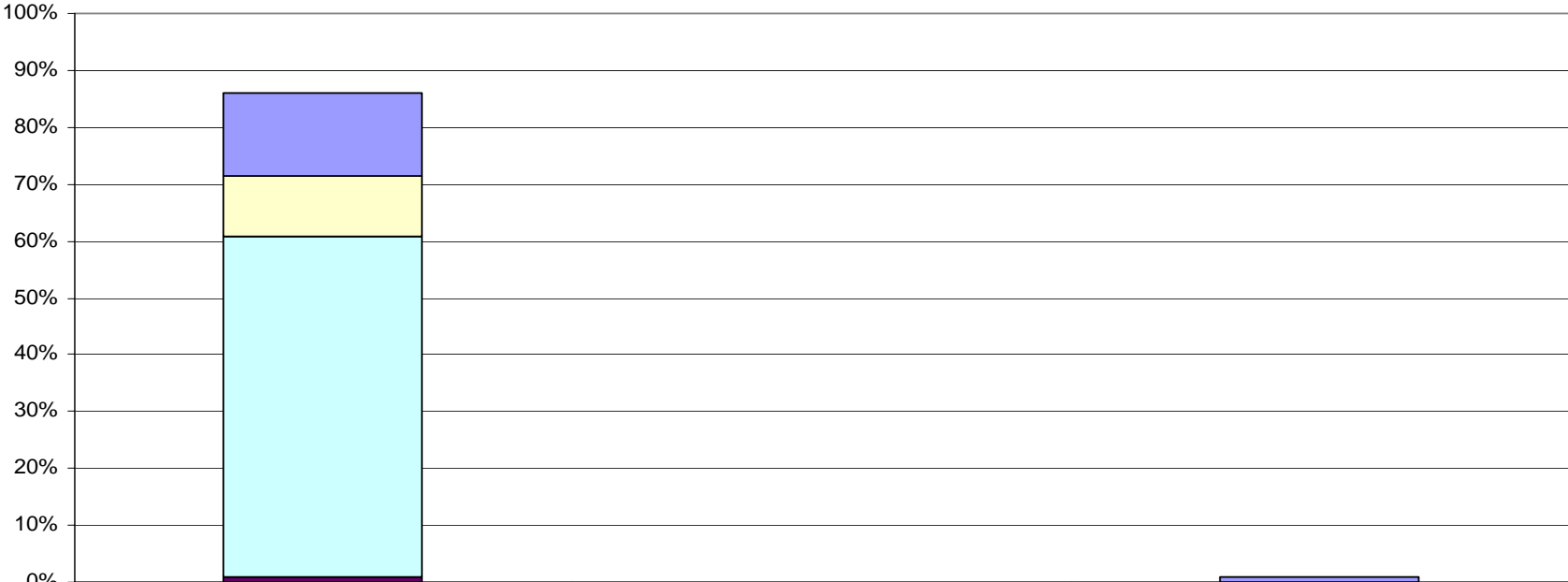


## Internet Service Providers



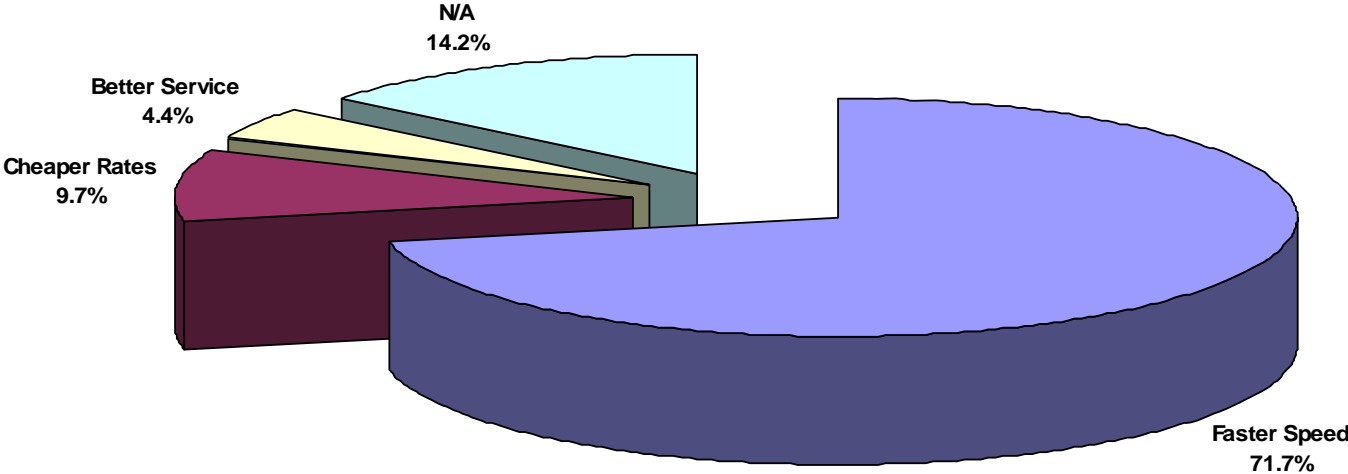


### Market Share Internet



