**CITY OF ELLENSBURG**
**AGENDA**
**Council Chambers**
**Thursday, June 16, 2022**
**3:30 PM - Utility Advisory Committee**

## 1. CALL TO ORDER

## 2. ROLL CALL

## 3. APPROVAL OF MINUTES

3.A Approve minutes - May 19, 2022 regular meeting minutes
UAC Minutes 5-19-22.docx

## 4. APPROVAL OF CONSENT AGENDA

Consent items have been distributed to committee members in advance for study and will be enacted by one motion. If separate discussion is desired on an item, that item may be removed from the Consent Agenda and placed on the Regular Agenda at the request of a committee member or at the request of a member of the public with concurrence of a committee member.

## 5. CORRESPONDENCE AND CITIZEN COMMENTS ON NON-AGENDA ITEMS

Time is set aside each meeting to allow citizens to address the Utility Advisory Committee on city utility issues that are not on the agenda. Please limit remarks to three minutes. The Committee will not take action when the issue is first raised, but may place the issue on a future agenda. Citizen comment on items on the agenda is also welcome. Please let the chair know you wish to speak and then wait to be recognized.

## 6. TELECOMMUNICATIONS UTILITY DISCUSSION ITEMS

6.A Telecommunications Issues and Updates
UAC June 2022 - Telecom Issues & Updates updated.docx

6.B Ellensburg Broadband Mapping and Strategic Plan
Ellensburg Broadband Mapping and Strategic Plan

## 7. ELECTRIC, NATURAL GAS, WATER, WASTEWATER, STORMWATER UTILITY DISCUSSION ITEMS

7.A Residential Natural Gas Extension Policy Review

## 8. INFORMATIONAL ITEMS

8.A Public Works & Utilities Issues and Updates
UAC June 2022 Public Works & Utilities Issues Update.docx

## 9. NEXT MEETING

9.A July 21, 2022 at 3:30 pm

## 10. ADJOURNMENT

**CITY OF ELLENSBURG** — **Utility Advisory Committee**
**Date of Meeting** — **May 19, 2022**
**Time of Meeting** — **3:30 PM**
**Place of Meeting** — **Council Chambers**

## 1. CALL TO ORDER

Chairperson Goodloe called the meeting to order at 3:30 pm.

## 2. ROLL CALL

Members present: Nancy Goodloe, Chair; Ed Barry, Vice Chair; Nancy Lillquist, City Council; Nate Sitton, City Utility Customer; Shane Scott, CWU; Bryan Clark, KITTCOM.

Also present: Ryan Lyyski, Public Works & Utilities Director; Darren Larsen, Assistant Utilities Director; Kim Bowie, Operations Analyst; Darin Yusi, Gas Engineer; Terry Weiner, City Attorney; Buddy Stanavich, Power & Gas Manager; Ben Faubion, IT.

One member of the public and others present remotely via Zoom.

## 3. APPROVAL OF MINUTES

3.A. Approve minutes - April 21, 2022 regular meeting minutes

Committee member Barry moved to approve the minutes. **Motion approved. 5-0**

## 4. APPROVAL OF CONSENT AGENDA

No items.

## 5. CORRESPONDENCE AND CITIZEN COMMENTS ON NON-AGENDA ITEMS

Fred Padjen spoke regarding natural gas building code requirements.

## 6. TELECOMMUNICATIONS UTILITY DISCUSSION ITEMS

6.A. Telecommunications Issues and Updates

Ben Faubion gave an update on telecommunications. City Attorney, Terry Weiner, spoke further about the NoaNet broadband report and answered questions the Committee had.

*Telecommunication members are allowed to vote on telecommunication items only per ECC 1.50.040*

## 7. ELECTRIC, NATURAL GAS, WATER, WASTEWATER, STORMWATER UTILITY DISCUSSION ITEMS

7.A. City of Ellensburg Sustainability Plan - Focus on Meeting State Energy Requirements Plan

Public Works & Utilities Director, Ryan Lyyski, presented a draft version of the request for qualifications to find a qualifying consultant to help the City develop a Sustainability Plan.

David Dunbar spoke, via virtual appearance, concerning the timeline for gas reductions within the Sustainability Plan.

Committee member Barry moved to direct staff to move forward with the RFQ. **Motion approved. 5-0**

## 8. INFORMATIONAL ITEMS

8.A. Building Energy Code Update

Building Official, Robert Doobvosky, compared previous three-year building code cycles to future requirements in upcoming code cycles.

8.B. Public Works & Utilities Issues and Updates

Staff shared key points on departmental issues and updates. Ryan Lyyski, Director of Public Works & Utilities, mentioned June 22 is Public Works' Touch-a-Truck event.

## 9. NEXT MEETING

9.A. June 16, 2022 at 3:30 pm

## 10. ADJOURNMENT

With no further discussion, the meeting adjourned at 4:23 pm.

Kim Bowie
Recording Secretary
**Drafted: 5/20/2022**
**Approved:**

# Ellensburg Utility Advisory Committee
## Telecommunication Issues and Updates
June 16th, 2022

- Continued working with Ellensburg School District to relocate the Lincoln Elementary School Fiber as part of the remodel.
- We have received a draft of the NoaNet Broadband Report.

# AGENDA REPORT

**Meeting Date:** June 16, 2022

**Agenda Subject:** Ellensburg Broadband Mapping and Strategic Plan

**Submitted by:** Ben Faubion Information Technology

**Recommended Action or Motion:** Staff is providing an informational update to the UAC with no action requested.

**Background/Summary:** In 2015 CTC conducted a Telecom Utility Strategic Plan. In the Telecom Utility Strategic Plan broadband service was evaluated and at that time the recommendation was to pursue niche markets to support the communities need for broadband. The recommendation was not to pursue a full retail broadband service as it would not be financially feasible.

July 2021 NoaNet and the City began a Broadband study to evaluate if building out a community broadband network project was feasible. The study conducted mapping to identify served, underserved, and barriers to broadband access. The study also conducted modeling to provide the city a better understanding of the financial obligations involved with open access and full retail broadband.

**Previous Council Action:** Two study sessions were conducted with City Council November 15, 2021 and March 7, 2022 to review the study findings. The feedback from Council was used by NoaNet and staff to draft the Broadband Mapping and Strategic Plan.

**Analysis:** The Ellensburg Broadband Mapping and Strategic Plan concludes that open access or full end-user Fiber-to-the-home solutions are economically infeasible. Rather, the Plan recommends the City pursue the excess capacity model as opportunities emerge that offer a reasonable return on investment that support the needs of the city

**Financial Impact:** No Fiscal Impact

**Attachments:**
Ellensburg Broadband Mapping and Strategic Plan

# CITY OF ELLENSBURG BROADBAND MAPPING AND STRATEGIC PLAN

Prepared by

June 9, 2022

## CONTENTS

# EXECUTIVE SUMMARY

## SCOPE AND PURPOSE

The City of Ellensburg Broadband Mapping and Business Assessment is intended to guide the development of broadband services in the City of Ellensburg to achieve a vision shared by city officials, residents, and local businesses. This effort expanded upon the objectives of the original buildout and commercial business district pilot project and mapped the City's broadband environment to capture broadband accessibility, affordability, reliability, digital equity, and literacy. This allowed the City's role in delivering broadband to the community, including business and residential solutions, to be evaluated objectively and establish a long-term strategic vision.

The objectives outlined at the onset of this project, which are responded to in this document, are as follows:

1. Expand upon the objectives of the original buildout and commercial business district pilot project.
2. Map the broadband environment of the City to capture broadband accessibility, affordability, reliability, and digital equity and literacy.
3. Collaborate with Kittitas County and the PUD towards a county-wide solution for our communities' broadband needs.
4. Evaluate the City's role in delivering broadband to the community, including business and residential solutions.
5. Create projects (service zones) that can be categorized and prioritized as part of a long-term vision towards a city-wide broadband network.
6. Establish a Long-Term Strategic Vision

This assessment can serve as a guiding document to outline the future steps of network deployment and broadband management by the City of Ellensburg.

## SUMMARY OF EFFORT

A community-wide online survey launched in conjunction with Kittitas PUD to develop a dataset of community-led feedback on current broadband needs, services, opinions, and speed tests. To ensure individuals without access to the Internet or technology could reach the survey, paper surveys were also distributed to community groups, available at the City Offices and critical community agencies that serve underserved populations. Additionally, a phone line was available for community members who could not access the survey via a web-enabled resource.

It was determined that the survey results showed that there was sufficient need to warrant continued exploration. Network solutions were developed and costs to deploy city-wide infrastructure to bring fiber services to the entire community were developed. Business philosophies were discussed, and various methodologies and partnerships were explored.

Individual meetings were held with several area service providers that overall expressed moderate interest, including:

- iFiber Communications
- Charter Communications
- Central Connect
- Blue Span
- Inland Networks
- Consolidated Communications

Four business case planning concepts were reviewed as possible solutions for this market: open access, public-private partnerships, excess capacity, and full end-user retail.

1. Open Access-
    a. A lit open access fiber-to-the-home (FTTH) broadband network means that the network is open to multiple service providers all the way to the home or business, not just to their town or neighborhood. Lit open access FTTH networks have all the required equipment to deliver broadband services included in them.
2. Public Private Partnership-
    a. A public private partnership in broadband means that the county or municipality builds community support, identifies its needs and offers its resources to the broadband provider to make broadband deployment more financially attractive to the provider, such as going out for grants or loans to help build the infrastructure.
3. Excess Capacity-
    a. A network that is built but has excess data capacity, such as a well-provisioned office or data center, which may not be using all of its throughput capacity all of the time – sells some of that extra unused network bandwidth space to others for their use.
4. Full End-User Retail-
    a. Offering consumer internet services products for sale directly to consumers.

All operating models explored initially and were then narrowed down from the original to open access and full retail for full analysis after there was not an apparent and clear private partner for a PPP, and excess capacity is the current model in use by the city. Throughout this effort, the city has maintained close collaboration with Kittitas County and Kittitas PUD to ensure all actions would be transparent and in line with the community's needs.

## FINDINGS SUMMARY

Services currently being offered by incumbent service providers generally exceed the FCC definition of broadband which is 25/3mbps. The average speed test completed in our survey yielded a result of 89/26mbps. However, the need for capacity at residential premises rises steeply over time, with that trend expected to continue.

While the results obtained through the study are above the FCC threshold, they are well below the Washington State broadband goal of 150/150mbps for every household by the year 2028. Less than 1% of test results yielded speeds that would pass this metric. If a continued investment is not made into the existing infrastructure, the City and UGA will quickly fall behind the curve and become inadequately serviced.

One of indicator of whether a network will be adequately maintained and upgraded over time is if there is free-market competition among providers. This environment is not without competition. Thirty-nine percent of survey respondents reported that their location was only serviced by one ISP. 47% of respondents reported having access to two service providers, and 15% said three or more providers serve their area. The results of the survey are explored in-depth in the survey results section of this document.

