BEYOND THE GTA

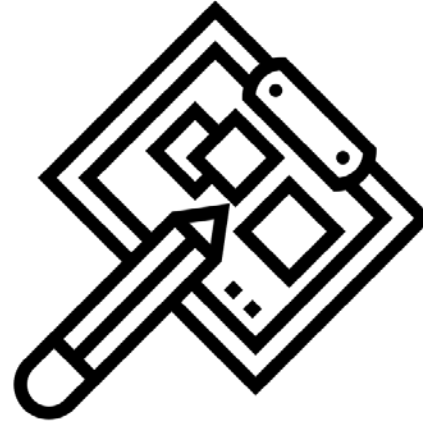## Lessons Learned from Small and Medium-Sized Urban Areas

PRESENTED BY DAVID FORSEY

MAY 6, 2020

The Four Phases of Model Development

Data Collection

Model Architecture

Model Estimation

Panic

Is the estimation dataset compatible with the application dataset?
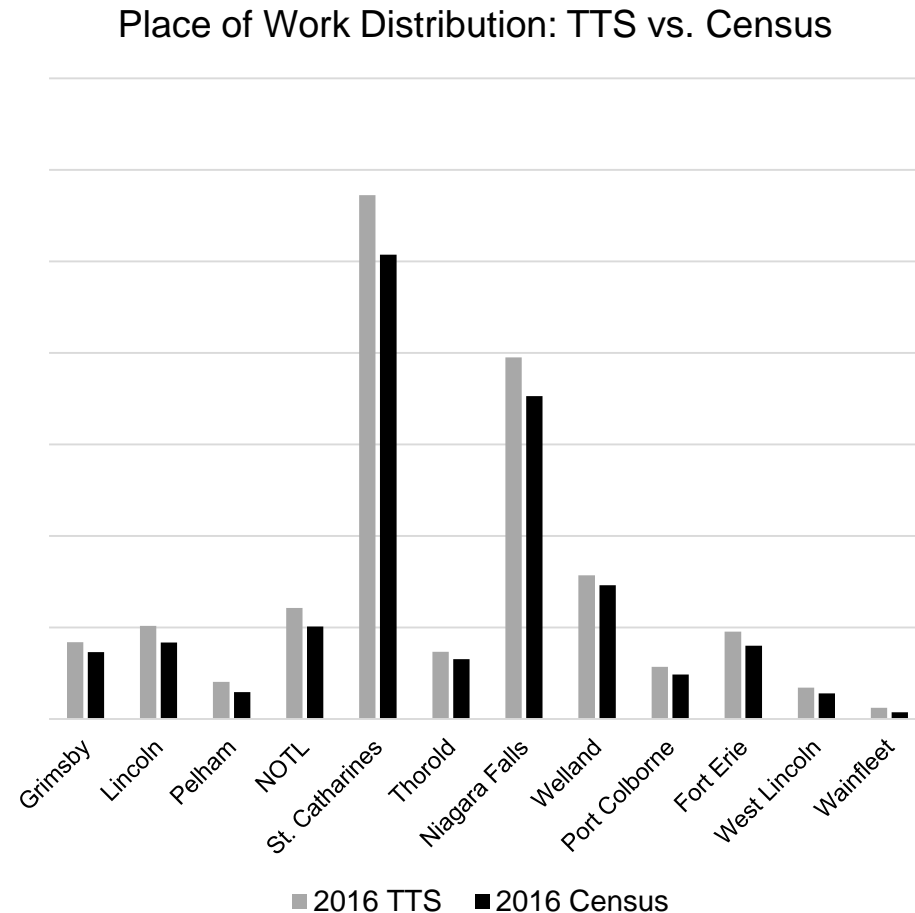
Estimation vs. Application

Estimation: Household travel survey
Application: Census

Survey expansion is never perfect

Potential solutions:

- **LOCAL SURVEY RE-EXPANSION**

- **CALIBRATE POTENTIAL BIAS**

Place of Work Distribution: TTS vs. Census

Grimsby · Lincoln · Pelham · NOTL · St. Catharines · Thorold · Niagara Falls · Welland · Port Colborne · Fort Erie · West Lincoln · Wainfleet