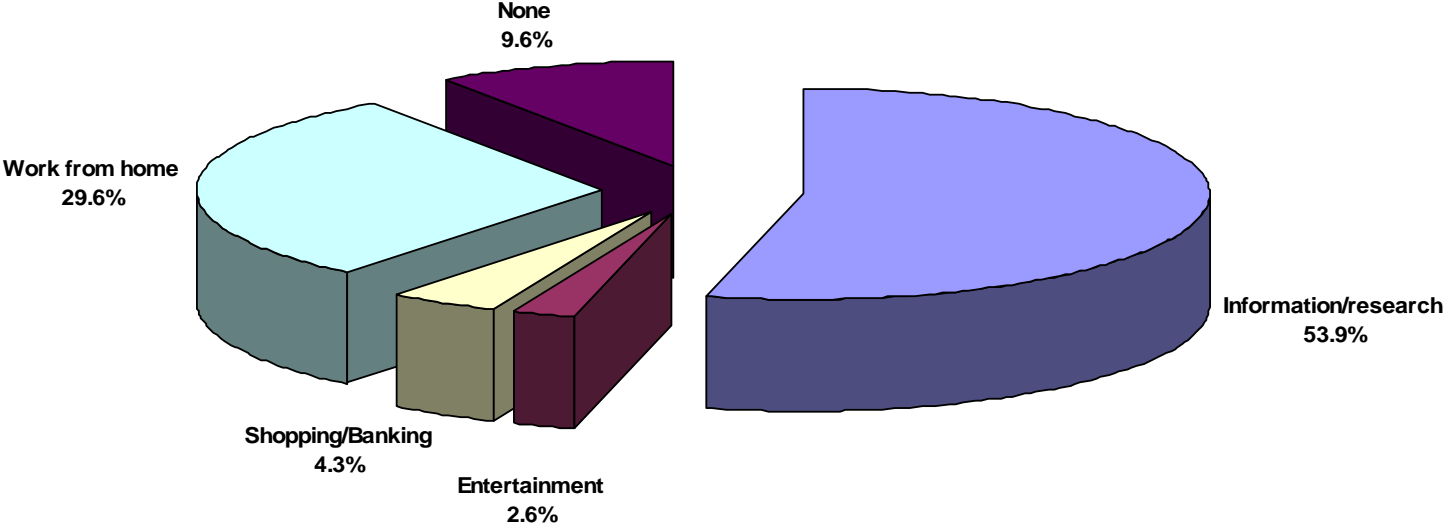
	Dial-Up modem	DSL	Cable Modem
■ AoL	15%	0%	1%
■ Time Warner	0%	0%	0%
■ MSN	10%	0%	0%
■ Other	60%	0%	0%
■ None	1%	0%	0%