Most of the broadband service is provided by two ISP's: Charter/Spectrum and Consolidated Communications, Inc. (CCI). While there are other providers in the community, they are mostly resellers of these two providers. Charter/Spectrum currently provides residential broadband speeds of up to 100 mbps, CCI's service is limited to DSL speeds, which are significantly lower. However, CCI has undertaken a significant build-out of new fiber service throughout Ellensburg, and reportedly offer speeds of up to 1 GB along with reduced pricing for low-income households.

The total costs associated with a citywide deployment of the infrastructure necessary to bring fiber services city-wide is approximately $17 million. As a non-rural area with many residents exceeding the FCC's threshold of broadband, the area is a candidate for the current funding available for broadband infrastructure expansion projects. Ellensburg would not be qualified as an unserved community by most funding authorities, but would be considered an underserved one, making outside funding such as grant and loan programs challenging. There are currently many communities throughout the state likely to be awarded grant points for metrics such as being rural, financially distressed, and only having access to sub 25/3 services, that this community would not be awarded.

City officials and staff currently recognize the importance of the existing fiber-optic system to the commercial business district's city services, education, and economic development, evidenced by the current infrastructure deployed, which services anchor institutions such as Central Washington University, municipal uses, and the core downtown business district. It also provides a core network that has greatly benefited the deployments modeled in this document.

**The competitive environment, including the new CCI broadband fiber build-out, makes the likelihood of the City investing in an open access or full end-user FTTH solutions economically infeasible. For reasons stated above, it is also doubtful the City will qualify for most of the grant offerings currently available, making a public-private partnership also unlikely. Therefore, given the current competitive and economic environment, and the City's already existing fiber network, it is well-positioned to take advantage of the excess capacity model. This will allow the City to strategically budget for and invest in network expansion as capital projects develop, especially those associated with potential grant opportunities targeted at broadband service.**

## HISTORICAL EFFORTS

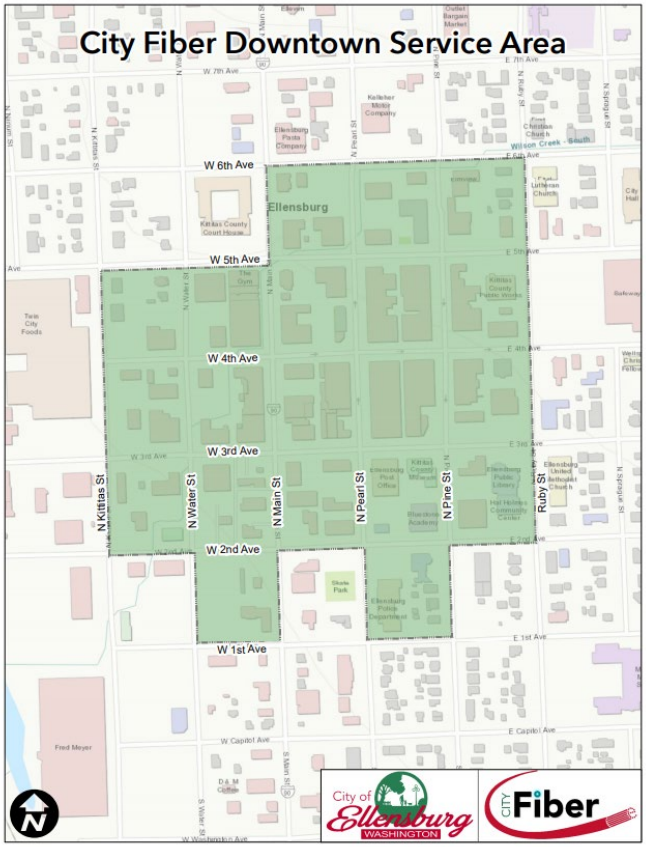
### BROADBAND FOR CITY SERVICES

The City of Ellensburg has been providing fiber services to the local municipality and other public agencies in the community since 1999 and began offering internet service in 2017. City Fiber operates on a break-even basis, and all savings are reinvested back into the network.

City Fiber is the retail name of the Internet Services owned by the people of Ellensburg and operated as a public service by the City of Ellensburg. The City fiber network consists of fiber optic cable which can deliver dark fiber and lit network services to a myriad of different anchor institutions, as well as supply internal network services to the city. This network has been used to serve the university, fire and rescue, library, public safety, small to medium business, and other mission critical city services, just to name a few.

### DOWNTOWN PILOT PROJECT

The City has improved the reliability and speed of internet services in Ellensburg by constructing a fiber optic-based internet network downtown. This network utilizes the latest technologies in fiber optic networking to bring the anchor institutions and downtown businesses of Ellensburg ultra-fast Internet at an affordable price. City Fiber is also an Open Access Network, so ISPs can lease fiber from the City to extend services to anchor institutions and residential neighborhoods and provide competitive services. Maintenance, monitoring, and operations are outsourced so the City can maintain a minimal staff to support this effort.



## BROADBAND MAPPING DATA

### SURVEY RESULTS

In mid-August of 2021, the City of Ellensburg launched a county-wide community survey coordinated with Kittitas PUD. The survey was available to any resident or business within Kittitas County for eight weeks until we closed the survey portal in mid-October.


The survey explored many aspects of digital inclusion – accessibility, affordability, and various data points that could potentially support future grant opportunities such as local farms, home-based businesses, and homes with students residing within them.

The survey was primarily available via an online portal. Community outreach for this web portal was engaged through social media, Be Heard EBurg, customer billing inserts, direct business outreach, and public community meetings.

To ensure individuals without access to the Internet or technology could reach the survey, paper surveys were also distributed to community groups, were available at the City Offices and critical community agencies that serve underserved populations. Additionally, a phone line was available for community members who could not access the survey via a web-enabled resource.

***949 SURVEYS WERE COMPLETED IN KITTITAS COUNTY, 333 OF WHICH WERE SPECIFICALLY WITHIN THE CITY OF ELLENSBURG CITY AND URBAN GROWTH AREA LIMITS.***

For the Ellensburg-specific responses, 278 were received from single-family homes, 46 from multi-unit housing such as apartments or condominiums, and 9 were from businesses.

We divided the speed test received through the survey into three categories of speeds relating to the governing organization's definitions of broadband. The FCC updated its definition of broadband in 2015 to 25mbps download and 3mbps upload as broadband. While federal programs have begun utilizing higher benchmarks such as 100/20mbps, 25/3 is the current official FCC broadband definition as of the time of this report. The other category utilized in our assessment is Washington State's stated broadband goal for Washington State. By the year 2028, Washington State leadership has aimed to, at minimum, see every household have access to broadband speeds of 150mbps download and 150mbps upload symmetrical broadband. This goal is even higher for businesses and anchor institutions at 1gigabit per second symmetrical services.

The City of Ellensburg is not far from being considered served for the FCC definition. 62% of the population have download speeds greater than 25mbps, and 84% are testing at upload speeds greater than 3mbps.

The speed tests were not as promising for the Washington State goal of 150/150. Of the speed tests completed, only 10% of the speeds recorded meet Washington State's 2028 broadband goal of 150mbps download capacity. Only 1% of tests met Washington's goal for upload speed of 150 mbps.

Maps of key survey results are included in this document as Appendix A.

An Interactive map of all results and other metrics is available at:
https://noanet.maps.arcgis.com/apps/webappviewer/index.html?id=3ba89edefaac41eeaa99fb860d2c7d3a

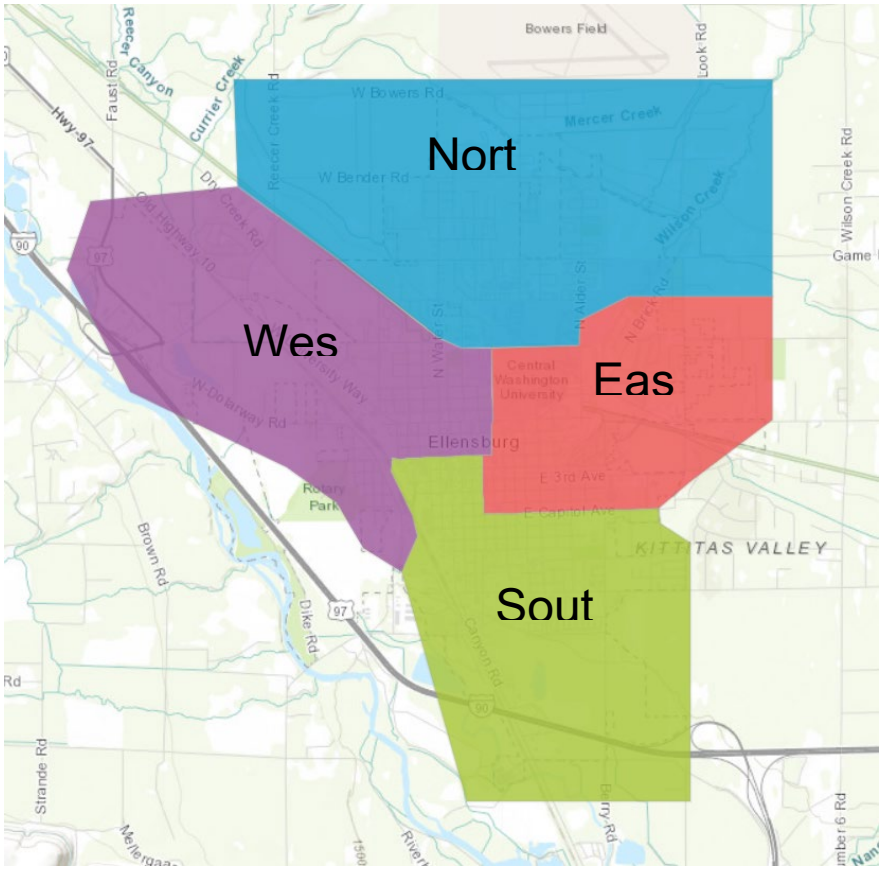
| DOWNLOAD SPEEDS RECORDED | | |
|---|---|---|
| < 25 mbps | > 25 mbps < 150 mbps | > 150 mbps |
| 28% | 62% | 10% |

| UPLOAD SPEEDS RECORDED | | |
|---|---|---|
| < 3 mbps | > 3 mbps < 150 mbps | > 150 mbps |
| 15% | 84% | 1% |

| | UNSATISFIED | SATISFIED |
|---|---|---|
| SPEED | 31.2% | 69.8% |
| RELIABILITY | 20.0% | 80.0% |
| VALUE | 61.8% | 38.2% |

## COMMUNITY DESIGN

### SERVICE ZONES




To further evaluate the viability of constructing a city-wide network, the area was divided into four logical service zones, directionally labeled as North, East, South, and West. Each zone was modeled with a 40% take rate.

The North Zone passed 2,227 service locations, and 909 were connected. The total cost of the backbone in the North Zone was $2,664,594.50, while the activation of customers was very similar at $2,619,787.52, bringing the total cost of the North zone to $5,284,382.02.

