Household Broadband Survey - MUCP, University of Toronto

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Rationale

After review of preliminary research done by the City as well as review of the TCHC tenant survey, we believe that a more robust version of the tenant survey is needed to properly address the confounding factors that may influence ConnectTO's implementation plan. We have codified this as a need for a supplemental survey that will allow the City to collect important data related to digital affordability and use in priority communities. It should also provide evidence to support strategic and operational planning in support of ConnectTO. This document will consist of a rationale in the form of a research based statement of need, a formula and examples of potential survey questions, and recommendations of what we believe will enhance the survey.

There are currently blindspots in the methodologies used to gather the most useful information. The most important data to be collected concerns the relationship between internet affordability, socio-demographic data, and household composition. Data has shown that 2% of households in Toronto do not have home internet access, where half of these households report that the cost is the barrier (Andrey et al., 2021). Further research indicates a 30% increase in household labour expended on basic needs activities, and a 23% decrease in household financial efficiency when internet services are terminated. This represents a breakdown of a household's ability to maintain its basic activities of daily living (Mersereau, 2022).

Survey Questions

The survey is structured by funneling questions to extract each participant's personal and unique experience as well as provide robust data on the digital divide landscape.

START:

→ Input Postal Code

[_ _ _ _ _ _]

Anchoring question:
→ Do you have access to the internet from the home

a. Yes
b. No

Will funnel here
(If no, participant will not have to answer the service provider section, will funnel straight to internet use)
**note - In flow chart anchoring question occurs at the end of the Family dynamic section, this is meant for visualization purposes only.

Family dynamic
→ How many people are present in the household? [Multiple choice range]
a. 1
b. 2
c. 3
d. 4
e. 5+

→ What is the age distribution of household residents? Select all that apply.
a. School age children (6-18)
b. Seniors (65+)
c. Adult (18+)

→ Are there enough devices for all household resident's day to day needs?
a. Yes
b. No
c. Prefer not to answer

Service provider information
→ What is the nature of your current internet plan?
a. Internet plan is separate from other services
b. Internet plan is bundled with mobile
c. Only have home internet, no mobile data
d. Only have mobile data, no home internet
e. No home or mobile internet

Will funnel here

If answered only mobile: What are your reasons for only having mobile wifi and not home? Choose all that apply:

a. Convenience
b. I do not use internet services enough to need both
c. I am usually out and do not use internet when I am at home
d. It is too expensive for me to justify having both

If answered only home: What are your reasons for only having home wifi and not mobile? Choose all that apply.

a. Convenience
b. I do not use internet services enough to need both
c. I am usually at home and do not use internet when I am out
d. It is too expensive and unaffordable for me to justify having both

If answered bundled: Is it possible to break contracts without financial penalty or loss of other services?

a. Yes, I can break contract without financial penalty or loss of services
b. No, I cannot break my contract without financial penalty or loss of services
c. Don't know the status of my contact
d. Prefer not to answer
e. Other: ___

→ What is the average monthly cost of your home internet plan? (please choose the closest amount).

a. $25 or under
b. $50
c. $75
d. $100
e. 125+
f. Other

-> What is the average monthly cost of your mobile internet plan? (please choose the closest amount).

a. $25 or under
b. $50
c. $75
d. $100

  e. $125+
  f. Other

→ Does the speed of your internet support your current needs?
  a. Absolutely
  b. Most of the time
  c. Sometimes
  d. Rarely
  e. Never

→ Has your internet service ever been canceled due to financial reasons?
  a. Yes, I've had to change plans in order to lower cost
  b. Yes, I've had to cancel my internet services
  c. Yes, I've canceled mobile internet in order to keep home internet
  d. Yes, I've canceled home internet in order to keep mobile internet
  e. No, I've never had to cancel internet service
  f. Prefer not to answer
  g. Other: ___

→ On a scale, how challenging is it to pay for monthly internet?
  - Scale from 1-10, ranging from "Not challenging at all, very affordable" to "Extremely challenging, not affordable at all"

Internet use
→ How many hours a day on average do you use the internet?
  a. <1
  b. 2-4 hours
  c. 5-7 hours
  d. >8

→ If you have school-age children, do they require home internet for educational purposes?
  a. Yes
  b. No
  c. N/A

→ Do you work from home and require the internet?
  a. Yes
  b. No

    c. N/A

→ What other features of the internet do you use frequently? Choose all that apply.
    a. Online Banking
    b. Healthcare services (appointment booking, prescription pick-up, virtual visits)

    c. Long distance communication
    d. Online classes or furthering education (not associated with children)
    e. Job search
    f. Public Transportation services (transit schedules, wheel-trans booking, fare re-loading)
    g. Other:

→ Where else have you gone to access internet services? Choose all that apply.
    a. Educational institutions
    b. Community centers
    c. Transit stations
    d. Toronto Public Libraries
    e. Other public spaces (Malls, restaurants, etc.)
    f. Other:

Recommendations:

    Incentives: It is recommended that the City considers providing an incentive to encourage as many residents as possible to participate in the survey. One suggestion is to provide respondents with the opportunity to be entered into a draw for a gift card containing a certain amount, such as 50$ for every 100 responses. The rationale behind providing a participation incentive is to leverage the participants' connections within the household, community and personal network so that more responses will be generated, respondents will feel rewarded for their efforts, and it is likely that residents will provide more detailed and thoughtful responses.

    Canadian Internet Registration Authority (CIRA) Internet Performance API: It is recommended to leverage the opportunity that the survey is being sent to many eligible residents. At the end of the survey, following with the "thank you to fill out the survey", it is recommended to add a CIRA Internet Performance link.

    The CIRA Internet Performance Test is a quick and accurate test of the Canadian internet connection. As each user performs the test, their data is anonymously collected and aggregated in a larger dataset. Participants benefit from not only knowing their internet speed but a detailed technical report on the internet speed compared in the neighborhood. As the data

grows, the ConnectTO team would be able to overlay demographic and social data to generate a deeper understanding of the current state of connectivity for Torontonians.

Knowledge mobilization: The multi-stakeholder participation in the ConnectTO project is a major paradigm shift, which also indicates that it might be more difficult for the general public to understand the project and look for resources when in need. To move from pilot to program and educate the city about it, it is recommended to work on translating policy and improving the user experience to broader city engagement.

We cooperated with another student team to create a prototype for the digital divide website. The eligible residents can get another entry in the prize draw.

Bibliography

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Mersereau, M. (2022). Constructing Household Routines with the Internet - assessing the role of the internet in normalizing household productivity. Journal of Community Informatics, 18(1), 1–25.

https://www.cira.ca/community-investment-program/internet-performance-test/how-internet-performance-test-works

Digital divide prototype website :
https://www.figma.com/proto/EqJMqaSnaeacaMBMOO7VUX/inf413-toolkit-website?page-id=0%3A1&node-id=1%3A2&starting-point-node-id=1%3A2&fbclid=IwAR29G7pdzTrKo63gV136OGmJD3I8EEf0S6Kvh3LZUuCHc2sYLxcpxAiA_c4