

# Partnering and Financial Issues

UTC Rural Broadband Workshop  
July 21, 2014

# Agenda

- ▶ The funding opportunity
- ▶ Partnership considerations
- ▶ Financial analysis structure
- ▶ Service revenues and margins
- ▶ Forces impacting market and opportunities
- ▶ Common myths vs. realities
- ▶ Common mistakes in financial analysis
- ▶ Consumer density impact to cost recovery
- ▶ Rural market considerations
- ▶ Funding considerations

# The Funding Opportunity: business considerations

# What's Going On Here?

- ▶ Represents an effort to achieve more with less
- ▶ Recognizes that competition is one path to that
- ▶ Door opened to non-traditional providers, as means to competitive dynamic and cost-effectiveness through innovation, entrepreneurial approach

# How It Works: 120 monthly pmts

## ▶ High bandwidth

- \$75M for 25/5
- \$20M cap per project

## ▶ Lower bandwidth

- \$15M for 10/1 service in high-cost areas
- \$7.5M cap per project

## ▶ Extremely high

- \$10M for 10/1 service in extremely high-cost areas
- \$5M cap per project

# Challenges

- ▶ Rewards cost-effectiveness and low-cost bidding
- ▶ Modest aggregate, per project, and per entity budgets
  - Hard to establish a new enterprise given fixed and start-up costs

# Potential Scenarios

- ▶ Incremental expansion of existing enterprise
- ▶ Harder for new entrant, even with pole and ROW assets, utility operations
- ▶ Incremental expansion need not be geographically close, assuming middle mile assets
- ▶ May be optimal for partnerships between utilities in eligible areas and out-of-territory, experienced partners who can scale existing operations

# Partnership Considerations



# Potential Approaches

- ▶ Collaboration can enable scale
  - The funding opportunity rewards scale but does not enable it
  - Buying coops analagous to the G&T
- ▶ Partner with your counterparts and peers
  - Other coops, including phone
  - Munis

# A Few Cautions

- ▶ Be skeptical of rosy projections
- ▶ Be sure that risk as well as revenue are shared
- ▶ Be aware of dependencies and control
- ▶ Avoid snake oil (remember BPL?)

# Financial Analysis Structure

# Financial Statements

- ▶ Income Statement
  - Revenues
  - Expenses
  - Depreciation
  - Interest
  - Taxes
- ▶ Cash Flow Statement
  - Implementation capital
  - Equipment replenishments
  - Sources of funds
  - Debt service
- ▶ Balance Sheet

# Key Inputs Beyond Revenue

- ▶ Depreciation
  - Electronics (5 year, 7 year, and 10 year)
  - Fiber (20 plus years)
- ▶ Expenses (partial)
  - Staffing
  - Contracted services
  - Churn
  - Sales and marketing
  - Locates
  - Electronics (license and annual maintenance)
  - Network operations center (NOC)
  - Content
    - Internet access
    - Programming
    - Dial-tone

# Residential Services

# Residential Consumer Services

- ▶ Data (Internet and transport)
- ▶ Telephone
- ▶ Cable television
- ▶ Advertising

Which service has the greatest revenue potential?

Which service offers the greatest “net” revenue potential?

Which service has the lowest threat of substitute products?

