

The background image is a high-angle, wide shot of a mountainous landscape. In the foreground, a rocky, sparsely vegetated slope descends from the left. The middle ground shows a deep valley filled with dense evergreen forests. In the far distance, a large body of water, likely a lake, is visible under a vast, blue sky with wispy clouds. The overall lighting suggests a clear, bright day.

# **WEST**CANAL Broadband Town Hall

August 2021



# Tonight's agenda

- What are we doing here?
- Who are we?
- What are your choices today?
- What is coming?
  - WA SBO (Russ): Rural broadband funding, and how to qualify
  - Jefferson PUD (Kevin, Lori): Quilcene and Disco Bay
  - Mason PUD1 + HCC (Kristin, Mike): Hama Hama to Mt Walker
- How can you help?
- Town Hall Q&A

A scenic mountain landscape with a clear blue sky and a valley below. The foreground shows rocky, sparsely vegetated slopes. In the background, a deep valley is visible, with a winding road and a small body of water in the distance. The text is overlaid on the upper half of the image.

**Connect the unserved in Jefferson and  
Mason counties to broadband.**

**Service must be fast, affordable, and reliable.**



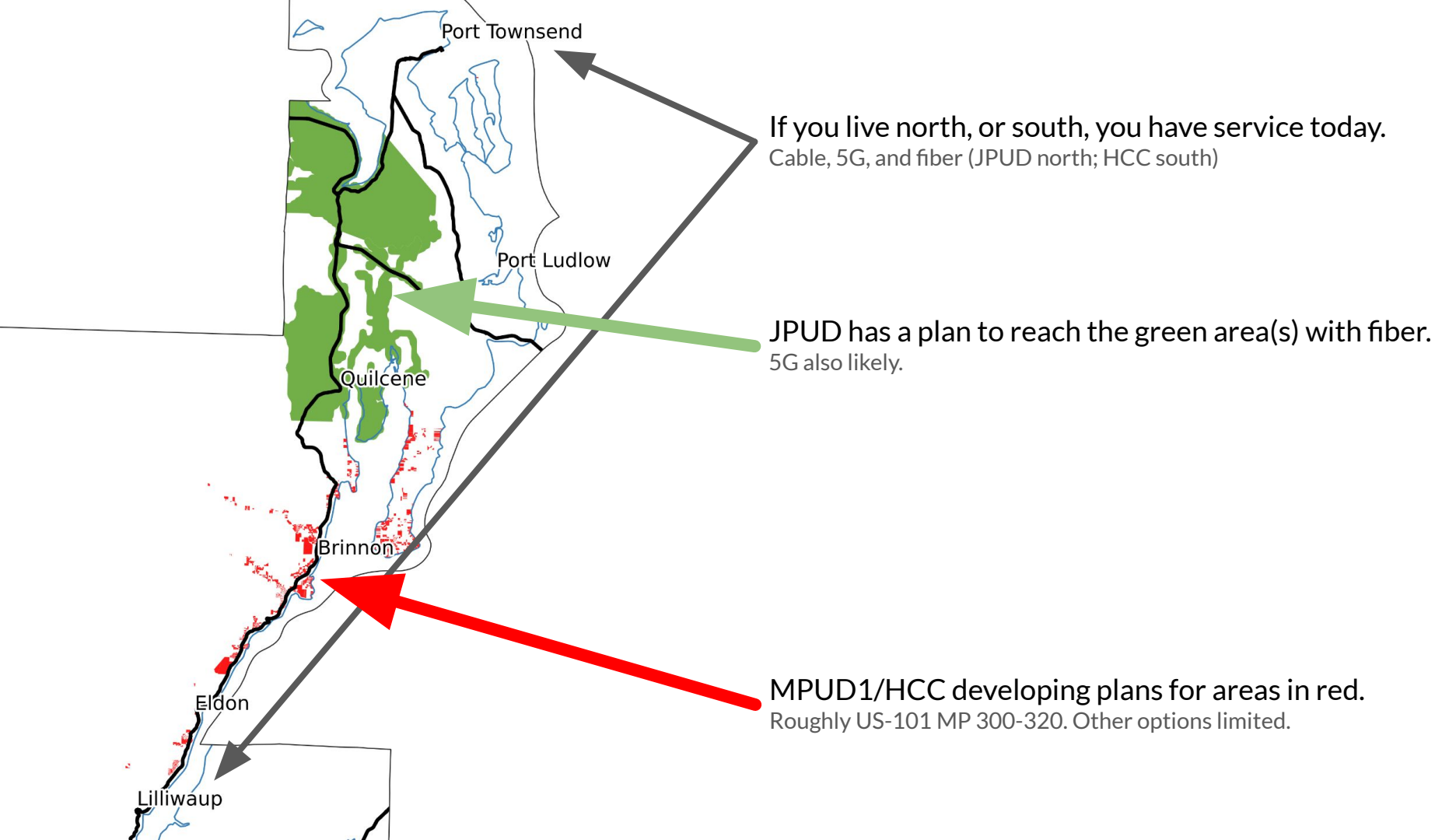
# Who are we?

