Active Travel to School Pilot in Markham

Wayfinding Signage and Sidewalk Stencil

This project is made possible through financial support from Green Communities Canada and the Government of Ontario.

Presented by:

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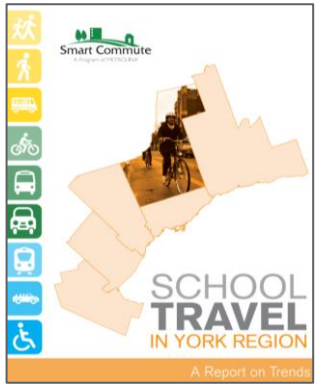
Background - Metrolinx Report on School Travel in York Region (2018)

- Metrolinx's 2041 Regional Transportation Plan (RTP) for the Greater Toronto and Hamilton Area envisions that **60% of children will walk or cycle to school by 2041**
- Rates of kids being driven to school continues to grow since 1986 (14.7%) and has more than doubled in 2016 (33.9%) in York Region.
- Meanwhile, rates of active transportation to school is decreasing.
- Active transportation modes are used more during the afternoon travel period than in the morning.
- The threshold at which driving became the dominant mode of transportation over walking shrank to 1.6km in 2016 from 2.2 km in 1986
- Automobile use continues to be the highest in York Region compared to other regional municipalities



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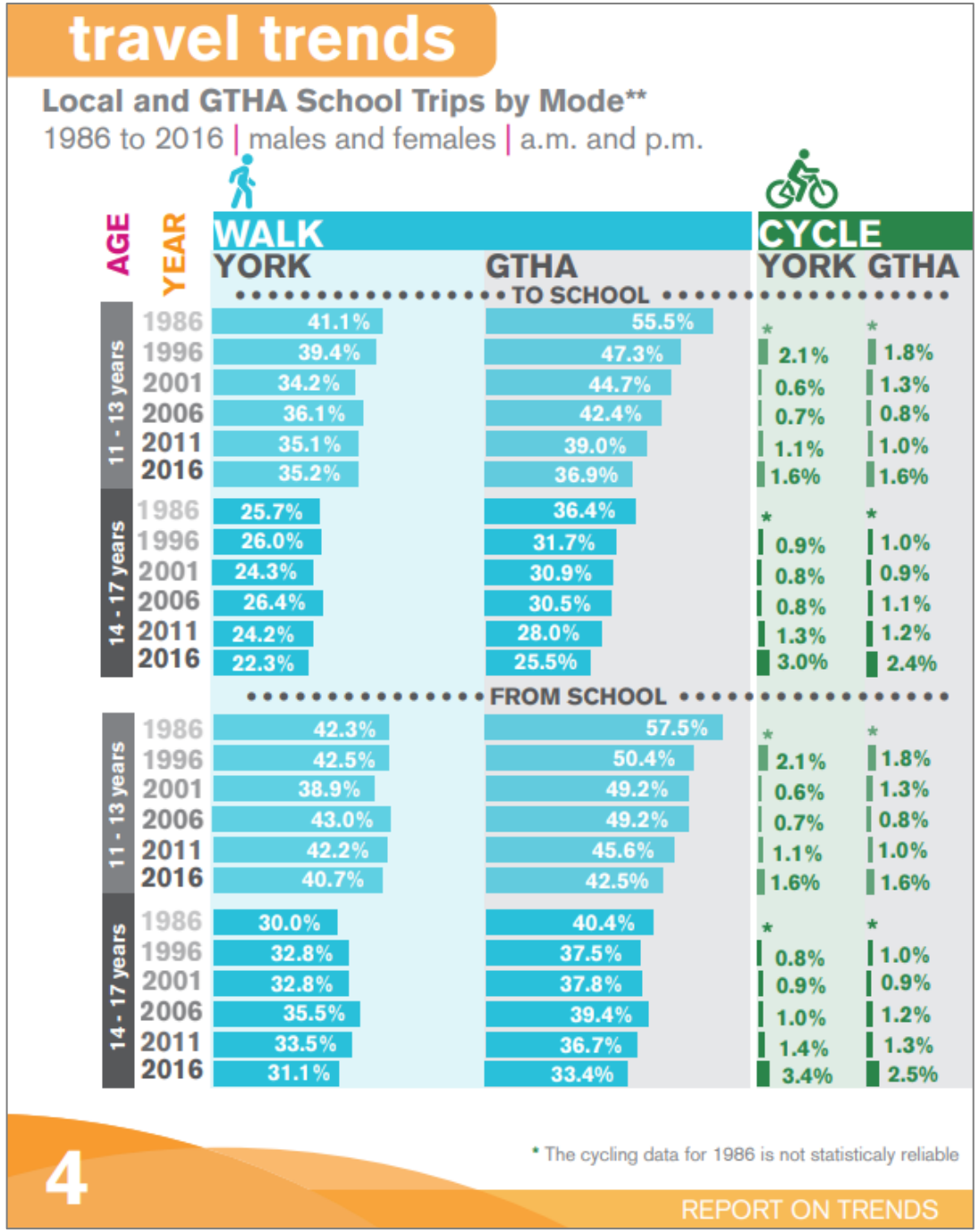


