GRAND JUNCTION CITY COUNCIL
WEDNESDAY, FEBRUARY 8, 2017

WORKSHOP, 7:00 P.M.
CITY HALL AUDITORIUM
250 N. 5TH STREET

To become the most livable community west of the Rockies by 2025

1. **Broadband Discussion** - Presentation by Michael Santorelli, New York Law School

   Supplemental Documents

2. **Other Business**

BROADBAND BRIEFING

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City Council
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About the ACLP

- **Focus on Broadband Policy**
  - o Analyze local, state, and federal public policies impacting the deployment, adoption, and use of broadband in the U.S.
  - o Work with policymakers to develop and implement rational, forward-looking frameworks

- **Current Research Areas**
  - o Barriers to Broadband Adoption in Key Demographics (e.g., Seniors, People with Disabilities) and Sectors (e.g., Education, Energy, Healthcare)
  - o Government-Owned Broadband Networks (GONs)
  - o PSTN-IP Transition (i.e., migrating from "telephone" to Internet Protocol)
  - o Bolstering Broadband Connectivity Across the U.S. via Demand- and Supply-Side Regulatory and Policy Reforms

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Municipal Broadband Experience

- **Produce studies and materials to inform GONs discussions & proposals**
  - ○ Example: our comprehensive *Policy Maker Toolkit* for officials to use when evaluating muni broadband proposals. Toolkit contains 45 essential questions to guide the analysis of: the local market, the municipality, the broadband proposals, the underlying business model, and other issues.

  - ○ We typically recommend that *any proposal be independently reviewed* by a business analyst expert not connected with the proposal

- **Serve as a resource to state/local policymakers on broadband issues**
  - ○ Local officials seeking feedback re specific proposals or the viability of GONs generally
  - ○ State legislators, regulators, and governors looking to bolster broadband connectivity in urban and rural areas

Municipal Broadband: The Big Picture

- **Context**: by many measures, broadband in the U.S. continues to improve
  - Speeds have increased more than 3x since 2012
  - Data indicates that consumers are paying less for more ($/Mbps)
  - The vast majority of Americans have multiple options for getting online (cable; fiber; DSL; mobile; satellite; etc.)
  - Challenges remain – some unserved areas; room for regulatory & legislative reform

- **Muni Broadband Debate**: ongoing for two decades
  - Animated by criticism that current offerings are insufficient
  - Many deployment models and projects have faltered or failed outright
  - Does not take into account other, more foundational challenges facing local gov't
  - *Folks often assume the best outcome instead of planning for the worst*

- **The Gig**: much of the current muni broadband conversation is driven by a singular focus on "the gig." This is occurring despite a lack of data re:
  - Real consumer demand for such speeds or
  - Measurable cause-and-effect impacts on economic development

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Municipal Broadband: Deployment Models

- **Purely Public**: the city builds and runs the network, possibly via open access
  - Prevalence: rare
  - Examples: Salisbury, NC; UTOPIA, UT
  - Risks/Concerns: city assumes all risk/debt obligations
- **Muni Electric**: a muni-owned utility deploys a network, oftentimes by leveraging unused fiber assets
  - Prevalence: somewhat common (relative to the purely public model)
  - Examples: Chattanooga, TN; Bristol, VA
  - Risks/Concerns: still substantial risk (debt); concerns re cross-subsidization
- **"Public-Private Partnership"**: several different models labeled PPP that seek to shift some risk away from municipality
  - Prevalence: increasingly common
  - Examples: Westminster, MD; Ammon, ID
  - Risks/Concerns: unproven models; no guarantee partner ISPs will attract enough subscribers to be viable

Surveying the Muni Broadband Landscape

Salisbury, NC (population: 33,000)

- **Motivation:** City thought it was falling behind the rest of the country and sought to *rebrand itself as a leading technology hub* via a gigabit, fiber-optic GON.

- **Key Facts:**
  - Financed the GON with $30M in debt
  - Failed to capture the predicted 30% market share
  - City incurred $12M deficit to its Enterprise Fund and had to borrow another $10M to prop the system up
  - City's credit rating has been downgraded
  - City currently seeking private sector partner & solution

Surveying the Muni Broadband Landscape

UTOPIA, UT (total population: ~400,000+)

- **Motivation:** to bring *superfast broadband* to a rural part of the state
- **Key Facts:**
  - Ambitious 16 city coordinated effort to build and open access FTTH network
  - Cost in excess of $500 million
  - UTOPIA has struggled financially for years, running up debts and exploring privatization options
  - To date, 5 original member cities have completely withdrawn from the initiative
  - UTOPIA is still in existence but financial solvency remains elusive

Surveying the Muni Broadband Landscape

Chattanooga, TN (population: 170,000+)

- **Motivation:** to help *rebrand the city and bolster economic development* via a FTTH system deployed by local electric utility (EPB)
- **Key Facts:**
  - Cost of nearly $400M and long term debt in hundreds of millions
  - System is financially solvent in large part due to a one-time $111M in federal grant funding and a $50M loan from EPB's Electric division
  - No actual evidence of direct economic development impacts. Employment growth in the city's information industries (those that depend on Internet connectivity) has remained flat since the network went live.
  - Questions exist re actual costs, existence and extent of cross-subsidization from electric utility, costs borne by non-subscribers, etc.