The East Zone passed 1383 service locations, and 553 were connected. This was the smallest zone, with congruently lower customers activated and overall costs compared to the other zones. The total cost of the backbone in the East Zone was $1,477,279.33, while the activation of customers was very similar at $1,399,166.03, bringing the total cost of the East Zone to $2,876,445.36.

The South Zone passed 1,746 service locations, and 698 were connected. The total cost of the backbone in the South Zone was $2,992,114.29, while the activation of customers was quite a bit lower at $1,930,213.86, bringing the total cost of the South Zone to $4,922,328.15.

The West Zone passed 1674 service locations, and 670 were connected. The total cost of the backbone in the West Zone was $1,878,107.08, while the activation of customers was very similar at $1,773,273.34, bringing the total cost of the West Zone to $3,651,380.42.

The detailed network design maps resulting from this network modeling are included as Appendix B in this document, and a logical network diagram is included in Appendix C.

## CITY-WIDE COSTS

The cost of the city-wide project came to $16,734,535.94, with the total cost of the backbone being approximately 54% of the total expenses at $9,012,095.19 and the remaining 46% of expenditures going to activation at $7,722,440.75. In this network build, 7,075 premises would be passed, with 2,830 premises being activated in the modeled costs.

The average cost of activation was $853.00 per premise. The physical service drop off of the backbone ranged from $1300 to $1600, bringing the average total cost per home for the service drop to between $2,529.83 and $2,882.24. If the backbone network is included in these estimations, the total cost of the network plus activation per home between the zones range from $5,199.65 to $7,048.01.

A recent state funding program prioritized projects where the total cost per premise activated was below $10,000 per premise. These average costs are well below that benchmark, which is expected in a more urban environment with a higher population density than in more rural areas.

Full financial spreadsheets may be found in Appendix D.

## OPERATING MODELS

An original assessment of the 4 operating models (open access, public-private partnership, excess capacity, and full-retail) was conducted. It was concluded that the open access and retail models should be more thoroughly explored as suitable solutions for the city fiber network. The public-private partnership model was determined not feasible due an absence of a qualified and willing partner organization.

The following pages explore open access and retail in further detail. The information provided outlines these operating models, their capital and operation costs, long-term viability, and challenges associated with each.

### OPEN ACCESS

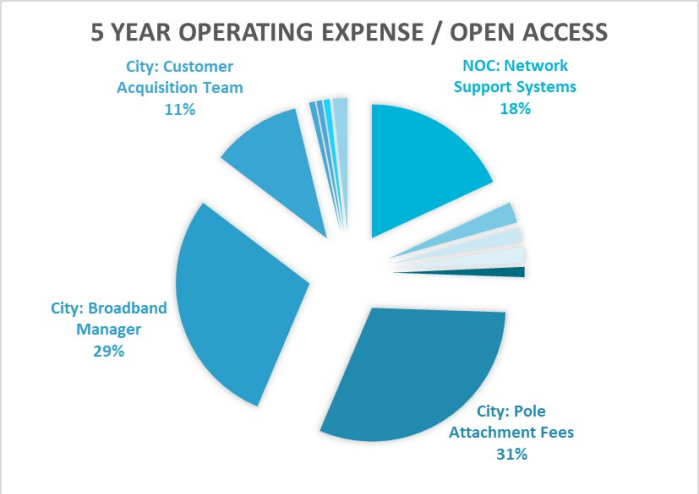
An open-access network model means that infrastructure and equipment would be built off the existing city-owned infrastructure to homes and businesses. This infrastructure would be made available on a non-discriminatory basis to any service provider who meets the City's service level standards to provide services to end-users.

There are 7,075 total premises in the city, with a 40% take rate modeled for last-mile costs and revenue capabilities. A $49 monthly wholesale rate per residential premise, $69 for commercial, $99 commercial fiber and $450 high-capacity monthly wholesale rate was modeled. Each premise also had a one-time non-recurring (NRC) charge of either $250 or $500 to help subsidize the last-mile network costs.

| | | |
|---|---|---|
| **Residential:** | **Customers** | **Rate** |
| | **2711** | **$49 $250 NRC** |
| **Commercial:** | **Customers** | **Rate** |
| | **106** | **$69 $250 NRC** |
| **Commercial Fiber:** | **Customers** | **Rate** |
| | **11** | **$99 $250 NRC** |
| **High Cap Fiber:** | **Customers** | **Rate** |
| | **1** | **$450 $500 NRC** |

The average current cost of residential services to this area is $60-79 per month, which is within reasonable market limits for the services being provided. Current services also do not have an NRC charge for hookups in most cases. At a $49 wholesale rate, the ISPs who would pick up the customers and sell the retail services to the end-user would also add an additional charge, likely resulting in higher service costs than current market prices. A lower wholesale rate would make the likely retail costs lower but would also impact city revenues. In our modeling, the capital project is completed in year 5, causing year six non-recurring gains to drop significantly due to no last-mile extensions being created. The net cash average is $46,000 per year with a 2% annual increase in customers connected. At year 12, the total cash flow analysis yields a negative $1,564,766 projection. These are modeled with a 40% overall take rate which will depend almost entirely on the performance and marketing efforts of the participating ISPs.

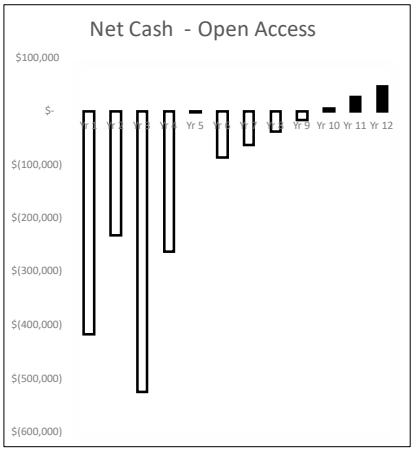
The most impactful expenses of operations are on acquiring a dedicated staff member to focus on broadband efforts and manage the development and delivery of open access services. This expense is 29% of the overall cost of this effort. The other most impactful price is recurring pole attachment fees, which cover 31% of the identified costs. The remaining 40% of costs include a small sales team, outsourced network operations, and other ancillary business costs.




Key considerations in the open-access model:

1. There is an existing competitive marketplace
2. Interviewed 6 ISPs, several of whom showed moderate enthusiasm about participating in an open-access market.
3. There was higher enthusiasm around gaining access to the network to support wireless deployments
4. 2022 Infrastructure and Labor costs are at a premium
5. 40% take rate dependent on successful ISP marketing and consumer engagement
6. Limits City's engagement in sales and marketing efforts
7. Can we physically keep up with the take-rate from a constructability perspective?

| Operations and Expense Model | | | | | | |
|---|---|---|---|---|---|---|
| **LINE ITEM DESCRIPTION** | **Yr 1** | **Yr 2** | **Yr 3** | **Yr 4** | **Yr 5** | **Yr 6+** |
| **Operating Expenses** | | | | | | |
| Network Operating Expense | $ 87,076.88 | $195,344.53 | $309,481.37 | $373,952.15 | $438,537.95 | $443,241.77 |
| Sales and Marketing | $290,000.00 | $288,250.00 | $296,897.50 | $305,804.43 | $314,978.56 | $324,427.91 |
| Business Administration | $ 9,500.00 | $ 9,785.00 | $ 10,078.55 | $ 10,380.91 | $ 10,692.33 | $ 11,013.10 |




Open Access Cash Notes:

- Year 5- Capital Project Completed
- Year 6- NRC revenues significantly reduced along with take-rate
- 12-year cash flow analysis:
  - Net Cash flow = ($1,564,766)
  - Net Cash Average = $46k/year with 2% annual increase

## RETAIL

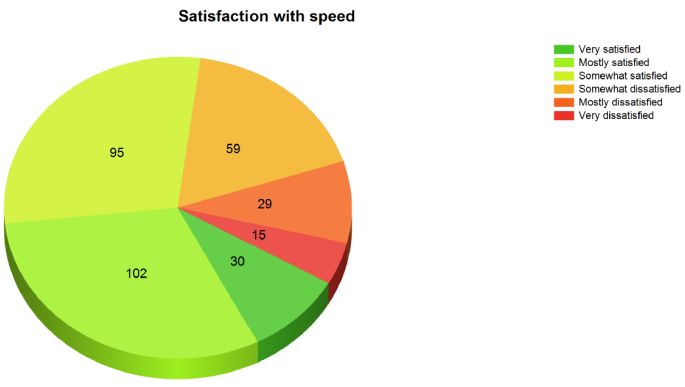
In the retail model, the infrastructure and equipment would be built off the existing city-owned infrastructure to homes and businesses. The City would utilize them to directly provide retail services to the end user. Additional revenue not modeled here could be access leased to other ISPs wholesale for transport.

There are 7,075 total premises in the City, with a 40% take rate modeled for last-mile costs and revenue capabilities. A $69 monthly retail rate per residential premise, $99 for commercial, $200 commercial fiber, and $800 high-capacity monthly retail rate was modeled. Each premise also had a one-time non-recurring (NRC) charge of either $250 or $500 to help subsidize the last-mile network costs.

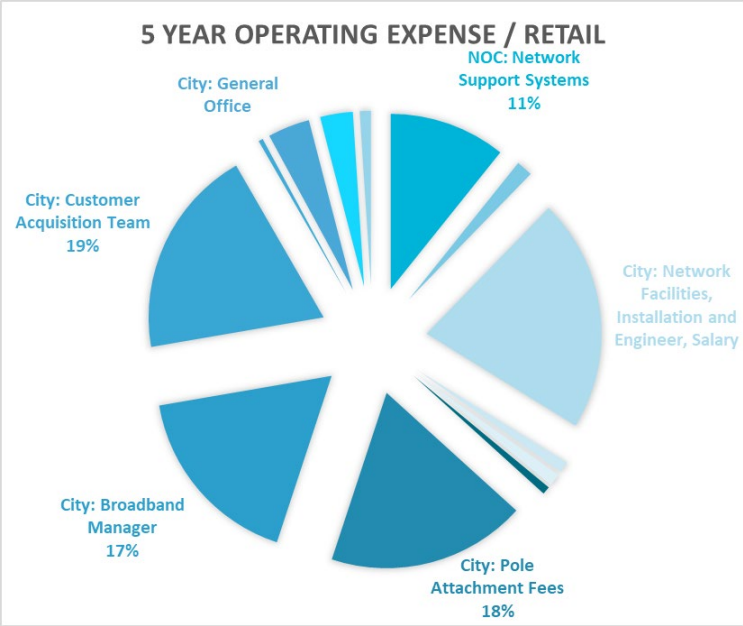
| | Customers | Rate |
|---|---|---|
| **Residential:** | **2711** | **$69 $250 NRC** |
| | | |
| | **Customers** | **Rate** |
| **Commercial:** | **106** | **$99 $250 NRC** |
| | | |
| | **Customers** | **Rate** |
| **Commercial Fiber:** | **11** | **$200 $250 NRC** |
| | | |
| | **Customers** | **Rate** |
| **High Cap Fiber:** | **1** | **$800 $500 NRC** |