Active School Travel Pilot in Markham Overview

Purpose

1. To learn what level of on-the-ground encouragement and programming is required to get more children walking or cycling to/from school
2. To improve sustainability of Active School Travel Programs

Approach

- Build partnership with key stakeholders
- Create a model that is self-sustaining
- Test and measure the effectiveness of different encouragement/ programs levels
- Collect comparable data before, during and after pilot to evaluate success

Active School Travel Pilot in Markham Overview

Pilot Duration

- One full school year
- May 2019 to June 2020

Project Partners:

- York Region District School Board, York Catholic District School Board
- City of Markham (Engineering & Cycling Pedestrian Advisory Committee)
- York Region (Transportation Services)
- York Region Public Health
- Local School: Principal, Teachers, Parents, Students
- Ontario Active Travel to School, Green Communities Canada
- Government of Ontario

Active School Travel Pilot in Markham Overview

Measureables

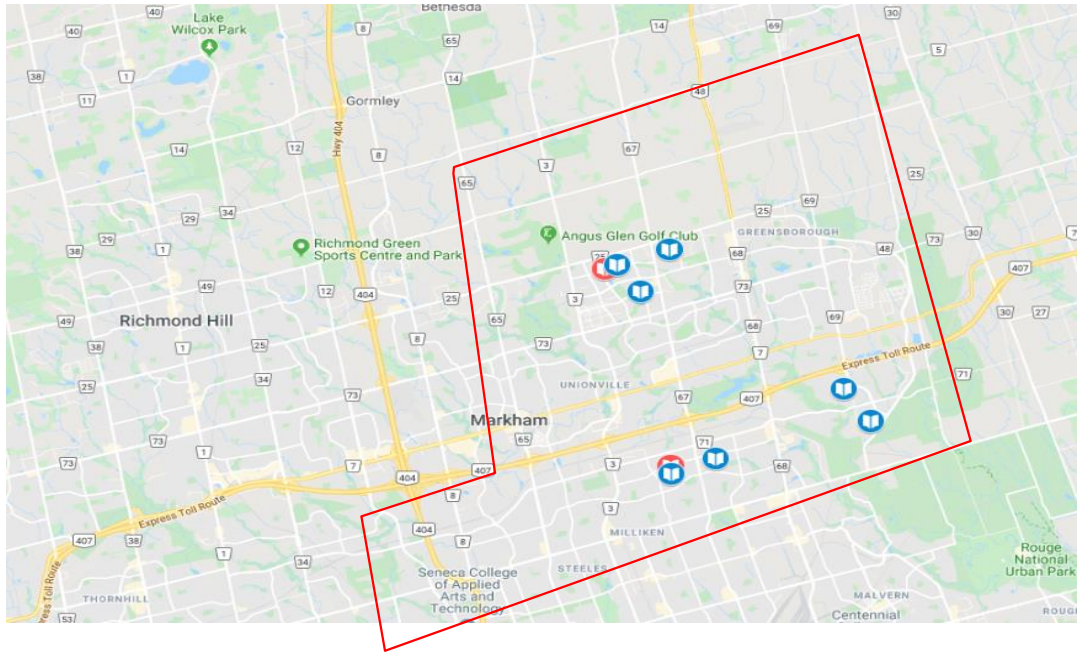
1. Hands up survey data collection
   - 1 week per month during school year
2. Monitor group walking
   - Number of families participating
3. Survey to parents (Board)
4. Feedback from residents (City)
5. Street parking activity (PUDO observations)

