



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

July 2025

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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

- 1 - About National Capital FreeNet
- 2 - Community Need and Impact
- 3 - Coalition in Action
- 4 - Technical Overview
- 5 - Early Successes – Real Results
- 6 - Investment & Partnership Opportunities



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.

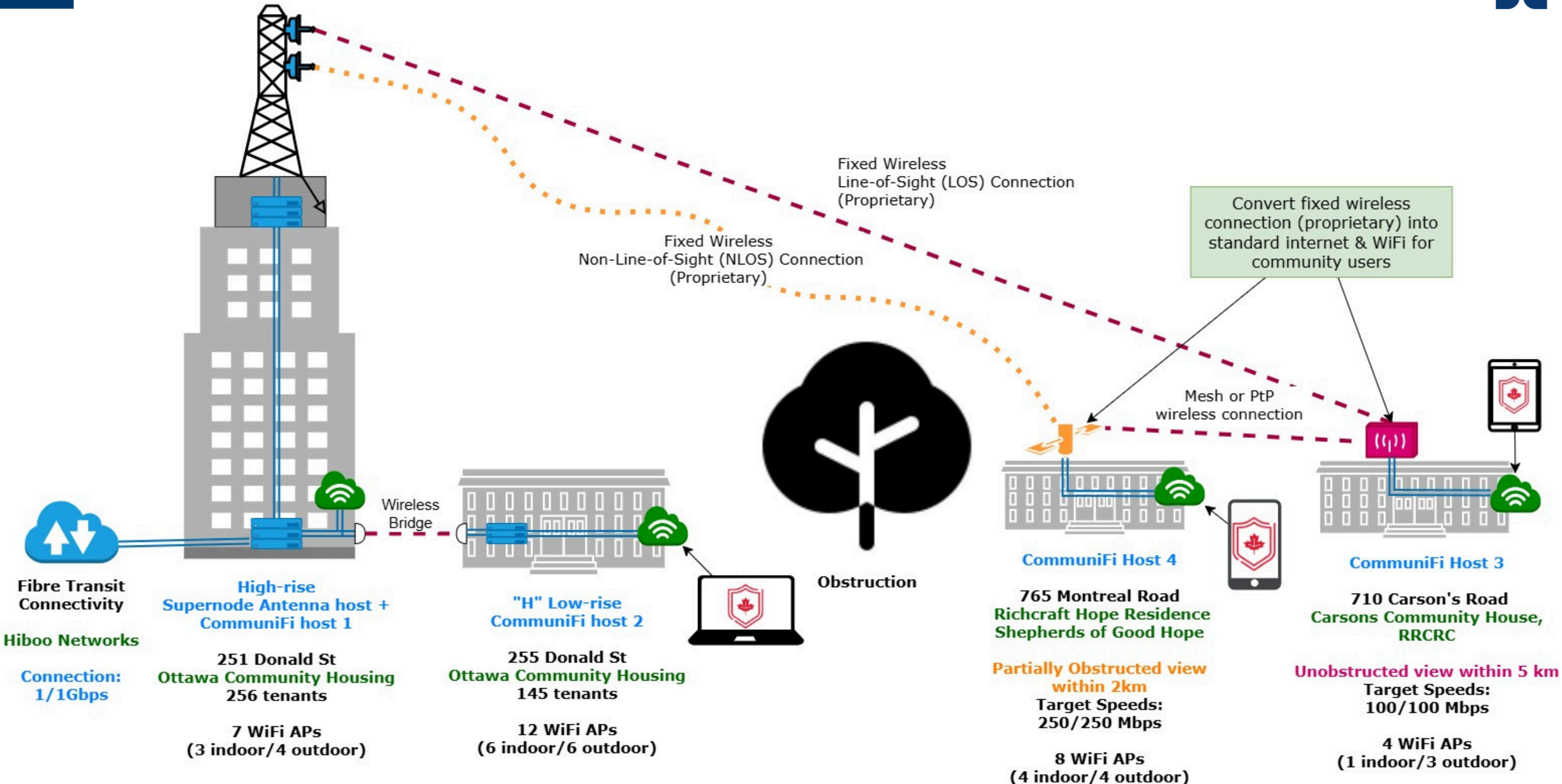
We're proud that this project is coalition of Ottawa-based not-for-profits and municipally-owned agencies committed to connecting those who need it most.