# Porters Five Forces

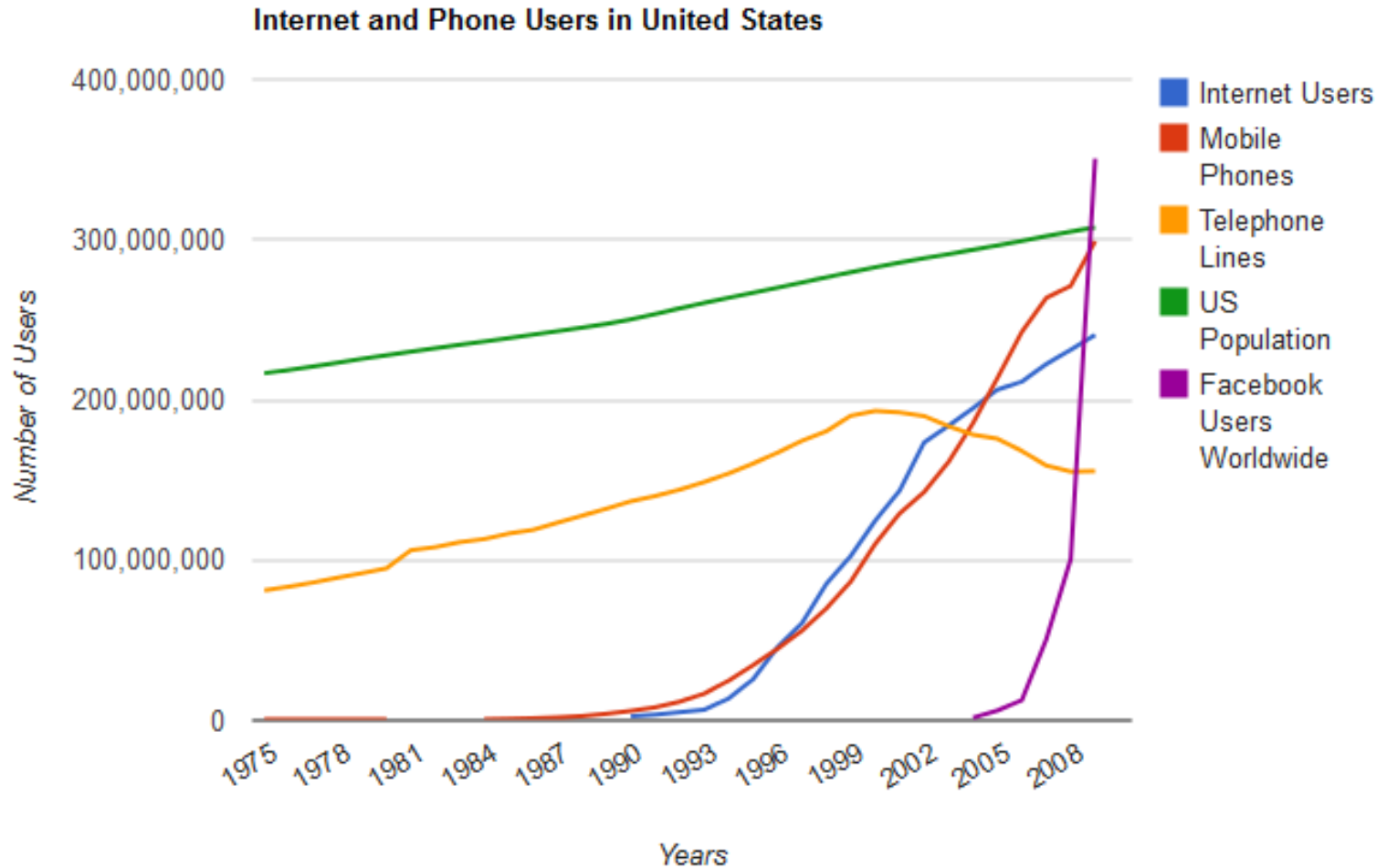


# Porters Five Forces



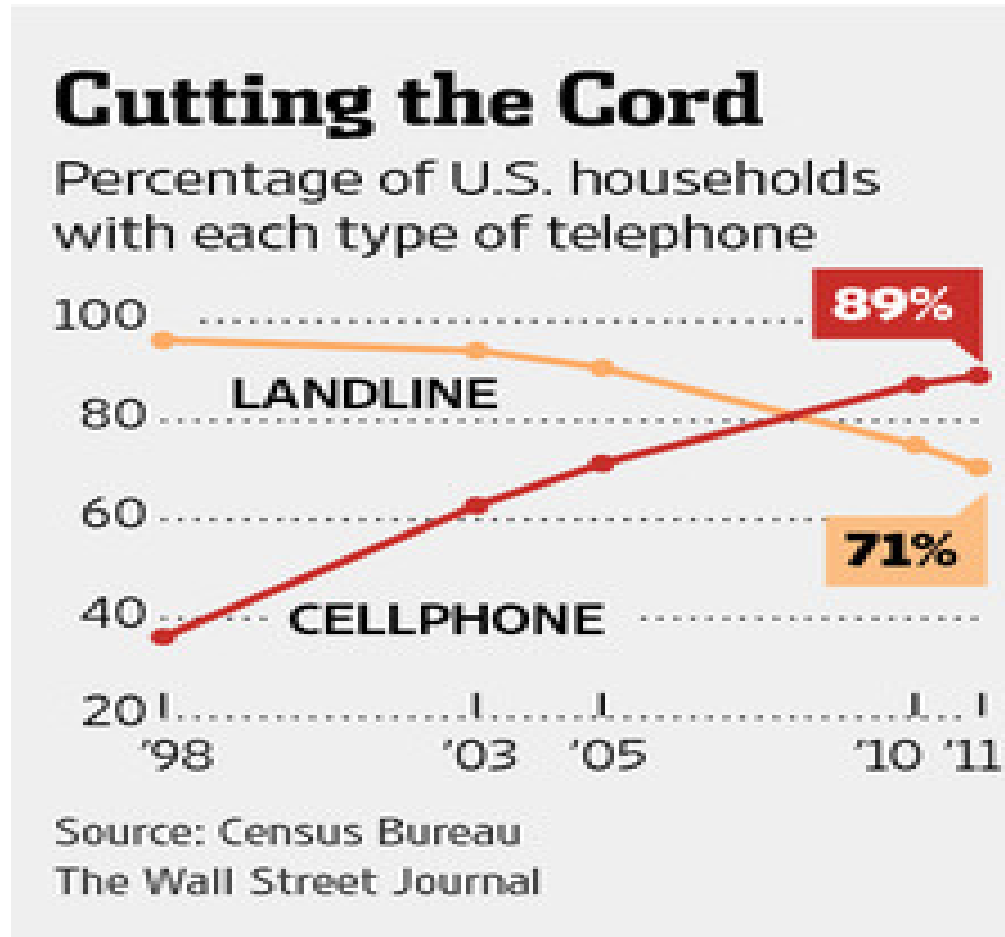
# Impact of Substitute Products

# Rise (Mobile & Internet) & Fall (Telephone)

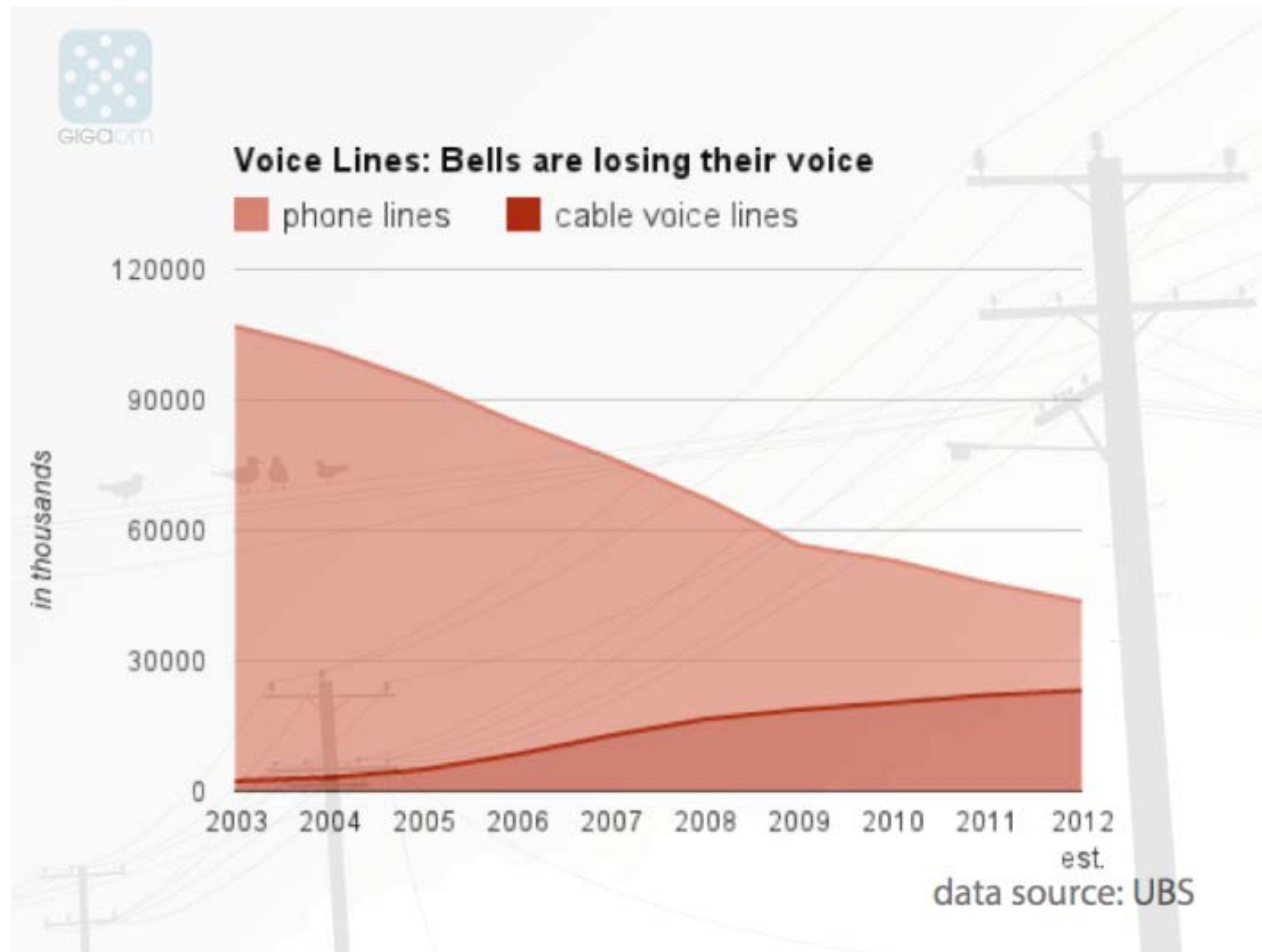


Source: Google

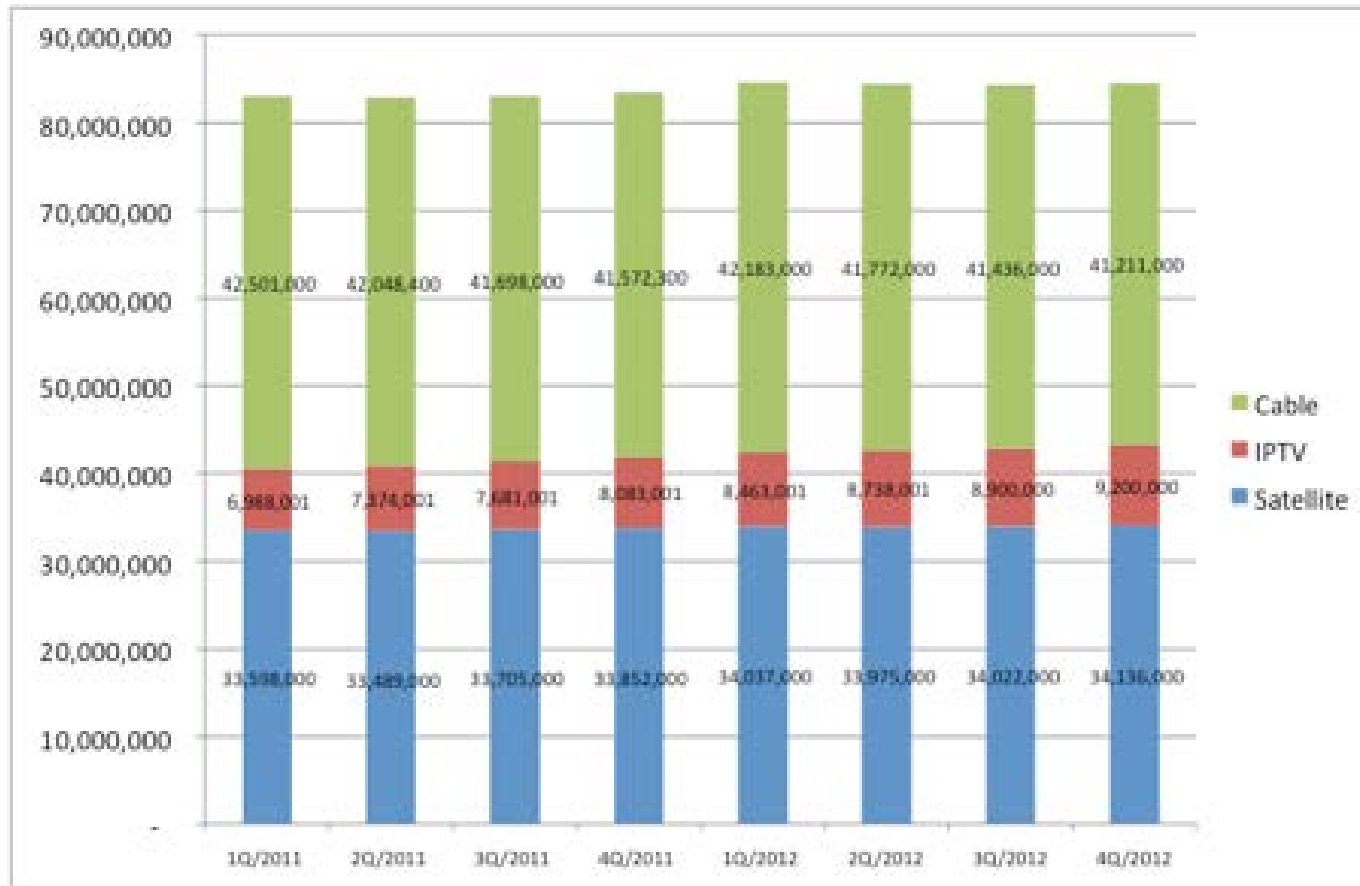
# The Decline of Landline Telephone



# Not All of Telephone Decline Because of Cell Phones



# Cable Television – Flat Growth

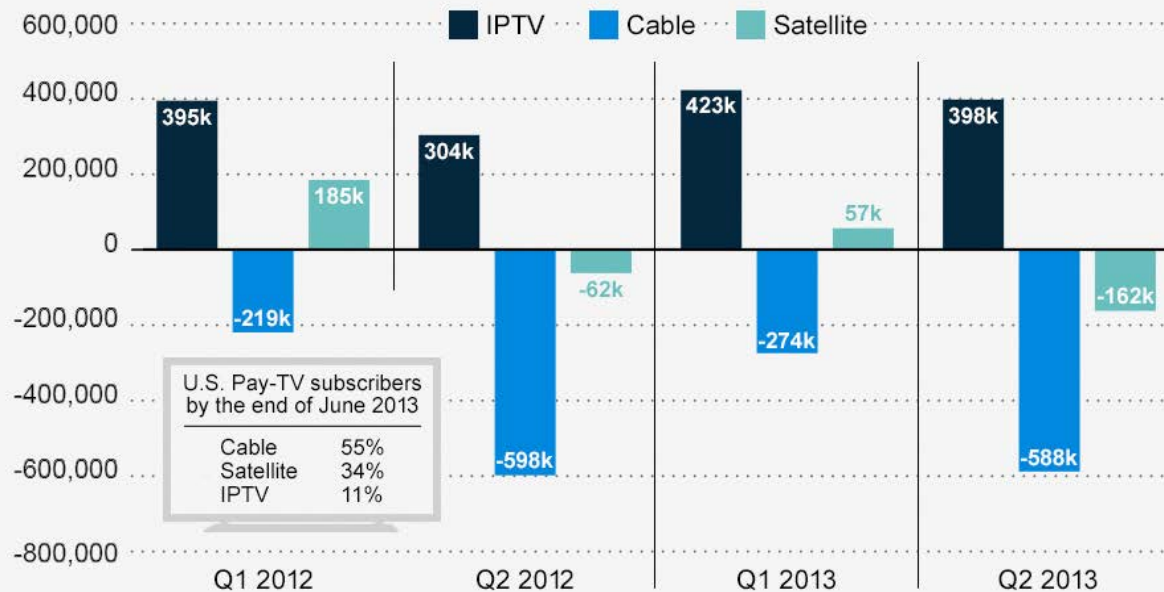


Source: Company financials, compiled by MRG

# Cable Television – Shifts

## The Rise of IPTV is Hurting Cable Companies

Net subscriber additions of U.S. Pay-TV providers, by segment



Note: IPTV in this figure is not over-the-top video, but “packaged” video that has the same form, fit, and feel as offered by the cable television companies. The “anytime-anywhere” video access offered by DirecTV, Comcast, AT&T, Verizon, and others require consumers to subscribe to a cable television package at their households.



# IP Telephone



BasicTalk™



8x8, Inc.