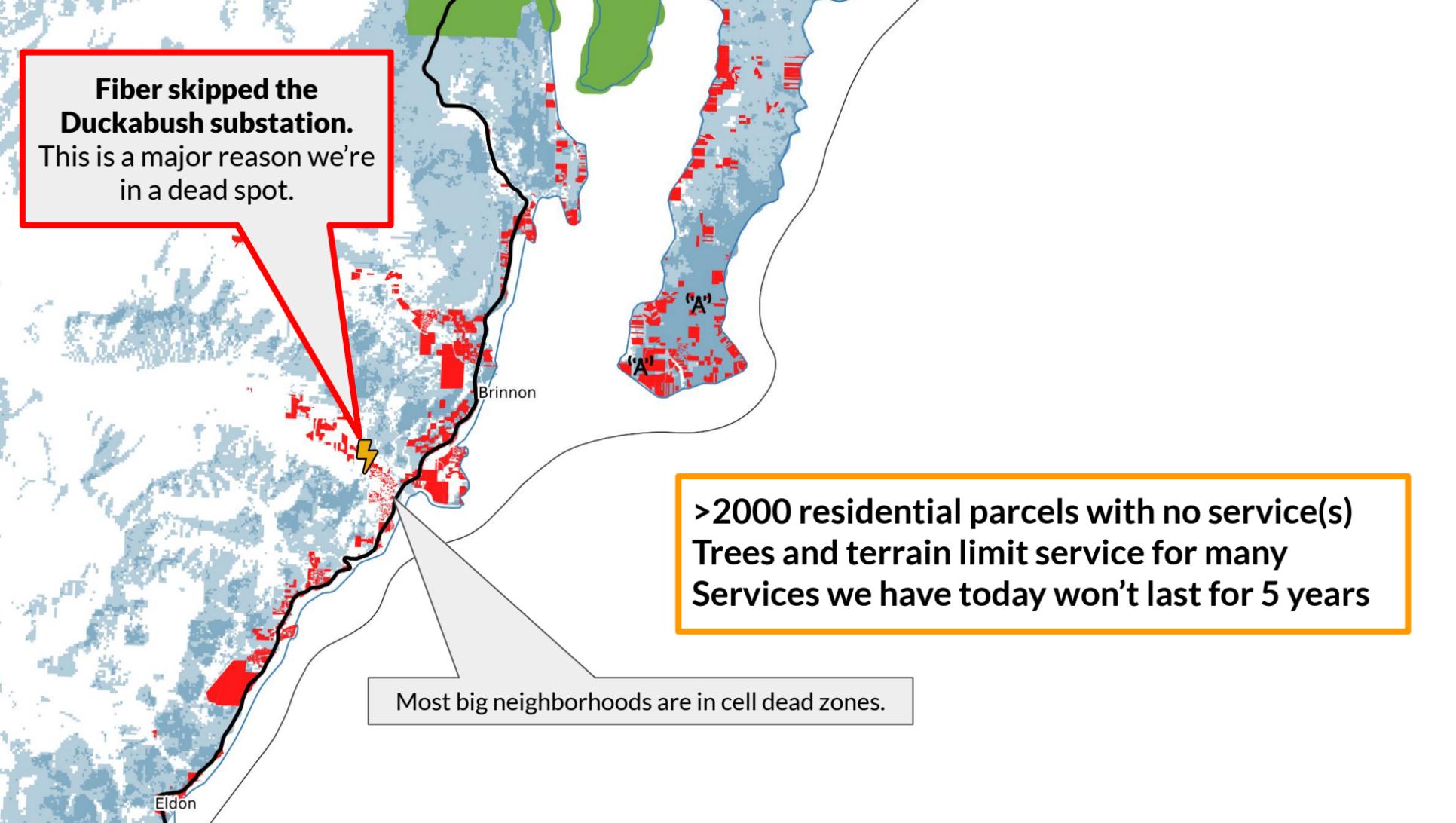
- **Community organization from Jefferson and Mason Co.**
  - Independent and not connected to any company or PUD
  - Have worked in technical and public utility sectors
- **Started in 2016, helped attract first new service (NOPDC)**
- **Relaunched in 2021 to ensure funding doesn't skip us again**
  - Collect detailed data to show the needs
  - Advocate for service with public, private companies (tonight!)
  - Help local households navigate the choices they have today



# What is our goal?

- **Service to families and businesses who need it**
  - Technology can be different wired, wireless, and satellite OK
- **Speeds, latency, and data caps meet standards**
  - **Now** 25/3 → **Build** 100/20 → **Future** 100/100
  - Good enough to use for video and voice calls
  - Something that will last
- **Accessible pricing (national average \$67)**
- **Reliability**
  - Get what you pay for
  - Works when you need it (not 2-6am)





**Fiber skipped the  
Duckabush substation.**

This is a major reason we're  
in a dead spot.

>2000 residential parcels with no service(s)  
Trees and terrain limit service for many  
Services we have today won't last for 5 years

Most big neighborhoods are in cell dead zones.

