MODELLING HEALTH CARE COST PATHWAYS

May 5, 2024

Currently, Ontario's health care insurance covers the costs of treating chronic diseases caused from household food insecurity, including the costs associated with the endocrinological care of managing and treating the chronic disease's associated morbid conditions.

The proposed research study aims to prove that it's cheaper to feed the poor than it is to treat them for chronic diseases caused from not feeding them. We intend to identify the entire health care cost pathway by modelling all of the cost stages and 'cost points' underlying the journey patients take to treat and manage diet-related chronic diseases. Further analysis will examine the treatment's effectiveness when it's applied at the onset of each morbidity progression stage. We anticipate the true costs of not feeding the poor will be of great interest to policy makers.

Data Extraction Methods

In 2023, Fresh Food Weekly connected with PATTISON Outdoor, a local marketing company that sells billboard advertising and design services. This is when we learned about a pretty neat mobility technology that could be used to identify study participant's mobility patterns to better understand influences driving the intervention's generated health and social outcomes.

Location-Based Data

How Advertisers Use It

PATTISON Outdoor works with Pelmorex Corp., a GPS location based data tech company that enhances location insights for advertisers through billboard advertising campaigns. Pelmorex uses geo-fencing technology coupled with Weather Network permission-based app users to gather audience insights [source]. Geo-fences are installed at site-specific locations to detect nearby GPS-enabled devices. This allows Pelmorex to extract big data for aggregation, anonymization and actionable audience insights [source].

Insights in Use

Here's a screenshot of some "insights in use" PATTISON sent over. These insights were derived from data collected between January 1st to 31st, 2020, and highlights the GPS-enabled cell phone users who drove by the specific billboard located at Mapleview Dr., E and Huronia Rd in Barrie, Ont., for that month:
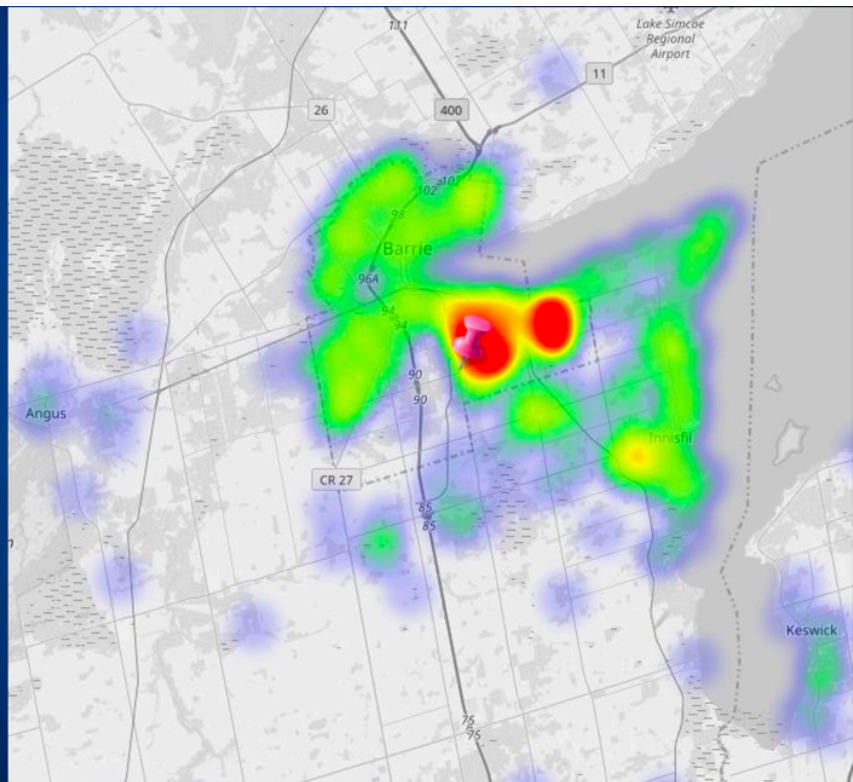

The audience passing this location were travelling from the following locations:

Barrie – 52%
Innisfil – 16%
Angus – 2%

(Remaining 31% coming from other areas, including: Oro-Medonte, Bradford, Orillia, Alliston, Newmarket, Wasaga Beach, Lefroy, North York, Brampton, Mississauga, Midland, Thornton, Toronto, Coldwater, Churchill, Cookstown, Tiny, and Others)

Pelmorex Location Insights, data taken from January 1st to 31st, 2020.
The information presented here is anonymous, aggregated, and permission based GPS location data. At this time, the data is intended to be used for anecdotal purposes only. Readers are to be aware that this data only looks at those who have travelled during the month of January (1st – 31st, 2020)

CLASSIC   DIGITAL   TRANSIT   PLACE BASED

PATTISON

LEVERAGE INSIGHTS TO GAIN AN ADVANTAGE

Analyze and action insights for better business outcomes.

