

Enhancing Youth Accessibility in Mississauga

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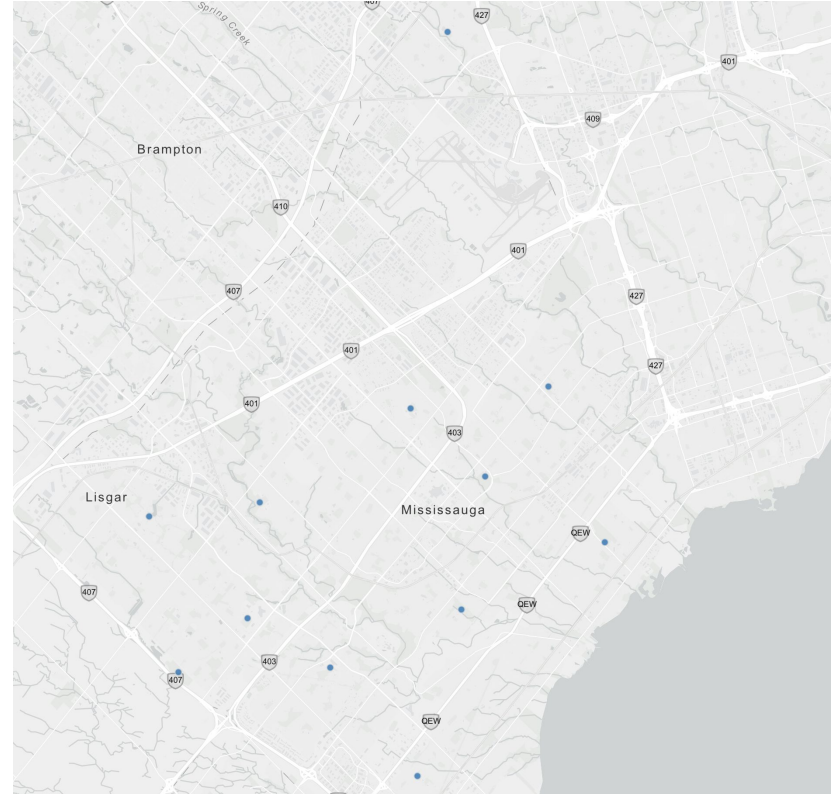


Known Unknown

Finding **dedicated third spaces for youth**, where the space itself and surrounding area are fostering safe places for youth to socialize, build relationships, play and find community

Known Unknown Relevance

- Mississauga is a multicultural city with various diverse age groups
- For many youths in the city, it can be hard to find a third place to interact and socialize with each other
- This is crucial to acknowledge because the city of Mississauga has a limited number of community centres for youths to utilize





What Potential Does A Better Understanding Of This Known Unknown Bring?

- This will indicate **whether the city is adequately serving the youth population with current infrastructure**
- This known unknown can help youth find people their age who are interested in the same things, find **places youth can freely hangout and socialize with their friends**
- This can show what amenities and programs are available in certain communities and which are not, potentially indicating **inequitable planning**



Missing Datasets And What We Need To Uncover This Known Unknown

- Data showing commute times from schools to local parks, community/recreational centres and cafés
- Many recreational centres tend to limit how long youths can occupy the space
 - It's important to see what spaces are truly accessible for youths
- Updated list of recreation programs in the city that is available for youths



Does this dataset already exist? If you need to link more than one datasets, how can you link them?

- **Many of the datasets do exist**, but they are often collected and managed by different sources → linking datasets can be done using **GIS**
- Existing datasets **already indicate the number and location of parks, community centres, etc.** → should take it a step further by **indicating the average commute times between getting from a school to the nearest public space**
- Existing datasets already indicate recreational programs that are offered, but the dataset needs to be updated with its availability of programming



Datasets Needed

Who creates and owns it? How can you (municipality) access this dataset?

If the data owned by private companies, the municipality can form partnerships with these private companies that collect relevant data. Municipalities can establish agreements for data sharing while ensuring privacy and transparency.



Datasets Needed

How can the dataset(s) help you (municipality) understand the known unknown?