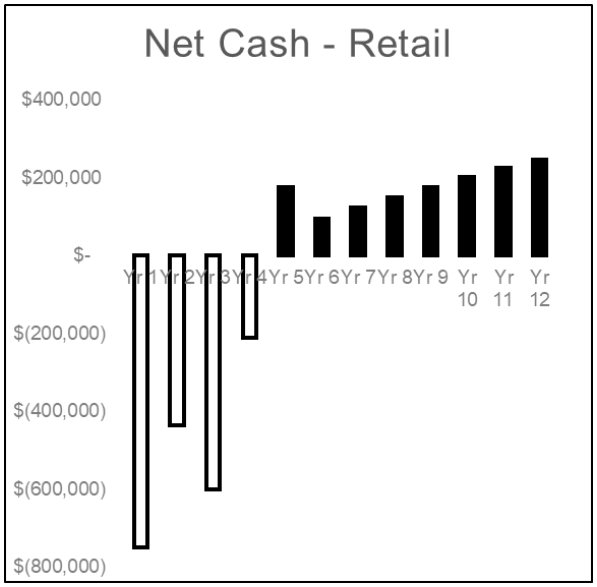
Our community survey and market analysis found that the average current cost of residential services to this area is $60-79 per month, which is within reasonable market limits for the services being provided. Current services also do not have an NRC charge for hookups in most cases. Unlike the wholesale model, there is no additional fee charged to the end-user in this model to bring retail services. The business case for retail was promising when modeled a 40% take rate. The net cash average is $250,000 per year with a 2% annual increase in customers connected. At year 12, the total cash flow analysis yields a negative $607,932 projection. To remain congruent with the open-access business model, the retail models utilized a 40% overall take rate of customers. Unlike the open-access model, where that 40% would be a cumulative customer base of all participating ISPs, this 40% take rate would depend entirely on the performance and marketing efforts of the City.

Many areas of the City already have more than one service provider available. Those entities may be able to undercut the price of the City's modeled services with promotional offers on a short-term basis to lock customers into plans over time. While the City's retail broadband services are likely to be of much higher quality than the current services available, most customers in this market are satisfied with their current service speeds. The draw of lower-cost services is likely to significantly impact the City's take rate, and it will be a struggle to obtain a 40% market share.



| Operations and Expense Model | | | | | | |
|---|---|---|---|---|---|---|
| **LINE ITEM DESCRIPTION** | **Yr 1** | **Yr 2** | **Yr 3** | **Yr 4** | **Yr 5** | **Yr 6+** |
| **Operating Expenses** | | | | | | |
| Network Operating Expense | $337,076.88 | $452,844.53 | $574,706.37 | $647,133.90 | $719,915.16 | $733,060.29 |
| Sales and Marketing | $440,000.00 | $442,750.00 | $456,032.50 | $469,713.48 | $483,804.88 | $498,319.03 |
| Business Administration | $ 80,000.00 | $ 82,400.00 | $ 84,872.00 | $ 87,418.16 | $ 90,040.70 | $ 92,741.93 |




Year 5- Capital Project Completed

Year 6- NRC revenues significantly reduced along with take-rate

12-year cash flow analysis:

- Net Cash flow = ($607,932)
- Net Cash Average = $250k/year with 2% annual increase

Key considerations in retail model:

1. There is an existing competitive marketplace
2. High-population of low-income customers- subsidization needed
3. High cost of construction
4. Although NRCs are not high, they don't cover the cost of deployment
5. Impressive marketing campaign and community education needed around subsidization programs
6. Can we physically keep up with the take-rate from a constructability perspective?

## POTENTIAL SOURCES OF FUNDING FOR BROADBAND INFRASTRUCTURE

### COMMUNITY ECONOMIC REVITALIZATION BOARD

CERB provides funding for construction and planning for broadband projects in Washington State that are in rural counties and rural communities only.

Eligible projects are those that encourage, foster, develop, and improve broadband within the state to:

- Drive job creation, promote innovation, and expand markets for local businesses; or
- Serve the ongoing and growing needs of local education systems, health care systems, public safety systems, industries and businesses, governmental operations, and citizens.
- And Improve accessibility for underserved communities and populations.

Ellensburg does not meet the qualifications of a rural community as defined by CERB and therefor this is not a feasible funding mechanism to consider for this project at this time.

### THE WASHINGTON STATE BROADBAND OFFICE

As part of the 2019 legislative session, SB 5511 created a statewide Broadband Office under the Department of Commerce Public Works Board to disseminate state and federal funds to facilitate broadband expansion projects in unserved areas of Washington State. Their most recent award cycle closed April 26th, 2022.

Kittitas County does not qualify as a severely distressed county for this program. However, NoaNet recommends the City to follow this project as a possible ongoing funding mechanism for broadband infrastructure development.

### THE WASHINGTON STATE PUBLIC WORKS BOARD

The Washington State Broadband office has an Acceleration Grant program which funded project up to $25 million dollars and requires a 10% cash match of the total project costs. This match requirement may be waived if the entity can demonstrate financial hardship. An additional funding round is expected for Spring of 2022 with a similar format, which highly favors the applicant to be the county, not any other entity. If the City is interested in pursuing funding through this program, close collaboration with the county is advised as the City is unlikely to be a winning applicant on their own.

## USDA RECONNECT

The Reconnect Program offers unique federal financing and funding options in the form of loans, grants, and loan/grant combinations to facilitate broadband deployment in areas of rural America that don't currently have sufficient access to broadband, defined by the law as 25 Mbps (megabits per second) downstream and 3 Mbps upstream. Infrastructure must support 100/100mbps symmetrical service.

This program's goal is to generate investment to deploy broadband infrastructure to provide high-speed internet e-Connectivity to as many rural premises as possible, including homes, community facilities for healthcare and public safety, schools, libraries, farms, ranches, factories, and other production sites. Awards are made in tiers of 100% grant, 50% Grant/50% loan and 100% loan.

An application window closed for the Reconnect Program in March of this year. USDA has continued to re-establish this program over time, and it is likely that this will continue. As the federal thresholds for what constitutes broadband continues to evolve, the City should monitor the Reconnect program as a potential future funding source.

## MUNICIPAL BONDS

A municipal bond, commonly known as a muni, is a bond issued by state or local governments or entities they create, such as authorities and special districts, and they also plan for urban development. Many municipalities have looked to bonding to fund broadband network deployment. At this time, when there are many grant programs for broadband network deployment available, this is a less attractive funding source for most areas. A municipal bond could be used towards match contributions of a larger grant project, or purposed for individual projects not able to take advantage of federal and state grant programs.

## INFRASTRUCTURE INVESTMENT AND JOBS ACT (IIJA)FUNDS

NTIA and Broadband USA are engaged in a range of efforts to increase broadband Internet access and adoption in America, which supports economic growth, job creation, and improved education, health care, and public safety. NTIA's BroadbandUSA program serves communities, industry and nonprofits that want to expand broadband infrastructure and promote digital inclusion. BroadbandUSA's services are driven by the needs and interests of state and local broadband leaders, and focus on encouraging private partnerships, supporting planning efforts, helping to identify funding, and implementing public-private broadband partnerships. NTIA also conducts research and analysis into broadband usage and adoption through our Digital Nation initiative.

The Infrastructure Investment and Jobs Act (IIJA) funded five new broadband grant programs: The Broadband Equity, Access, and Deployment Program; the Enabling Middle Mile Broadband Infrastructure Program; and the Digital Equity Act Programs, which include the State Digital Equity Planning Grant Program, State Digital Equity Capacity Grant Program, and Digital Equity Competitive Grant Program. The NOFO for these opportunities have not been released but the City of Ellensburg could be a successful applicant to these programs, especially for digital inclusion efforts.

## LOCAL UTILITY DISTRICTS

Long before the FCC recognized broadband as a utility, citizens and communities were finding high-speed Internet access necessary to their well-being and future success. Broadband telecommunications are increasingly becoming how people communicate, conduct business, access government services and distance education opportunities.

Kitsap Public Utility District (KPUD) recognized that broadband is a utility in their community and has worked to expand their fiber optic network to increase access to all residents of Kitsap County using Local Utility Districts (LUDs). Below is an outline of how the LUD model in Kitsap County, Washington is formed to fund broadband infrastructure:

1. Homeowners petition the Public Utility District to form a Local Utility District. If a majority (50% + 1) of the homeowners petition the LUD is formed.
2. Once the LUD is formed, the PUD begins the process to construct the infrastructure
3. When construction is complete, the homeowners are provided a final assessment amount
    a. The assessment can be paid:
        i. Upfront or over a determined period
        ii. Or a combination of the two with some upfront and the rest over the determined period
4. The county administers the assessment and homeowners receive a tax bill for their assessed amount annually

The City could leverage this model utilizing Local Improvement Districts as a funding mechanism for telecommunications infrastructure as Kitsap PUD has done. The city should keep this model in mind for persistently unserved areas such as locations that are exceedingly difficult and costly to access to help mitigate costs.

## "FIBERHOODS" WITH CONSTRUCTION ADDERS

Mason PUD #3 in Mason County is running a "Fiberhood" program where residential areas have an opportunity to show interest for fiber broadband connectivity in a defined build area. If that area reaches a 75% interest rate, the PUD builds an open-access network out to their homes. Each month in addition to their service fee from their selected Internet Service Provider, they pay a $25 "construction adder" to pay for the cost to build the network

to their homes. That fee is paid for 12 years, and then retired after it has covered the cost of the build to the premise. Customers also have the option to pay the $3600 total cost upfront to lower their monthly bill, qualify for seasonal service, or write the cost off as a business expense.

If attempts to procure outside funding for commercial or residential buildout in the PUDs service area are not successful, the "Fiberhood" model of engaging homeowners and businesses in specific areas for self-financing is a successful option to help assist homeowners and businesses with the high costs of infrastructure line extensions.

## PRIVATE CAPITAL INVESTMENT FIRMS

Private investment firms are funding community networks that are either unable or unwilling to use bonds to support network investments. These firms' partner with real estate developers, municipal, county, and other governmental entities, as well as a variety of private partners to deploy last-mile fiber optic network infrastructure.

There are many state and federal grant and low interest loan programs. The city should exhaust those avenues of project funding before considering private equity investment options.

## KEY PARTNERSHIPS

### KITTITAS PUBLIC UTILITY DISTRICT

Kittitas Public Utility District is actively studying broadband in their service area, which is surrounding the City of Ellensburg and the city UGA. They also are the predominant power utility pole owner for the area surrounding the City and may be a favorable future partner.

### KITTITAS COUNTY

Kittitas County Government is currently evaluating broadband infrastructure deploying in the area as well and will be a key strategic partner in any broadband efforts for Kittitas County. Current state funding programs may prioritize projects that partner with counties and have a wide area strategic plan.