90%

of enterprise businesses say data is of increasing importance to their business overall.

Source:
https://www.forbes.com/sites/forbesbusinesscouncil/2022/11/08/stop-making-assumptions-using-data-to-drive-your-business-decisions/?sh=21c795a163ec

LEARN MORE ›

A LEADER IN 1ST PARTY LOCATION DATA

Our trusted position in market has given us access to rich insight allowing us to create solutions for your business.

Location data received from over 16.9M devices,
including location permission collected from a variety of additional premium data partners.

Approximately 7 MILLION USERS visit our desktop and 12 MILLION USERS visit our mobile web platforms on an average monthly basis

REACH ONLINE & OFFLINE FIRST-PARTY AUDIENCES

Rely on our experts to determine which data segments to take advantage of to reach your target

Precise Geolocation
Web And App Behavioural
Home Postal Code Linked To
Demographic / Purchase Data
Contextual

Connect with users based on purchase intent.

WEATHER DATA AND INSIGHTS

Over 30 years of weather data, expertise, and over 18 million forecast locations at 1 km resolution, updated 24/7.

Use weather insights to surface patterns that drive future business decisions.

Activate campaigns based on the weather. Available cross-platform and through direct IO and programmatic.

BUSINESS DECISION TOOLS

Power smarter decisions using proprietary tools that helps you measure, learn and plan.

Turning insights into actionable solutions using Pelmorex Product Suite: Location Insights Platform, Audience Builder, Condition Based Ad Triggering, Engagefront (proprietary DSP) and Foot Traffic Attribution.

UNDERSTAND THE IMPACTS OF WEATHER

Harness the power of weather to drive business decisions and activate media campaigns when most relevant.

93%

of business executives report that improved weather insights can positively impact annual revenue growth

Source: IBM Institute for Business Value 2018 Global Weather Study Survey (n=1,000)

EXPLORE MORE >

INDUSTRY LEADING TECH

Built by a team of engineers and data scientists, our tech-enabled solutions deliver more data and deeper insights.

CANADIAN DSP

EngageFront (DSP): Pelmorex's proprietary demand-side platform enabling marketers to create, activate, and evaluate programmatic advertising campaigns.

Best-in-class technology, ease-of-use functionality, high-quality data insights and dedicated support teams allows EngageFront to provide marketers with full-circle advertising solutions – all in one interface.