Ring  
Central®

Vonage

magicJack

Masomobile ooma®



# Streaming Video



WHAT TO WATCH. WHERE TO WATCH IT.



**hulu**PLUS

Instantly  
Watch Hit  
TV Shows

Only \$7.99 / month  
(with limited advertising)  
Cancel anytime.



\$15 credit toward purchase of Five Sony Pictures Titles  
with select Sony Blu-ray Players with **super Wi-Fi**

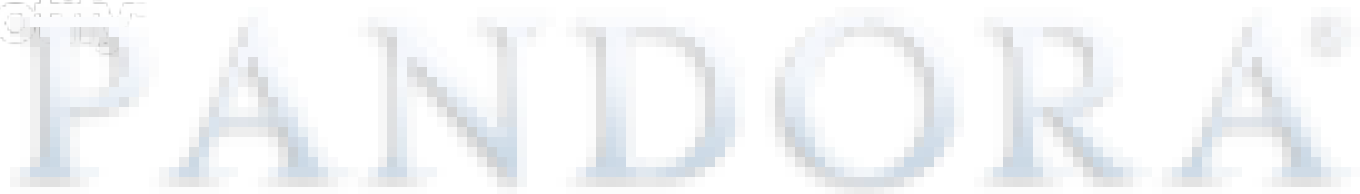


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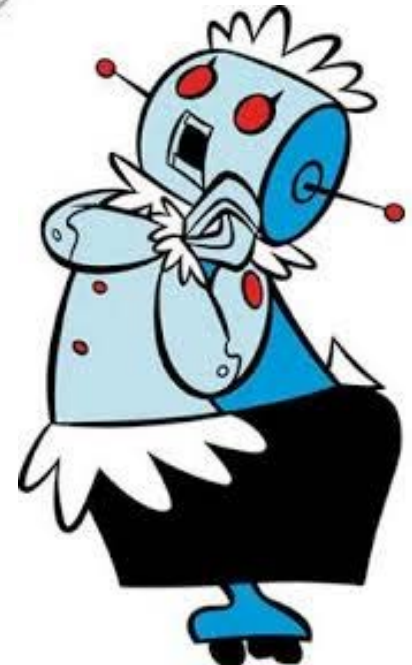
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# Streaming Music & Audio



# Internet of Things



InternetAppliance™



# Common Myths

# Common Myths vs. the Reality

- ▶ Deployment of fiber is an economic development strategy
  - Fiber is a tool, part of the overall strategy which includes training, utilities, financing, taxes, and other tools
- ▶ A pent up demand exists for broadband access
  - Marketing is critical. Must create demand by showing value it delivers to consumers.
  - Unlike electricity – consumers have a option of not buying broadband