### CENTERFUSE

In 2020, with grant funding from Washington State Department of Commerce, CenterFuse retained CCG Consulting (CCG) to review current and future broadband needs, affordability of services, a service gap analysis, future demands, identify broadband service providers, options and costs and identify potential areas for partnership among local and state government, and incumbent/competitive providers. They are continuing to develop relationships and pursue a path forward for addressing broadband accessibility in the area.

### NORTHWEST OPEN ACCESS NETWORK (NOANET)

NoaNet is an open-access network in Washington State, they provide whole- sale wide area and last mile broadband solutions to rural communities on a fiber optic high-capacity system. Owned and operated by Public Utilities, NoaNet has been assisting successful public benefit broadband programs since 2000. NoaNet and the City of Ellensburg have been in collaboration for many years.

## REPORT RECOMMENDATION

The current efforts underway at the City of Ellensburg have been very impactful to the community. In all network expansion models explored, the existing network reduced the cost of new infrastructure by $6 million. It has provided much-needed broadband infrastructure for city services, filled a void by supplying services to higher education, public safety, and community support institutions, and brought high-capacity services to the downtown business corridor. The method by which the network was developed allows for continued expansion into underserved pockets over time as possible and needed. The recommendation is to continue in the City's excess capacity model to bring highly valuable fiber assets to the community and keep the door open for opportunities to expand as opportunities arise strategically.

This model of ‘excess capacity’ brings many advantages to the City. The availability of broadband services around the community encourages competition and service offerings by the local and regional service providers. This model unlocks opportunities for several entities, including those not originally in the market, to expand service offerings, and reduce expenses, creating a more affordable product offering throughout the City. This model has allowed the City to address city-specific needs, including internal operations, its strategic plan objectives of increasing economic development, and community public Wi-Fi.

The City has created an 'intranet' – a wide area network that connects city services to city functions by having a city-wide network. The community network is helpful for two reasons:

1. It supports the City's information technology needs by connecting city services and public safety systems to each other and the outside Internet.
    a. This reduces the need to purchase services from others and rely on potentially inferior capacity and security that the City can provide for itself.
2. By offering the excess capacity of the existing network to regional providers, the City supplies a high-speed information network for essential public infrastructure, ensures fair and equitable competition, generates revenue, ensures universal access for all, and has established a non-discriminatory network for community use.

A "broadband for all" fiber build to every business and residence has substantial risks. An all-inclusive network has a $17 million price tag to bring a future-proof network to the community. This network would support and encourage a vibrant economic development strategy and support pandemic solutions such as public safety and work from home initiatives. However, it would also create a substantial burden on taxpayers, overbuild existing provider networks, and have no clear investment return. The risks of such an endeavor without significant outside subsidization would prove to be challenging.

Moving forward, the city should look to invest in infrastructure projects that help support the goals of resolving broadband access and affordability. The City should explore opportunities in areas where there is a reasonable return on investment that support the needs of the city. This limited buildout of the fiber broadband system could include:

- new housing developments that may not have a broadband development plan,

- individual anchor institutions projects that provide higher capacity services than what the private market is capable of providing, and
- distributed fiber backhaul solutions to wireless and cellular companies.

The strategies listed below support the recommendation and the current excess capacity model:

- Continue serving on the existing network following the excess capacity model.
- Evaluate individual projects on a case-by-case basis to determine cost/benefit analysis and risk profile.
- Evaluate opportunities with wireless infrastructure provider partners to provide commodity Internet to the community.
- Continue to operate with the intent to pay off the existing debt service
- Evaluate a small broadband delivery model by reducing the scope of a city-wide network. Take advantage of existing facilitates to reduce cost of construction by eliminating the cost of higher buildout areas, thereby decreasing capitalization on the retail model and increasing margin.
- Engage a public education and outreach Initiative for utilization of Affordable Connectivity Subsidy Program for low-income households
- Seek grant funding for digital literacy programs in conjunction with other community-serving institutions such as libraries and schools.
- Continue to engage with Kittitas County and Kittitas PUD in a collaborative manner for potential future projects
- Develop a small marketing program to facilitate further adoption of the downtown commercial broadband district.

A series of identified projects already underway or in planning that support the recommendation are outlined below, these projects look to provide targeted areas of the city with city-owned infrastructure and open-access services:

- Downtown business district service area
- Gateway 1
- Gateway 2
- South and North greenfield development areas
- University Way

A strategic approach to localized infrastructure projects would continue to bring broadband benefits to the community and encourage continuous private sector investment without increasing the City's financial risk and reducing overbuild. A smaller, more localized approach may also create opportunities for smaller funding sources for broadband projects. The interactive survey response and broadband needs mapping tool that has been developed is available to the city. This resource could be useful in verifying areas of concern. If greenfield development opportunities are of strategic interest, a notification from permitting may be an approach to bring potential opportunities for future expansion to the broadband team at the City. These avenues would be more strategic, yet potentially a stepped approach towards overall broadband expansion efforts.

## APPENDIX A: SURVEY RESULTS MAPS

**Figure 1 Download Speed Tests**

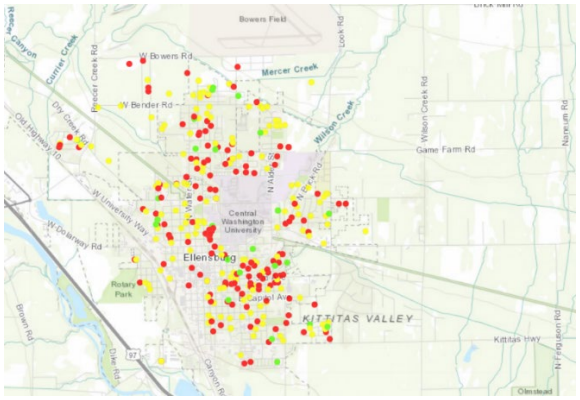



**Figure 2 Upload Speed Tests**

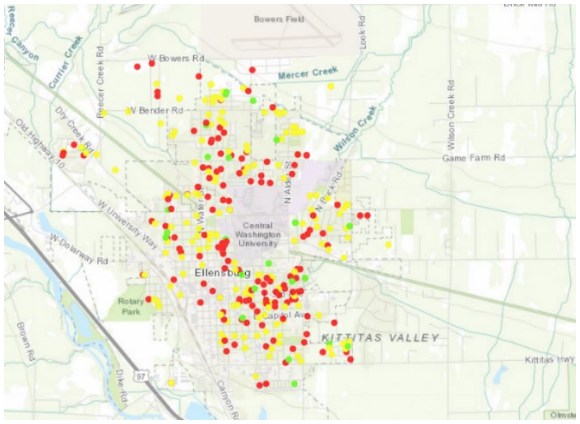



**Figure 3 Satisfaction with Speed**

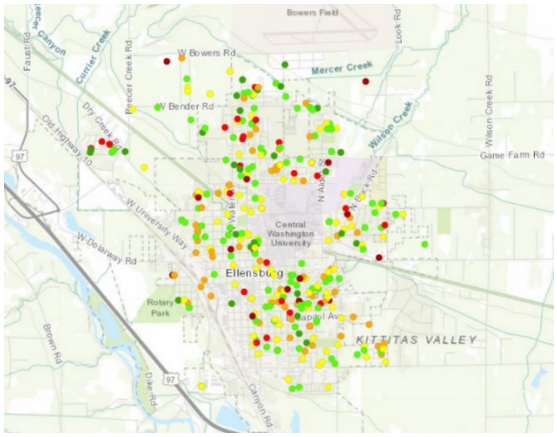



**Figure 4 Satisfaction with Reliability**

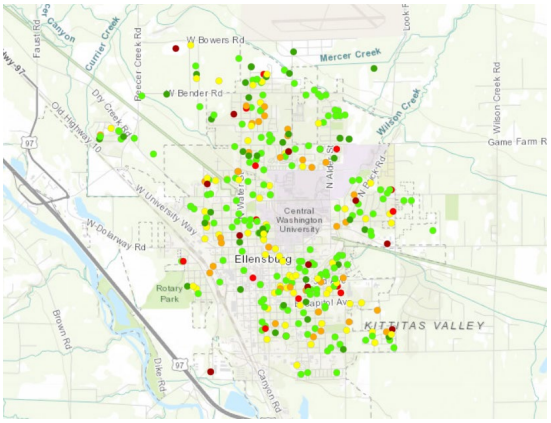
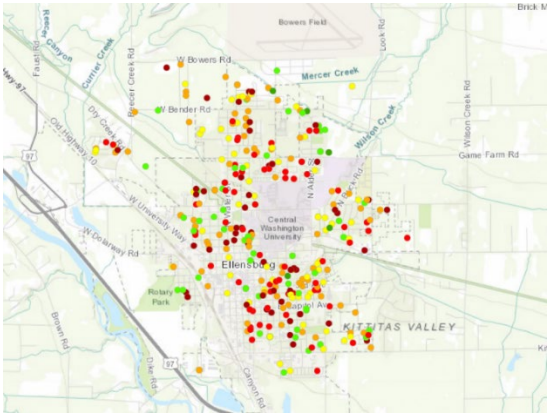



**Figure 5 Satisfaction with Value**




An Interactive map of all results and other metrics is available at: https://noanet.maps.arcgis.com/apps/webappviewer/index.html?id=3ba89edefaac41eeaa99fb860d2c7d3a

