



# Grassroots to Rooftops: Building a free community WiFi network across Ottawa

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**In Partnership with:**







# Land Acknowledgement

NCF acknowledges the Anishinàbe Algonquin People whose traditional unceded, unsurrendered territory is where our work takes place.

We recognize that the digital divide disproportionately affects Indigenous peoples, communities and Nations and that reconciliation is central to advancing digital equity in our region.





# Overview

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Founded in 1992, National Capital FreeNet (NCF) is a local not-for-profit internet provider committed to advancing digital equity.

This includes the understanding that some groups are disproportionately affected by the digital divide.

**We believe everyone in our region has a right to affordable, high-quality internet that they can understand how to use, while feeling safe online.**

We serve thousands of residential and business members through our affordable internet, free locally-hosted email, digital skills resources and award-winning HelpDesk of staff and community volunteers.







### The Need is Real:

- The high cost of home internet and cellphone data plans means that many of those living on low incomes struggle to afford internet access.
- In a 2020/21 survey of more than 200 OCH tenants, 22.5% did not have home internet
- Lack of reliable internet connectivity limits people's ability to access health and government services, stay in touch with friends and family, find and apply for jobs and practice critical digital skills.





## 03 Coalition in Action

### CIRA

- Joined our mission in December 2023 through their Net Good program to fund our pilot.
- Provides free use of their DNS Firewall service and is deploying its Internet Performance Test service for continuous improvement.

### Ottawa Community Housing (OCH)

- Hosts our supernode by offering free power and roof space, along with support for community engagement sessions and workshops.

### Hiboo Networks

- A wholly-owned subsidiary of Hydro Ottawa, built our network backhaul, offering free transit for 18-months and lower than market rates for at least five years.

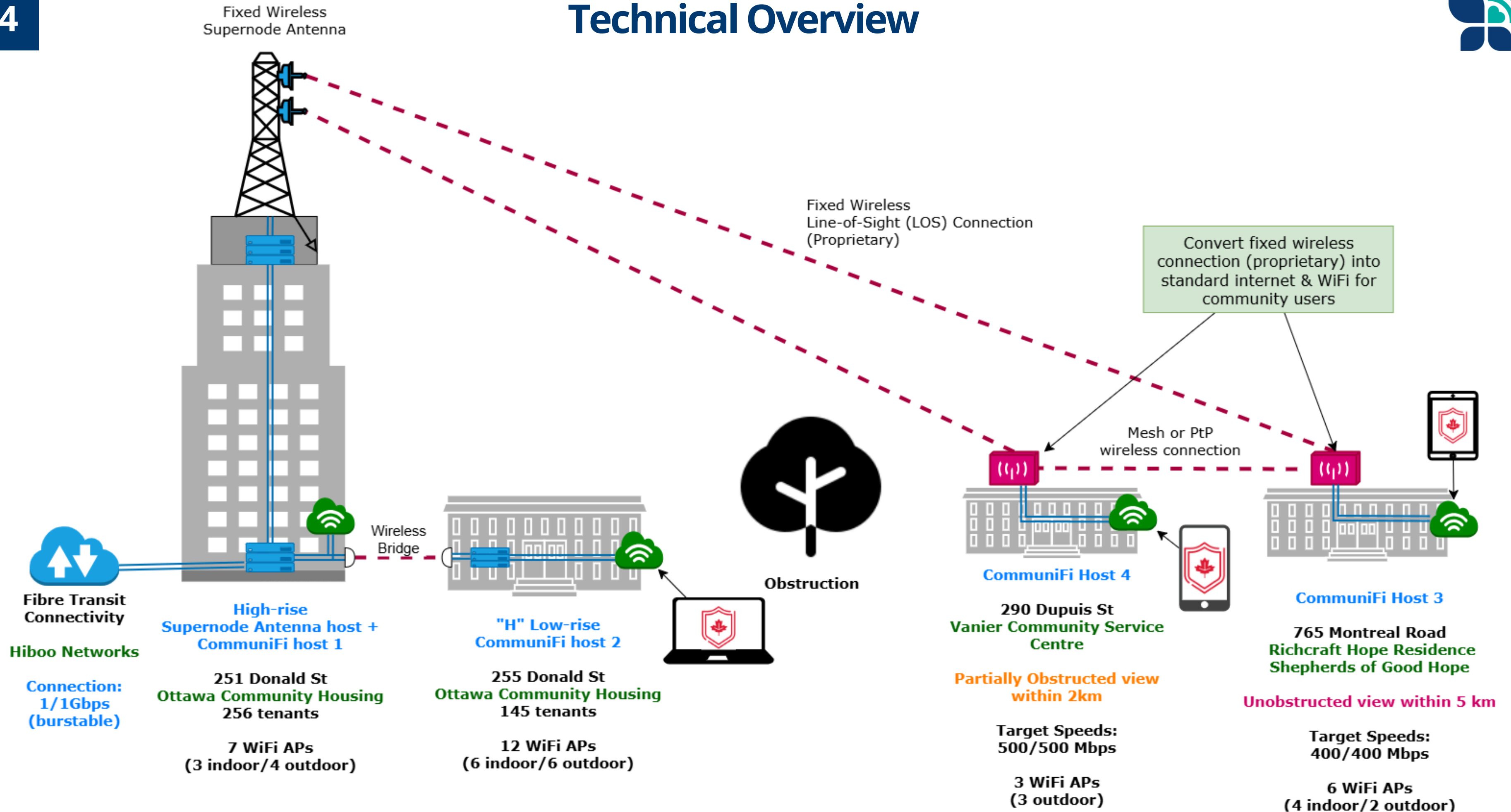
We're proud that this project is coalition of Ottawa-based not-for-profits and municipally-owned agencies committed to connecting those who need it most.







