General Policy Committee Meeting
February 23, 2017

What is GRUCom?

GRUCom is the Gainesville area's only all-fiber-optic network, with more than 500 miles of fiber in Alachua County

- Business to business provider for small businesses, up to large multi-location corporations
- Own and operate 13 cell towers
- Licensed CLEC in State of Florida
- GRUCom service is discretionary; no one is obligated to purchase GRUCom services
- GRUCom is a contract service with fixed pricing and term requirements

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GRUCom's Standard Service Portfolio

- Data & Telecommunications Services
  - Carrier Access Services (Interexchange, Local Access & Cell Site Backhaul)
  - Commercial Data Transport Services (Private Line & Special Access Service)
  - Commercial Internet Access Services (Enterprise and Business Class)
  - Residential Internet Access Services (GatorNet Wholesale and GatorNet Retail)
  - Dial-Up Internet Access Service (GRUNet Internet)
  - Central Office Data Center Co-Location Services
- Communications Tower Leasing
- Trunked Radio Services (Public Safety Radio System)

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GRUCom Revenues

Revenue Item	Projected FY16
Telecommunications	$7,494,448
Public Safety Radio	$1,736,265
Tower Lease Rental	$1,752,138
Other Income	$735,846
Total	**$11,718,697**

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What Makes GRUCom's Network Unique?

- All fiber network
- Design focus is on moving data
- Network design ensures capacity and reliability through route diversity
- Route diverse Internet connectivity to Atlanta and Miami with multiple Internet providers
- Established peering arrangements with major content services (Netflix, Google, YouTube, Apple, Amazon)
- Strategic partnerships with National, regional and local transport providers expands service capability beyond the physical network

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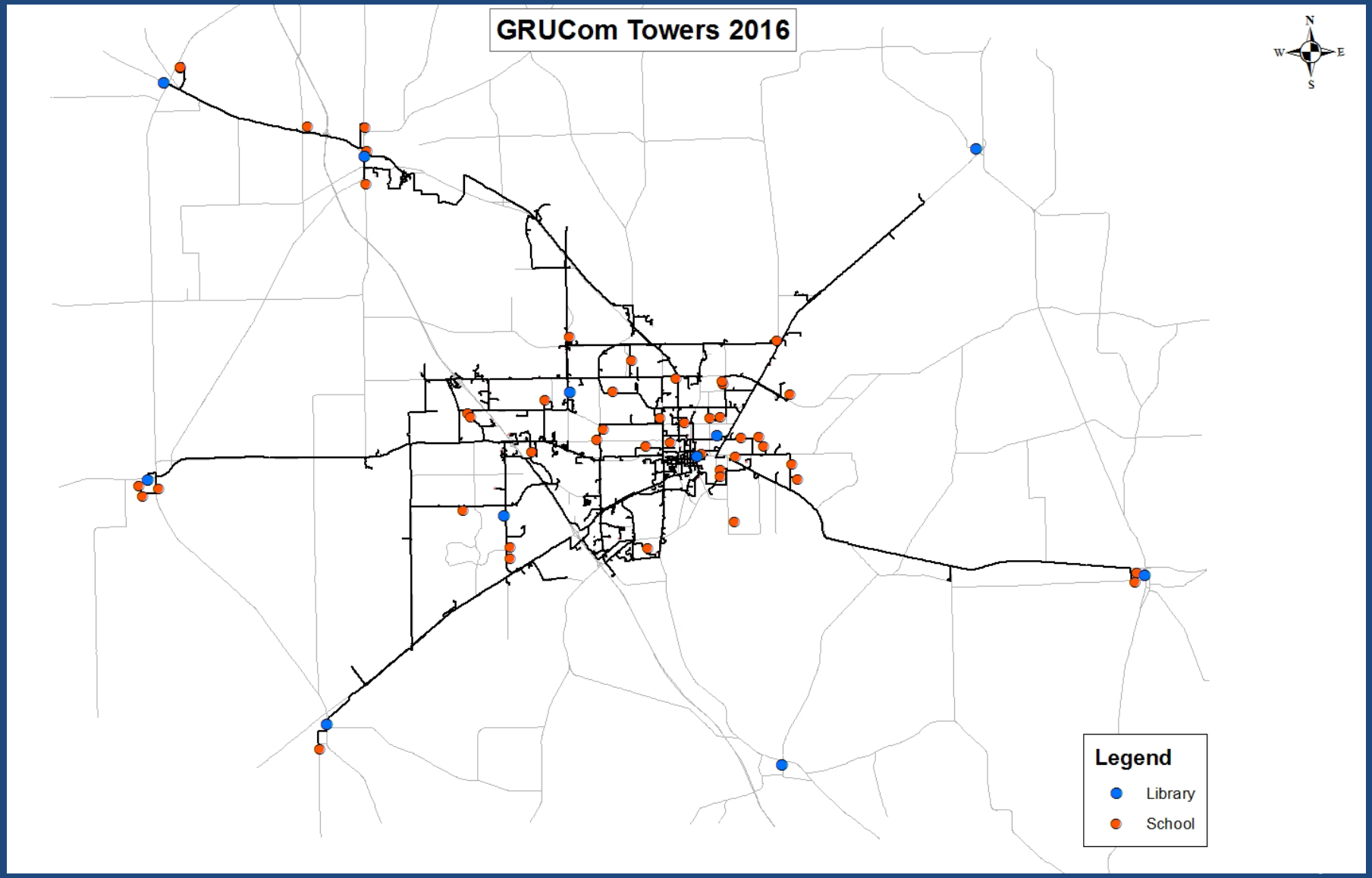
How & Where are Services Delivered?