# Common Myths vs. the Reality

- ▶ Cable television service has substantial positive net margin
  - Often is a “break-even” in competitive markets needed to increase broadband penetration
  - Rural consumers not “hooked” on by bundling
- ▶ Advertising offers a modest revenue stream
  - Web-sites, search engines, Facebook, and others have eroded the opportunity
  - Opportunity varies market-by-market, need to find niche



# Common Myths vs. the Reality

- ▶ Wireless will offer the long-term solution for broadband
  - Wireless will play a role, but requires fiber access
  - Wireless has a 5 to 7 year depreciation cost vs. 20 plus for fiber (need to compare total cost of ownership)
  - Wireless has limits on supported service speeds
- ▶ Advanced Metering Infrastructure (AMI) will pay for FTTP
  - AMI can be enhanced with fiber, but does not require

# Common Mistakes



# Common Mistakes

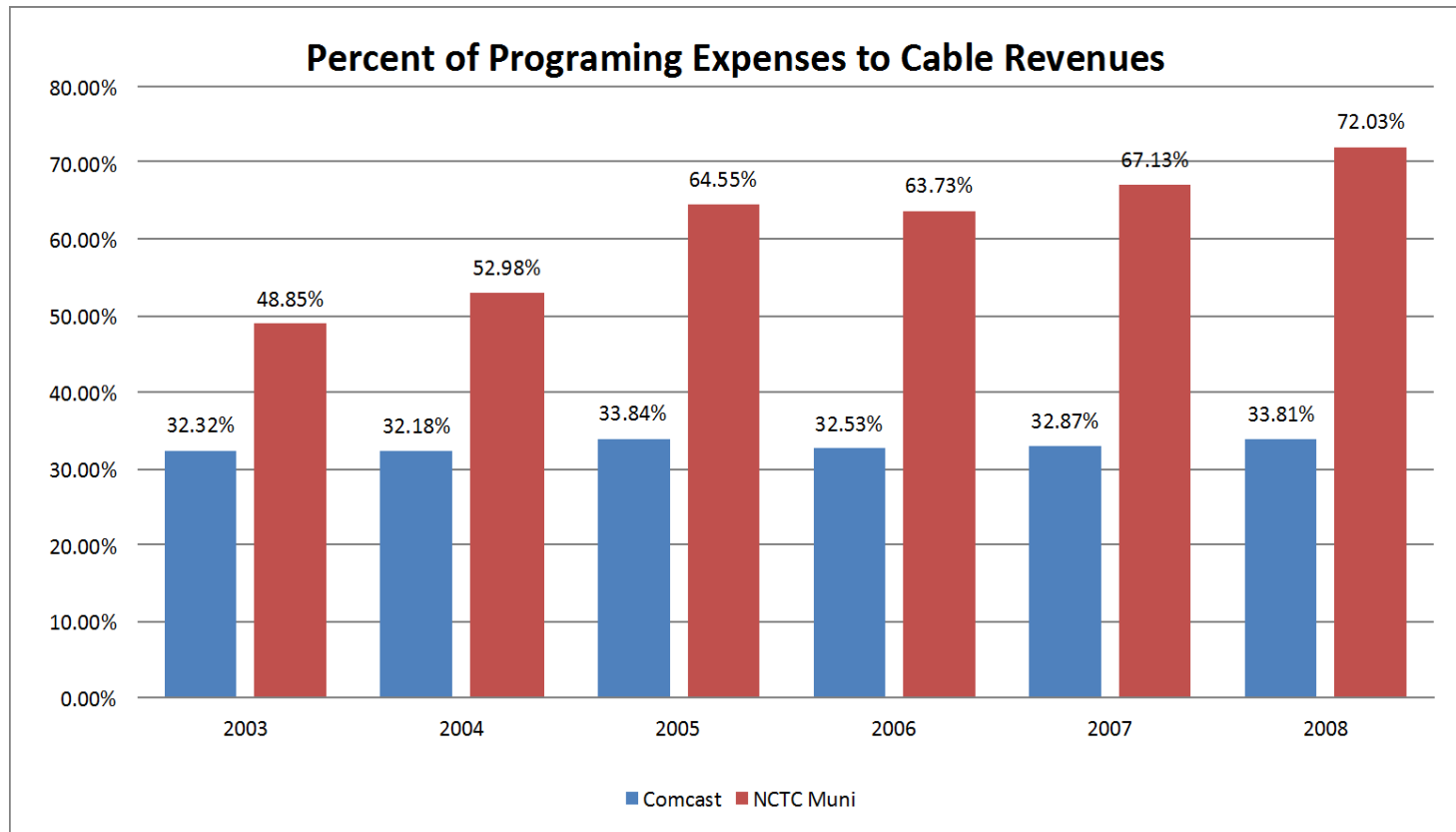
- ▶ To account for “inflation”, add a multiplier for expenses and revenues
  - This approach will greatly overstate margins in the out-years (uses “inflation” to increase net margins)
  - A flat model is more appropriate
    - Do not inflate any revenues or expenses except maybe salaries and cable programming

# Common Mistakes

- ▶ Add churn – with a consumer payment for connection fee greater than the cost of acquiring a new customer
  - This approach makes churn a contributor of revenue, rather than a loss
  - Churn needs to be included, but as a net cost
- ▶ Using the same depreciation period for fiber and electronics
  - This approach overstates cash flow projections in out-years since electronics need replenishment every 5 to 7 years

# Common Mistakes

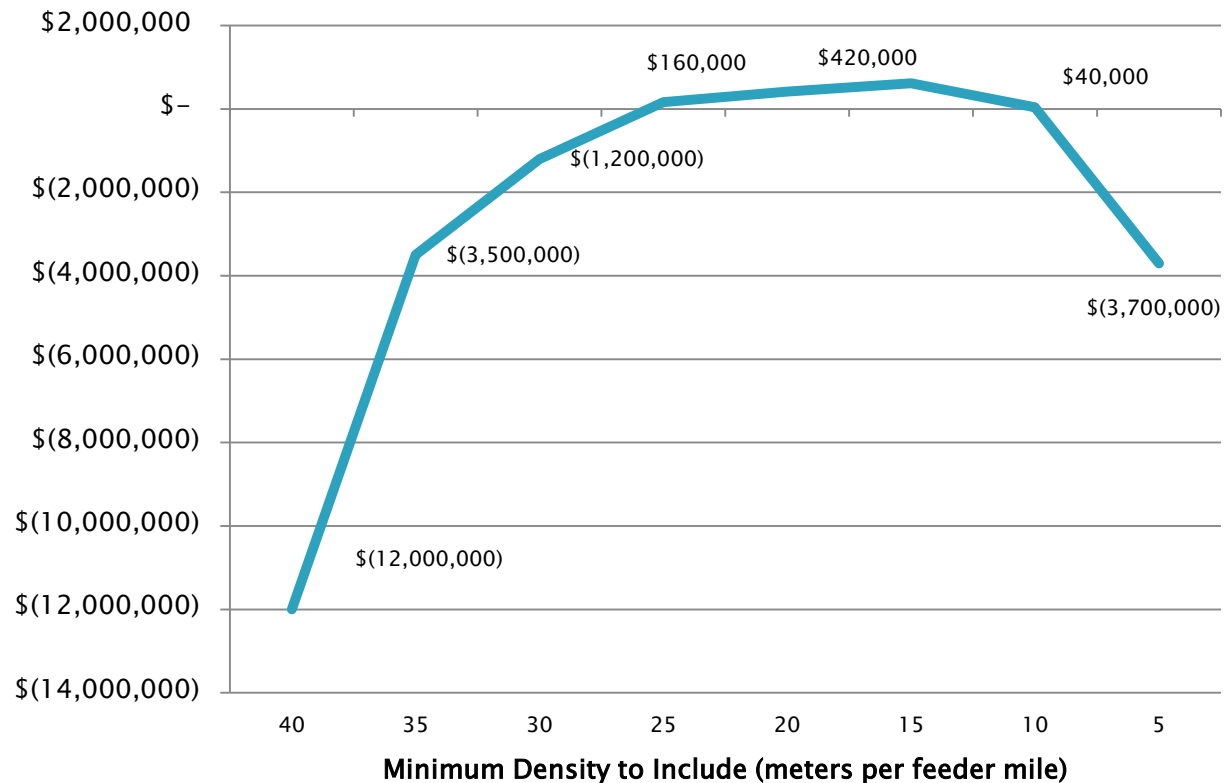
- ▶ Underestimate the “value” of buying power