Six-Tier Encouragement & Program Levels

Level	Tools & Approach
Tier 1	Marketing/Education/Communication
Tier 2	Tier 1 + Classroom Competition
Tier 3	Tier 1, 2 + Family Connection (Group Walking)
Tier 4	Tier 1, 2, 3 + Sidewalk Stencils + Wayfinding Signage
Tier 5	Tier 1, 2, 3, 4 + Traffic and Pedestrian Enhancements - No Stopping signs - Curb line paintings to reinforce No Stopping signs - School Zone Road Stencils - Zebra markings at crosswalks closest to school
Tier 6	Tier 1, 2, 3, 4, 5 + Walking Wednesday – Kiss & Ride Closure

School Selection Criteria

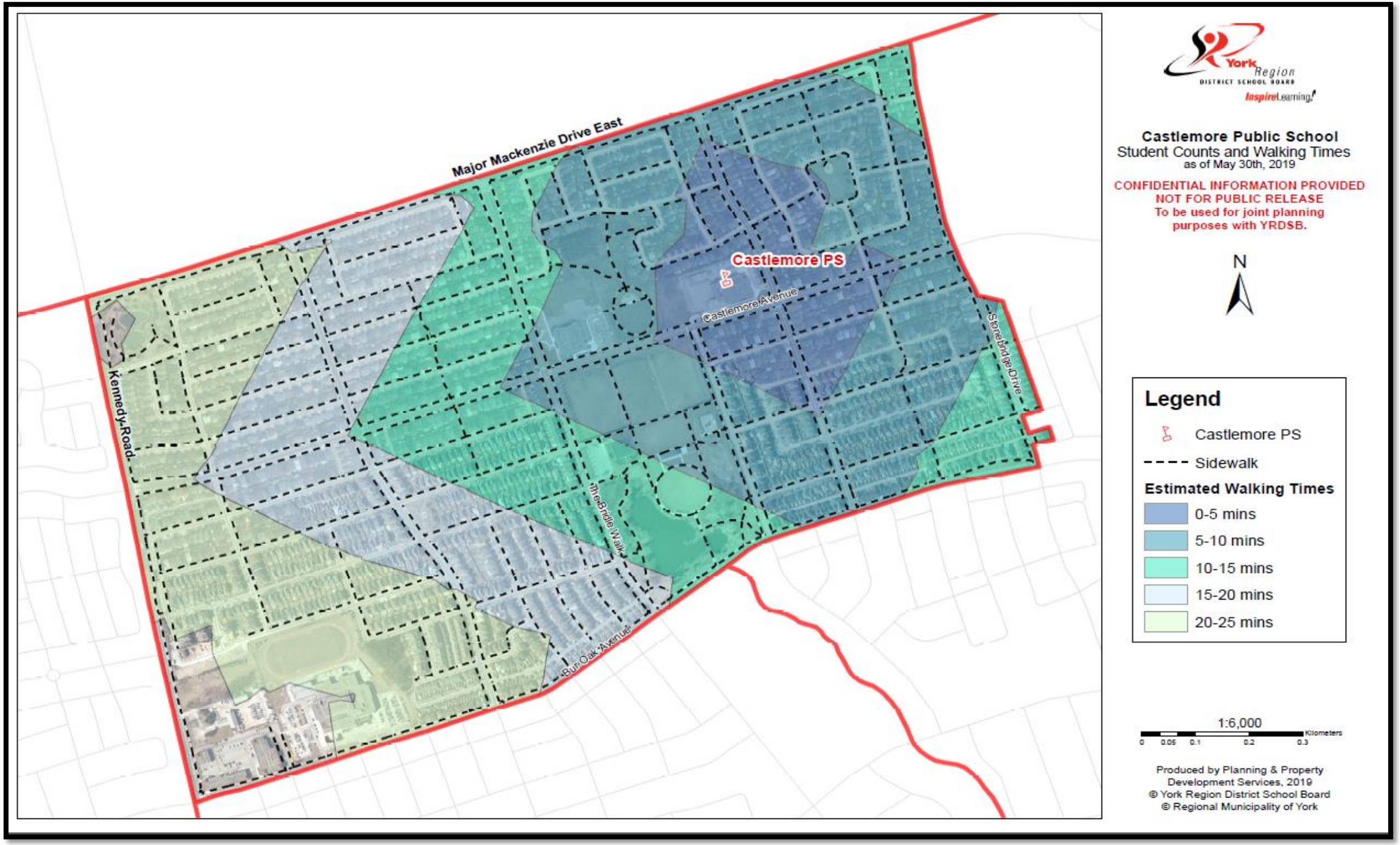
- Previously engaged in School Travel Planning (STP)
- On going site and community traffic issues
- School Parent and Admin buy-in including identification of champions
- Existing sidewalk network
- 2 Schools within 1.6km of each other (community based approach)
- A total of 9 Elementary Schools (7 Public and 2 Catholic) are participating in this pilot project.