**Desired Change in Internet Service**

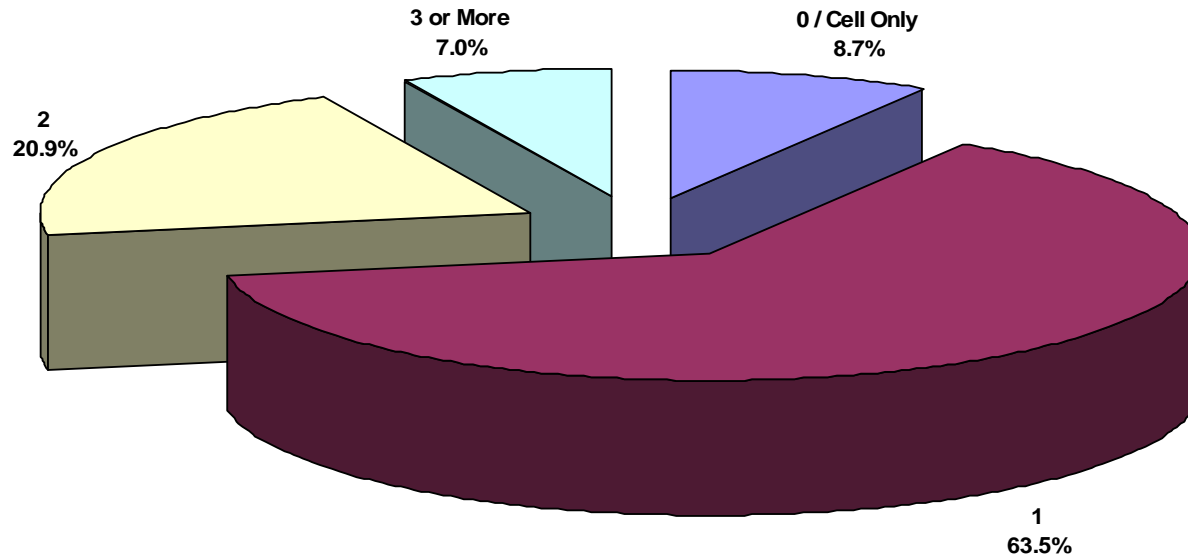




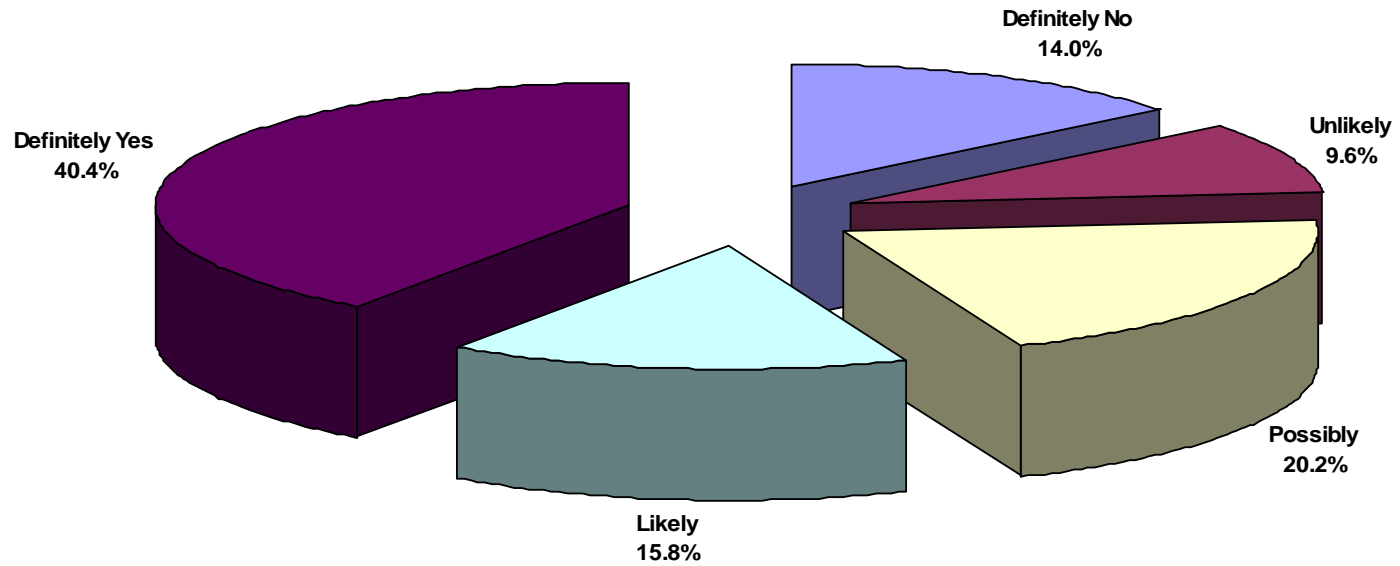
**Broadband Applications**



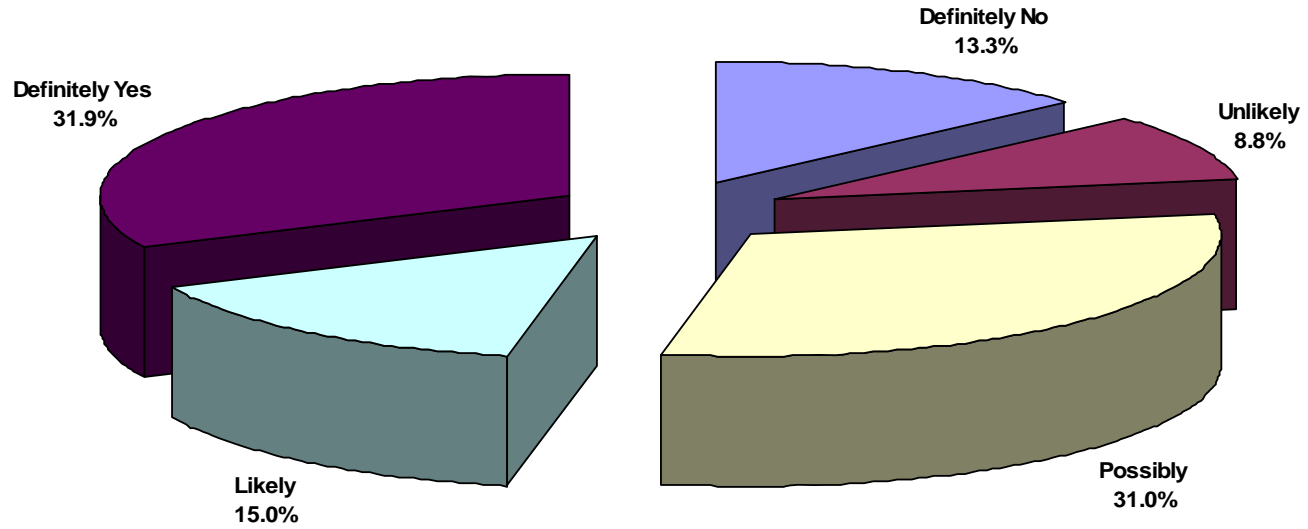
### Number Telephone Lines



**Broadband Internet at \$40/Month**

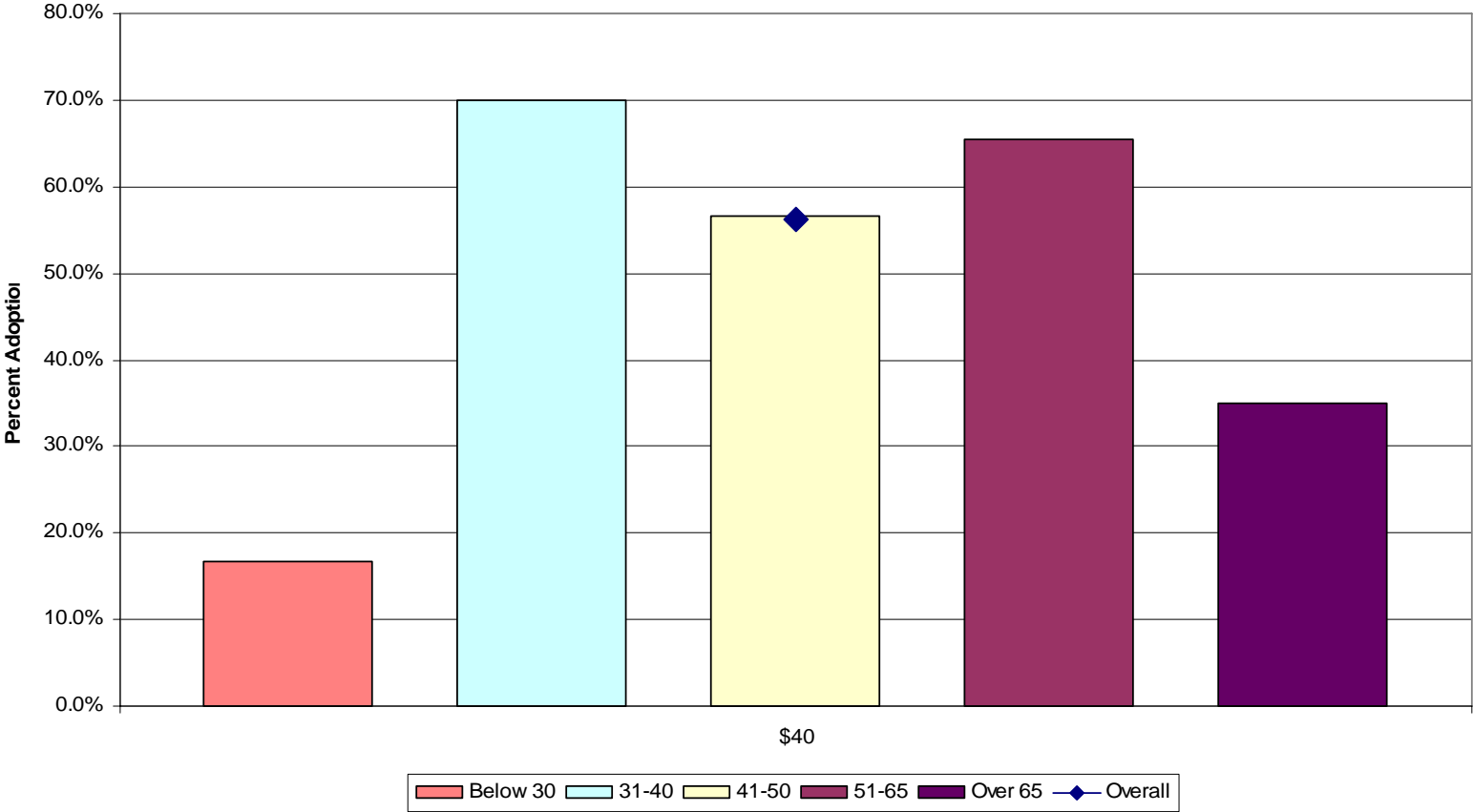