# Technical Overview





# Year One: Client Devices



3844

Total unique clients (devices)

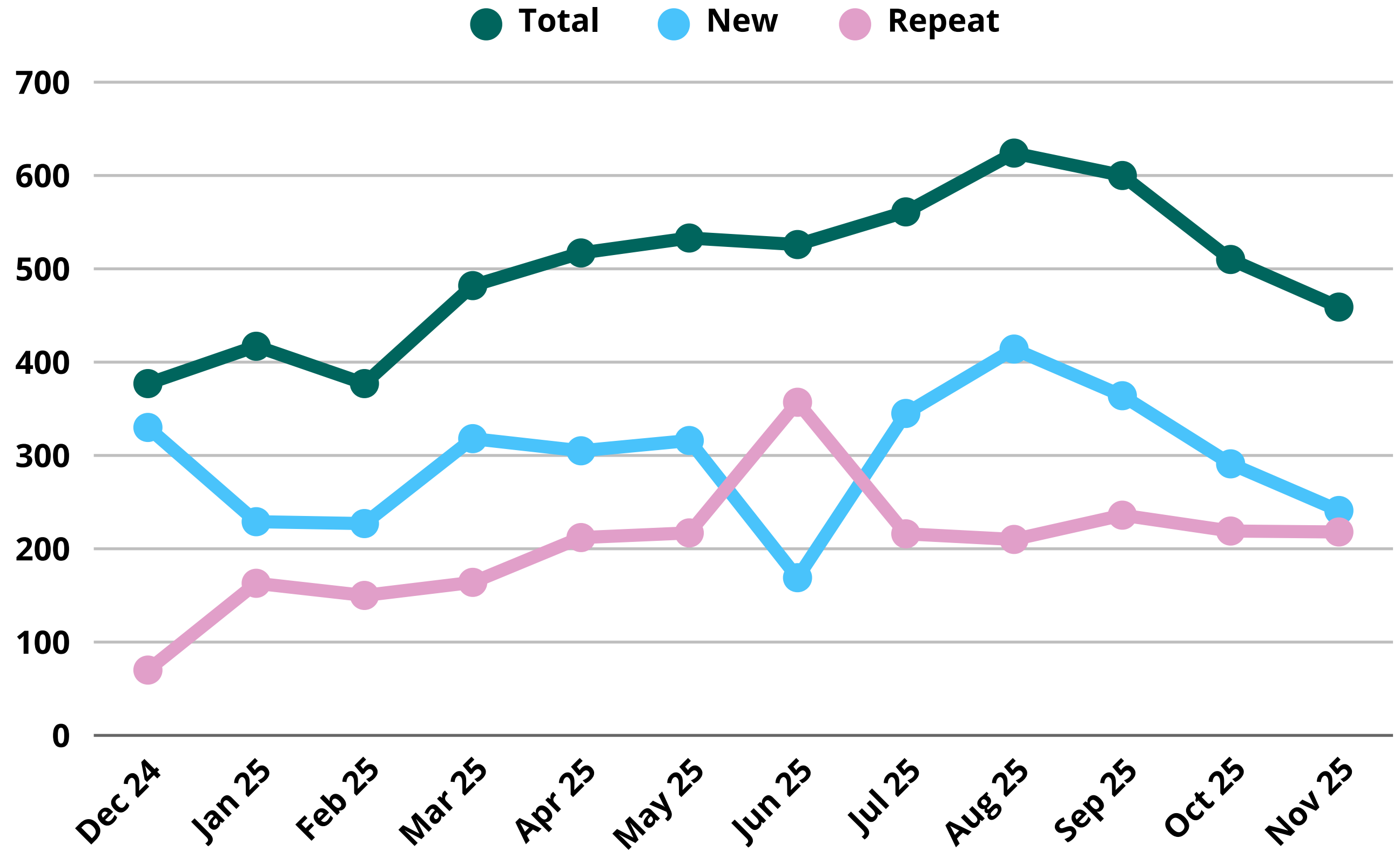
298

Average new clients (devices) each month

213

Average repeat client (devices) each month

### Number of unique clients (devices)





# Year One: Usage



## 9.96 GB

Average monthly usage  
per client (Nov 2025)