■ 2016 TTS   ■ 2016 Census

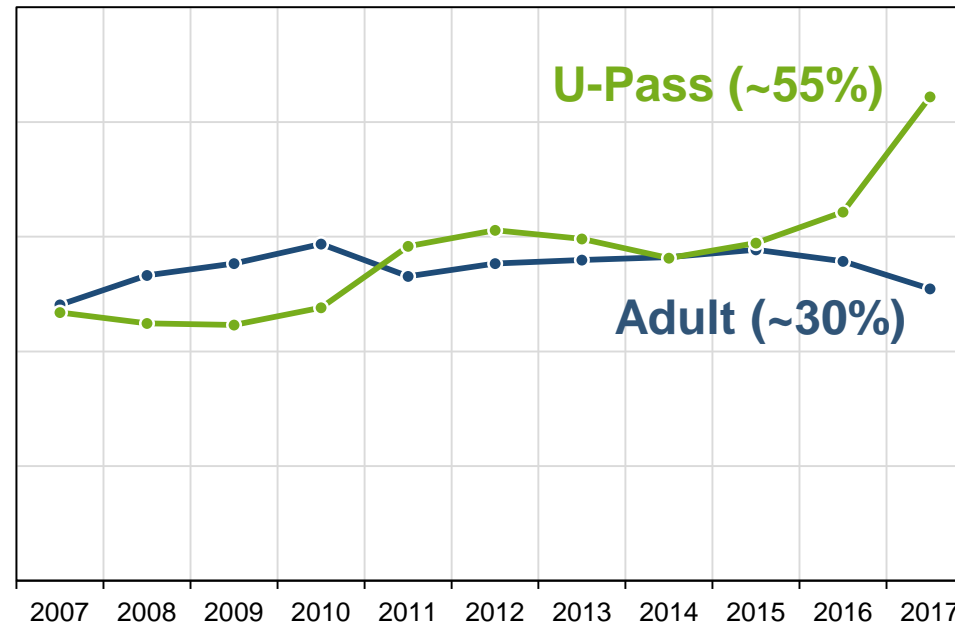# Are all critical travel markets being captured?

Critical Travel Markets

Not all trip-makers are captured by household travel surveys (or the Census)

Through travel; student travel

Potential solutions:

- **THIRD-PARTY DATA**

- **SATELLITE SURVEY**

Peterborough Transit Ridership by Fare Type

U-Pass (~55%)

Adult (~30%)

2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

What are the local travel "quirks"?

Travel Quirks

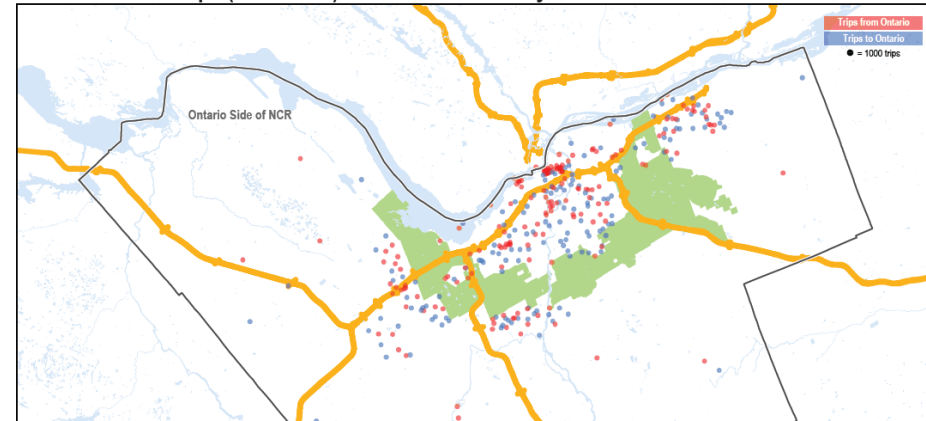Best to capture quirks in architecture and estimation

You have to know what you're looking for, so do your research!

Potential solutions:

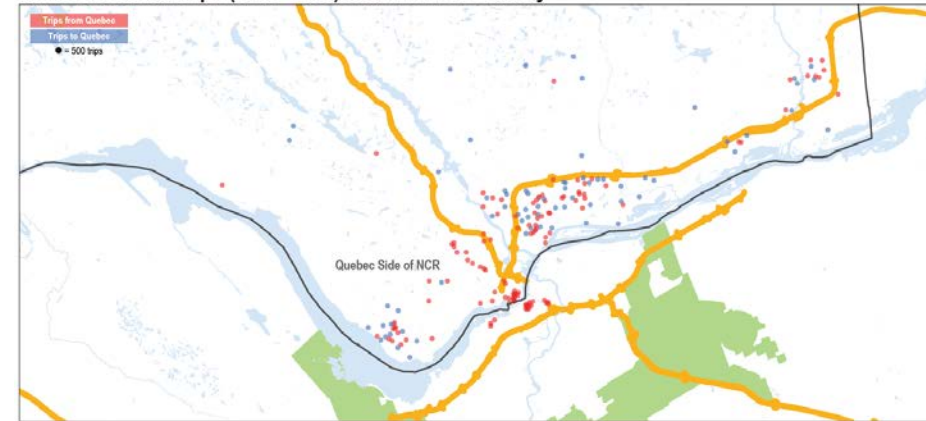- **DETERMINE "MOTIVATION" FOR QUIRK, AND MODEL IT!**

Ontario Side of National Capital Region
AM Peak Period Trips (6:30 - 8:59) from 2011 OD Survey

Quebec Side of National Capital Region
AM Peak Period Trips (6:30 - 8:59) from 2011 OD Survey

Thank You!

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