Video Services at \$40/Month





### Broadband Internet Demand By Age



# *Municipal Broadband Network Details*

# *Goffstown MBN Review*

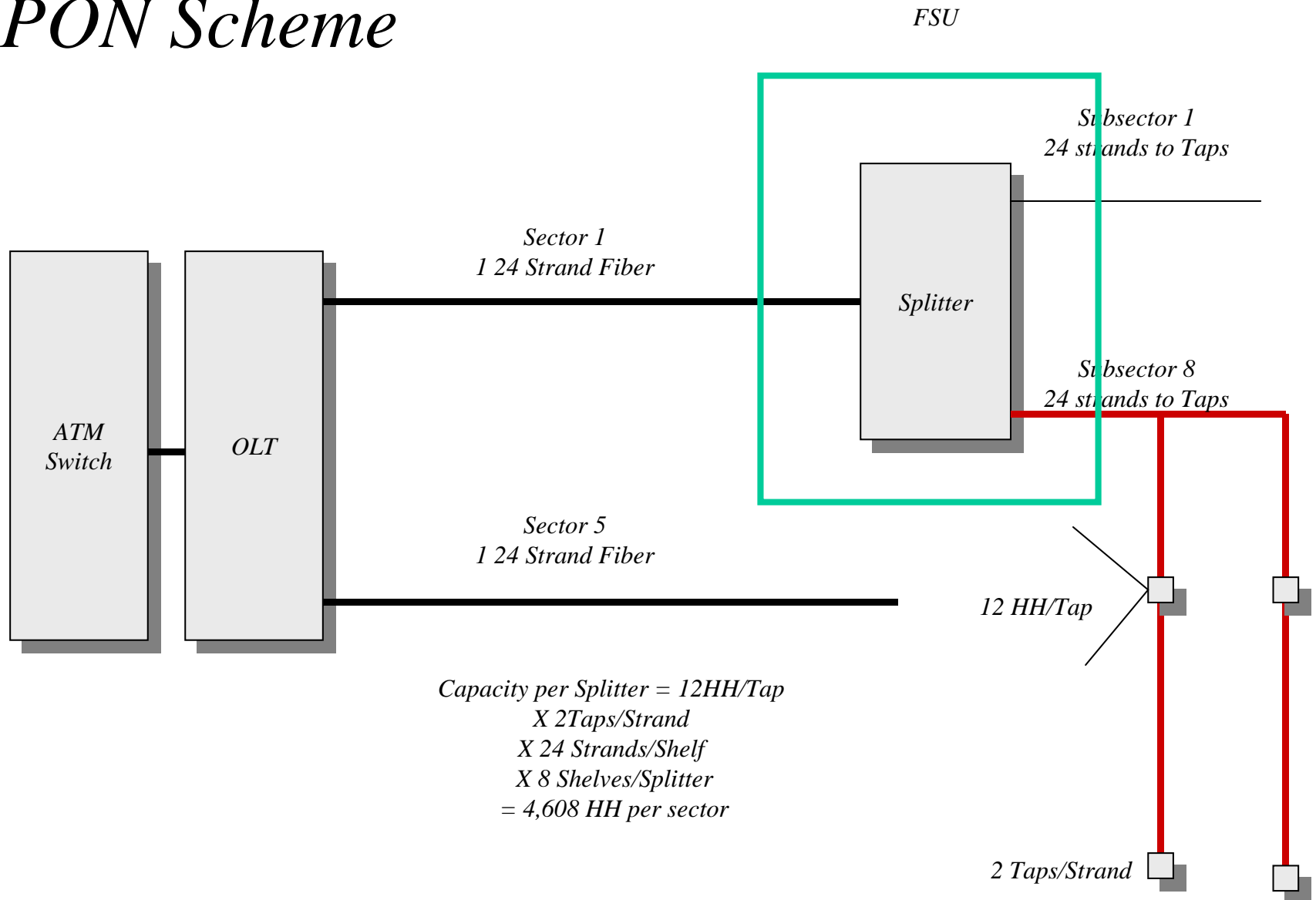
- *Total homes passed: 5,600*
- *Total street miles: 120*
- *Build fiber backbone over 100% of streets in Year 1*
- *93% aerial construction, 7% trenching*
- *About 36% pole Make Ready expected*
- *Target 30% subscribers in Year 1*
- *Build drop cables to HH as service is provided*
- *May need fiber optic rings to provide redundancy*