Brinnon  
Eldon

# What service is here today (or soon)?

Tech	Speed	\$ / mo	Lag	Limits
<b>DSL</b> CenturyLink	6 / 0.66 Legal disclosure	N/A	50ms	No longer sold
<b>Geo Satellite</b> ViaSat, Hughes	18 / 3 Speed test	\$300	600-700ms	High price, small data caps (150Gb)
<b>Cellular</b> T-Mobile, Verizon	37 / 8 Legal disclosure	\$60	40-70ms	Rural 5G is $\leq 2x$ faster than 4G Most neighborhoods in dead zones
<b>Microwave</b> NOPDC	40 / 20 Advertised	\$120	20-60ms	Limited coverage, reliability Speed upgrades may come in future
<b>Low Satellite</b> Starlink, Kuiper	97 / 14 Speed tests	\$100	40-60ms	Limited coverage, not yet available Variable speeds



# **WA State Broadband Office**

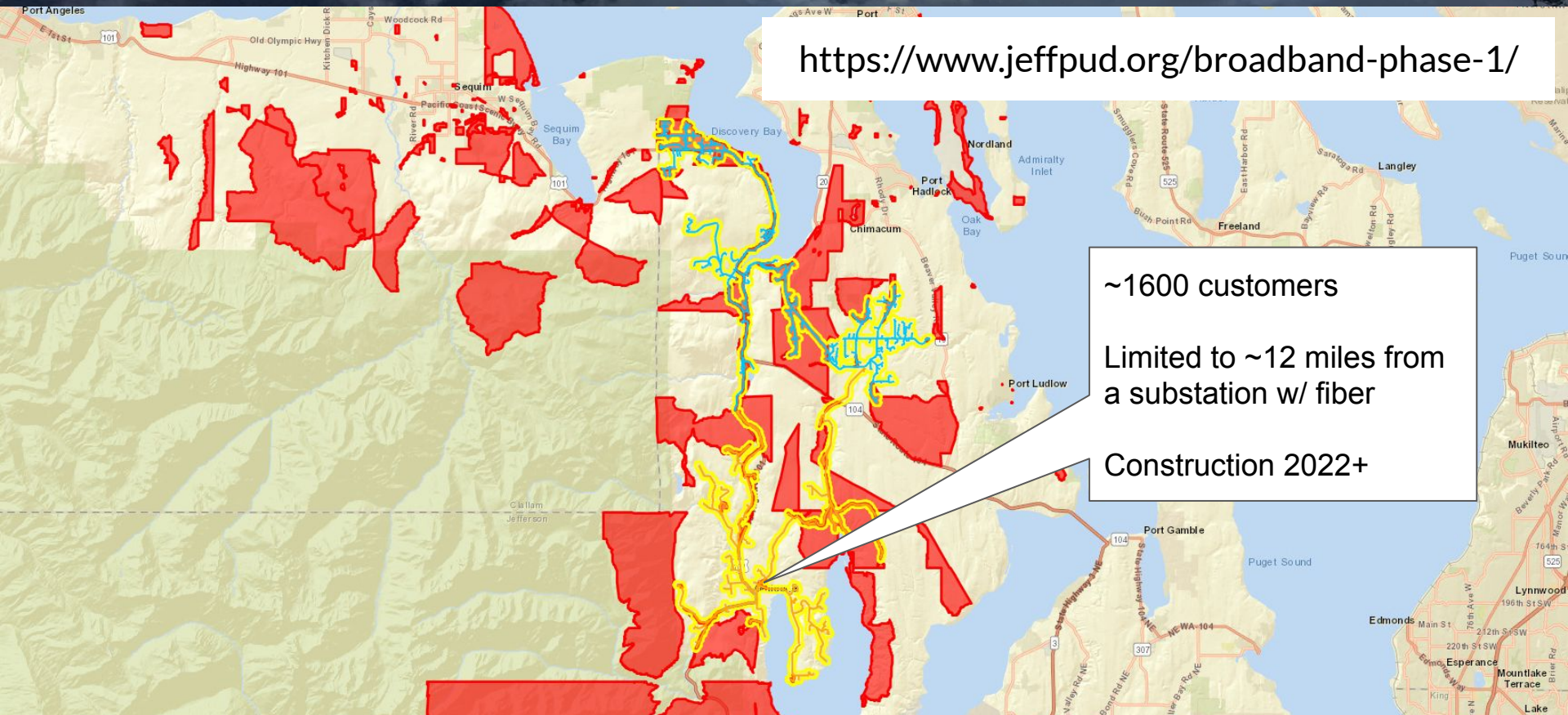
# Jefferson PUD

<https://www.jeffpud.org/broadband-phase-1/>

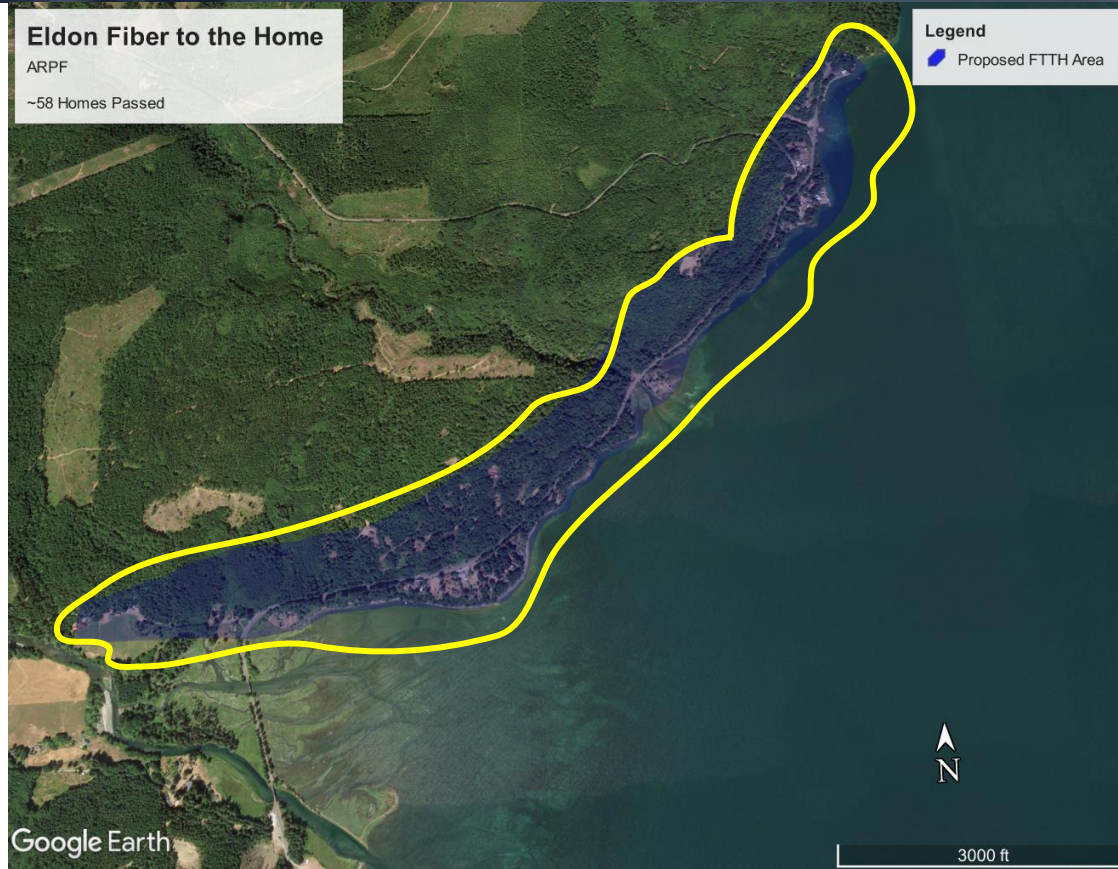
~1600 customers

Limited to ~12 miles from  
a substation w/ fiber

Construction 2022+



# MPUD1 + HCC - Eldon




# MPUD1 + HCC - Colony Surf

## Colony Surf Fiber to the Home

ARPF

~90 Homes Passed

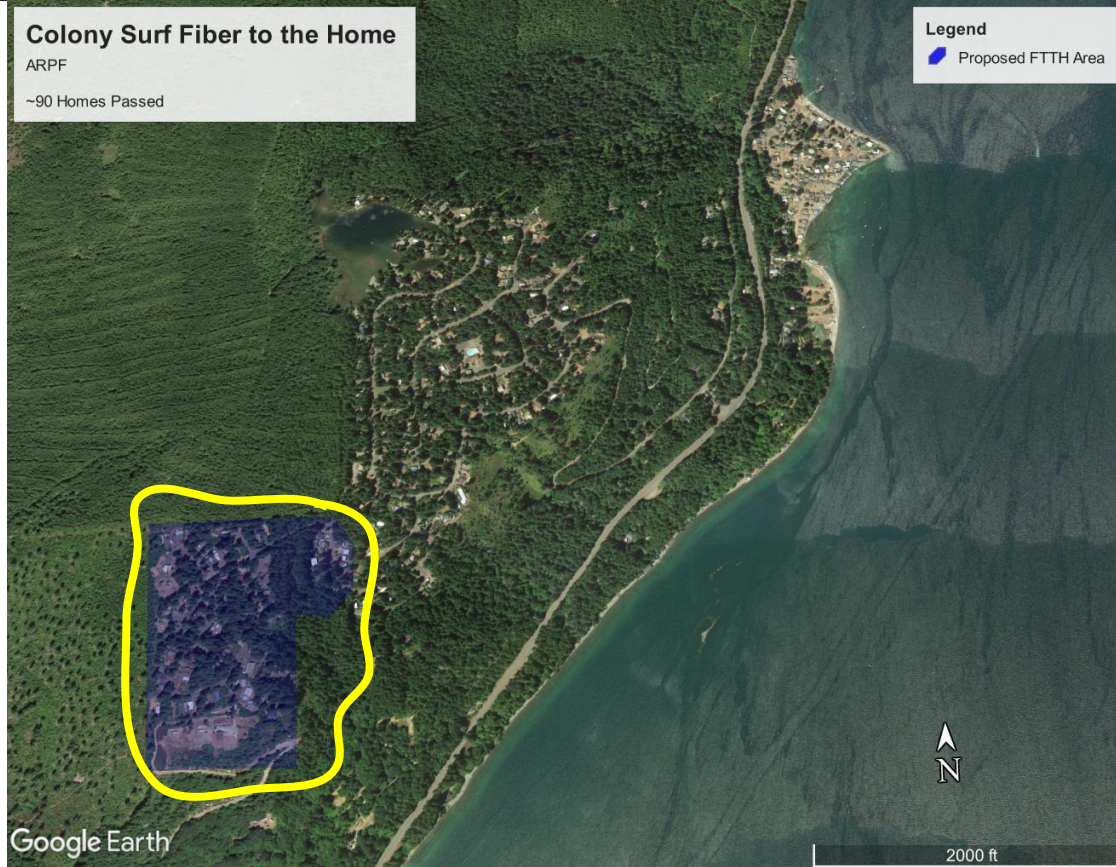
### Legend

 Proposed FTTH Area

Google Earth

N