Wayfinding Signage Identification Process

Preliminary review of:

- School boundary
- Catchment area
- Student home address distribution maps that are categorized based on a radius around school:
  - 300 m (5 min walk)
  - 600 m (10 min walk)
  - 900 m (15 min walk)


Major Mackenzie Drive East
Castlemore PS
Castlemore Avenue
Stonebridge Drive
Kennedy Road
The Bridle Walk
Bur Oak Avenue
York Region District School Board
Inspire Learning
Castlemore Public School
Student Counts and Walking Times
as of May 30th, 2019
CONFIDENTIAL INFORMATION PROVIDED
NOT FOR PUBLIC RELEASE
To be used for joint planning purposes with YRDSB.
N
Legend
Castlemore PS
Sidewalk
Estimated Walking Times
0-5 mins
5-10 mins
10-15 mins
15-20 mins
20-25 mins
1:6,000
0 0.05 0.1 0.2 0.3 Kilometers
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Wayfinding Signage Identification Process continued

Identification of closest intersections

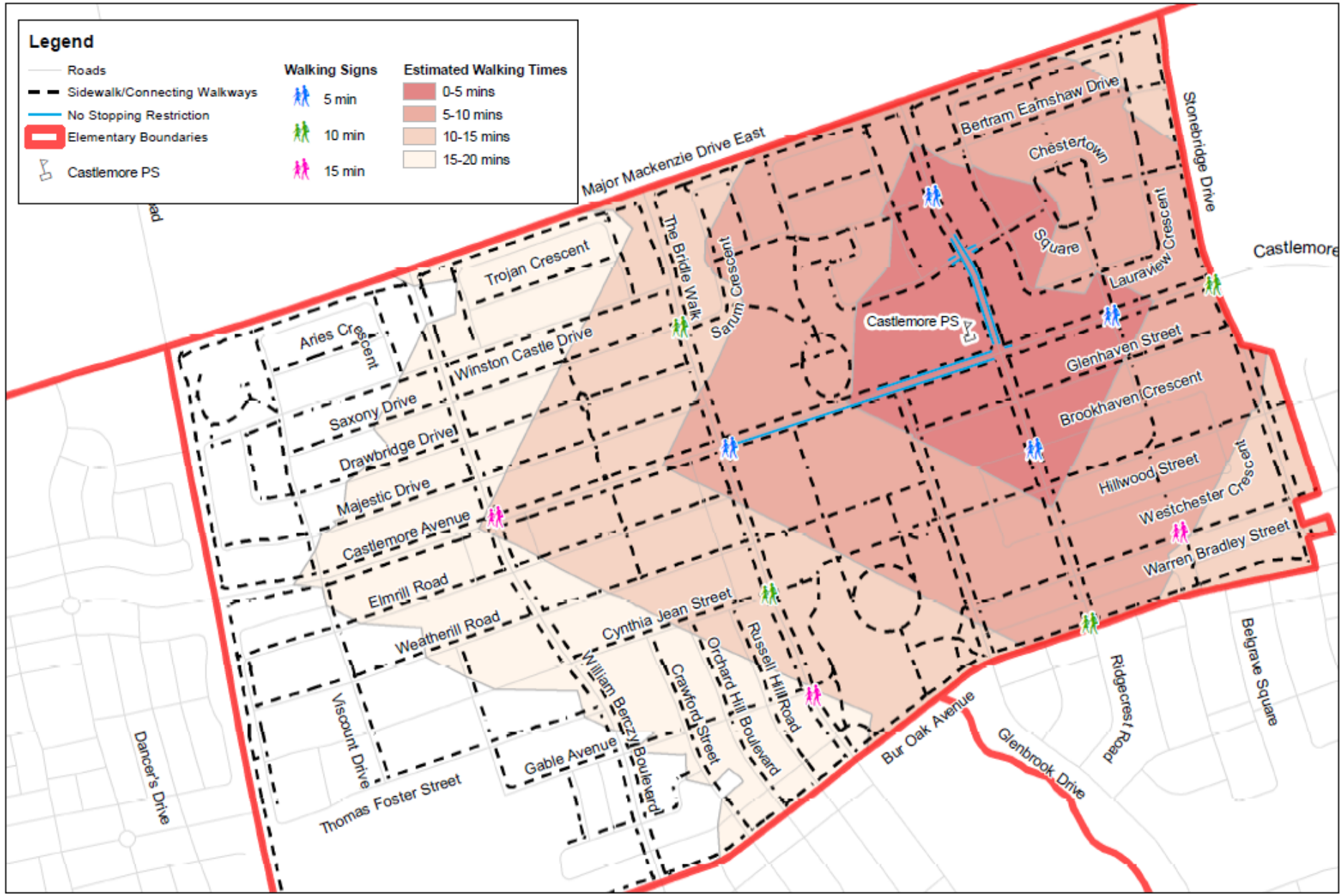
- Continuous sidewalk network
- Along main walking/cycling route to school
- Signage should be highly visible
- Existing pole availability
- 3-4 locations for each distance (within a budget)
- Professional judgement based on community and experience
