

Introducing Fort Collins Connexion

Erin Shanley, Broadband Marketing Manager | 10/6/21



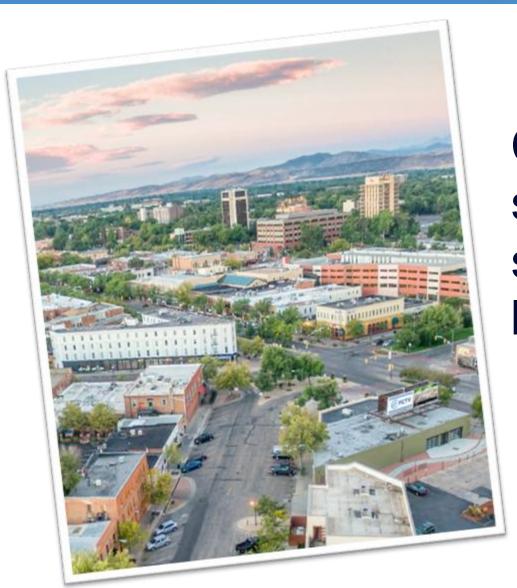


Internet access is no longer a luxury for a household or business, it is a necessity.

There is a lack of fair, affordable high-speed Internet connectivity for all residents and businesses in the City of Fort Collins.







Connexion provides gigabitspeed internet, phone and TV service to the residents and businesses in Fort Collins.







Fiber is Fast

Transmitting data at the speed of light allows content to be uploaded and downloaded fast and simultaneously.



Better Bandwidth

Fiber optics have more bandwidth available today and will be expanded upon in the future without significant changes to the fiber types being used. That's why they are said to be "future proof."



Low Latency

Our network is optimized to process a very high volume of data with minimal delay. This is critical for local businesses whose operations require near real-time access to rapidly changing data.



Cost Effective

Low operating expenditure, long lived, resilient and smooth migration path to next generation.



Eco Friendly

Fiber optics have the lowest power consumption per megabit per second!



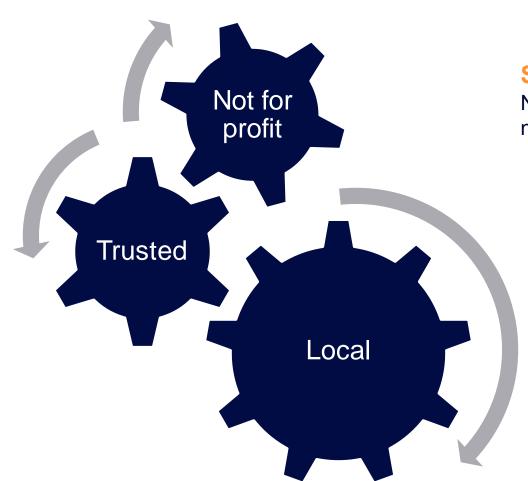


CUSTOMER SATISFACTION

Value of the City and exemplified by all of us.

100% LOCAL

Connecting community to the people and things that matter most.



SERVICE DRIVEN

Need to cover costs but profit is not our motive.

FUTURE-PROOF SERVICE

Committed to ensuring that every resident/business has the option and availability of our service.





The Future – City as a Platform





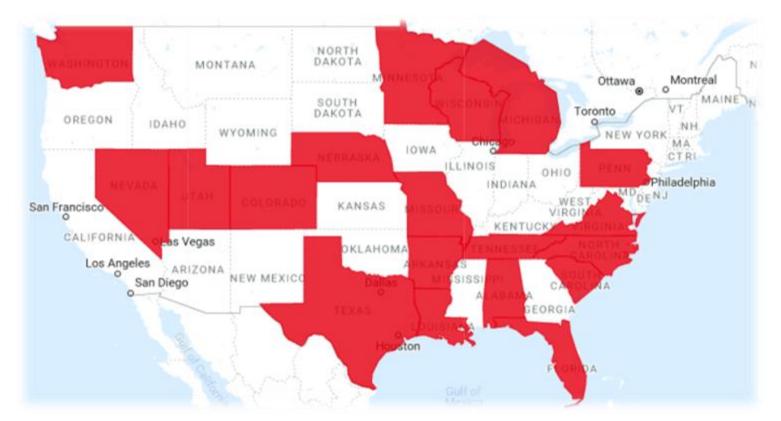


About Municipal Broadband

• These networks have sprung up across the US as a direct reflection of the country's growing frustration with sub-par broadband speeds, high prices, and poor customer service from local incumbents.

