



BROADBAND DATA ANALYSIS: ORO-MEDONTE TOWNSHIP

2020

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R2B2 Regional & Rural
Broadband

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PURPOSE

- To highlight key findings from the 2020 Oro-Medonte Community Survey (SurveyMonkey), SWIFT survey (2017-2020), a rapid survey in 2020 (Survey123) and CIRA data (2020) in order to examine which areas or groups have the lowest quality of service (QoS) and/or highest need for broadband support.
- To provide a benchmark for quality of service in Oro-Medonte so that future broadband improvements can be assessed in comparison to a pre-improvement period.

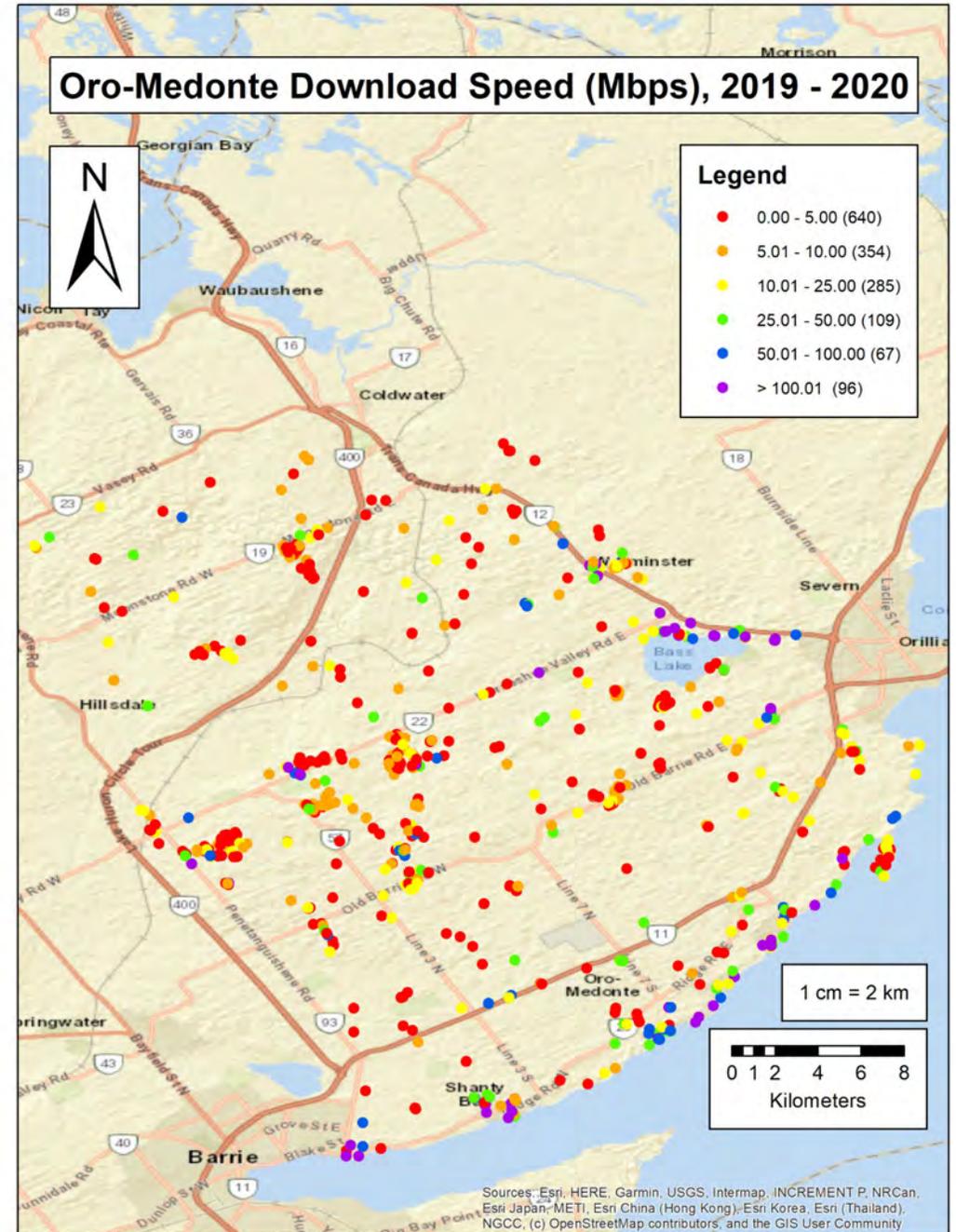
DATA OVERVIEW

- 1,790 CIRA speed test responses (almost all of these responses are due to promotion efforts by Oro-Medonte).
- 905 responses from the Community Survey conducted using SurveyMonkey.
- 295 responses from SWIFT survey and Survey123. Responses includes premises that are: home residences, farm residences and businesses at residences (home-based businesses).
- Data tables and graphs provided in this document are for information purposes only.