**Figure 6 - Download Speed Tests Heat Map**

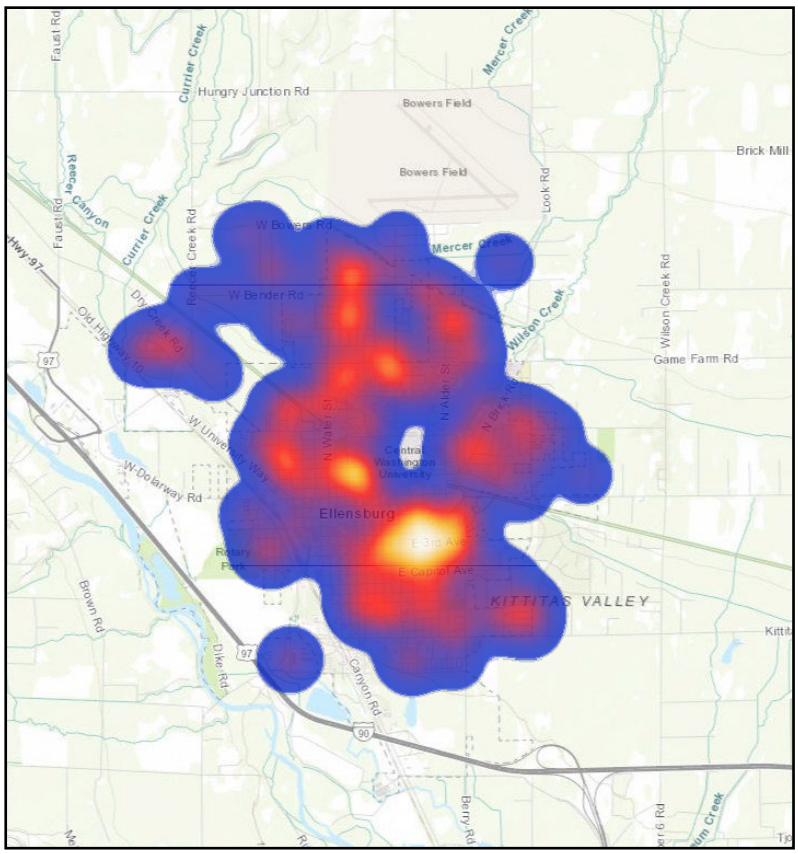
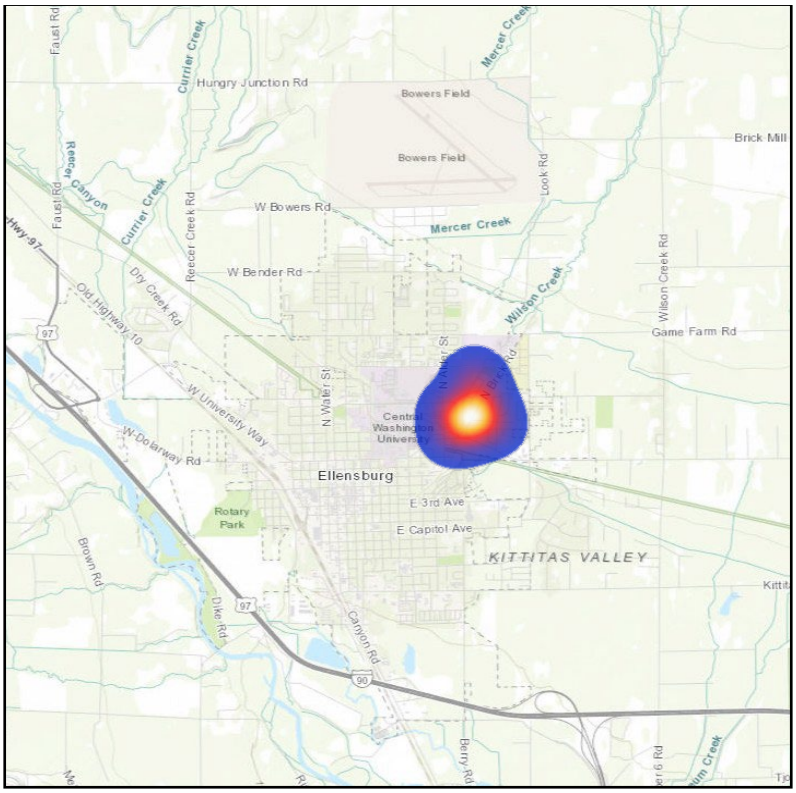
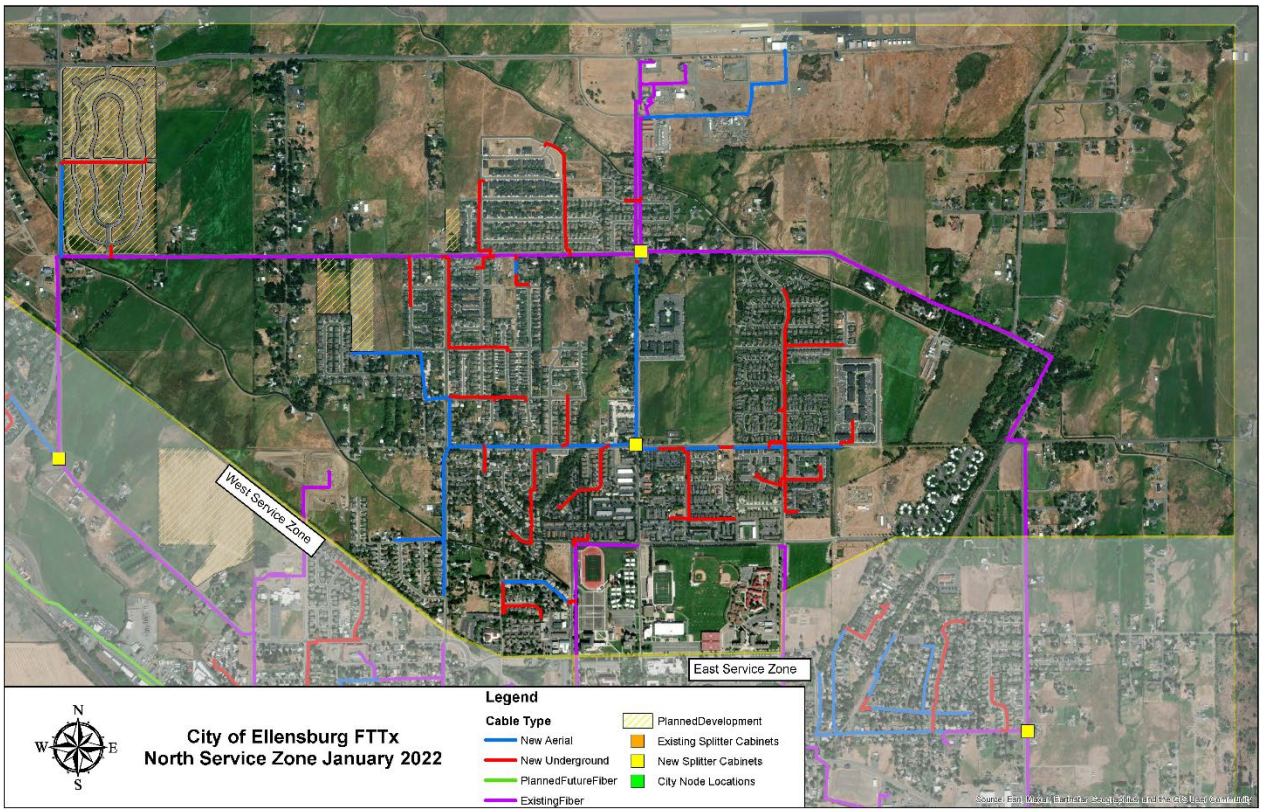
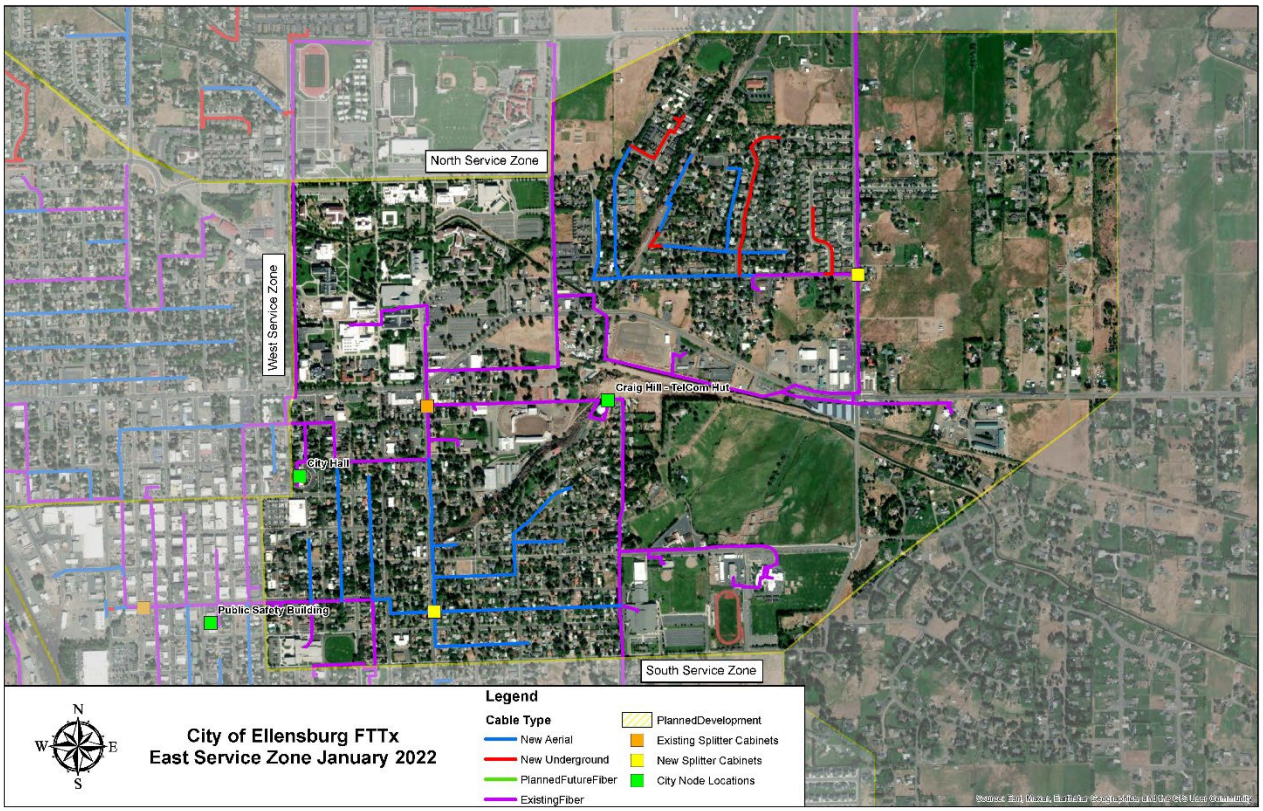