 They've also emerged despite the fact that Internet Service Providers (ISP) lobbyists have convinced more than 20 states to pass protectionist laws hampering local efforts to build such regional

networks.



2014

Community outreach prioritizes broadband in the City Budget for Outcome process

- GigU
- Google

2015

Magellan hired

to benchmark communities case studies

NOVEMBER

SB152 overturned; passed at 83%

2016

Uptown Services LLC hired to complete feasibility analysis

MARCH

Statistically-valid survey conducted for market demand

APRIL - JUNE

Uptown Services and City create financial feasibility, begin modeling

JUNE - NOVEMBER

Community Outreach conducted

AUGUST

Request for Information issued to seek 3rd Party alternatives; Axia selected in October 2016

NOVEMBER

1st ever Telephone Town Hall with City Manager, Mayor and CFO

DECEMBER

Narrowed to two options – 3rd Party alternative and retail

2017

JANUARY - APRIL

3rd Party alternative Due Diligence

APRIL

Axia unable to move forward with the City

MAY

Council direction to move forward with business plan for municipal broadband and issue <u>Request for Proposals</u> for 3rd Party alternative

JULY

Broadband Business Plan is completed

AUGUST

Council to review/adopt ballot language for November charter change

NOVEMBER

Voters approve a ballot measure to add telecommunication services to the Utility Charter and a bond up to \$150M to build out the network by 57%.

2018

JANUARY

Council gave direction to move forward with building and implementing high speed next-generation broadband to the entire community.

FEBRUARY -MARCH

Issued request for proposals (RFPs) for engineering, design, equipment and marketing. In addition, the City will allocate funds to launch the startup.

MAY

City Council Authorizes bonds

JULY

Fort Collins Connexion unveiled

Connexion Team announced

NOVEMBER

Construction begins

2017 DECEMBER



2018

DECEMBER

2019

2020

2021



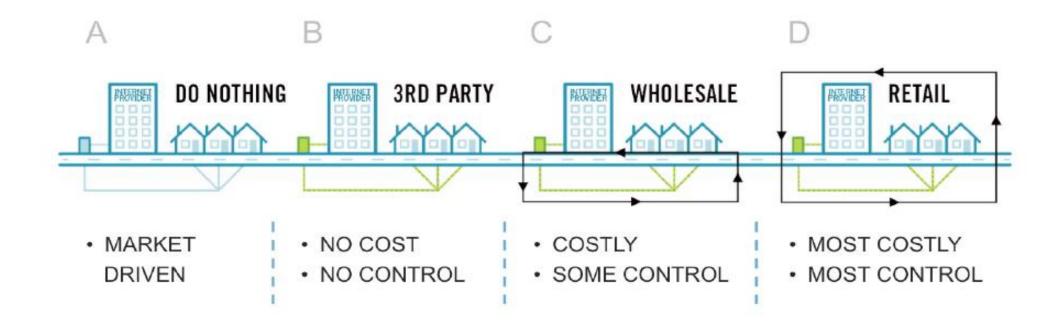
2022

Construction First customer begins service Continued system buildout and increased customer availability

Design, planning and permitting



- The City held discussions with each of the Fort Collins major incumbents.
- Evaluated peer cities had conversations/visit with Cities who had successful and unsuccessful broadband deployments
- Staff explored a number of solutions and developed the following four alternatives & surveyed citizens for preference.