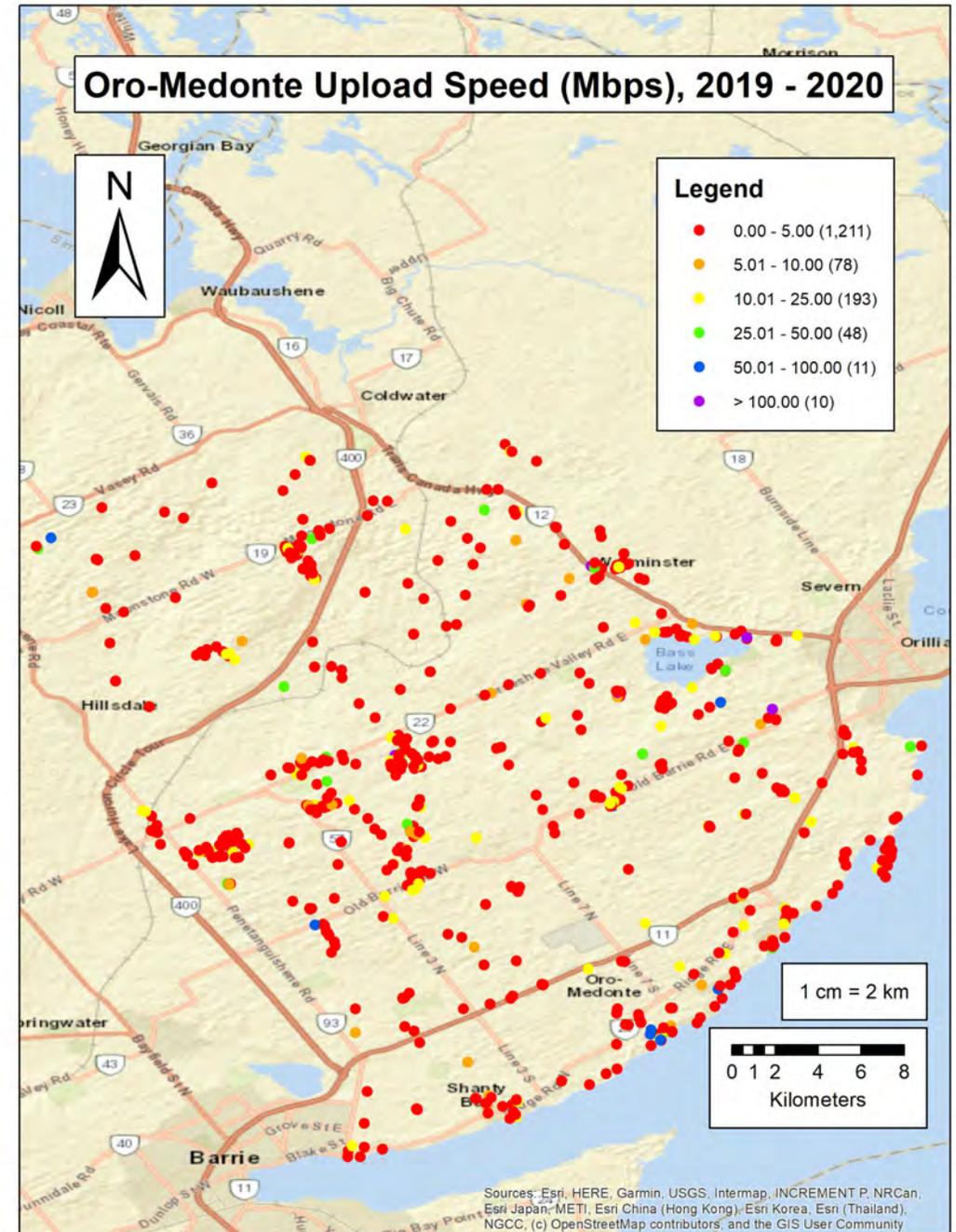
RESULTS OF ANALYSIS

- The results of R2B2 Project data analysis are presented in the following slides.
- First we present the CIRA quality of service data and assess it in terms of achieving the national standard of basic service objective (BSO) (50 download speed and 10 Mbps upload speed and latency lower than 50 ms)
- We then present a comparison of the datasets - data collected in the Oro-Medonte Community Survey, SWIFT surveys, the rapid survey tool using Survey 123 and the CIRA data. In this comparison we summarize the providers offering service in Oro-Medonte Township as of 2020, types of connections, changes over time in the quality of service and the monthly cost of service and considerations of affordability.