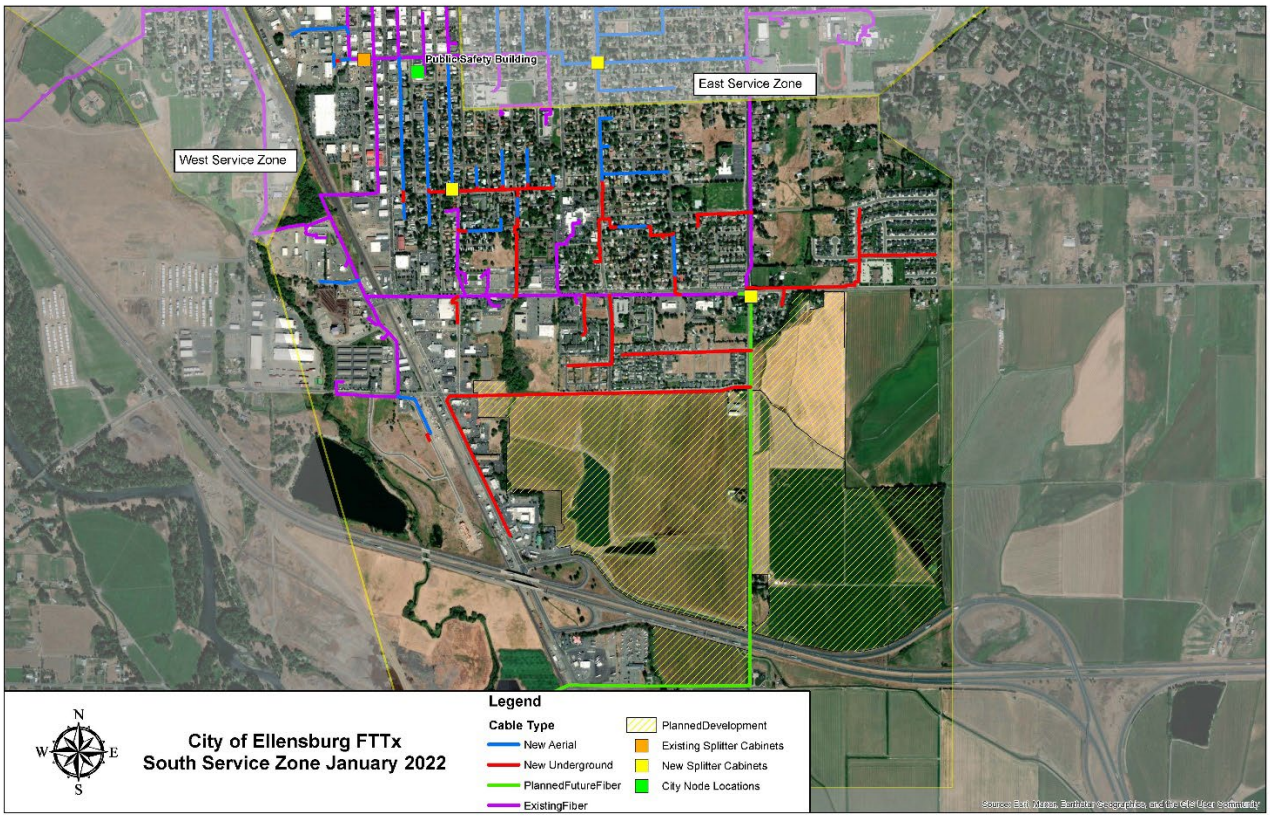

**Figure 7 Upload Speed Tests Heat Map**

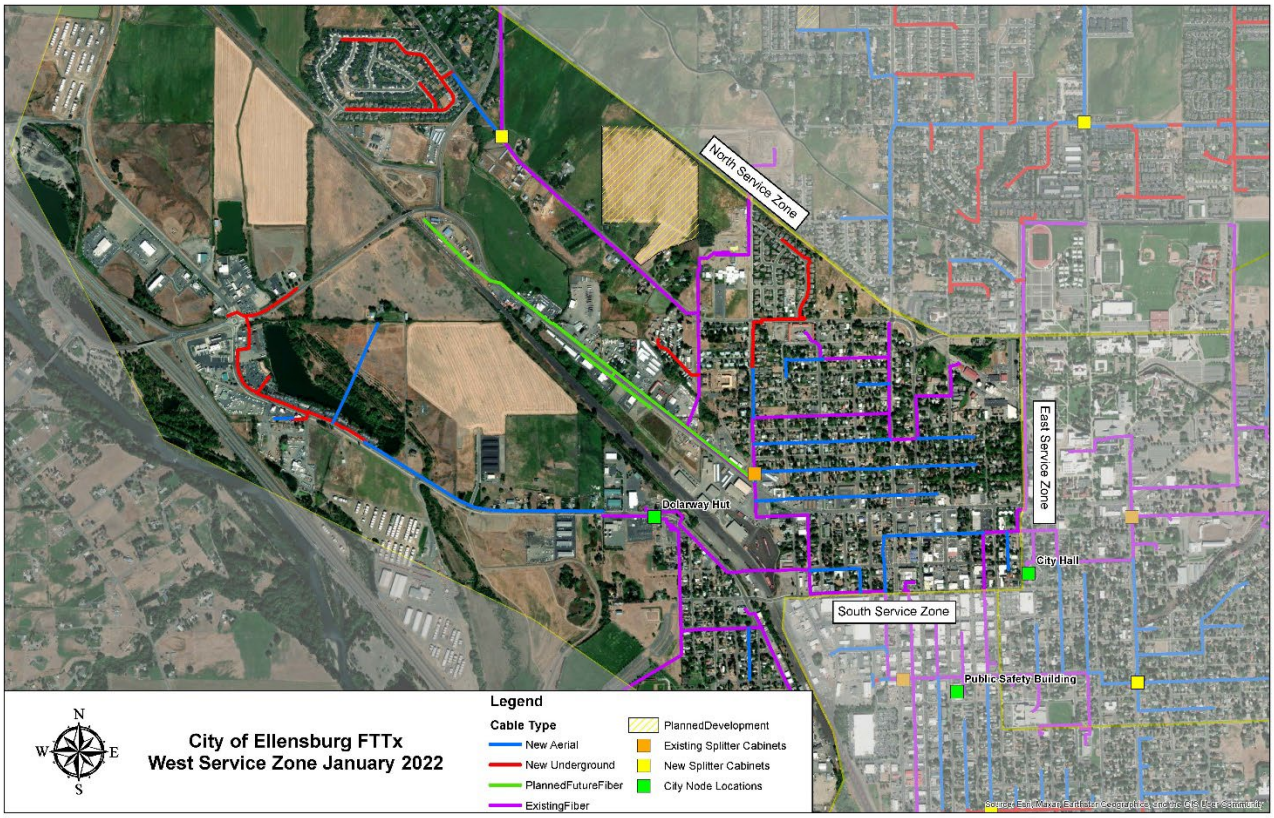


## APPENDIX B: PROPOSED NETWORK DESIGNS

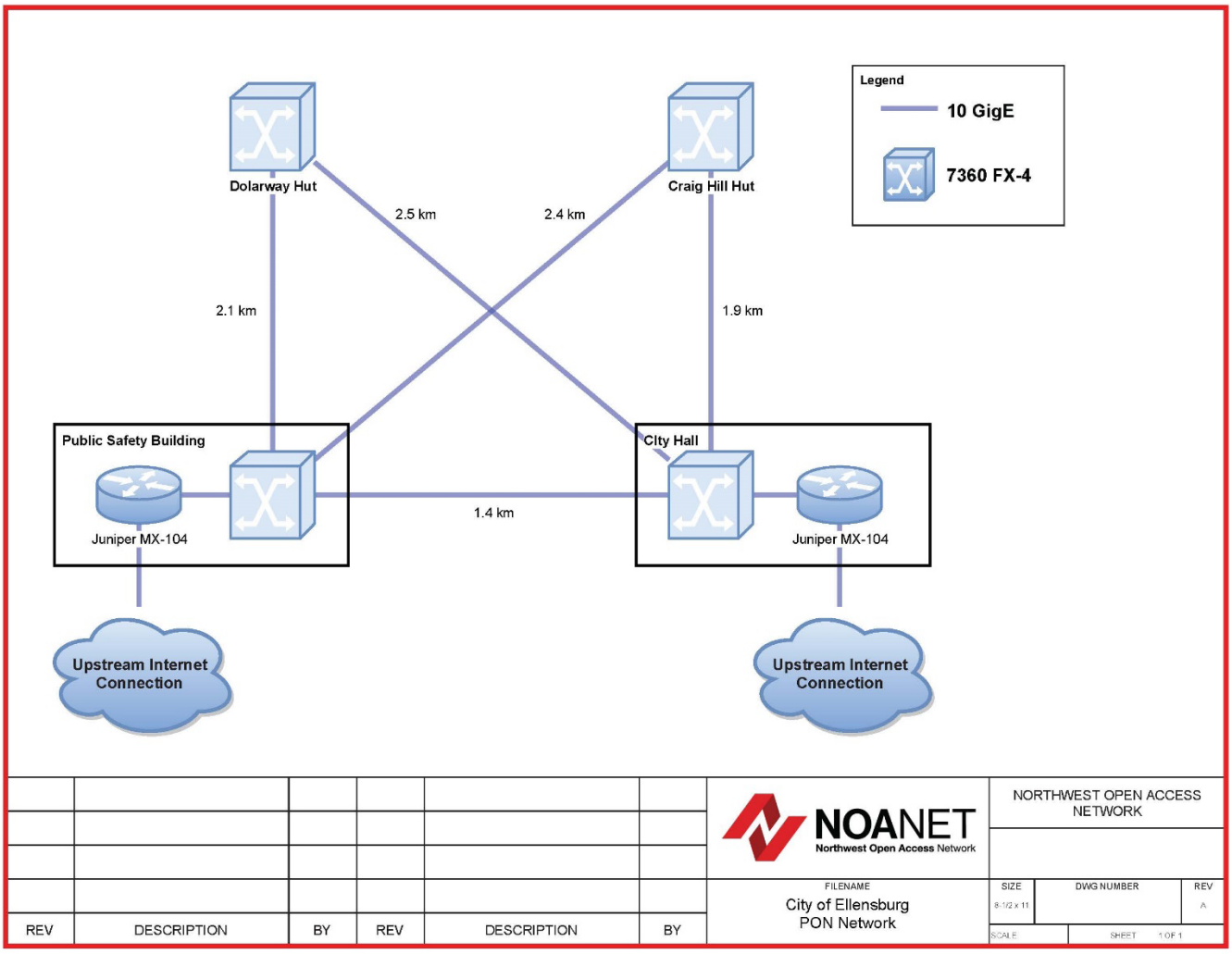



Public Safety Building
East Service Zone
West Service Zone
N
W
E
S
City of Ellensburg FTTx
South Service Zone January 2022
Legend
Cable Type
New Aerial
New Underground
PlannedFutureFiber
ExistingFiber
PlannedDevelopment
Existing Splitter Cabinets
New Splitter Cabinets
City Node Locations


North Service Zone
East Service Zone
Delarway Hut
City Hall
South Service Zone
Public Safety Building
N
W
E
S
City of Ellensburg FTTx
West Service Zone January 2022
Legend
Cable Type
New Aerial
New Underground
PlannedFutureFiber
ExistingFiber
PlannedDevelopment
Existing Splitter Cabinets
New Splitter Cabinets
City Node Locations

## APPENDIX C: NETWORK DIAGRAM



## APPENDIX D: FINANCIALS

| Cost Roll Up | | Cost Breakdown | | | |
|---|---|---|---|---|---|
| | Totals | East | North | South | West |
| Number of Premises Activated | 2,830 | 553 | 909 | 698 | 670 |
| Number of Premises Passed | 7,075 | 1383 | 2272 | 1746 | 1674 |
| | | | | | |
| Overall Adoption Rate | 40% | 40% | 40% | 40% | 40% |
| | | | | | |
| | | | | | |
| Total Cost of Project | $16,734,535.94 | $2,876,445.36 | $5,284,382.02 | $4,922,328.15 | $3,651,380.42 |
| Total Cost of Backbone | $9,012,095.19 | $1,477,279.33 | $2,664,594.50 | $2,992,114.29 | $1,878,107.08 |
| Total Cost of Activation | $7,722,440.75 | $1,399,166.03 | $2,619,787.52 | $1,930,213.86 | $1,773,273.34 |
| | | | | | |
| | | | | | |
| Residential Buildings | 6,778 | 1116 | 2153 | 1370 | 1391 |
| Commercial Building | 297 | 267 | 119 | 376 | 283 |

| Averages | | Cost Breakdown | | | |
|---|---|---|---|---|---|
| | | | | | |
| Drop | | East | North | South | West |
| Average Cost per Activation | | $853.00 | $853.00 | $853.00 | $853.00 |
| | | | | | |
| Average Cost per Service Drop | | $1,300.00 | $1,600.00 | $1,500.00 | $1,400.00 |
| | | | | | |
| Average Cost per Project Management | | $376.83 | $429.24 | $411.86 | $394.19 |
| | | | | | |
| | Total | $2,529.83 | $2,882.24 | $2,764.86 | $2,647.19 |
| | | | | | |
| Network Plus Drop | | | | | |
| Ave Cost per Home | Total | $5,199.65 | $5,814.68 | $7,048.01 | $5,453.08 |
| | | | | | |

# AGENDA REPORT

**Meeting Date:** June 16, 2022

**Agenda Subject:** Residential Natural Gas Extension Policy Review

**Submitted by:** Ryan Lyyski Public Works & Utilities

**Recommended Action or Motion:** Discuss policy to require natural gas infrastructure extensions in new residential development.