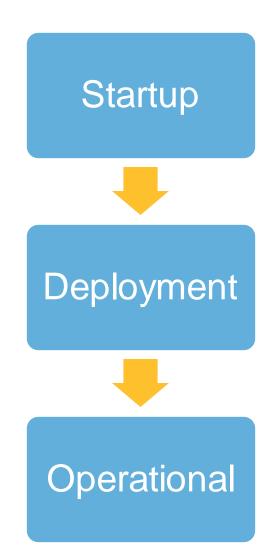


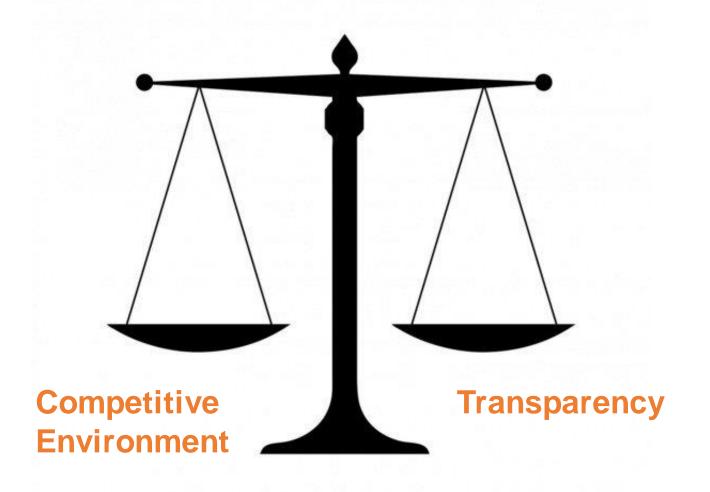
- As part of the investigation, staff conducted phone discussions and visited with several communities that have launched a broadband effort.
- City also evaluated how 25 peer communities are working to stay connected.
- Consulting firms were hired to analyze business models, conduct surveys, evaluate and estimate construction costs, estimate market take rates and develop a financial model for a full build-out fiber network.
- From 2016 through early 2017, staff explored both the 3rd Party/Partnership model and the Retail model.
- Ultimately the City made the decision to move forward with a City-owned and operated FTTP internet service business.





Communications Strategy & Transparency















- Construction Metrics:
 - Miles of Fiber
 - Completed Fiber Areas
 - Vault and Flowerpots
- Forecasted vs. Actual:
 - Fiber Pulled
 - Fiber Areas Complete
- Construction Notifications
- Service Availability
- Postcards to income qualified customers





- Take Rate / Market Share
- Available service areas
- Communication plan for fiber areas exceeding our 9-month standard



Deployment:

- Specific timelines
- New areas
- MDU/commercial entry & new builds
- Marketing strategy
- Pricing strategy
- Any other matters allowed under Colorado law





30%

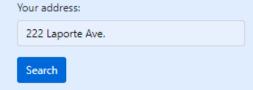
As of 9/3/2021. Take Rate of residential neighborhoods released for a minimum of 90 days.





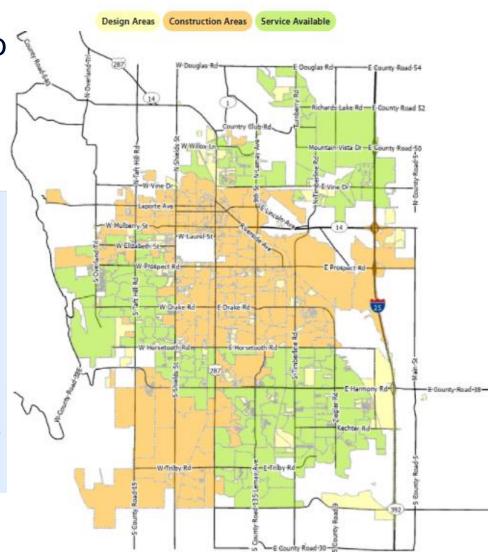
- Real Time Construction Status:
 - In Design, Under Construction & Service Availab
- Live map display
- Sign up to be notified when service is available

The City is working with Atlantic Engineering Group (AEG) to build the Connexion fiber network throughout Fort Collins. This project is a Design-Build process. This means there are multiple processes happening simultaneously. Use the form below to check the progress at your location.