INSIGHTS AND ACTIONABLE LEARNING

Business decision tools backed by proprietary technology with easy access to insights, all under one roof.
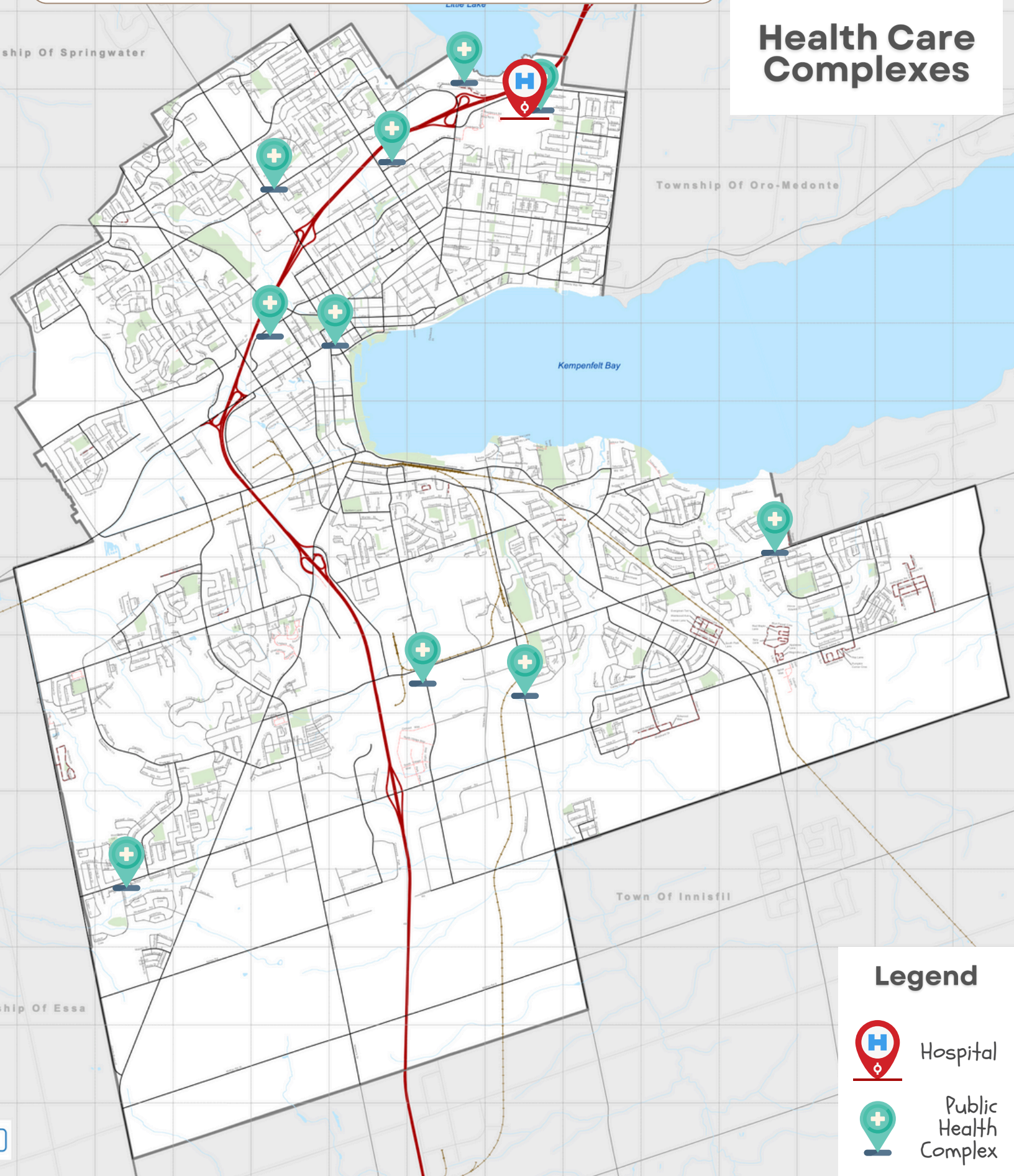
CONTINUOUS INNOVATION

Our tech continues to evolve to meet client needs and the changing media landscape. A dedicated team keeps innovation at the forefront.

This map indicates all the public health care complexes in Barrie, Ontario. Geo-fences could be installed at each health care location used to diagnose, treat or manage a symptom of chronic diseases caused by or exacerbated by household food insecurity.

Health Care Complexes

Township Of Springwater

Little Lake

Township Of Oro-Medonte

Kempenfelt Bay

Town Of Innisfil

...hip Of Essa

Legend

Hospital

Public Health Complex

The City of BARRIE

Walk-In Clinics

Little Lake

Township Of Springwater

Township Of Oro-Medonte

Kempenfelt Bay

Township Of Essa

Town Of Innisfil

	Legend
	Local Roads
	Major Roads
	Highway
	Private Roads
	Unassumed Roads
	Railway
	City Boundary
	Parks

The City of
BARRIE

Medical
Labs

Little Lake

Township Of Springwater

Township Of Oro-Medonte

Kempenfelt Bay

Town Of Innisfil

Township Of Essa

Legend

LifeLabs

X-Ray

Cardiology

Endoscopy

The City of BARRIE

Pharmacies

Local Roads	
Major Roads	
Highway	
Private Roads	
Unassumed Roads	
Railway	
City Boundary	
Parks	