# *Passive Optical Network (PON) Design*

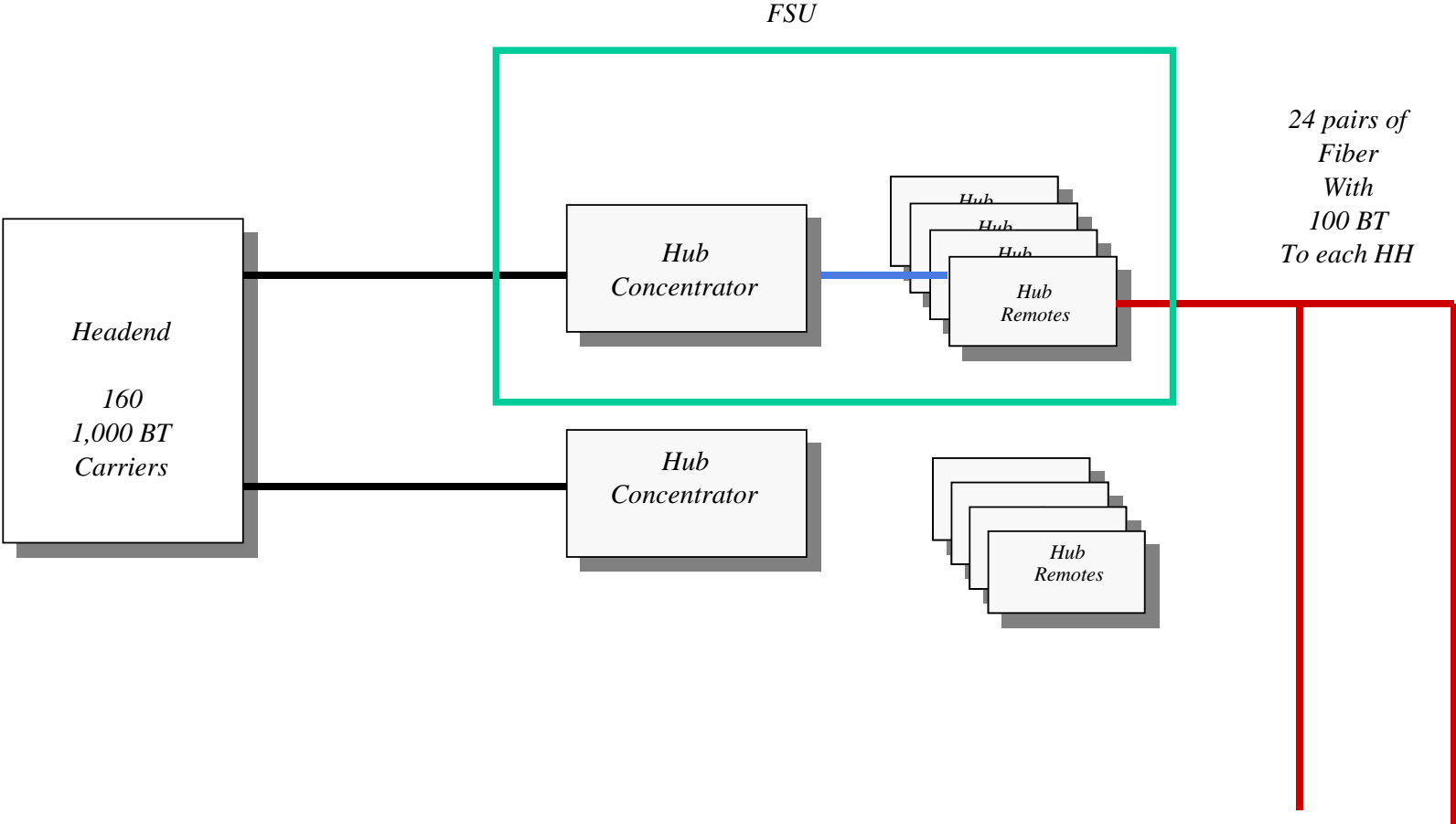
- *4 sectors overlaid on town GIS map*
- *Smaller sectors have higher density of users*
- *Larger sectors have lower density of users*
- *Capital expenses driven by total subscribers passed, and distance between and center of serving area and radius of serving area*



