

City of Greeley Broadband Presentation



City of Greeley Broadband Initiative Timeline



2018 Feasibility Study: Road Ahead Recommendations

1. Broadband Friendly Policies and Ordinances
2. Connect Remaining City Assets to Fiber
3. Discussions with Community Anchor Institutions
4. Create Forum for Public Engagement



City of Greeley Fiber Optic Backbone



1. City backbone includes 45 miles of fiber
2. 95% of the City buildings are connected to City fiber. Will be at 100% by end of 2021. *
3. Traffic system is 90% connected
4. Planned expansion to SCADA, Firestation 6, Traffic signals on the west side by 2021

* Does not include Boyd and Bellevue water treatment plants



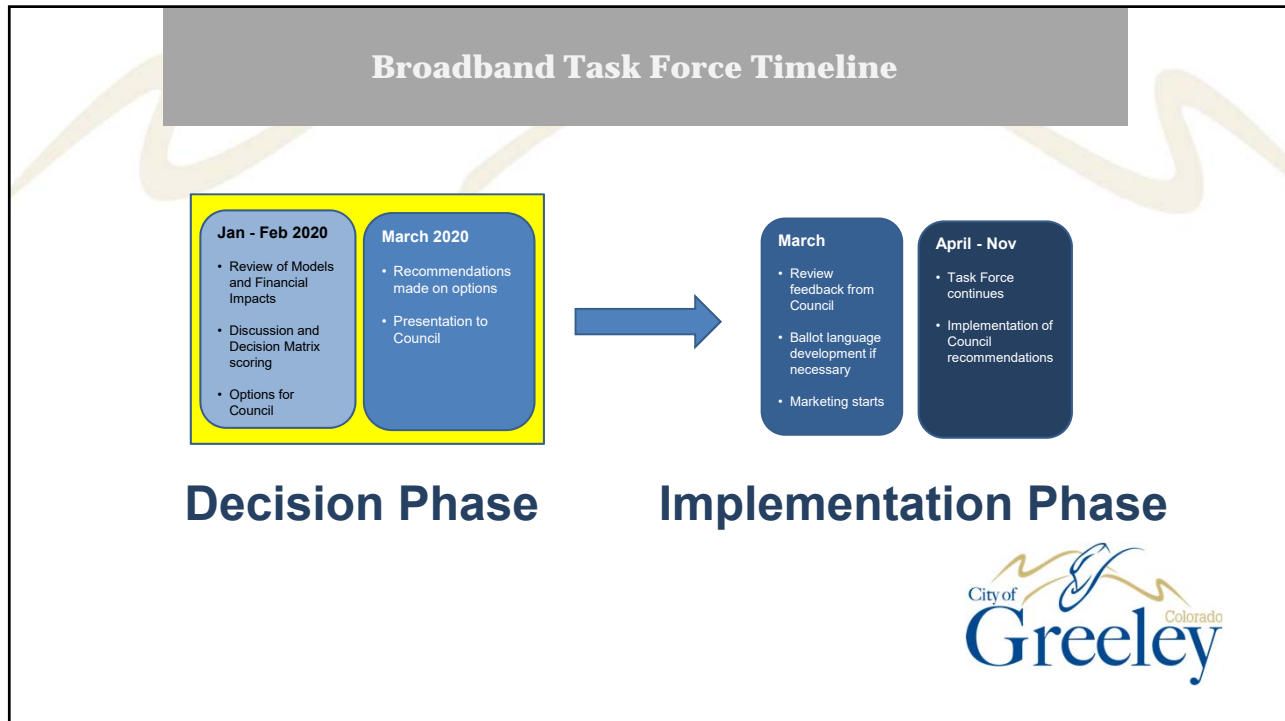
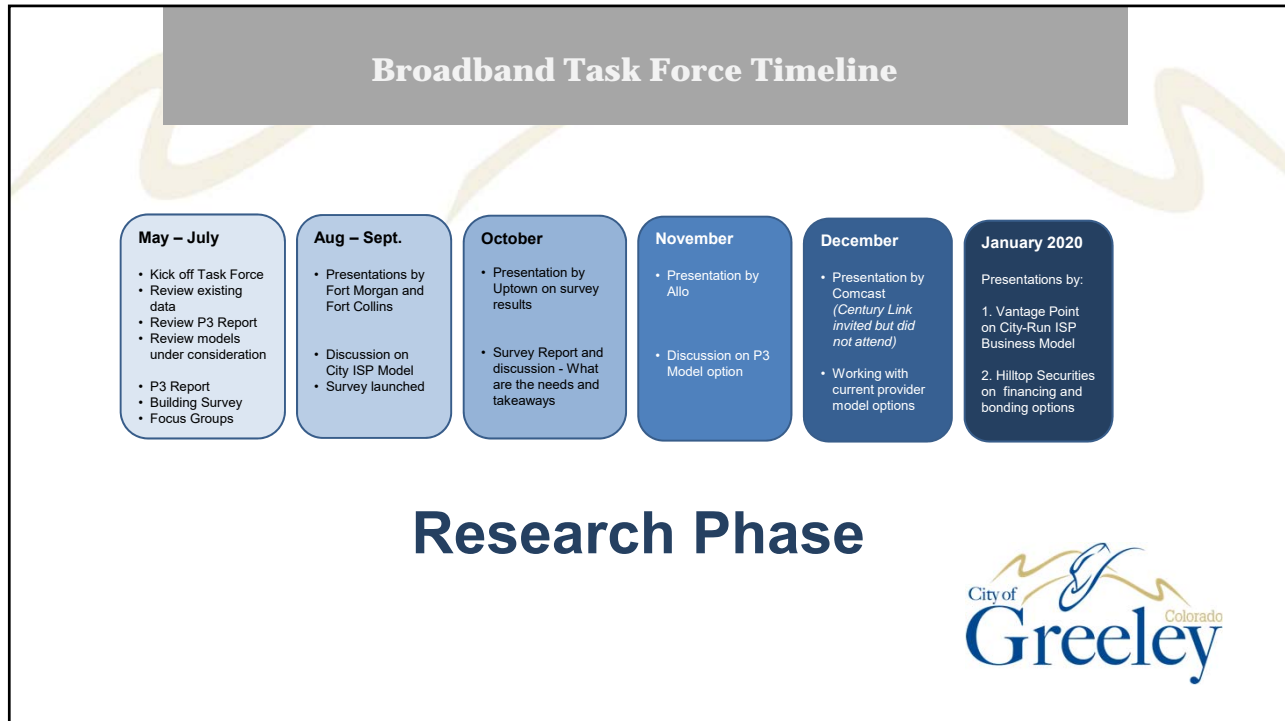
Broadband Task Force



