



EVALUATION OF THE VISION ZERO SCHOOL SAFETY ZONES PROGRAM IN THE CITY OF TORONTO

***POLICY MAKERS AND RESEARCHERS
WORKING TOGETHER***

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WHO WE ARE: The Researchers



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WHO WE ARE: The Policy Makers/Knowledge Users

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City of Toronto Transportation Services



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- Toronto's VZ began in 2017
- School safety zones: physical environment changes, enforcement activities, education and school traffic management facilitator
- Evidence-based and data-driven
- **Our Project**
 - Policy makers and academics working together to develop an appropriate evaluation strategy

TWO RELATED PROJECTS

Project 1: *School Safety Zone*

- Interventions within 150m surrounding school
- 2017 (25 schools), 2018 (22 schools)
- Expanded to 80 schools, 2018

Project 2: *Routes to School*

- Bloomberg, Partnership for Healthy Cities
- 3 schools, pilot initiative, Fall, 2018 (summer installations)
- Expands Project 1 into neighbourhoods to designated walking/cycling routes

CHALLENGE #1

When do we do the study?

Timelines

- Academic funding cycles
- City timing of interventions
- Outcomes and deliverables

Solution: Negotiation, regular communication



CHALLENGE #2

Who do we want to study?

- Randomized selection vs. political/community priorities

Solution: Priority setting

1. Proactive Stream-weighted

- $\frac{1}{3}$ # of school-related* collisions involving KSI
- $\frac{1}{3}$ # of other school-related collisions
- $\frac{1}{3}$ % of children living within walking distance of the school (i.e. 1.6 km)

2. Reactive Stream

*pedestrian and cyclists, ages 4-18, Mon-Fri, Sept-June, morning, lunch and afternoon pick-up/drop-off times

Too many “n”! (Project 1)

- Political response to incidents
- Addition of schools not planned for
 - Lack of manpower, money

Solution: Stick to original plan!!

Or



Not enough “n”! (Project 2)

- How do we make it valuable and accurate?

Solution: Pilot, feasibility studies, process evaluation

CHALLENGE #3

What do we want to study?

What are the **interventions**?

- Evidence-based
- Fiscal restraints
- Time restraints
- Political and community will

What are the **outcomes**?

- Meaningful to everyone- Researchers, Policy Makers and Community

INTERVENTIONS



Types of interventions

- Longer term higher cost physical interventions e.g. traffic calming
- Lines and signs

Solution: Selecting appropriate outcomes

Change in intervention schedules

- Keeping track of intervention schedules
- Pre-test for a school becomes a post-test!
- Control school becomes an intervention school!

Solution: Close communication and flexibility in study design and timing (ie control group)

Group 1
(2017 program)
N = 25

Group 2
(2018 program)
N = 22

Group 1 Interventions
(prior to Spring 2018 Data Collection)

Spring 2018
Data Collection

Analysis
Post Intervention (Group 1)
Compared to Control Group

Group 2 Interventions
(prior to Spring 2019 Data Collection)

Spring 2019
Data Collection

Analysis (Group 1)
Post-Post with Control Group

Analysis (Group 2)
Pre-Post with Control Group

CHALLENGE #3

What do we want to study?

- What are the interventions?
 - Evidence-based
 - Fiscal restraints
 - Time restraints
 - Political and community will

What are the **outcomes**?

- Meaningful to everyone- researchers, policy makers and the community
- What will most appropriate for the interventions?
- Need to think about location, timing of measurements

OUTCOMES

Project 1: School Safety Zones

- Active School Transport (surrogate health outcome)
- Vehicle Speeds/Volumes (surrogate safety)
- Risky Driving and Pedestrian Behaviour (surrogate safety)
- PMVC rare (safety)

Project 2: Routes to School (Pilot 3 schools)

- As above (with the addition of route measurements)
- Parent's perceptions of traffic dangers pre/post interventions (survey) and change of walking routes

Process:

- Facilitators and barriers to implementation
- Feasibility/usefulness of measuring the proposed outcomes
- Cost-benefit analysis

Negotiation and collaboration are the key to a successful, important and relevant evaluation, that can be implemented in other jurisdictions



Common Goal

Active safe school transportation for our children





TORONTO'S ROAD SAFETY PLAN VISION ZERO