Questions from Commission…

- Expand Connectivity
  - 2009 study found that 99% have access to Broadband
  - Residential provider states speeds up to 150 mbps in service area
  - In many cases LTE service in the area exceeds 25 mbps
- Lower Prices
  - CONNECT2Compete:
    - for families participating in SNAP, TANF and the National School Lunch Program ($9.95 for 5 mbps, no deposit required, contracts to sign, installation or modem rental fees)
    - for families living in HUD-assisted housing with school-age children ($9.95 up to 10 Mbps, free WiFi, free installation)
  - FCC Lifeline:
    - discount on phone service for qualifying low-income consumers
    - 2016 Lifeline Modernization Order included broadband as a support service in the program
- Increase Speeds
  - GRUCom offers speeds up to 1 Gbps (since 2005), and can offer up to 10 Gbps
- End the Digital Divide
  - SBAC: GRUCom provides 10 Gbps enabled service to each school, scalable 20 Gbps
  - Alachua County Library District: GRUCom provides broadband service to every library branch throughout the county
  - GRUCom capability and sales drove 4G/LTE service implementation in Alachua county a year or more before similar sized markets

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Business Case - Bulk Multi-Dwelling

- Construction costs - $100,000
- Ports 1000
- Price per port $10.00 (market based)
- Monthly Income $10,000
- Recovery time of Construction costs – 10 months

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Business Case – Single Family

Business Case - Single Family

- Construction Costs - $122,500
- Ports 49
- Monthly Price to recover construction costs in 48 months -$52.00
- Does not include inside costs (Homeowner)
- Does not cover operating costs
- Internet only
- 40,000 homes = $100,000,000 for starters

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Competition Between Public and Private Sector

- Municipals face challenges
  - Overbuilds (building a competing network through the city's rights of way) can be very expensive
  - Budgets/services are discussed in public forums
  - Smaller customer base
  - Smaller geographic area
  - Profit margins are smaller

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Competition Between Public and Private Sector (continued)

- Incumbent providers have a number of advantages
  - They have a majority of customers
  - They can lower prices temporarily to ensure fewer customers “switch”
  - Infrastructure is in place
  - National customer base (allows incumbent to spread fixed cost across hundreds of thousands of customers)
  - Strong marketing
  - Budgets and rate structure is not open to public discussion

What are the best practices and critical success factors

- Strong public leadership that champion broadband projects
- Weak competition
- Effective partnerships
- Public seed funding and grant programs to encourage investment and build out
- Proper planning and due diligence

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What do Municipalities providing broadband have in common?

- Fiber Buildout was prompted to realize efficiencies on the electric system
- Electric Utilities built the fiber network to:
  - Provide AMR/AMI
  - Run SCADA Networks
  - Provide Internal Voice Networks
- Electric Utilities did not lower rates but rather attached a monetary value to the efficiencies which was then used to reinvest in the telecom network
- Increased regulatory pressure from incumbent providers

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Broadband Models

- There are two models enabling communities to build broadband to reach the maximum number of residents
  - Electric Utility Model (Chattanooga, Scottsboro, Opelika, etc.)
  - Public Private Partnerships P3s

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P3 Framework

- There are three models with tradeoffs from a public perspective:

	Model 1 Private Investment Public Facilitation	Model 2 Private Execution Public Funding	Model 3 Shared Investment and Risk
Risk	Low	High	Moderate
Benefit	Potential But Not Assured	High	High
Control	None	Moderate	Moderate

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Model 1
Private Investment/Public Facilitation

- Private sector decides when and where to build.
- Relatively modest cost; however, most likely will increase staff time and effort.
- Gives Private partner complete control over the deployment of the infrastructure.
- Public sector may receive more modest benefits.

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Model 2
Private Execution/Public Funding

- Public sector is funding the private partner
- Beginning with financing all the way through to operations, service provisioning and customer service
- Public funding used to fund infrastructure that some residents will not choose to use
- Risk to Public sector if revenues are not realized, i.e. take rate is low, expenses increase etc.

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Model 3
Shared Investment & Risk

- Allows Public entity to secure access and control
- Public entity secures funding thereby taking financial risks
- Private Partner takes risk due to commitment to pay public entity even if take rate isn't sufficient to cover expenses

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Key Strategy Considerations

- Determine priorities
  - Product or service to offer
  - Competition
  - Enhanced service
  - Equity and service to all
  - Public control over infrastructure
  - Risk avoidance
  - Ability and method to cover financial obligations

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QUESTIONS?