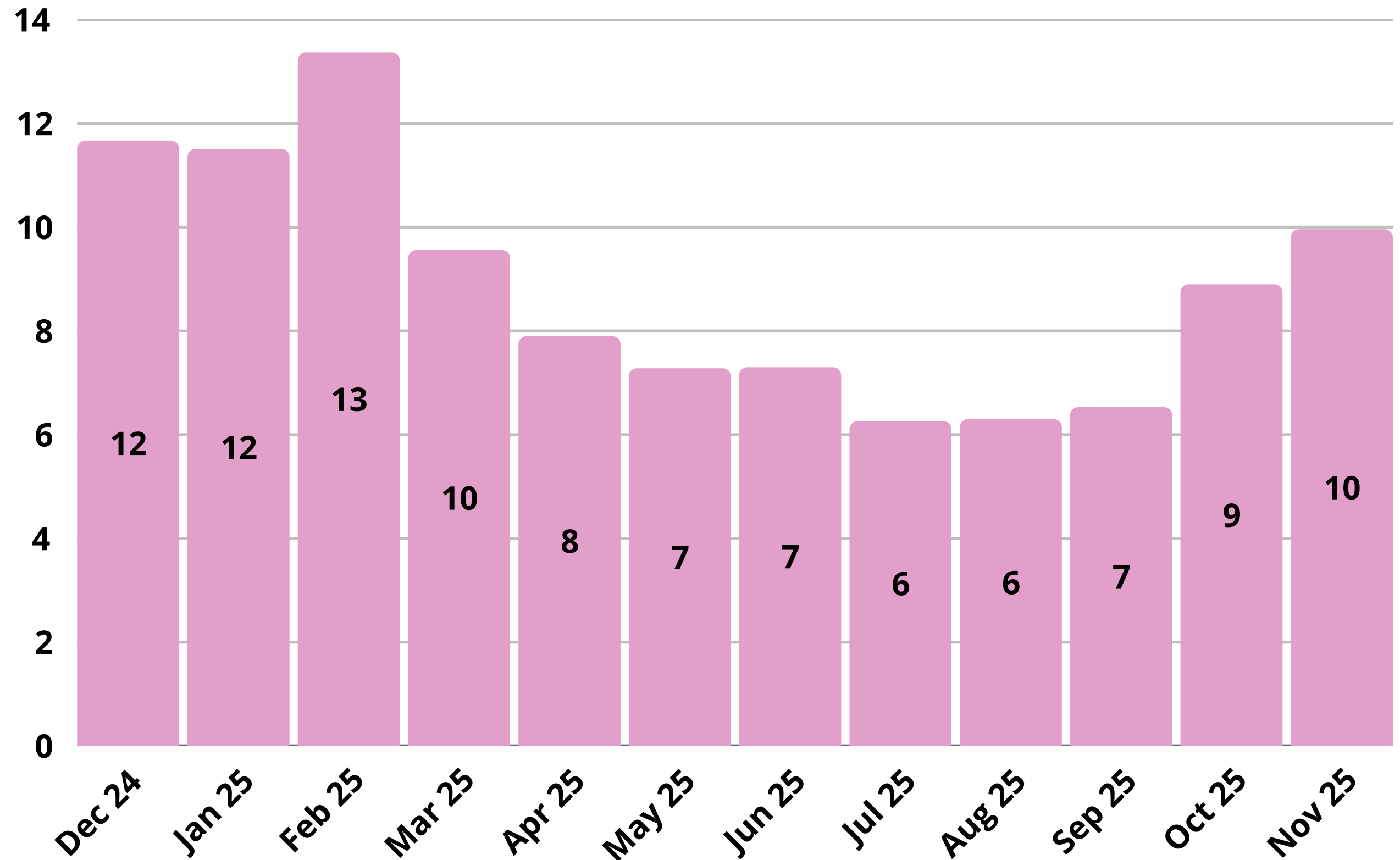
## 10.16 GB

Average usage per mobile  
subscriber in Canada (Q2 2025)