# Impact of Consumer Density

# Impact of Meter (Consumer) Densities

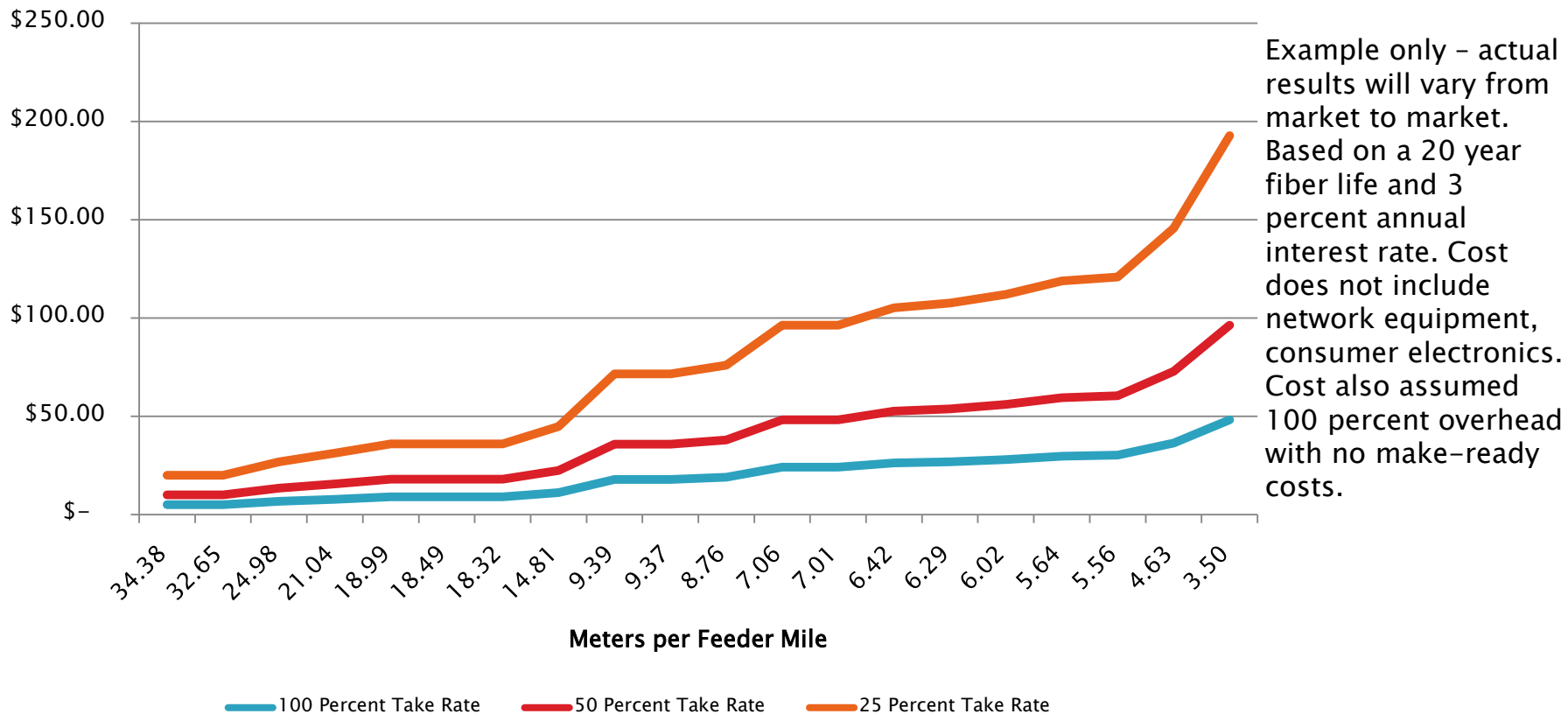
## Year 10 Unrestricted Cash Balance



Above is an example only – actual results will vary from market to market

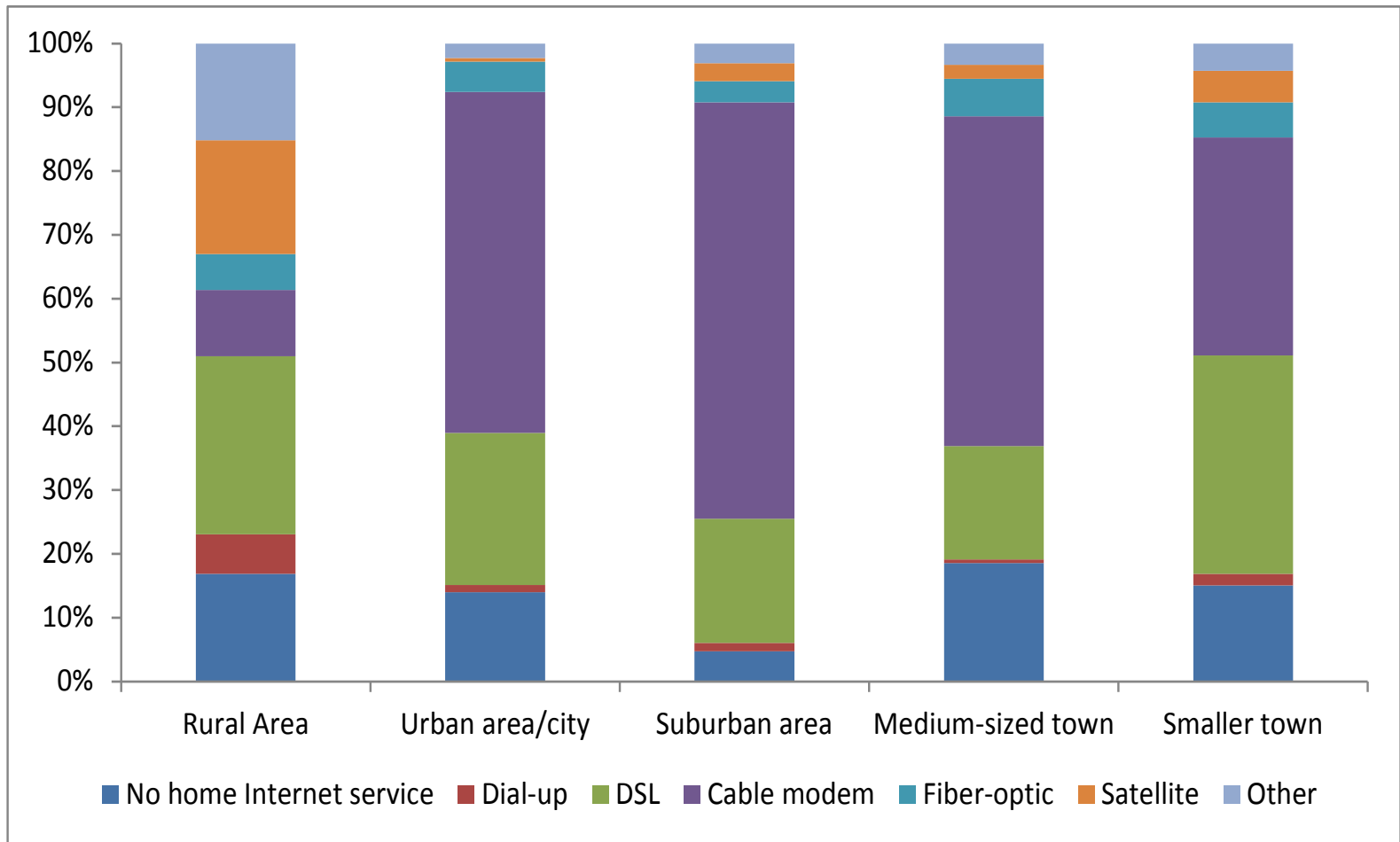
# Capital Cost Recovery

## Fiber Passing Cost (per meter per month)



# Example Market Data

# Internet Access (Kansas 2013)





# Homes With Broadband Access

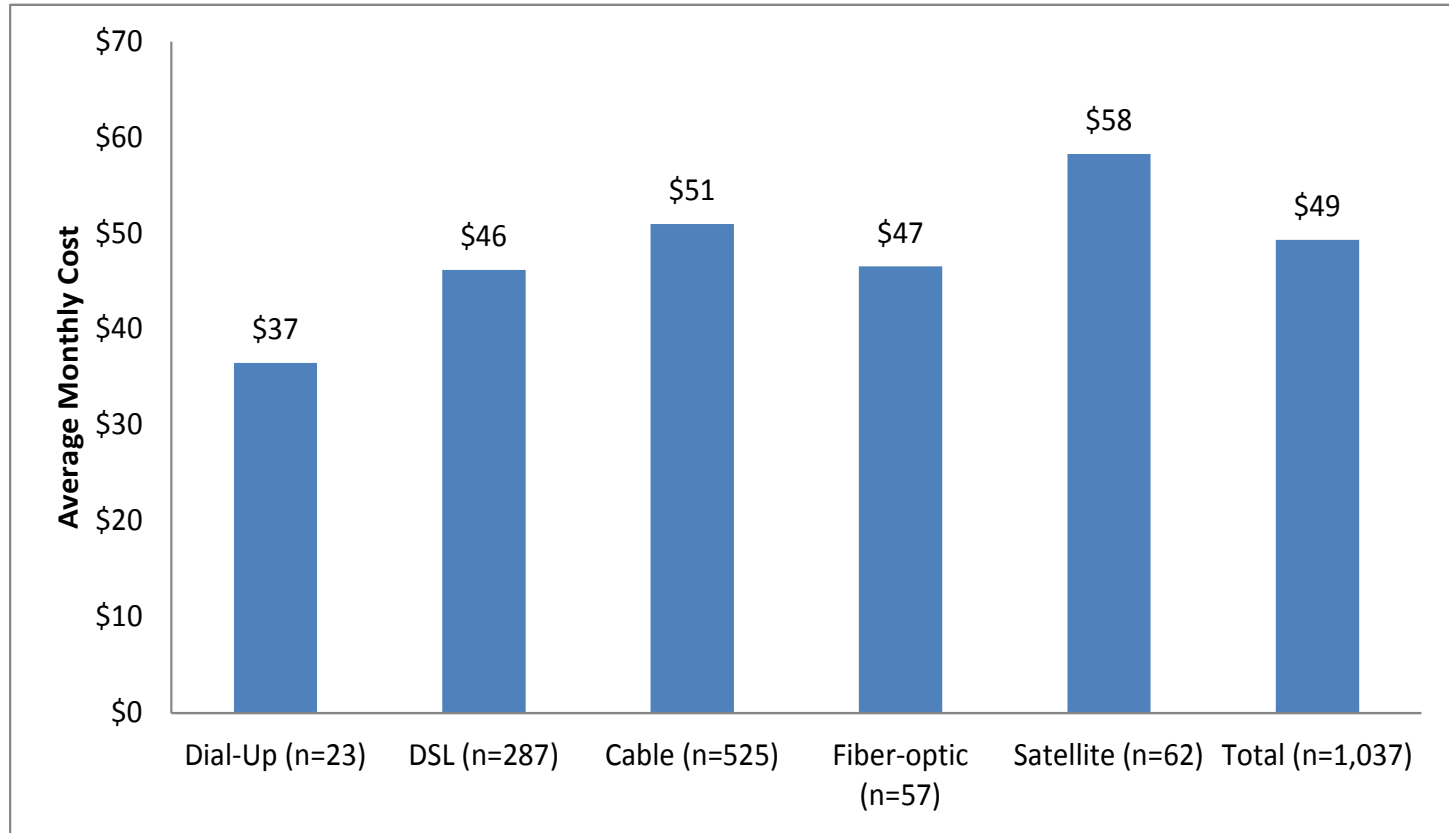
Location		U.S. Including Satellite (%)	Kansas Excluding Satellite (%)	Kansas Including Satellite (%)
All Homes		70	79.2	84.5
Geographic Category	Urban	70	84.3	84.9
	Suburban	73	91.1	93.9
	Medium Town	n/a	78.7	80.9
	Smaller Town	n/a	78.3	83.2
	Rural	62	59.1	76.9