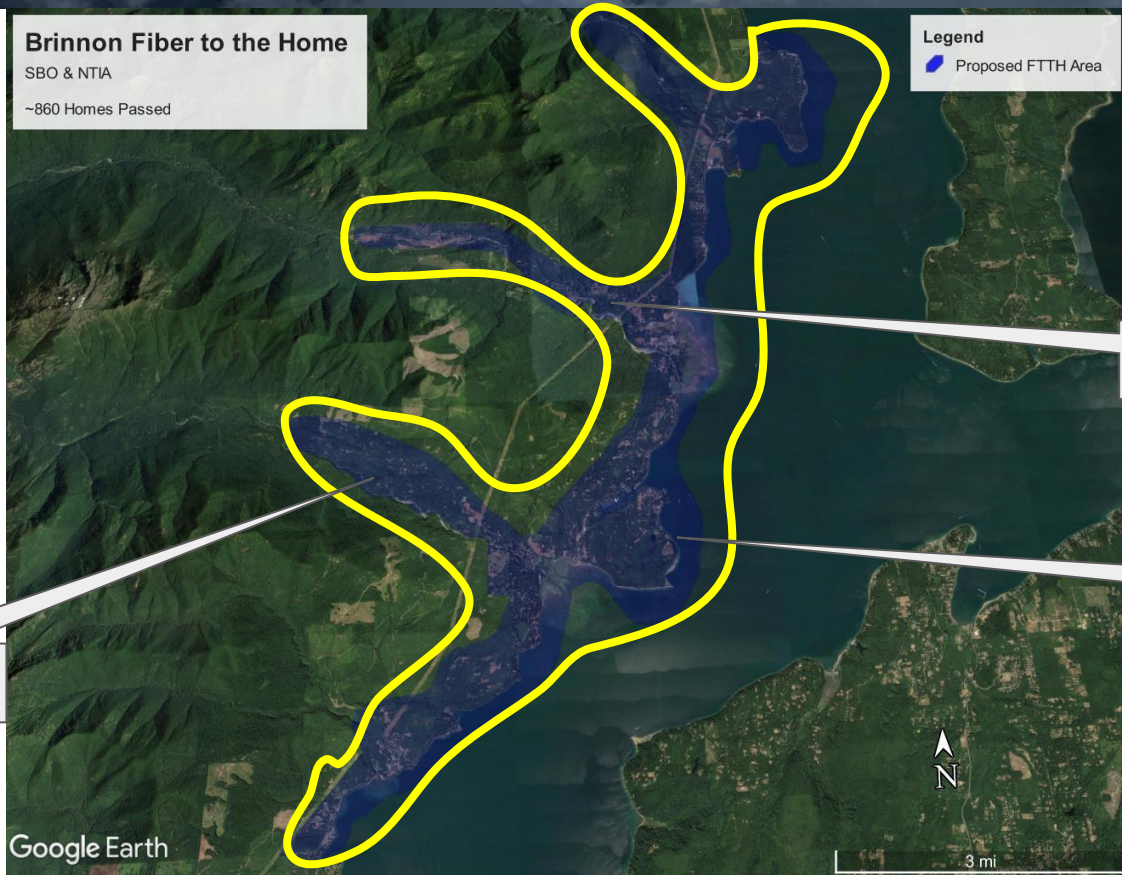
2000 ft



# MPUD1 + HCC - Triton Cove



# MPUD1 + HCC - Brinnon Area





# What you can do to help

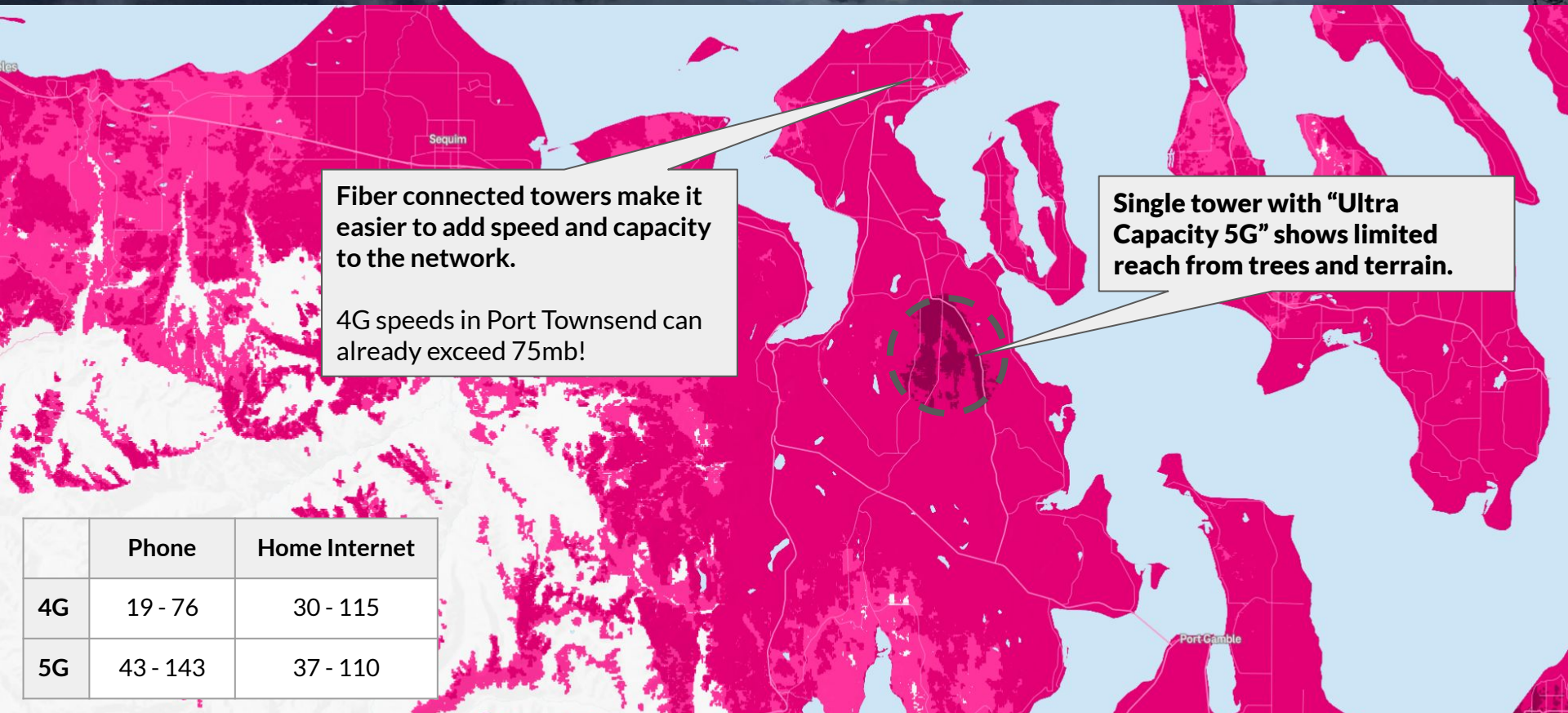
- **Take the surveys to show your needs and current speed**
  - [West Canal Community Broadband](#) - local data helps us move faster
  - [Washington State](#)
  - FCC - Apple or Android Apps
- **Share the word with your neighbors**
  - Sign up for Emails to get updates
- **Write in to show your support**
  - See the handout