**Background/Summary:** Councilmember Lillquist has requested that staff provide background and overview of the implications of the City's policy to require natural gas utility infrastructure to the Utility Advisory Committee.

**Previous Council Action:** In 2013, the City Council added requirement for extension of natural gas mains throughout developments—a "dig once" policy.

**Analysis:** At the meeting, staff will deliver a presentation to facilitate a discussion with the Committee.

**Financial Impact:** N/A

# Ellensburg Utility Advisory Committee
# Public Works & Utilities Issues and Updates
June 16, 2022

Consent Items

Agenda Reports for items approved by the City Council since our last meeting are attached.

All Utilities

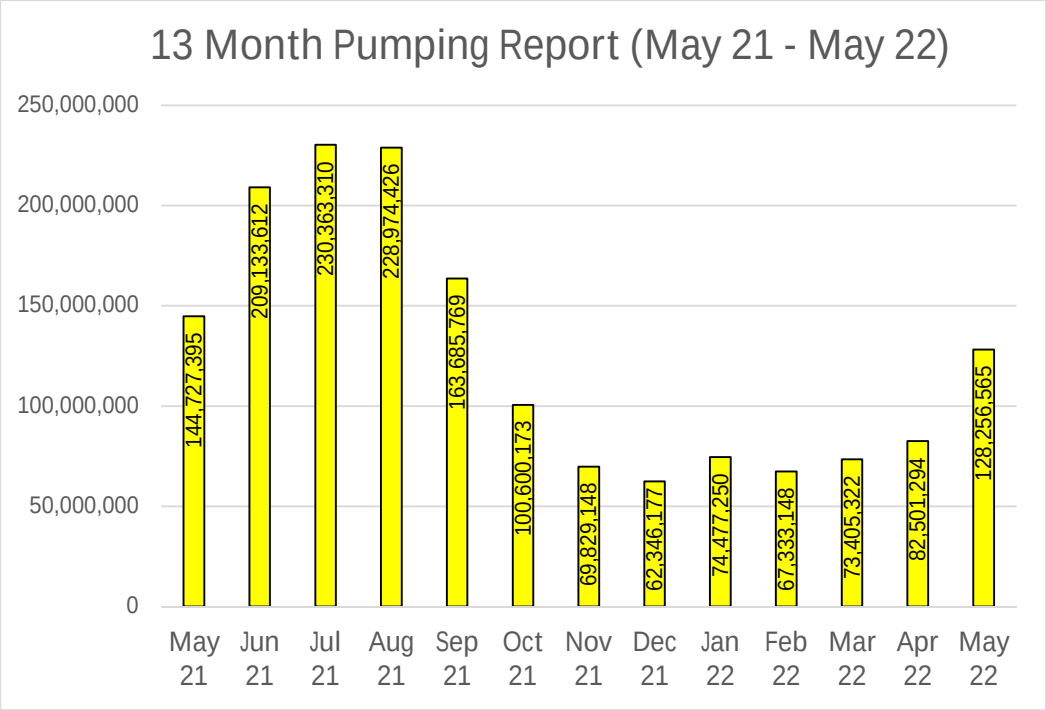
- COSA Update - Staff is responding to a preliminary data request to allow FCS Group to begin updating the information required for the Comprehensive Multi-Utility Rate Study Update. Staff is hopeful for UAC presentation at July's meeting.
- In celebration of National Public Works Week, and after a two-year hiatus due to the Coronavirus, the City's Public Works and Utilities Department is excited to once again be hosting the Touch-aTruck event. This year's event will be held on Wednesday, June 22nd, from 11:00 a.m. to 2:30 p.m. at Rotary Park.

Sewer

- Collections staff continue to work on their annual jetting and flushing.
- Staff noticed a noise coming from the motor on one of the aerators that was installed last year. The unit was removed and delivered to a motor shop in Moses Lake that is authorized to determine if the necessary repairs are covered by the warranty. Staff is waiting for the results of the inspection before determining a course of action. The WWTF division has back-up aerators on hand, and one has been placed into the basin in the interim. We still have not received an analysis from the motor shop.
- Staff attended four risk analysis workshops with Kennedy Jenks (KJ), the consultant hired to update the City's General Sewer Plan (GSP). KJ uses these workshops to get a better understanding of the components of the WWTF and the Collection system, and the associated risk that a failure to any of those components might cause.
- Staff continue working to fill in missing data in GIS for the wastewater collection system. Kennedy Jenks needs this data to provide accurate modeling of flows and loads in the GSP update.
- Insituform Technologies completed the work included in the 2022 Cured-in-Place Sewer Line Rehabilitation Project in early June. Staff will be reviewing video taken by the contractor of the completed lines.
- The Bureau of Reclamation's Schaake Project is nearing completion. The Bureau and staff are working on final details. The land exchange is currently anticipated in summer 2022.
- The Anderson Road Sewer Extension project design is progressing, and staff is hopeful to have necessary environmental permits and approvals within the next couple of months. Once permits are received, the plans will be finalized and the project will go out to bid.

Water

- Water pumped for May 2022 was 128,256,565 gallons, compared to May 2021 which was 144,727,395 gallons.




- The rebuilt pump assembly was reinstalled by Pumptech LLC at the Vuecrest Booster Station and is operating smoothly. Once that pump was operational, Water Division crews removed the motor from the second pump and replaced the bearings. Both pumps are in service.
- Staff are working on the valve maintenance program.
- The motor on the Whitney Well pump failed. The motor was pulled and delivered to a motor shop for repair. Staff will pick up the motor and reinstall once repairs are completed. Repairs are expected to be completed by Friday, June 10th.
- Water Division crews are working on new services as they are requested.
- Staff have been dealing with communication faults between the Water System Telemetry and three wells. Airport Well #3, Hayward Well, and Route 10 Well have been intermittently losing connection with telemetry in the evening. Staff are working with Consolidated Communications and Connetix Engineering to determine the cause of these interruptions.
- Supply chain issues continue to make the acquisition of parts and materials difficult for our utilities. Our warehouse personnel are trying to navigate difficulties such as very long lead times and major price increases. Brass and copper items are currently very difficult to procure, which negatively impacts Water Division inventory. For example, residential copper setters that were ordered February 2nd have been delayed and aren't expected to arrive until August 4th. One copper setter is used at each new single-family residence that is constructed.
- Work has begun on the Illinois Well and Helena Ave. watermain project. The contractor is currently installing the 16" ductile iron water main from Cora St. to Water Street, which is necessary for activation of the Illinois Well to allow water to be pumped from the Illinois Well to the upper pressure zone. The contractor has also began ordering material for the well house construction that will begin this summer.
- Staff has received comments from DOH on our draft water system plan update. Staff is now working with our consultant and DOH to address all comments received.

Storm

- Staff completed the 3rd and final round of applications with the Department of Ecology's Floodplains by Design for removing Wilson Creek off Brook lane on April 27, 2022. The draft offer list will be available sometime in June. If funded, the project will design, permit and prepare a feasibility study to move Wilson Creek out of the straightened channel at McElroy Park and off Brook Lane and into a new channel on CWU's campus. The goal is to eliminate flooding in the Brook Lane neighborhood and give Wilson Creek better habitat.
- Gateway I re-design (bid package) is finished and has been sent to Ecology for review. It is anticipated that the project will go to add late May and open bids June.
- Gateway II design and permitting is nearing 30%.
- Bridge/Levee project off Dolarway is moving forward with the CLOMR/LOMR process with FEMA as expected. Aspect Engineering is putting together a bid package so the bridge can go out to bid late summer. Flood swales and levee will be a bid additive and likely be constructed next year early spring.
- Staff will begin inspecting and monitoring/flow data collection work for Spring/Summer/Fall compliance work.
- Staff will begin drafting the Operation and Maintenance Plan Update for the City Shop and field crews as directed by the Department of Ecology for Fall Submittal.
- Staff is updating the City's Tree Code in anticipation of it going before the UAC and Council sometime in June or July.

Electric

- We continue to advertise for two vacant Journeyperson Lineperson positions and a Temporary Lineperson.
- The City advertised for the vacant Light Engineering Technician position and interviewed two candidates. Dan Davis was selected as the most qualified candidate and will begin working for the light department on June 16, 2022.
- Potelco is on the property and filling the void of our understaffing issues. They are focusing on customer driven work as well as maintenance work.
- City crews have been focusing on day-to-day operations as well as smaller maintenance and service jobs.
- D'Hittle met with staff to review progress drawings for the Dolarway Substation project. The design was reviewed and several issues were discussed including removing, relocating and replacing the existing steel support structures for the eight feeder reclosers. This revision is an increase in scope and costs, staff has directed the consultant to proceed with the revisions.

Gas

- Crews performed scheduled monthly pipeline patrol tasks and installed new customer requested main and service lines. Crews are currently performing the annual atmospheric corrosion survey. Crews completed various hands-on operator qualification tasks.
- Aaron Pascoe, Gas Meterperson has resigned from his position. His last day on the job was May 27th. Aaron was with the Gas Division for 21 years.
- The Gas Division and MESA Products Inc. have signed a contract for the Walnut Street Rectifier & Deep Well Anodes – Relocation & Replacement project. Qualifications and material submittals are currently

being reviewed. Contractor started on Monday, June 6th and anticipated to complete the project by Wednesday, June 15th.

- Staff continues to review material inventory and projected needs in anticipation of supply chain issues.
- A digital advertising campaign has begun to enhance the Public Awareness and Damage Prevention Program. June's advertising has an emphasis on "Gas Safety".
- 1 Bid was received for the Mobile Data Collection System and ERT Programmers. This bid consisted of a collection system and programmer for the finance department, and programmers for the Gas, Light, and Water Departments. The collections system is used to collect meter reads for billing.
- A Gas Mainfitter JATC Program compliance review was performed by L&I on May 26th.
- Staff participated in a Pipeline Safety Audit with the UTC on June 7th.
- Jonathan Miller will start on June 16th as our temporary Gas GIS Intern.
- Luke Gerchak will start on June 16th as our temporary Student Laborer.