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# Homes With Dial-Up Access

Location		U.S. (%)	Kansas (%)
All Homes		3	2.2
Geographic Category	Urban	2	1.1
	Suburban	3	1.3
	Medium Town	n/a	0.5
	Smaller Town	n/a	1.8
	Rural	4	6.2

# Average Internet Cost (Kansas 2013)



# Service Attributes

Gap Between Satisfaction and Importance Ratings (Kansas Survey Data)

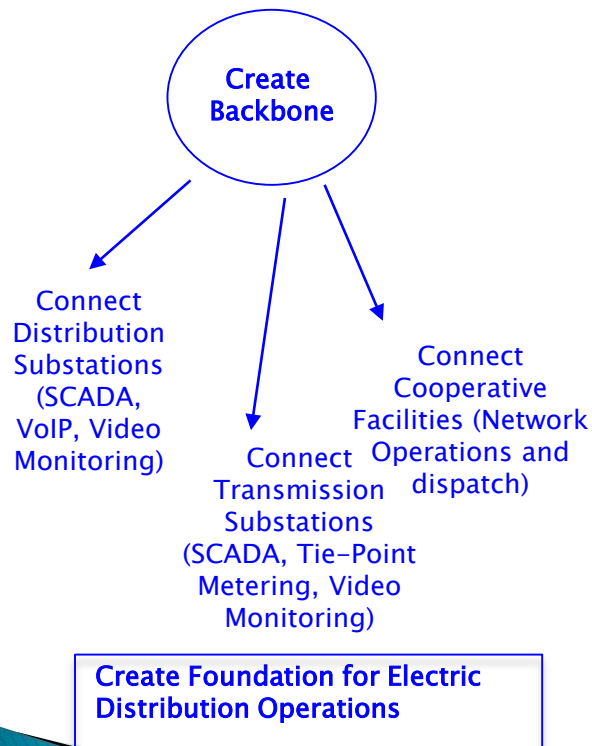
	Mean Satisfaction	Mean Importance	GAP < = >	Significance
 Speed	3.4	4.4	-1.0	Expectations not met
 Connection Reliability	3.5	4.7	-1.2	Expectations not met
 Clarity of Bills	3.5	3.9	-0.5	Expectations not met
 Billing & Account Service	3.5	4.0	-0.5	Expectations not met
 Technical Support Service	3.4	4.3	-1.0	Expectations not met
 Cost	2.6	4.6	-2.0	Expectations not met