A scenic mountain landscape with a large body of water in the distance under a blue sky. The foreground shows rocky, sparsely vegetated slopes. The middle ground features a deep valley with dense evergreen forests. In the far distance, a large, calm body of water, likely a lake or reservoir, stretches across the horizon under a clear blue sky with some light clouds. The overall scene is majestic and serene.

# Community Q&A

# Appendix

# T-Mobile Coverage (North County)



# T-Mobile Coverage (South County)

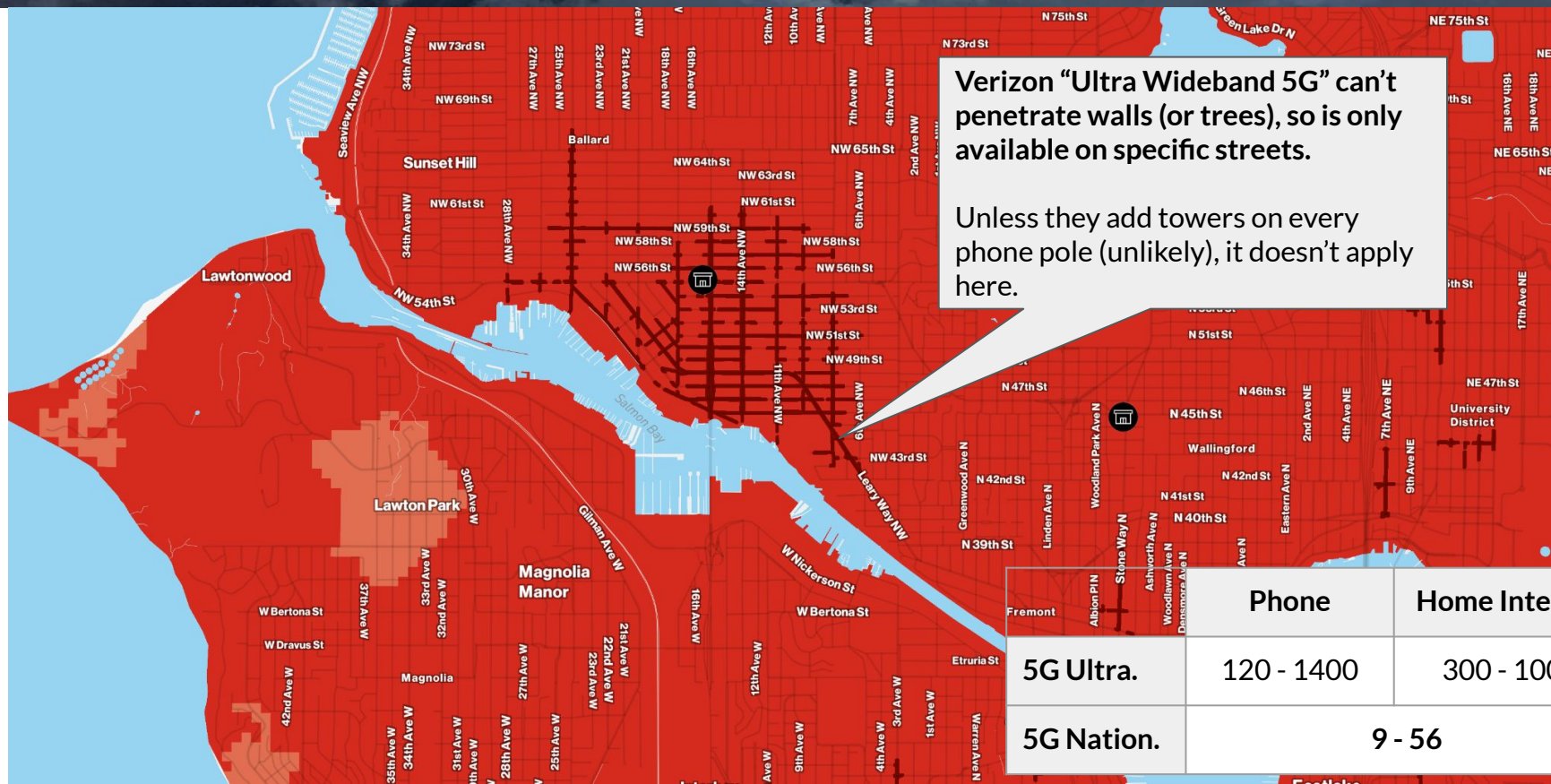
Bright colors are LTE-only, and will not support home users.