## 53.3 TB

Total usage to date

### Average monthly usage (GB) per client per month







54,093

Total Web Filter blocks  
for Family Network

22,605

Total Phishing blocks

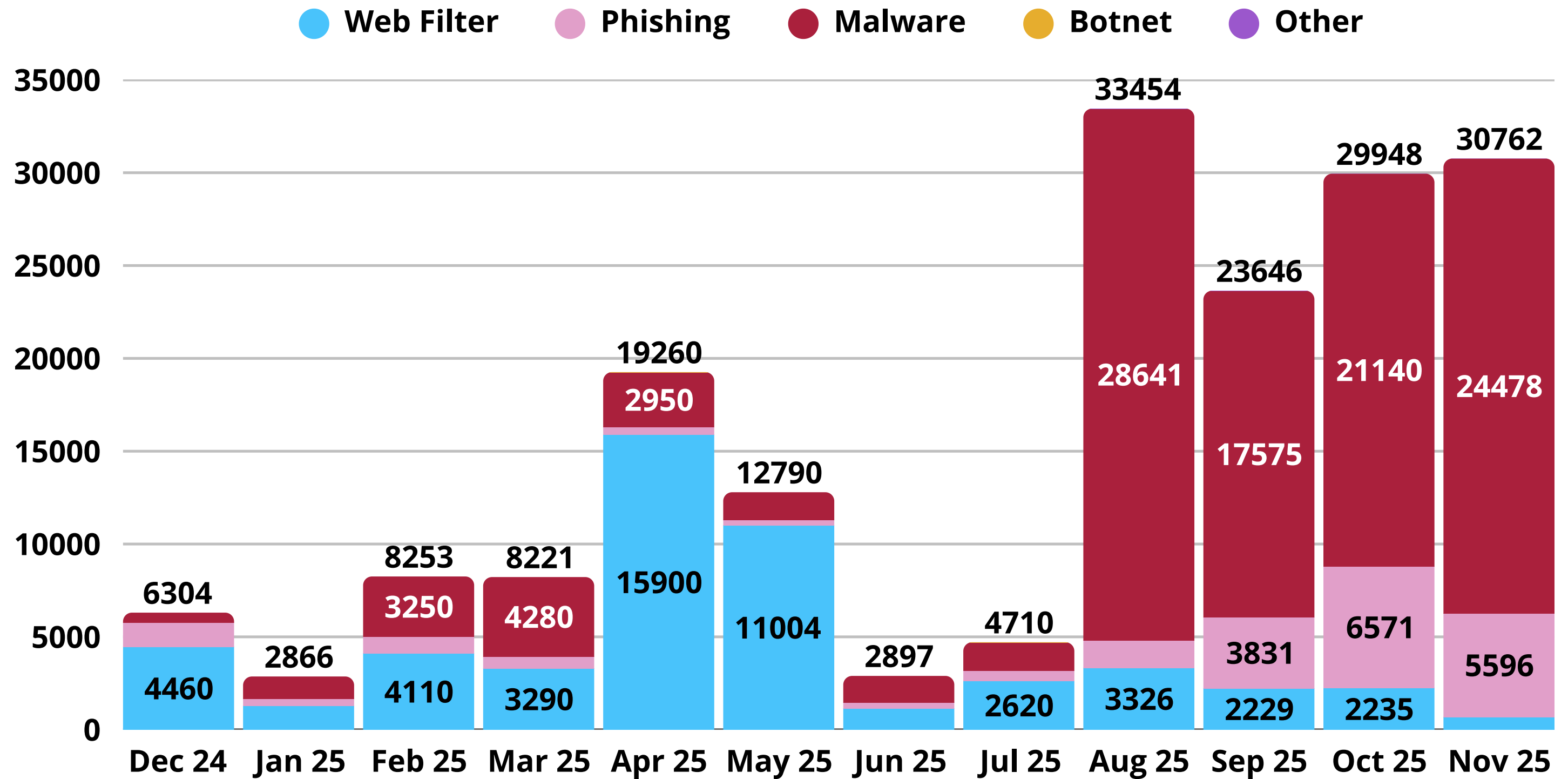
109,136

Total Malware blocks

32

Total Botnet blocks

## CIRA DNS Firewall Blocks



**01****Become a CommuniFi Host**

- Ideal for community organizations, social service agencies, or small businesses within 5 km and in direct line-of-sight of 251 Donald.
- Anticipated to connect at least 1,000 people per year.

**02****Sponsor a WiFi Connection**

- Investment of approximately \$15,000 per host connection.
- Supports equipment, installation, ongoing maintenance, and digital skills workshops.

**03****Social Procurement Opportunities**

- Departments or agencies can extend managed WiFi services, fibre connectivity for backhaul or direct tenant connectivity by tapping into our service offerings

**04****Donate**

- Cash or in-kind donations boost network expansion as we work toward our own charitable status.





### Host

Provides free WiFi indoors and extends coverage up to 300 feet outdoors. This investment covers site surveys, equipment, installation, and 5 years of maintenance & digital skills support.

**\$15,000**



### Hub

Funds a signal repeater hub that enhances the range of our supernodes. Includes engineering studies, equipment, installation, and 5-year support with added digital training.

**\$50,000**



### Supernode

Establishes a supernode for a new neighborhood (e.g., Carlington-Caldwell), featuring comprehensive infrastructure for network resilience, redundancy, and broader outreach.

**\$175,000**





## Phase Two Goal

Expand to five new host locations, bringing high-speed, free-to-use WiFi access to residents in common areas and community spaces, with the strategic target of growing the user base to between 8,000 and 10,000 users.

## Phase Two Expansion Host Partners

This expansion is made a reality through partnership with the organizations providing the physical site access and staff support, enabling NCF to complete the technical design work needed to reach their clients and the public in need. Our expansion partners include: Ottawa Community Housing (OCH), Shepherds of Good Hope and the Ottawa Mission.

## Future Expansion

We have also begun planning to strategically expand our existing network into new priority neighbourhoods. To make this expansion a reality, we are actively looking to build new partnerships with organizations in these areas:

- Lowertown-Sandy Hill
- Carlington-Caldwell
- Heron-Heatherington
- Foster Farm-Bayshore





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