Surveying the Muni Broadband Landscape

Bristol, VA (population: 17,000+)

- **Motivation:** to *bolster economic development* via a FTTH system deployed by local electric utility
- **Key Facts:**
  - Costs in excess of $130M
  - Once touted by White House and FCC as a success
  - Significant government funding was infused into this GON
  - System struggled financially for years
  - Corruption at the parent utility hastened its demise
  - The system is currently being sold off at a substantial loss to taxpayers
  - Unwinding the failed network has been incredibly difficult

Surveying the Muni Broadband Landscape

Westminster, MD (population: 18,000+)

- **Motivation:** to *improve local broadband options and stimulate economic activity.*

- **Key Facts:**
  - System is a "shared risk" PPP being used to build a FTTH network
  - Initial cost of ~$20M-$30M
  - Still in the deployment phase
  - Evidence of rising costs and delays

Surveying the Muni Broadband Landscape

Ammon, ID (population: 14,000+)

- **Motivation:** *improve local broadband options and stimulate economic activity*

- **Key Facts:**
  - Dark fiber PPP network that is being deployed incrementally
  - Network is still in deployment phase
  - Viability of financing model is uncertain

Key Takeaways

- ***A municipal broadband network is a risky gamble***
  - Not every effort fails, but many struggle to deliver promised benefits
  - Competing with the private sector is extremely difficult, and muni networks often lack the nimbleness to keep up
- ***Those muni systems that fail tend to do so because of the competitive response from incumbent ISPs (and because of overly-optimistic assumptions about the market and competitive landscape)***
  - Many muni networks are deployed under assumptions tied to specific price points, leaving little room for adjustment in response to competitive pressure
- ***Initial demand survey results are often inaccurate / misleading***
  - There have been instances (e.g., Groton, CT; Monticello, MN) where promising survey results did not translate into subscriber gains and the networks failed.

Key Takeaways (cont.)

- ***Deploying a muni network triggers significant opportunity costs for cities***
  - Municipalities already face a number of core challenges, including maintaining basic infrastructure; pension funds; funding schools; etc.
  - A dollar – and/or energy/focus of the city – spent on a municipal network is potentially a dollar not spent elsewhere
- ***There is little data identifying a clear cause-and-effect between gig networks and economic development***
  - Despite claims to the contrary, there is no hard evidence showing that municipal networks themselves generate jobs or otherwise bolster local economic development
- ***Cities possess many levers they can pull to encourage greater private sector investment***
  - Regulatory reforms aimed at streamlining deployment
  - Focus on demand side

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Grand Junction Proposal

- The materials identify a number of risks and questions associated with this project:
    1. It is potentially perilous to "suggest" specific prices, speeds, and offerings
    2. Very optimistic residential take-rate projections – due to the need for the system to be cash flow positive from day one?
    3. Survey results highlight that (1) for many residents, speed is an abstraction and (2) their willingness to pay for the proposed service drops significantly as the speed and price increase. This begs the question: do most residents want – and will they even benefit from – superfast connectivity?
    4. Risks to the city's credit rating are real– the city could be penalized for exercising fiscal prudence by electing not to appropriate funds in support if the network struggles
    5. Is it prudent to lock the city into a network that might not change much over 30 years?

Concluding Thoughts & Ideas

- **Time is your friend.** A thorough, comprehensive, data-based analysis will make for an informed decision. Taking time to fully evaluate will yield the best result.

- The ACLP's **Policy Maker Toolkit** provides a comprehensive framework for your consideration.

- Consider having all materials, proposals, etc. reviewed by a qualified, **independent business analyst** with no stakes in the proposals.

- If the project goes forward, consider including a comprehensive **Indemnification Clause** to protect the City against any losses incurred as a result of third-party performance issues, inaccurate business model assumptions, the failure of the network to become viable, etc.

- Also consider **transparency, auditing and reporting** requirements to ensure that all assets and liabilities are fully accounted for and made available to the public for review.