Task Force Mission

Greeley's City Council, business leaders, local institutions and city management recognize the increasing importance of how high-speed connectivity affects our community. The purpose of this committee is to better understand the community's current and future expectations regarding residential, business and governments' access to the internet. We will use that information to define a strategy for how these expectations and needs can best be met.





Models Evaluated by the Task Force



- Overall, 85% of households use Internet at home, (78% for households earning under \$50k)
- Internet service satisfaction levels benchmark below average.
 - Lower pricing = predominant need for improvement with current Internet service
 - Speed is important for those most likely to switch
- Forecasted residential take rates of 32% (Internet) and 14% (voice) with Gig Internet at \$70
- The City is the preferred provider, but by a narrower margin than other studies
- A majority of households support the issuance of a revenue bond to fund construction

Market Survey Key Findings



Overview of Models

City-Run ISP	Public-Private Partnership (P3)	Work with Current Providers	Establish a Grant Program	Maintain Status Quo
The City would finance a FTTP Network throughout the City. The City would own and operate the system.	The City would issue an RFP to develop a P3 with a private provider. Terms and Conditions TBD.	The City would work with Century Link and Comcast to better improve access and services. This could include new programs.	The City would set-aside money to establish one or more grant programs to help close the digital divide.	The City would not take any new action.