Technical Overview

Fixed Wireless
Supernode Antenna



Early Success - Client Devices



2350

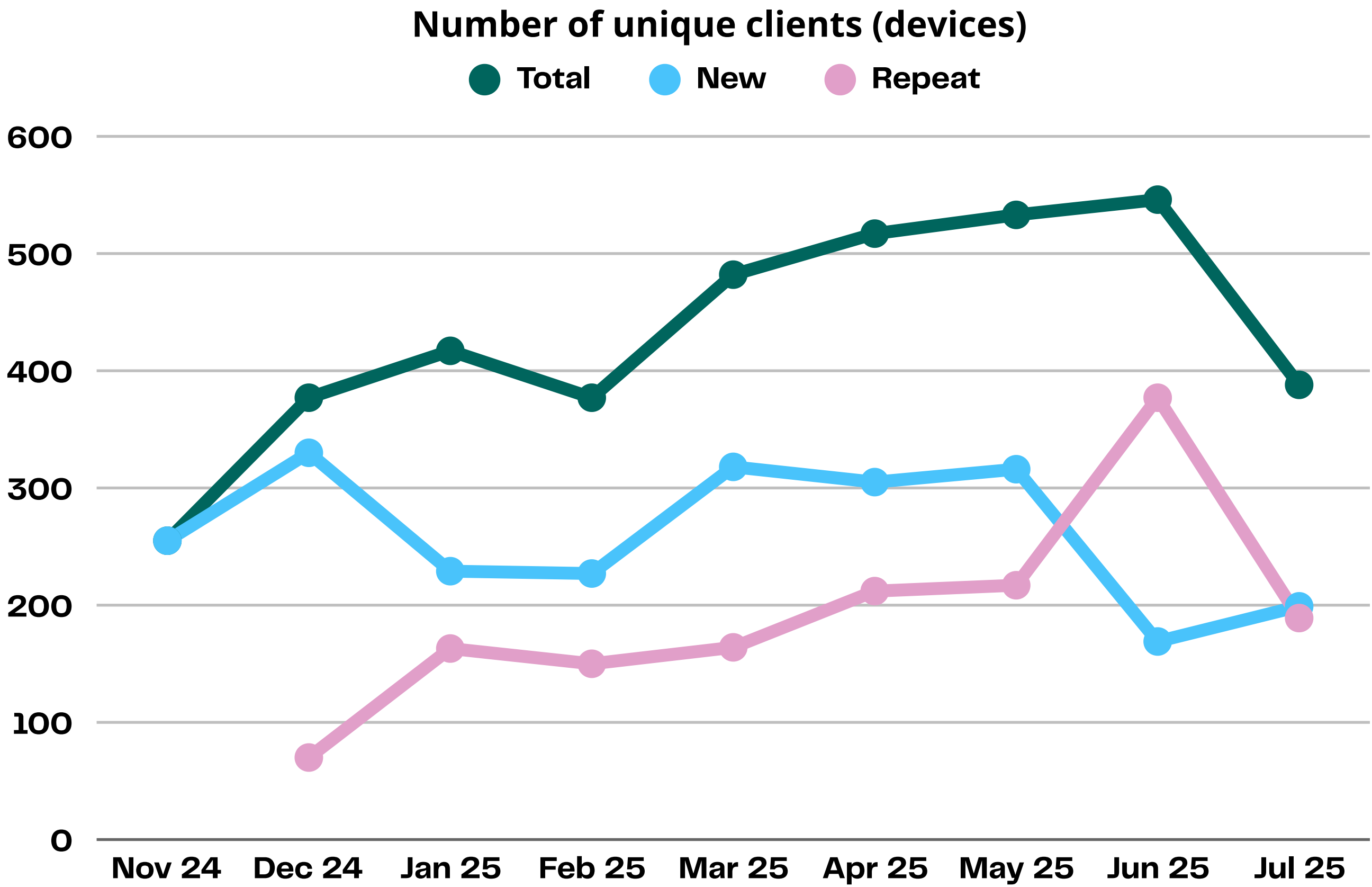
Total unique clients (devices) to date

269

Average new clients (devices) each month

176

Average repeat client (devices) each month



Early Success - Usage



7 GB

Average monthly usage
per client (Jun 2025)