222 LAPORTE AVE, 80521 - In Construction

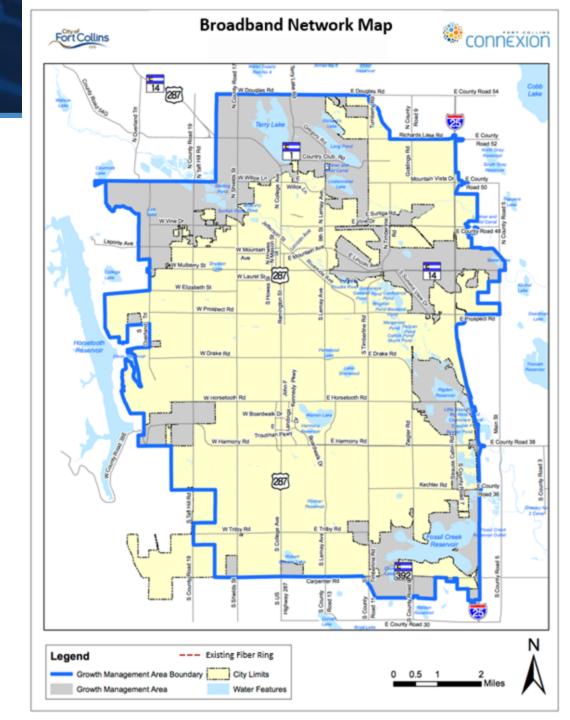
This is the building phase of the process. Once you see construction in your neighborhood and receive a door hanger announcing construction, service is typically available within 6-9 months. For any construction-related questions or concerns email fcresidents@aeg.cc or call 970-207-7873. If you would like to be notified when service is available at your address, please complete the service availability notification form.







- Connexion is providing gigabit speeds to all residents and businesses within the boundaries of the city.
- Connexion is partnering with Larimer County and Loveland Pulse to provide high speed internet to surrounding communities like Timnath and Wellington.







- Provide fiber service in the fastest and the most efficient way possible.
- Rolling design build design & construction.
- Building in different locations at the same time.
- Continue to release new neighborhoods for service weekly & sign-up customers daily.
- Completion in Q4 2022.

https://www.fcgov.com/connexion/reports







Atlantic Engineering Group (AEG)



Four Construction Aspects:

- Boring
- Vaults
- Pulling Fiber
- Splicing Fiber

















What Do Cables Look Like?



Type: Copper conductor

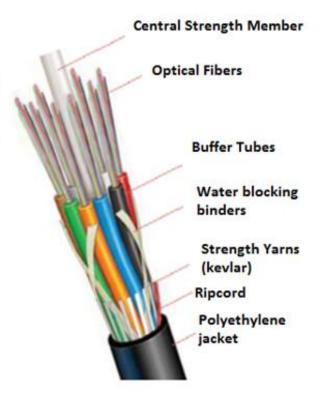
Applications: Typical to phone and campus

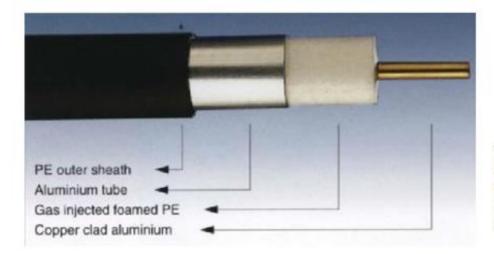
style networks.

Broadband solutions: DSL, VDSL, G.Fast Speeds: Today up to 40mbs. Reliably up to 500mbs within 250m of fiber connected

cabinet.

Type: Fiber Optic cable
Applications: Typical to high
speed networks both long
and short haul.
Broadband solutions: GPON,
XGS-PON, TWDM-PON
Speeds: Today up to 40Gig,
limits unknown.