# PON Scheme



# Gigabit Ethernet (GigE)



# *Network Operations & Maintenance*

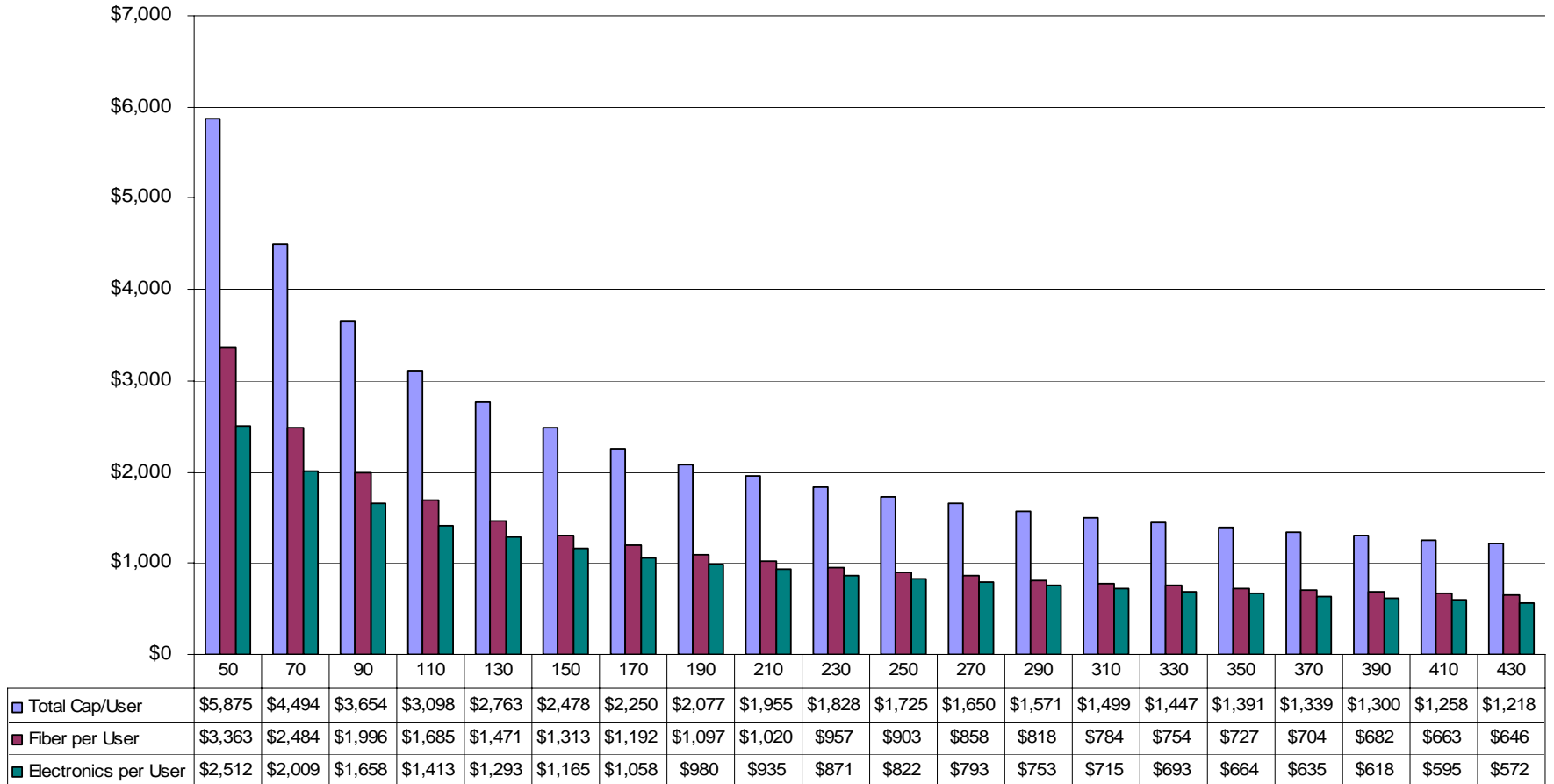
- *Operations*
  - *Business Management*
    - *Operations Support System (OSS) driven by network and subscriber requirement*
  - *Network management*
    - *Network provisioning, monitoring and management provided by Merton / third party*
- *Maintenance*
  - *First Level Maintenance, repair and return provided by Merton / third party*