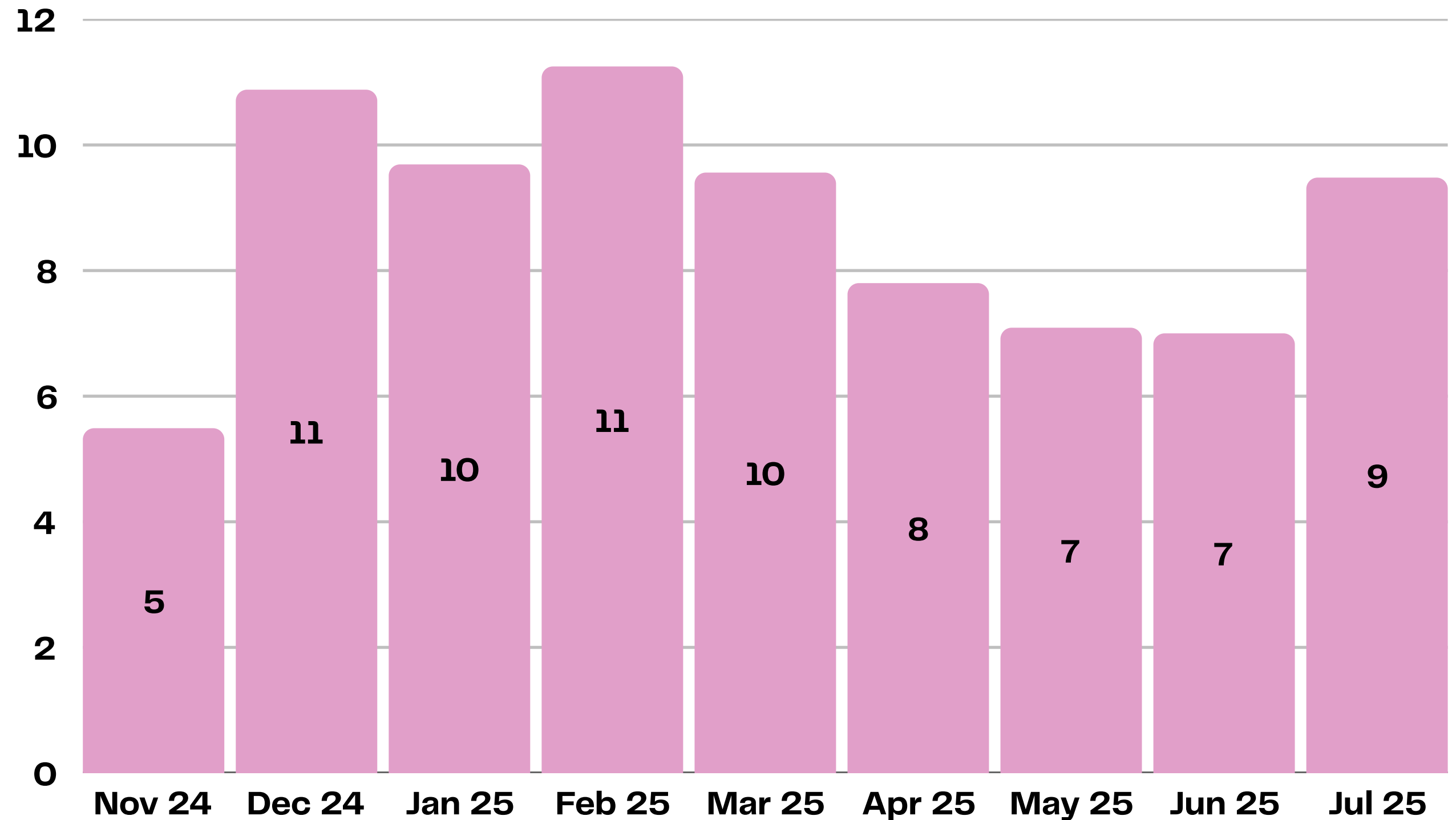
9.55 GB

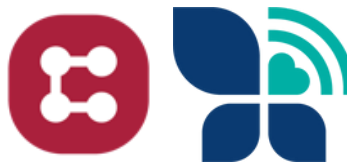
Average usage per mobile
subscriber in Canada (Q3 2024)