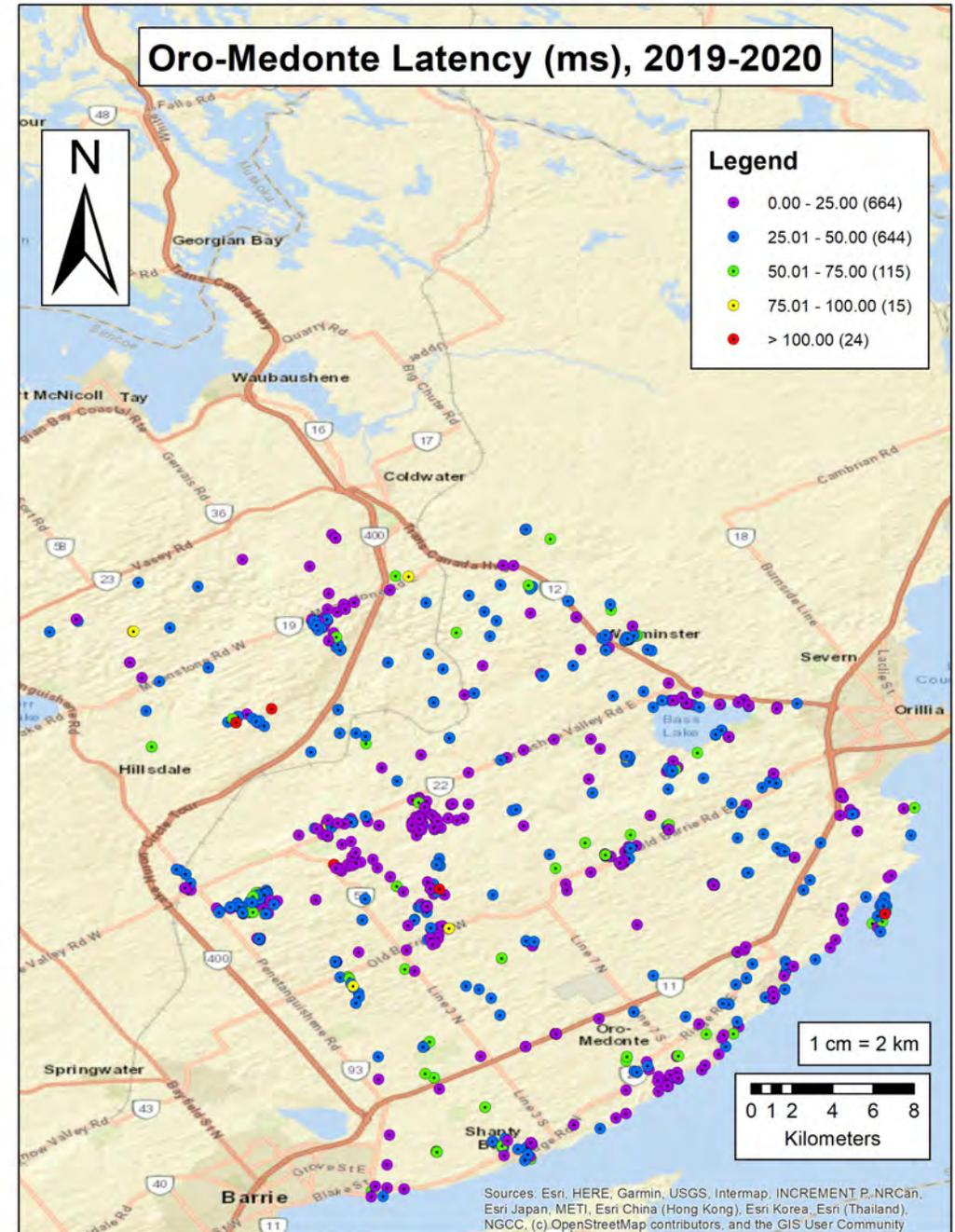
CIRA DATA DOWNLOAD SPEEDS



CIRA DATA UPLOAD SPEEDS



CIRA DATA LATENCY



SUMMARY OF THE QUALITY OF SERVICE IN 2020 (CIRA DATA)

Quality of Service (n=1,454)	Median value
Download speed (Mbps)	5.93
Upload speed (Mbps)	0.96
Latency (ms)	29.24

QUALITY OF SERVICE COMPARISON – SWIFT SURVEY DATA AND CIRA DATA

	Median Download Speed (Mbps)	Median Upload Speed (Mbps)	Median Round-trip Time (ms)
SWIFT Survey Data	5.00 (n=204)	0.99 (n=204)	41 (n=176)
CIRA Data	5.93 (n=1,454)	0.96 (n=1,454)	29 (n=1,454)

These results add confidence to the quality of service results as they are very similar across both datasets.