Little Lake

Township Of Springwater

Township Of Oro-Medonte

Kempenfelt Bay

Township Of Essa

Town Of Innisfil

The City of BARRIE
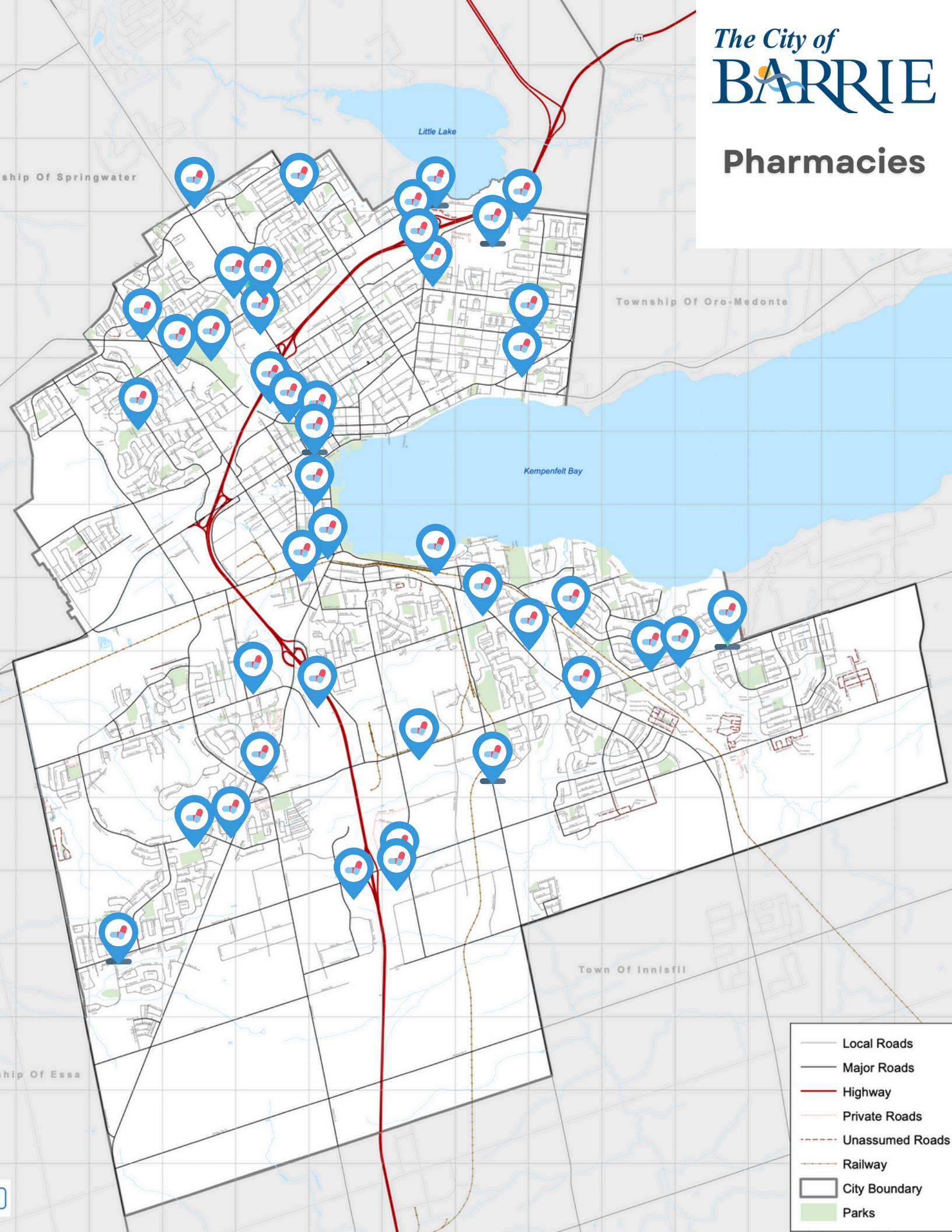
Social Service Agencies

The Good Food Box

Home & Community Care Support Services North Simcoe Muskoka

Catulpa Community Support Services

New Path Youth & Family Services

Barrie Immigration Medical Centre

The Barrie Food Bank

Simcoe District Health Unit

Empower Simcoe

The Busby Centre

Ryan's Hope

Hope Centre

The Salvation Army

Ministry of Community & Social Services

Canadian Mental Health Association (CMHA)

Simcoe County Addiction & Mental Health Service

Little Lake

Township Of Springwater

Township Of Oro-Medonte

Kempenfelt Bay

Town Of Innisfil

ship Of Essa

Local Roads
Major Roads
Highway
Private Roads
Unassumed Roads
Railway
City Boundary
Parks