36.2 TB

Total usage to date

Average monthly usage (GB) per client per month





44396

Total Web Filter blocks
for Family Network

4653

Total Phishing blocks

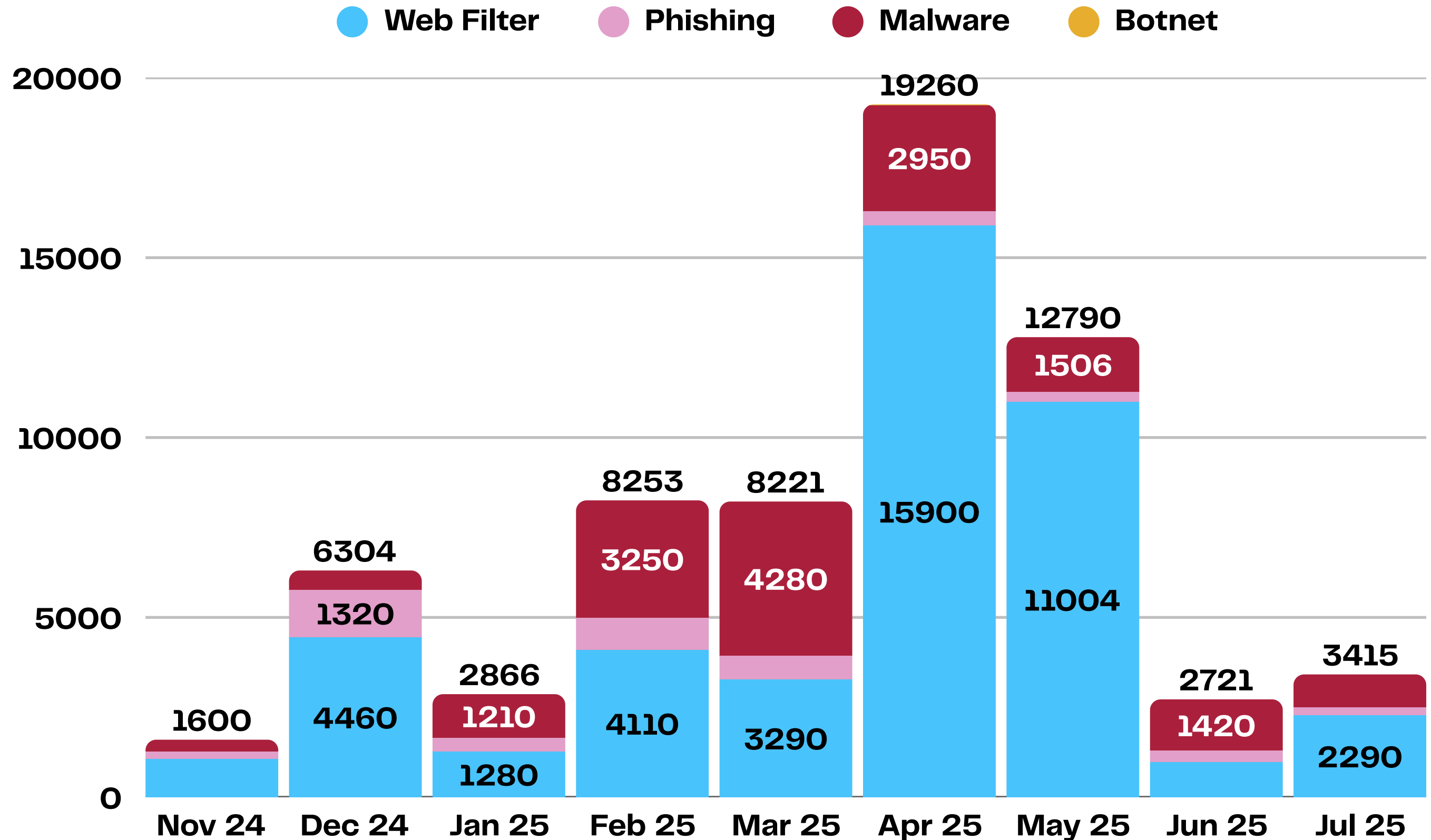
16369

Total Malware blocks

12

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 2

- With 12 initial host sites planned by the end of 2025, our flagship supernode site at 251 Donald is projected to serve between 8,000–10,000 residents annually.

Expansion

- We want to expand the network footprint to help connect priority neighbourhoods:
 - Lowertown-Sandy Hill
 - Carlington-Caldwell
 - Heron-Heatherington, and
 - Foster Farm-Bayshore



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