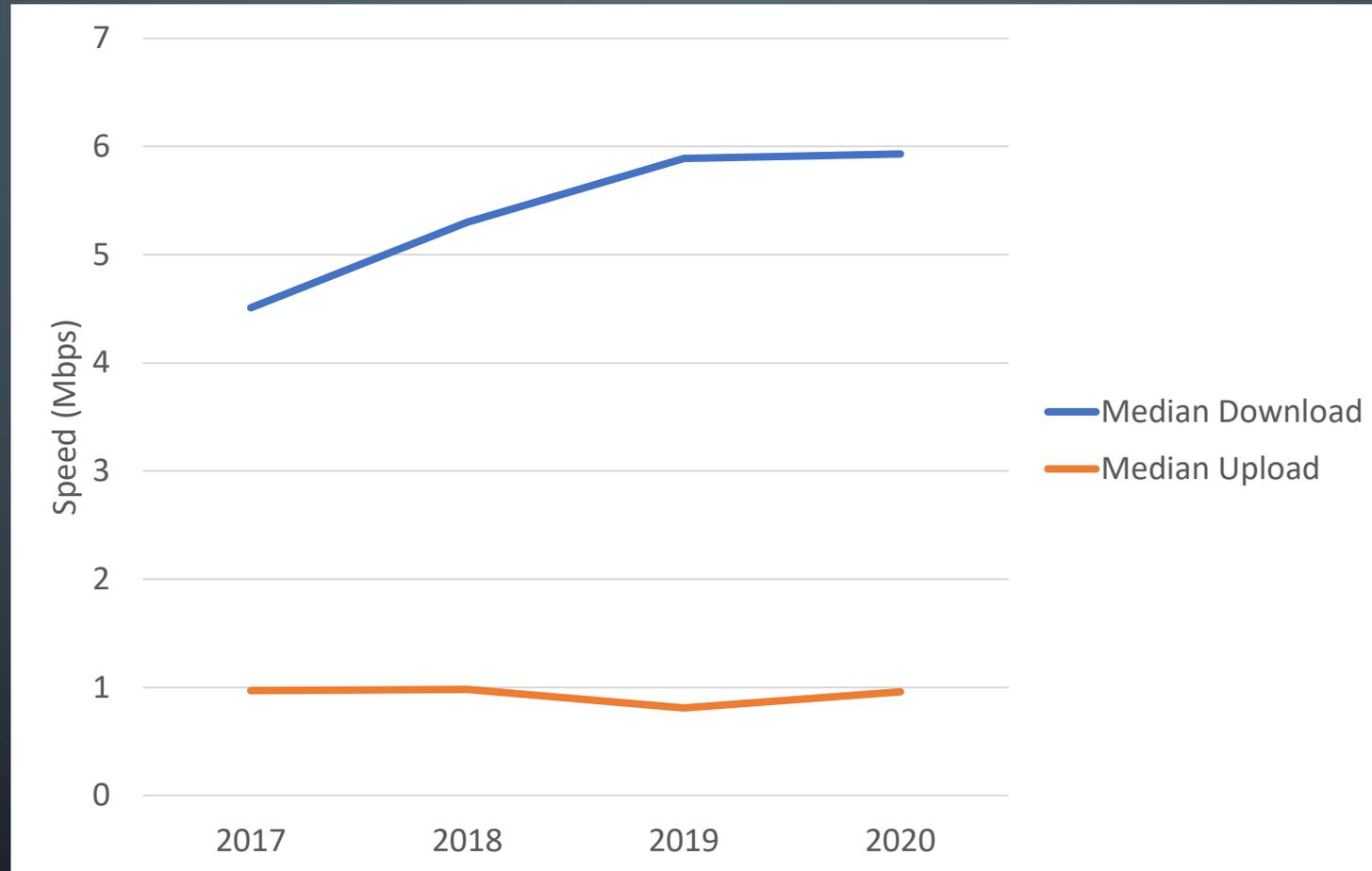
QUALITY OF SERVICE BY RESIDENCE TYPE

(CIRA DATA)

Residence Type	Median download speed (Mbps)	Median upload speed (Mbps)
Home (n=361)	4.94	0.80
Business (n=55)	10.31	1.59

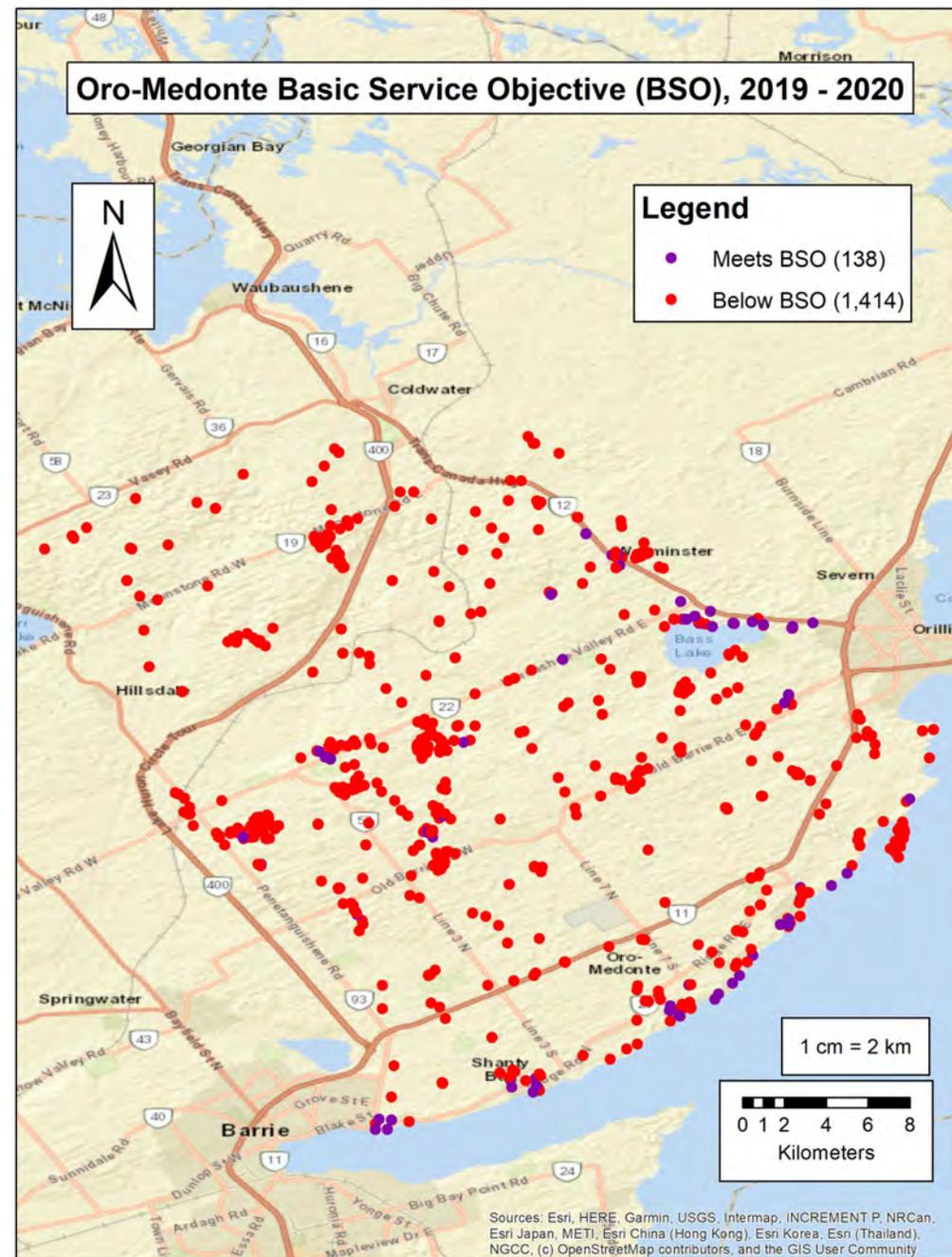
In 2020, residential premises have a lower quality of service than businesses. This is a relevant consideration because many businesses must be at home during the COVID-19 pandemic, some or part of the work week.

QUALITY OF SERVICE OVER TIME (CIRA DATA)



CIRA DATA: BASIC SERVICE OBJECTIVE (50/10 MBPS)

Most areas of Oro-Medonte are below the 50/10 Mbps BSO set by the federal government. This would qualify these areas for funding under the Universal Broadband Fund (UBF) and ICON funding for improved broadband and cellular connectivity.