Dataset can provide municipality with valuable insights into “Known unknown,” helping them create more inclusive and accessible spaces. Municipalities can leverage various datasets that address specific urban challenges. For example, using GIS can be used to identify lack accessible parks, playgrounds, and recreational spaces for youth.



Bridging the Gap: Making Toronto's Accessibility Data Accessible

Kainat Zehra, Rayyan Mia,
Safiyyah Memon, Leen El Bizri, Zach Li

The Known Unknown

- Our team aims to tackle the Known Unknown Data regarding Accessibility in Toronto, more specifically, people who have **physical disabilities** preventing them from entering and travelling within the Low-rise and Mid-rise Residential Buildings
- Focusing on specific topics such as ramps, accessibility parking, elevator sizes in regards to accessibility all in relation to our building typology



(MyParkingSigns, n.d.)

Why is Accessibility within Residential Buildings Important in Toronto?

- More equitable outcomes (right to the city, aging in place)

“The City of Toronto recognizes that design barriers are a form of discrimination. We want to support the integration and full participation of individuals of all abilities...to access their environment.”

- Toronto Accessibility Design Guidelines 2021

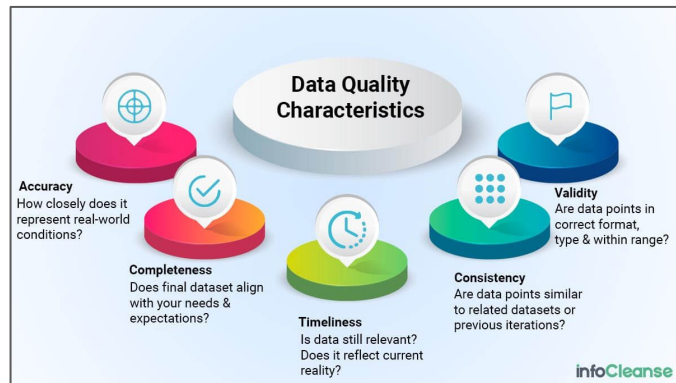
- Also supported by provincial and federal legislation (Accessibility for Ontarians with Disabilities Act, - Accessible Canada Act)

“One of the major barriers to advancing accessibility efforts is the lack of data on the state of accessibility within Canada, as well as globally. There is a severe lack of publicly available government data on accessibility barriers. To achieve a fully-accessible and barrier-free Canada by 2040, it is crucial to have data-driven benchmarks and guidelines for tackling issues relating to inaccessibility”

- AccessNow 2023

How Can We Better Understand This Known Unknown?

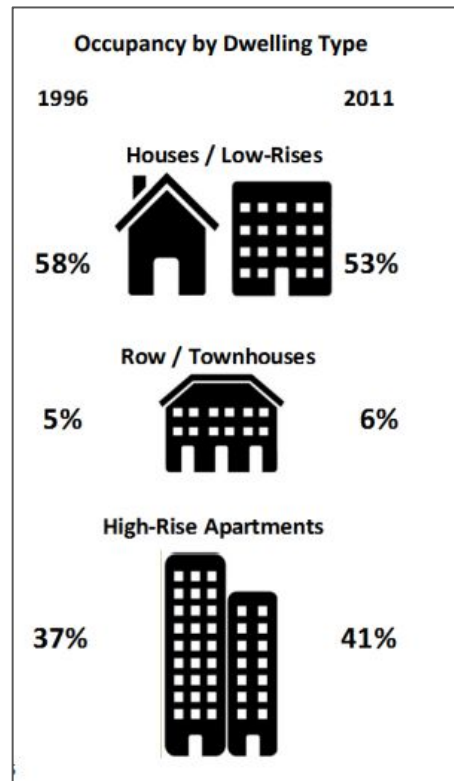
- Cross-referencing data sets and understanding what “good data” in cities is
 - Comparing and understanding what data is needed
- Having a regulation that renters could follow that enforces the idea of reporting areas of the aspects of inaccessibility
- Having residence and communities come together to report various inaccessible areas



What Should Be Included in A Data Quality Checklist Template?
(MyParkingSign, n.d)