Most big neighborhoods in LTE-only zones, which won't get home Internet!

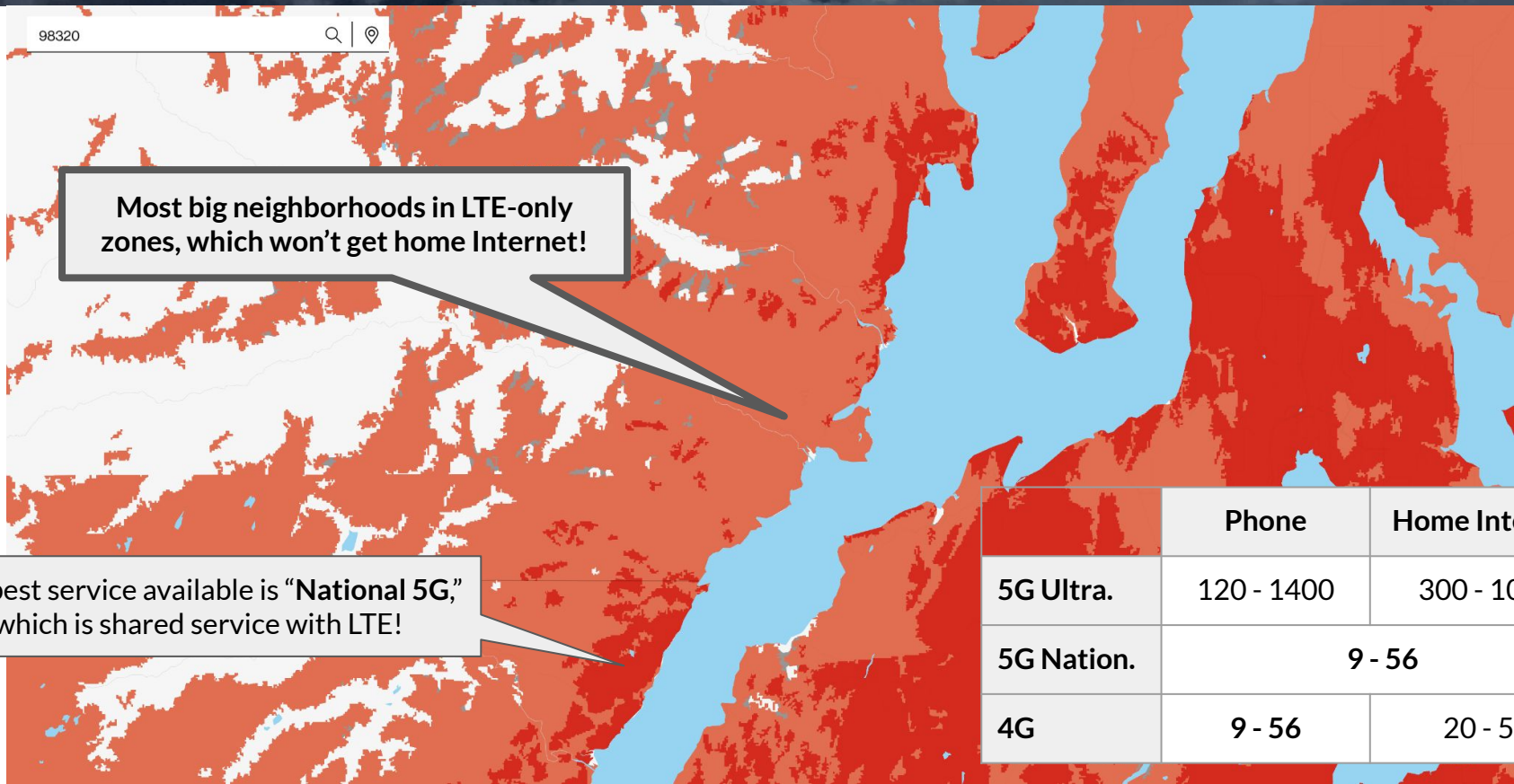
Dark areas are "Ultra Capacity 5G," which is capable of fast, unlimited home access.