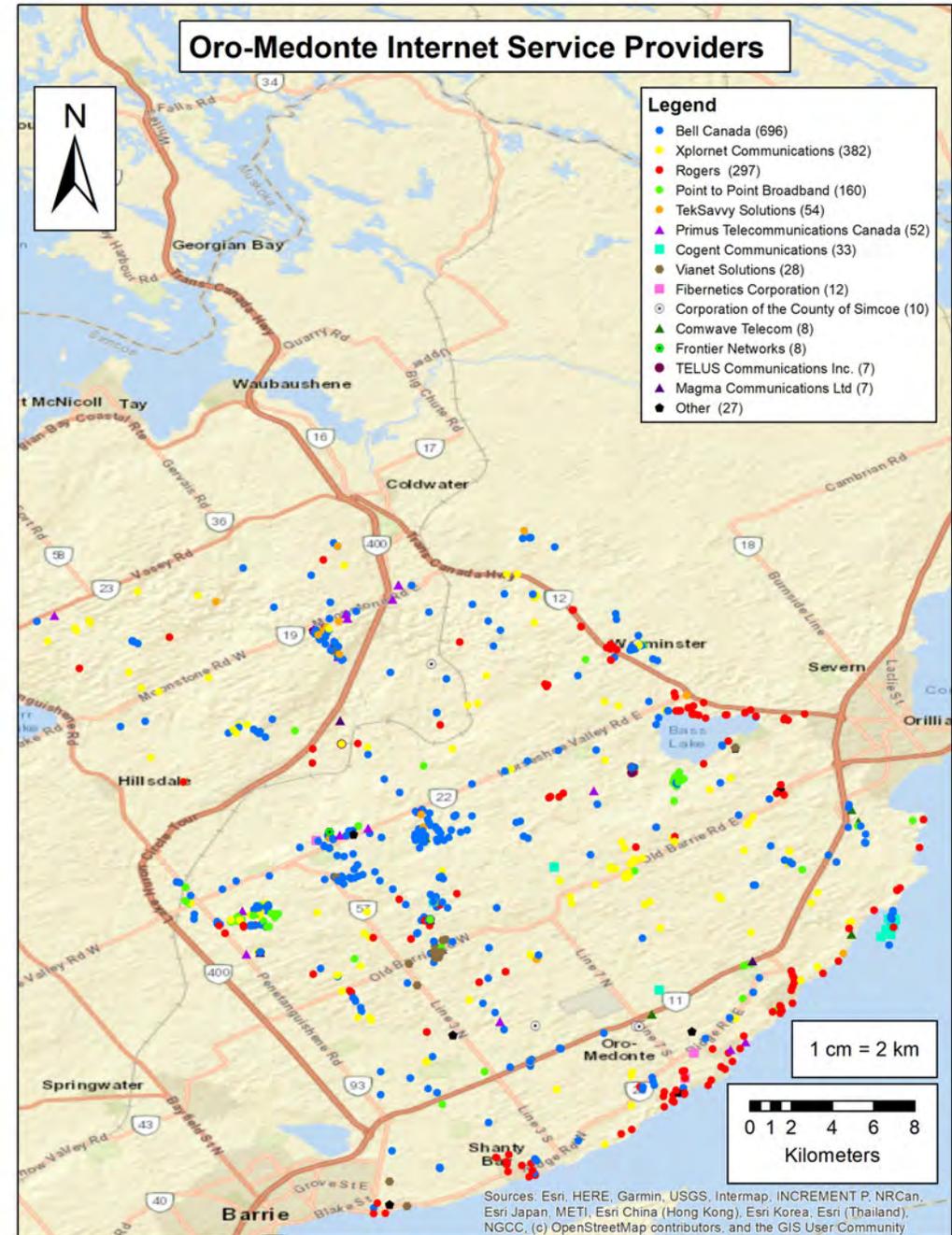
SERVICE PROVIDERS IN 2020 (CIRA DATA)

Service Provider (n=1,454)	% of responses
Bell	40.99
Xplornet	20.98
Rogers	16.16
Point to Point Broadband	8.60
TekSavvy	3.23
Vianet	1.93
Primus	1.51
Other	6.60

Note: Percentages may not sum to 100% due to rounding.

- The majority of respondents have service through Bell (41%), Xplornet (21%) or Rogers (16%).

SERVICE PROVIDERS IN 2020 (CIRA DATA)