# Funding Areas

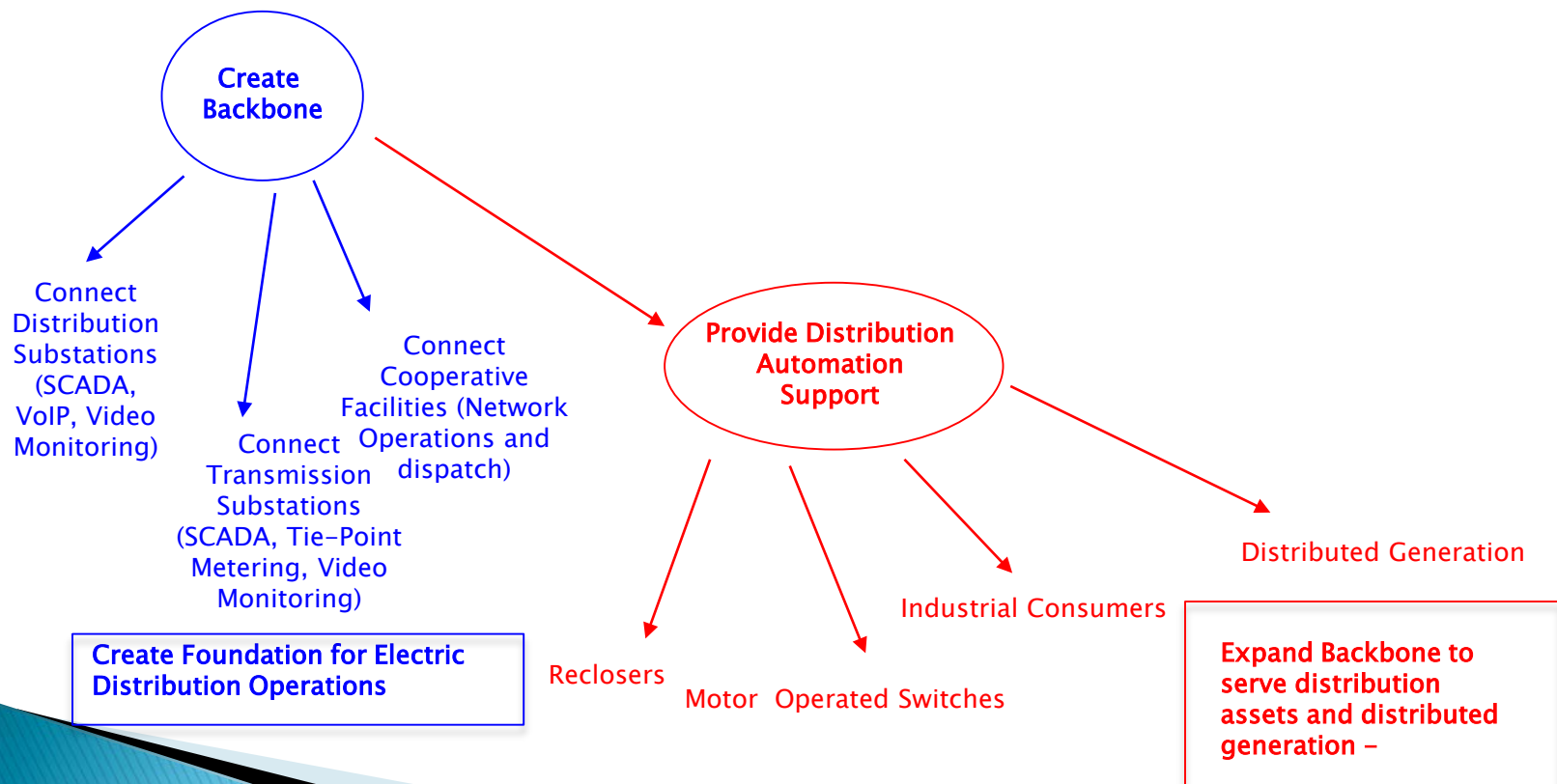
# Funding Sources

- ▶ Subscriber revenues
- ▶ Federal programs
  - Health connect
  - e-rate
- ▶ Grants
  - Capital
  - Ongoing O&M
- ▶ Bonding
- ▶ Internal loans
- ▶ Consumer payments
- ▶ Electric allocations
  - Capital
  - Ongoing O&M