The City of
BARRIE

Grocery Stores & Farmer Stands

Little Lake

Township Of Springwater

Township Of Oro-Medonte

Kempenfelt Bay

Town Of Innisfil

Township Of Essa

Legend

Grocery Store

Farmers' Market or Roadside Produce Stand

The City of
BARRIE
Leah's
Estimated
Health Care
Path for 2023
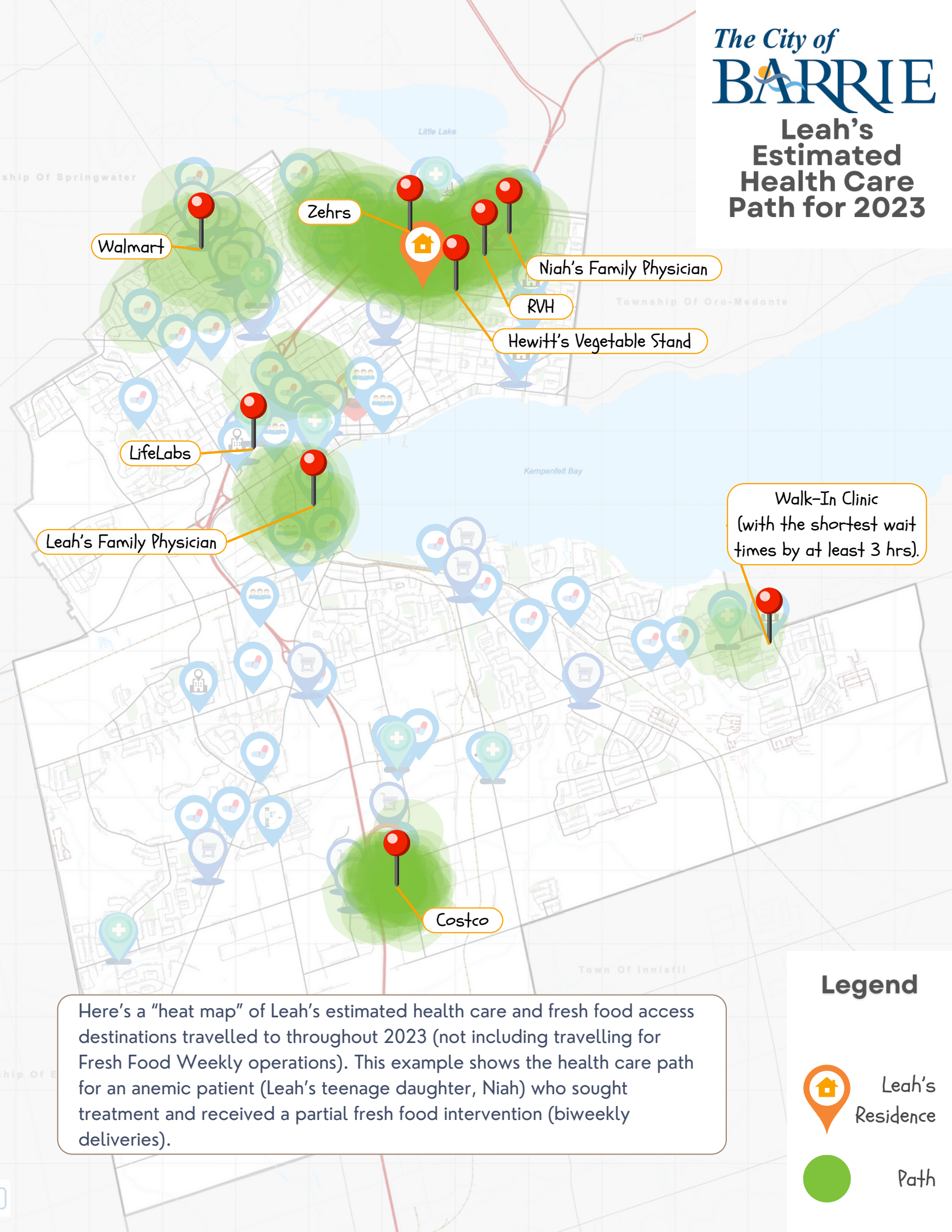
Walmart

Zehrs

Niah's Family Physician

RVH

Hewitt's Vegetable Stand

LifeLabs

Leah's Family Physician

Walk-In Clinic
(with the shortest wait
times by at least 3 hrs).

Costco

Here's a "heat map" of Leah's estimated health care and fresh food access destinations travelled to throughout 2023 (not including travelling for Fresh Food Weekly operations). This example shows the health care path for an anemic patient (Leah's teenage daughter, Niah) who sought treatment and received a partial fresh food intervention (biweekly deliveries).

Legend

Leah's
Residence

Path