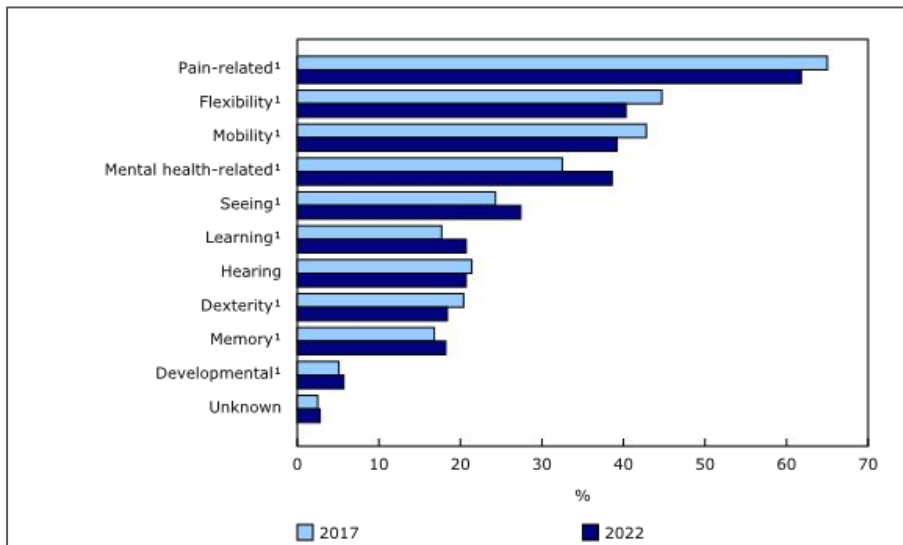
What Datasets are Needed to Uncover the Unknown? And Does the Dataset Exist?

- Locations of Accessibility Ramps
- Disabled Parking Spaces
- Elevators in Low and Mid-Rise Residential Buildings
 - Lack of documentation which leads to an underreported and underrepresented areas for those with physical mobility impairments
 - As the housing options for Toronto citizens change, it becomes critical for accessibility within these housing options to be measured and tracked



How can the datasets help you understand the known unknown?

- “Barriers related to features inside or outside public spaces, such as entrances or exits and sidewalks, were the most commonly experienced (56%), ...”(Statistics Canada, 2023).
 - The disabled population in Toronto is still incredibly marginalized



Canadian Survey For Disabled People, 2022

Public Washroom Access



International Smart Cities Network Data Challenge - Nov 1, 2024

Lucas Vastani

Nathi Sritharan

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Known Unknown

How can we create a centralized publicly accessible dataset for public and semi-public washroom data, which aids in:

- + Locating public washrooms
- + Understanding where to build new public washrooms
- + Making public washrooms accessible

What is a PUBLIC Washroom? ❤️

Washrooms available to people of all ages and abilities, open 24/7

A Toronto Specific Novel and Relevant Problem? 🙄

Novel: Public Washrooms are an essential amenity for good, complete public spaces. Although not “novel”, public washrooms seem to be undervalued in Toronto — *where are they?*

Relevance: Public washrooms are essential for everyone (...duh)!

Note: The COVID-19 Pandemic shed light on the lack of public washrooms in public spaces and hindered people’s ability to stay outside in public spaces, as well as the city’s reliance on private businesses to supply public facilities

Toronto's Current Public Washroom Infrastructure



Publicly owned washrooms and facilities take several forms:

- A. Stand alone washrooms (e.g. in public parks)
- B. Portable Toilets (temporary)
- C. Washrooms located Inside other city-owned facilities (e.g. skating rinks, community centres, public libraries, public pools, etc.)