# Fiber Deployment – Potential Phases

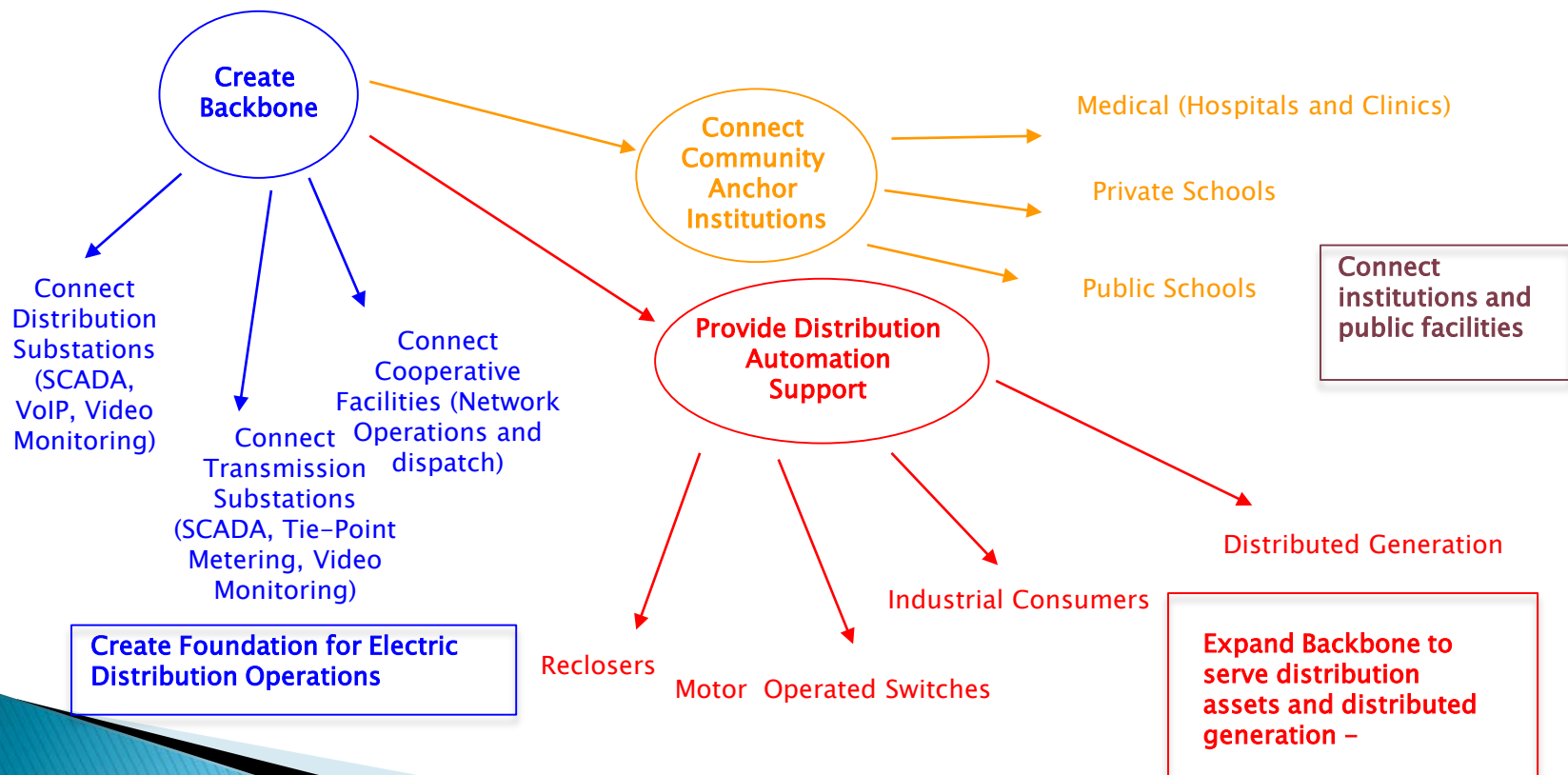


# Fiber Deployment – Potential Phases

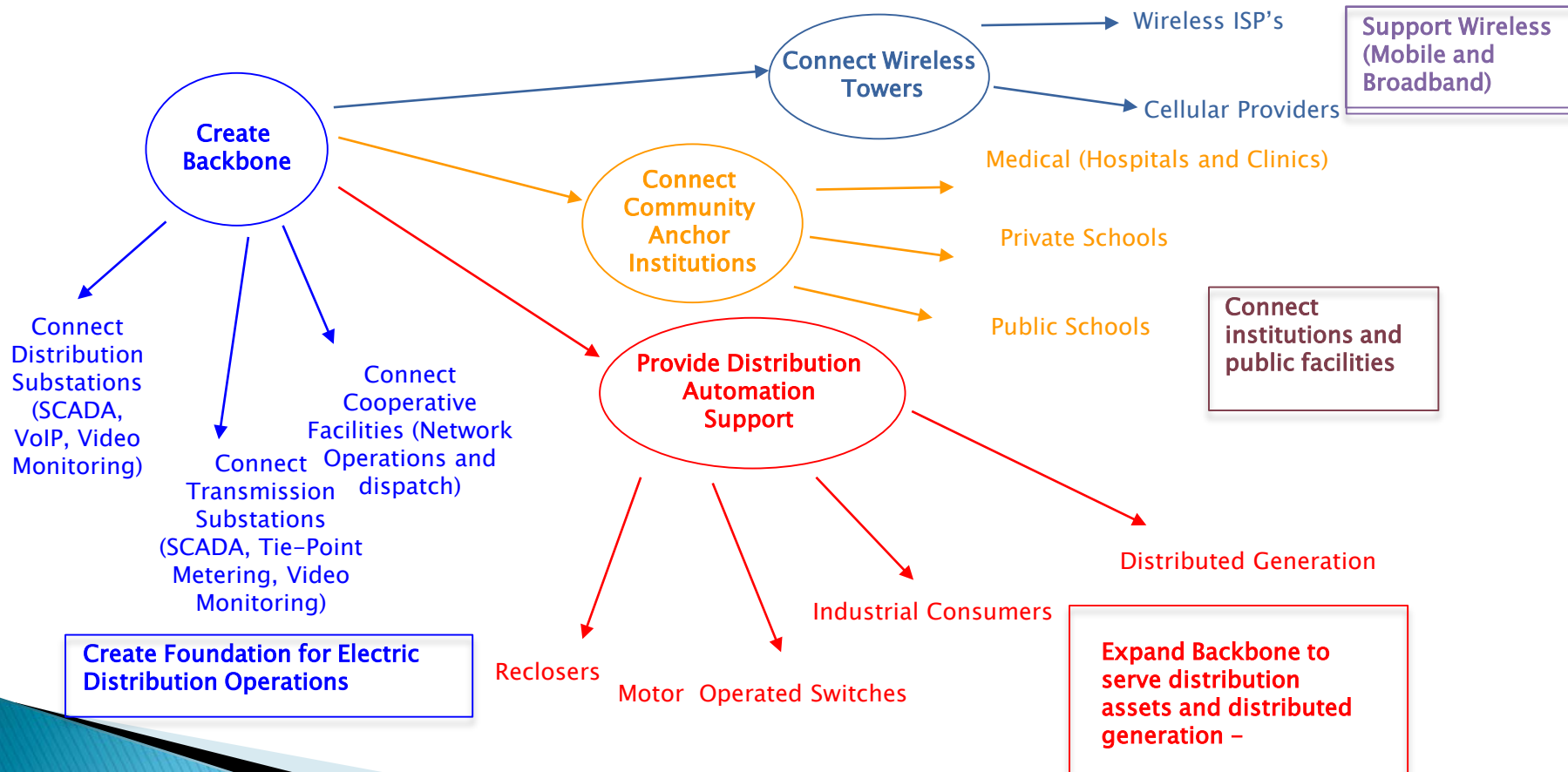




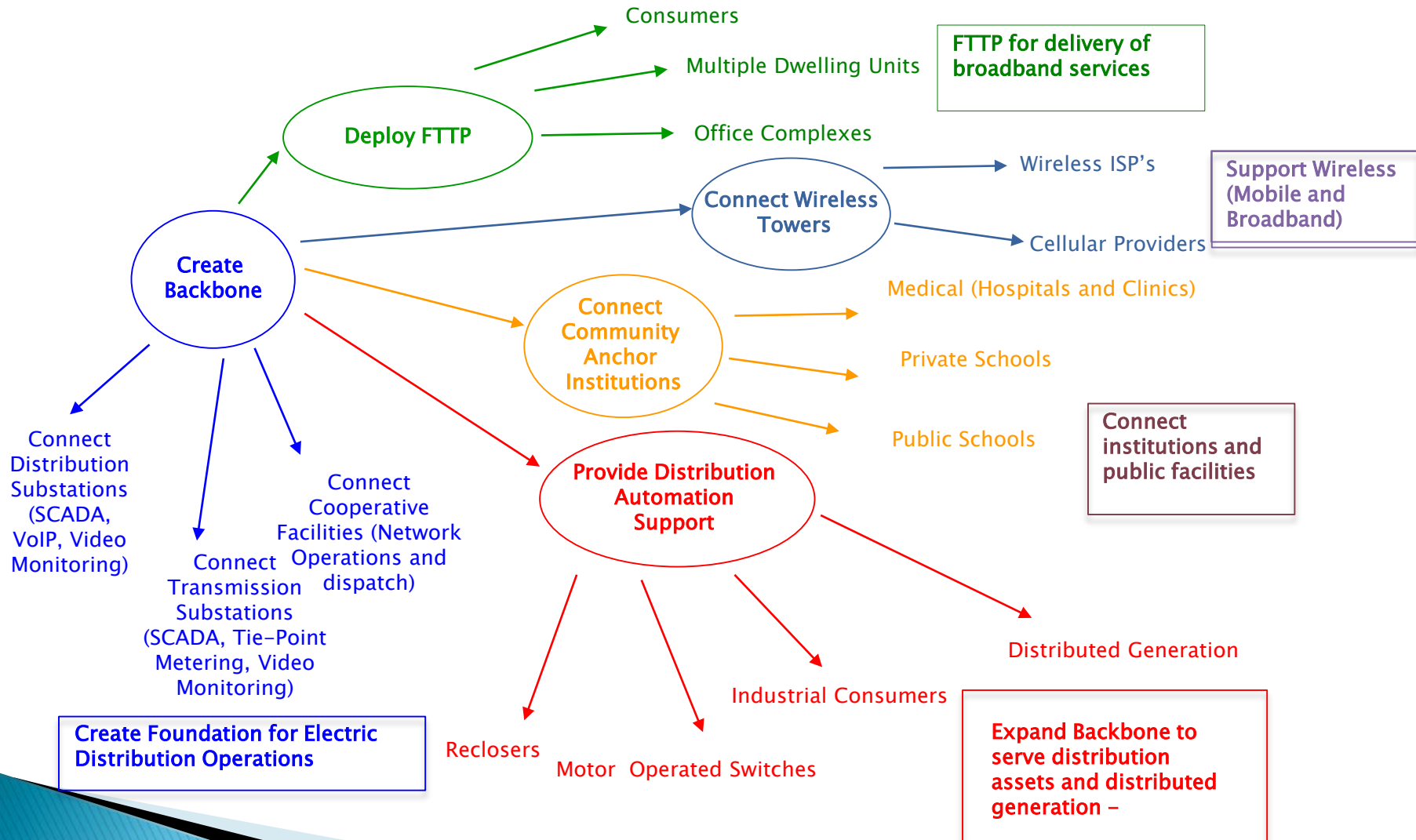
# Fiber Deployment – Potential Phases



# Fiber Deployment – Potential Phases



# Fiber Deployment – Potential Phases



# Thank you!

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