	Phone	Home Internet
4G	19 - 76	30 - 115
5G	43 - 143	37 - 110

# Verizon Ultra Wideband Coverage (Seattle)



# Verizon Coverage (South County)



	Phone	Home Internet
5G Ultra.	120 - 1400	300 - 1000
5G Nation.	9 - 56	
4G	9 - 56	20 - 50



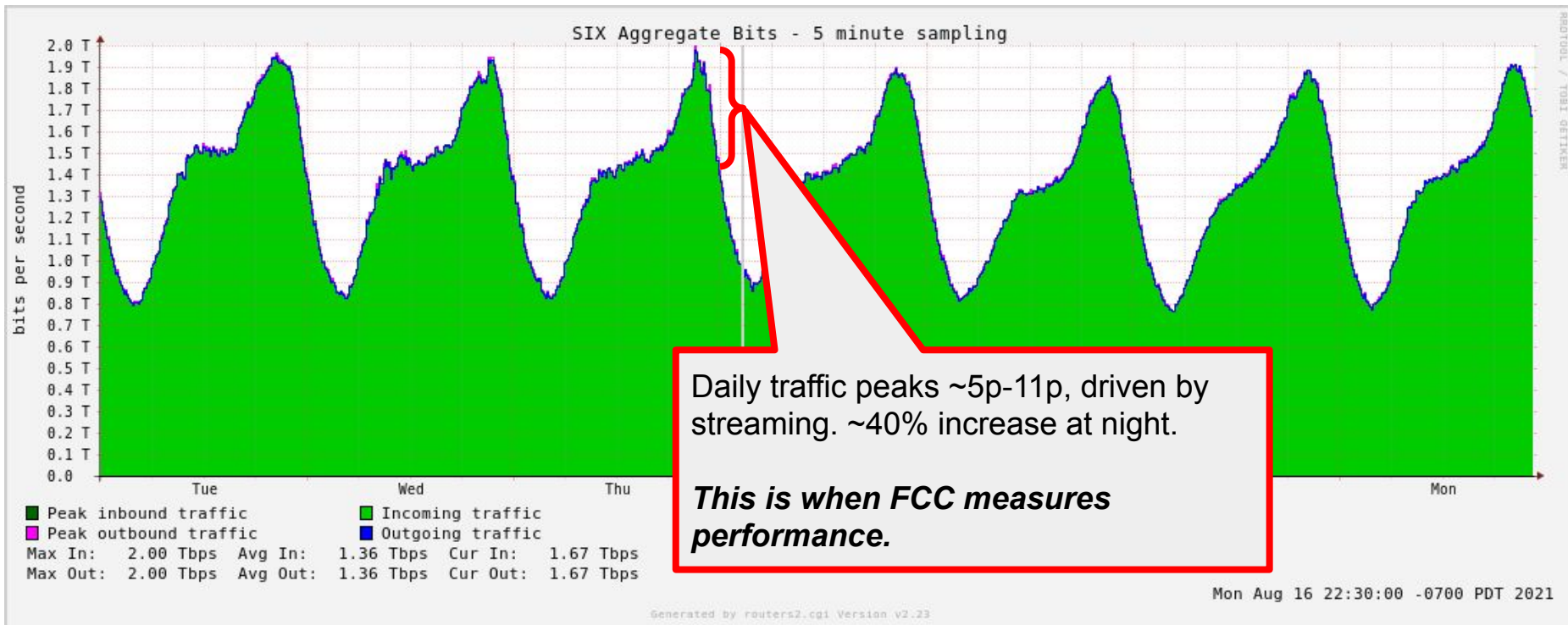
# Is fiber the only answer? Yes and no.

- **Long distances need fiber**
  - Need more bandwidth than fiber can provide
  - Wireless interference increases too much with distance
  - Wireless 10g @ 7 miles < Fiber 100g @ 1000's of miles
- **Shorter distances can use wireless**
  - Copper 1g: ~1/10 mile
  - Wireless 1g: ~1/2 mile
  - Wireless 200m: 5-10 miles
- **The service you get may be different based on your location**
  - Some of the fastest ISPs are wireless (Google, Monkeybrains, Starry)

# NOPDC Monthly Pricing

Speed	Wireless	Fiber
7/1	\$50	Not available
20/1	\$70	
40/20	\$120	
50/50	Not available	\$50
100/100		\$70
1000/1000		\$90

# Networks need to work when we need them





# “Cable cutting” / Money saving ideas

## TV

- Locast - Live broadcast TV (free)
- Hulu / Youtube TV / Sling - Satellite/Cable TV alternatives (\$50-70/mo)

## Telephone

- Verizon / AT&T / T-Mobile - WiFi calling improves cell coverage at home (free)
- Ooma / Vonage - Landline phone (\$5-20/mo)