A



B



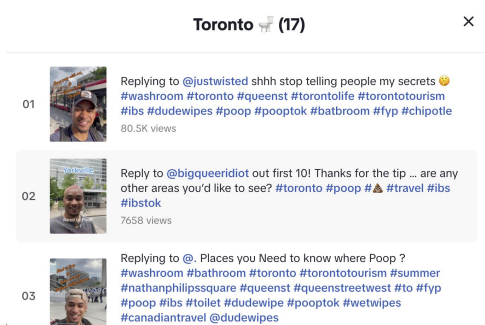
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Potential of a Better Understanding This Known Unknown

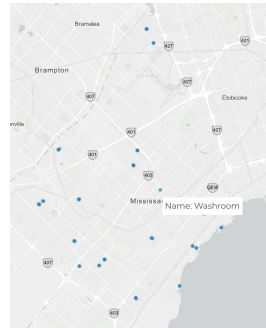
- + Help develop more facilities by using data to locate where public washrooms are needed
- + Providing a comprehensive map for people to find public washrooms — filling a “knowledge gap” amongst the general public
- + More public washrooms allow for better used, more populated, vibrant public spaces — i.e. people can stay out in space longer (especially populations such as, but not limited to: elderly people, small children, those with colitis, IBS, or Crohn's)

Datasets to Uncover This Known Unknown

1. City of Toronto Park & Recreation Washrooms & Drinking Water Dataset
2. NAICs (North American Industry Classification System) Code Data
3. Simply Analytics
4. Access Now
5. TikTok (utilizing Artificial Intelligence)



Example: Tik Tok Creator reviewing washrooms, while including locations, target audiences etc.



Mississauga Open Data



Toronto Open Data

How Datasets Help us Understand the Known Unknown

- + Provide details to any user (could be someone new to the city, traveler) that is looking to use a facility
- + Show the gaps in the city provision of public washrooms, help plan for where to add new washrooms
- + *Access Now* shows detailed washroom data. This can be studied with foot traffic data/sensor technology to show which washrooms with which facility features (ie changing tables) get used the most

Identifying Park Safety Features in Toronto

Members:

Liam Vu, Maneet Dhaliwal, Sabiha Dhalla, Shams Yousif, Bayley Jung

The Known Unknown

Acknowledging: some parks feel safer than others

Understanding: how can we determine aspects of a safe park

Utilize: Use the data collection to make improvements and attract the community as a whole

Activities and Uses (Part 1)

Dataset sources:

How are people using these parks?

- Playing in playgrounds
- Smoking
- Drug Use
- Crime
- Skateboarding

What is the demographic of these parks?

- Homeless Individuals?
- Young Children?
- Elderly?

Municipal Access and Use:

Acquired through surveys and participant observation studies

- Non-profit organizations:
(i.e. ParksPeople report
(accessible on their website
and downloadable PDF)
- However, there is not full
coverage of all parks in Toronto -
unknown dataset, but
discoverable through participant
observation

Activities and Uses: Participant Observation (Part 2)

- Type of data collection where the researcher is immersed in the day-to-day activities of the users
- It can be used to record the activities, physical characteristics, and social behaviours of visitors within parks (anonymously)
- Observer sits in park for 1-2 hours at different times of the day on different days (weekdays and weekends) and records the following:
 - Perceived gender presentation, age, visible minority status
 - Using visible mobility aid(s)
 - Social behaviours, physical activity level etc.

Is there any **Social Behaviour**? For example, anyone talking (includes being on the phone),* engaged with others, or with another person is considered social behaviour.

Yes

No

⋮

What is their **Physical Activity Level**?*

0. Sedentary = not moving (e.g. sitting)

1. Light = can keep up a conversation easily (e.g. walking/biking leisurely, playing in the sand)

2. Moderate = bit breathless, but can manage a few words (e.g. moving at a brisk pace)

3. Vigorous = unable to talk because of how tiring it is (e.g. HIIT workout, sprinting)

Are they **staying in-place**? if not, how are they **moving in space**?*

Staying in-place

Walking

Running

Biking

Scooting

Other...

Describe their **Activity**. An activity (or activities) is how the individual is interacting with the environment and their actions. (ex. Sitting on a bench reading a book, or Running on the path talking with their running partner, etc.)

Relevancy and Benefit

- Safety
- Community Engagement
 - Community gathering spot
 - Promote Usage
- Public Overall Health
 - Shift away from sedentary lifestyle