Type: Coax

Applications: CATV networks, microwave signals

Broadband solutions: HFC (hybrid fiber coax) Docsis 3.1 (Data

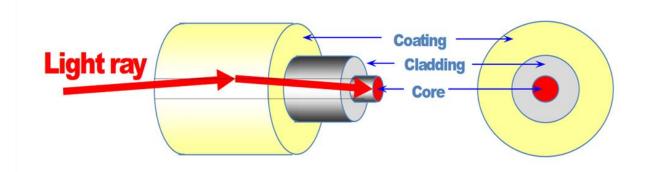
over cable service interface specification)

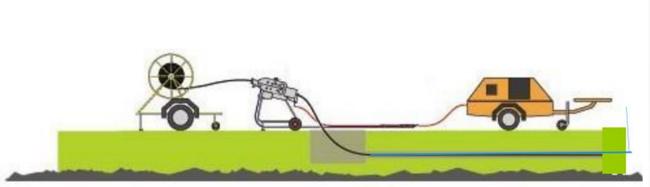
Speeds: Today up to 1Gig, theoretically up to 10Gig

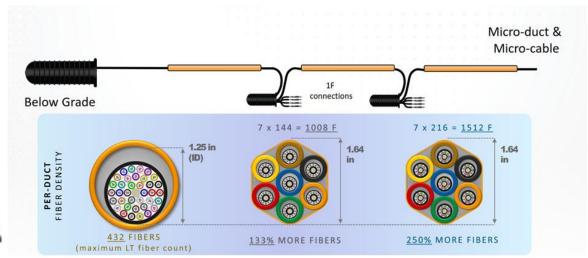


























1 Gigabit Speed

\$59.95

a month

- · Best internet value
- 1 Gbps upload & download speed
- · No contract required
- No data caps
- (10) email accounts included
- Security software license included
- · Free installation
- 24/7 local technical support

No tax on internet service

10 Gigabit Speed

\$299.95

a month

- · The fastest internet ever
- 10 Gbps upload & download speed
- · No contract required
- No data caps
- (10) email accounts included
- Security software license included
- 24/7 local technical support

No tax on internet service

- ✓ No contracts
- ✓ No installation fees
- ✓ No data caps
- ✓ Symmetrical speeds (1 Gbps up & down)
- √ 100% fiber to the home
- √ 24/7 local technical support



Your Choice in WIFI Coverage:

Bring your own wireless router or have WIFI enabled and managed for only \$9.95/month.





WATCH HOW YOU WANT, WHEN YOU WANT



Enjoy Connexion TV with the App

Download the Connexion TV App from the Apple, Google and Amazon App store. Need help? Watch our quick set up guide videos.



Connexion TV Set Top Box

If you prefer a more traditional cable viewing experience, we offer a set top box option for only \$9.95/month.



Cloud DVR

Enjoy 100 hours* of recorded content wherever you are with the benefits of the Cloud.



Multi-streaming

Watch up to five different shows* on five different devices, so no one has to miss out on the fun.



Replay Feature

Watch previously aired movies and shows for up to 72 hours after original air time.



Video on Demand

Thousands of your favorite shows and movies any time with Connexion TV On Demand.



HBO Starz WWIME.





Premium Channel Pricing							
НВО	Showtime	Cinemax	TMC	Starz	Starz Encore	Sports Pack	Spanish Language
\$15.00	\$12.00	\$12.00	\$12.00	\$8.95	\$5.00	\$10.00	\$5.00







Digital equity requires acknowledging that some populations need more support than others in order to get online.

Addressing affordability, equipment barriers, digital literacy, and/or technical support are key success factors.

Digital Inclusion | Digital Literacy | Digital Access:

Equipment, Availability, Price



- \$19.95/month (includes wifi)
 - Connexion made whole through PILOT (Payment in Lieu of Taxes)
- Residents who participate in a City income-qualified program and live in an area where Connexion service is currently available are eligible for discounted Connexion internet service and will receive a mailer once Connexion service is available in their neighborhood.
- Code for America's Community Fellowship program has employed 3 technologists to work in close collaboration with the City through September 2021 to develop the online application and income verification portal which will be available in English and Spanish.
- The online application will serve as a footprint for the future development of a single point of entry to all City income qualified programs.





- Net Neutrality
- Privacy & Security
- Future-Proof Network
- Competitive Services

Commitment is an act, not a word.

Jean-Paul Sartre