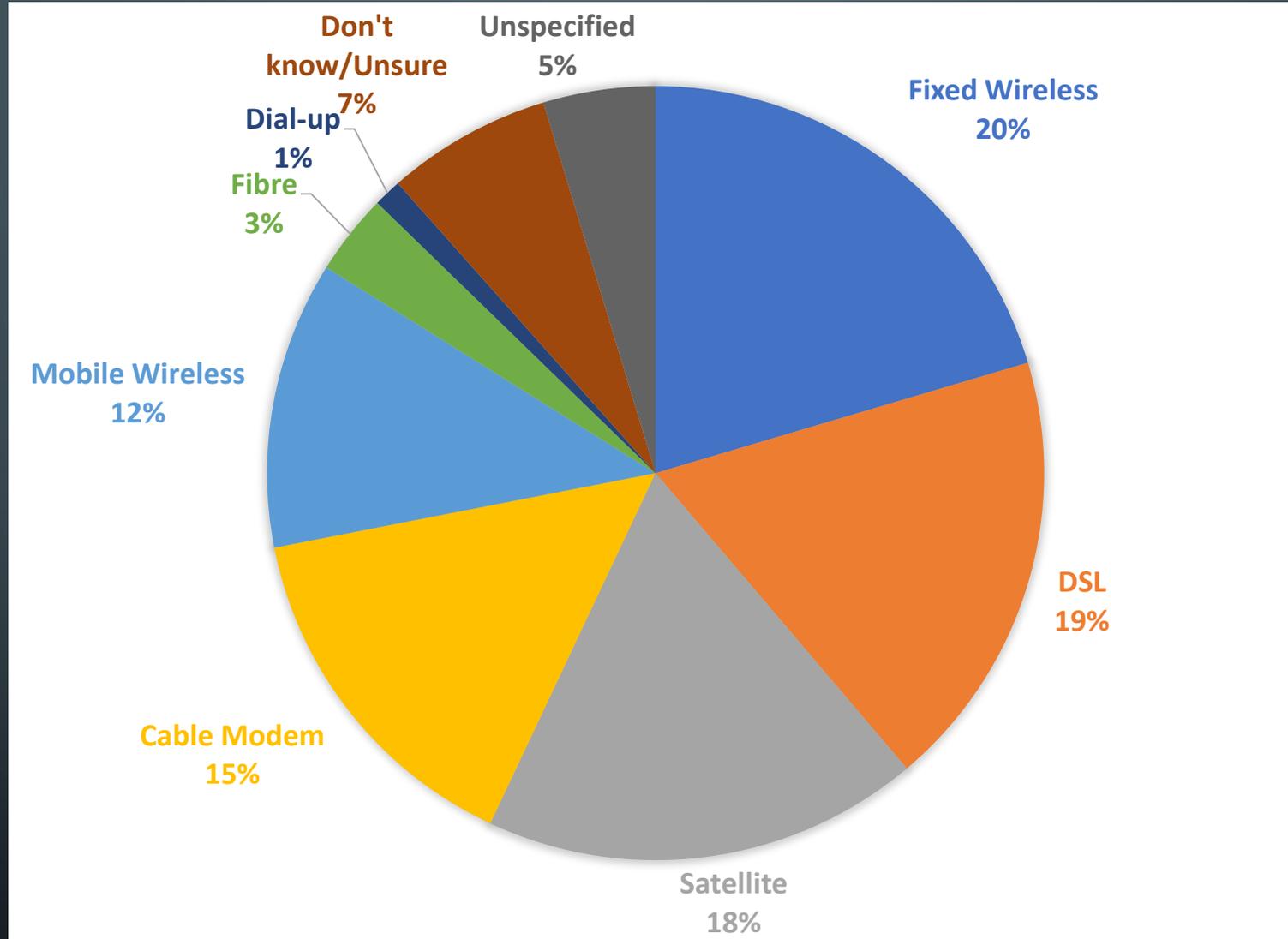
CONNECTION TYPES (SURVEYMONKEY, 2020)

- The five most common connections types for respondents were Fixed Wireless (20%), DSL (18%), Satellite (18%), Cable Modem (15%), and Mobile Wireless (12%) connections.

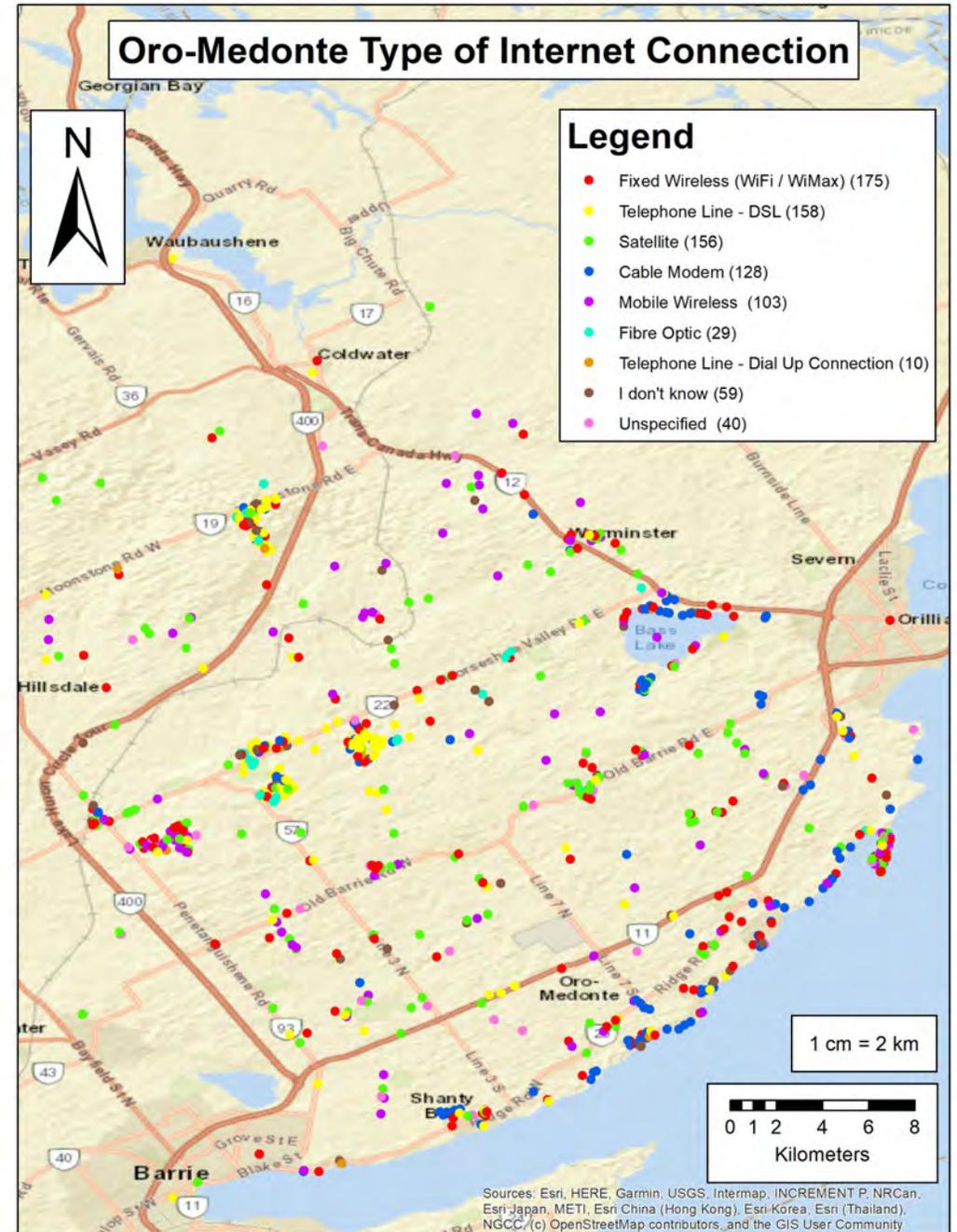
Connection type (n=858)	% of responses
Fixed Wireless	20.40%
DSL	18.41%
Satellite	18.18%
Cable Modem	14.92%
Mobile Wireless	12.00%
Fibre	3.38%
Dial-up	1.17%
Don't know/Unsure	6.88%
Unspecified	4.66%