# *MBN Project Financials*



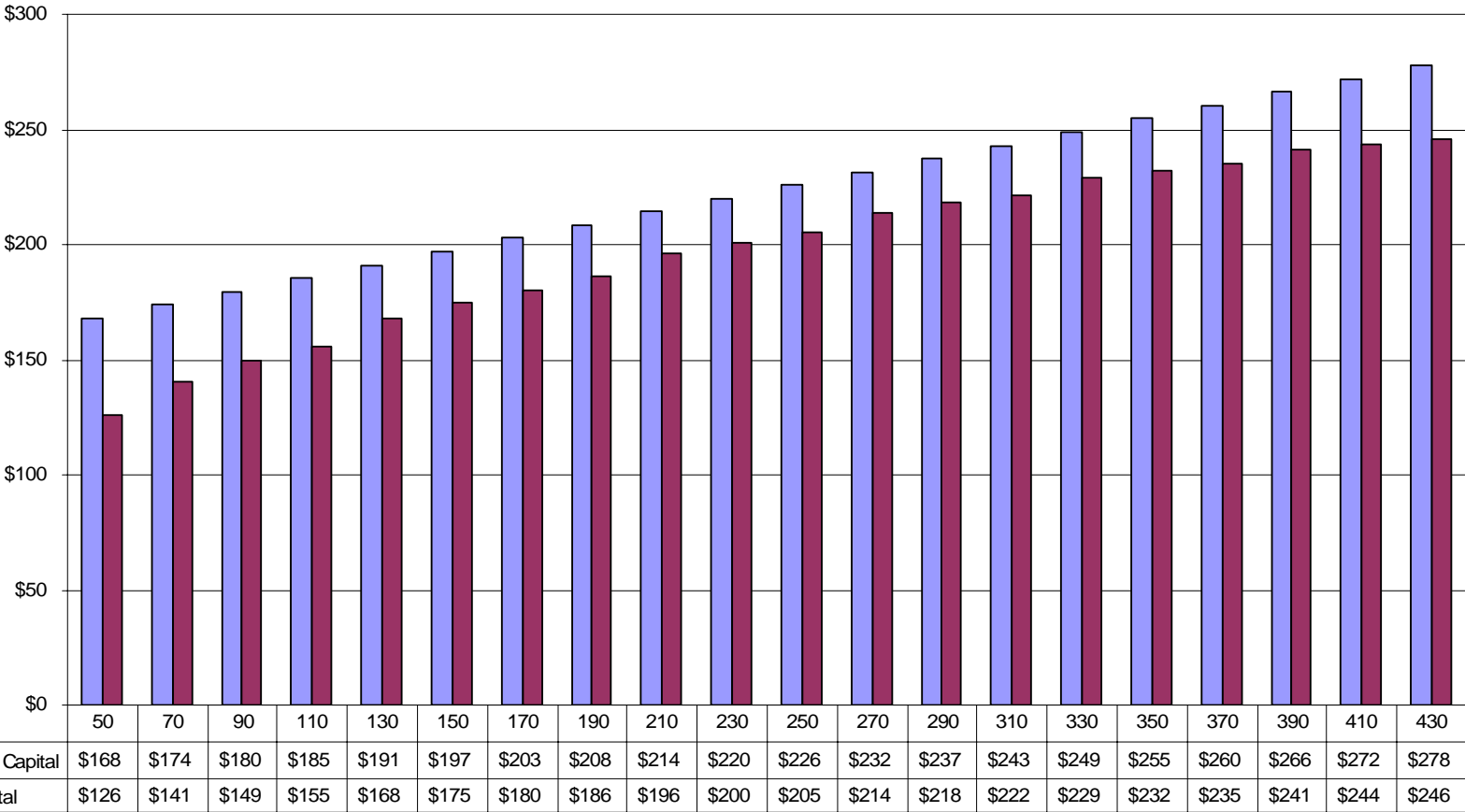
# *CAPEX*

# CAPEX per Sub



Number Subs (HH)

# Total CAPEX



Number Subs (HH)

# *Opportunities and Risks of MBN Project*

# *Opportunities*

- *Strong demand for MBN broadband and video*
- *Estimated revenue potential from only broadband more than sufficient to cover financing bonds*
- *Substantial revenue upside from other revenue sources (video, telephony, etc.)*
- *Significant “surplus” cash likely after Year 3 with just broadband*
- *Competitive environment, enhanced services, improved economic development*



# *Risks*

- *Senior population segment forms very weak market base*
- *ISPs, other revenue opportunities need to be established*
- *High current broadband penetration (cable modem)*
- *Subscribers are extremely price sensitive*
- *Network deployment should balance costs with revenues*
- *Choice of technology and vendors*
- *Competing new technologies: wireless, etc.*

# Schedule & Next Steps