Municipal Network Options

There are two main types of municipal networks that serve end-users:

- Middle-Mile (City Backbone)
 - connections to facilities and/or anchor institutions
- Last-Mile (retail model)
 - Connections to facilities and/or anchor institutions
 - And connections to homes and residents

Technology is typically fiber and may have some wireless components as well



City-Run ISP

Operational Overview

- Data Network Requirements
- Connectivity to the Outside World
- Administrative Requirements (back office)
- Staffing Requirements (technicians, customer service, engineering, marketing, etc.)
- Regulatory and Reporting Requirements



10 Year Financial Feasibility Study

- Utilized the estimates from NEOConnect Study
- 32% Penetration Rate - Uptown Services Market Study
- Total Capital Expenditure = \$120 Million (5-year build)

Assumptions and Findings

- Only one offering - 1 Gigabit at \$70.00
- Operating Expenses not including depreciation = \$6 Million
- Cumulative earnings of \$-33,468,691 over ten years
- Return on Investment = - 27.83%
- Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA) averages \$3,034,424 per year over ten years
- 20 Year Debt Amortization
- 2.5% interest rate in year 1 with increase of .25% each following year

City-Run ISP

Financial Overview



City-Run ISP –

Why Not Viable in Greeley

Primary reason - Greeley does not have a municipal electric system

- Impacts cost to deploy network
- Operating systems are not in place to absorb broadband system administrative operations
- Financing options are limited



- Cities have operated their own electric utilities for decades and all of their utilities are an established Enterprise as defined by TABOR.
- Issued enterprise utility revenue bonds to fund broadband networks which are secured by revenues from both the electric and broadband systems
- Due to electric systems - bonds on all four municipalities received investment grade ratings which helped reduce the risk profile of the bonds for a better rate.

Comparison to:

**Fort Collins,
Fort Morgan, Loveland
and Longmont**



Financing Options for Greeley

Projected revenues from the broadband system would not be sufficient to solely support an issuance of revenue bonds to fully fund the entire project.

	Steps Required?	Challenges of Financing	Option Potential Risks
Utility Revenue Bonds	Potentially needed to expand definition of utility	Potential charter issues and legal challenges by existing bondholders; may be challenging to meet the additional bonds test	This may place a burden on rate payers to support the broadband network and to fund water and wastewater improvements in the future
General Obligation Bonds	Voter Approval for Tax Increase and Debt Authorization	Property tax owners that do not subscribe will be paying debt service for a network they are not using	This may limit the City's ability to utilize GO Bonds in the future for projects that are more suitable for the financing
Sales Tax Revenue Bonds	Voter Approval for Tax Increase and Debt Authorization	In addition to approving a sales tax increase, voters would also need to authorize the issuance of debt (two questions)	If sales tax revenues decline this could place a burden on the City's general operations if revenues are not sufficient to pay debt service from the broadband system
Certificates of Participation	Need to identify leased property equivalent to the amount financed	Need to determine if General Fund can support all or a portion of projected debt service payments	If the broadband system is not successful it will strain the City's General Fund and operations
Pay-As-You Go/ Cash	None The City can only build out the system as funds become available	If significant funds are not available upfront to put in the base-level infrastructure, the City may not have a usable asset	

The City could work with a provider to build a FTTP network. Potential model options:

- City provides resources and in-kind assistance; provider finances and invests in 100% of network.
- City builds out backbone. Provider invests in the rest.
- City builds out backbone/middle-mile plus all roads. Provider invests in drops to premise.
- Provider builds out entire network. Possible City buy-back over 20+ year period.

Details, Terms and Conditions would depend on proposals submitted through RFP Process and contract negotiation.

P3 Basic Options



Benefits of a P3

The City already has an interested provider in Allo. This is a rare opportunity.

- Lower financial risk than a City-run network
- A provider has experience owning and operating networks
- Provider could deploy a network more cost effectively and quicker
- A provider should keep up to date on new innovations and update technology as needed.
- A new provider could bring down pricing and increase competition.



Task Force Presentation



Task Force Recommendation

Model	Priority Ranking
Public Private Partnership (P3)	1 st
Work with current providers to improve service/price/accessibility	2 nd
Grant Program	3 rd
City-run ISP	4 th
Maintain Status Quo	5 th



Questions for Council

1. Does City Council have any questions regarding the review undertaken by the Broadband Task Force?
2. Does City Council want staff or the Broadband Task Force to conduct further review or consideration of anything additional?
3. Based on the recommendation, does the City Council support directing staff to move forward with the development and release of a Request for Proposals to seek proposals for a Public-Private Partnership?
4. Does the City Council support shifting the Broadband Task Force to a role of advisory committee to aid in providing community insight and feedback on future recommendations around this model?