Note: Percentages may not sum to 100% due to rounding.

CONNECTION TYPES (SURVEYMONKEY, N=858)



CONNECTION TYPES (SURVEYMONKEY, 2020)



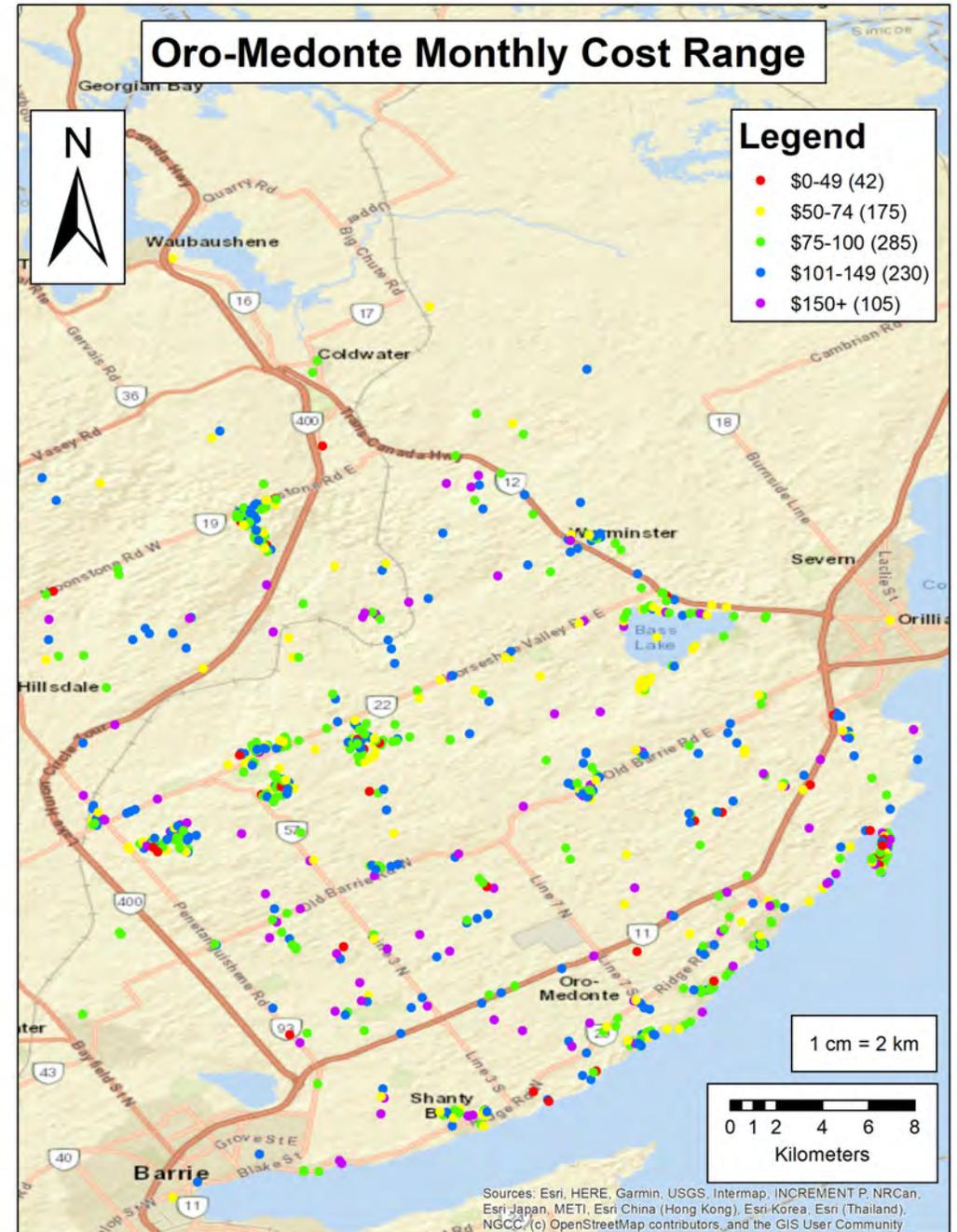
MONTHLY RECURRING COST COMPARISONS

(SWIFT SURVEY AND CIRA DATA)

Average monthly cost of service	
SWIFT Survey and Survey123 (n=256)	\$100.01
CIRA Data (n=386)	\$98.67

Comparison of the data from the SWIFT and Survey 123 with the CIRA data indicates a close cost comparison and slight decrease in monthly recurring costs for Internet service at the residential level. This is not, however, the only aspect of cost as the next slide indicates.

MONTHLY RECURRING COST (SURVEYMONKEY AND SWIFT SURVEYS)

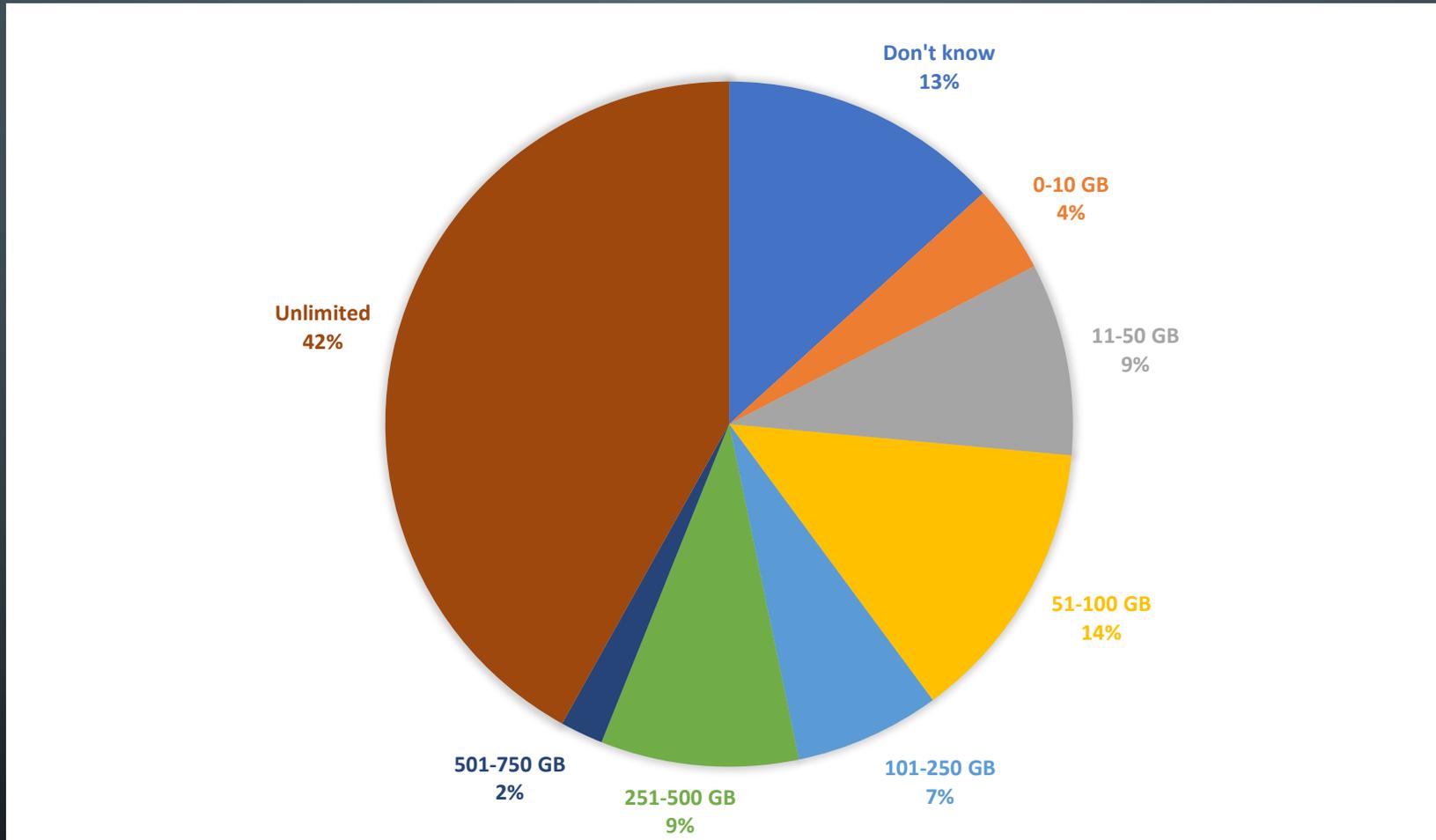


DATA CAPS (SWIFT SURVEY DATA)

Metric	Value
Does your service have a data cap? (n=108)	Yes - 76% of respondents
In the last 12 months have you exceeded your data cap? (n=74)	Yes - 59% of respondents
How much data does your service plan include? (n=72)	100 GB on average (median)

The affordability of Internet services needs to take into account three costs: a) monthly recurring cost (previous slide); b) cost of data overage, and c) one-time set up costs. As this data premises in Oro-Medonte lack access to unlimited data plans, and 59% of users regularly exceed the data cap.

DATA ACCESS (SURVEYMONKEY, N=892)



RECOMMENDATIONS & CONSIDERATIONS

- As of the date of this report, 2,990 survey observations across four different data sources were available for Oro-Medonte, a lower-tier municipality of approximately 21,000 people and 9,000 residential premises.
- The vast majority of surveyed premises are below the federal "basic service" (50/10 Mbps) threshold. Oro-Medonte has significant broadband and cellular connectivity challenges. The dominant rural providers (Bell at 41% and Xplornet at 21%) are not meeting quality of service.
- Connectivity along major highways, regional roads and to settlement areas will be priorities for UBF and ICON support. Data collected in Oro-Medonte surveys should therefore be cross-checked with the data for the area in the National Broadband Mapping platform.
- All support and recognition is given to the Oro-Medonte Task Force that was able to generate the survey data and awareness about the need for improved connectivity, to date. In the future, Oro-Medonte user surveys using the Survey123 tool should continue to see if there are changes through to the end of 2020 and over time.
- Oro-Medonte has a strong case for improved connectivity and results presented here should be taken into consideration in discussions at the county and regional level as well as with providers.