- Create signage implementation plan

Wayfinding Signage Identification Process continued

Signage Criteria

- Referenced OTM Book 5 for pedestrian crossing signs
  - Size 30 cm by 45 cm
  - Placed on far side of intersection where pedestrians would normally look to find sign
  - Should be facing pedestrians
  - Should not be distracting to drivers
  - Different colour than typical street signs

Active School Travel Map
Castlemore PS



1:7,512

0 0.0475 0.095 0.19 0.285 Kilometers

Produced by Planning & Property Development Services, September 2019
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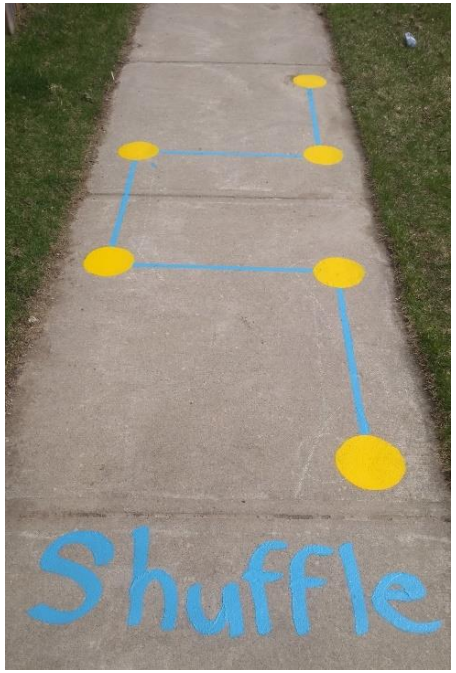
Wayfinding Signage Design Process

Brainstorm with City Communications Department on the design of the signage

Wayfinding Signage Installed Examples

Sidewalk Stencil Implementation Process

- Inspired by City of Toronto and Waterloo experience
- Conducted walkabout at school sites
- Location of stencil should be 400 – 500 m within school radius
- Continuous sidewalk network
- Along main walking route to school
- Highly visible
- Appropriate gap distance between driveways
- Professional judgement based on community and experience
- Create stencil installation plan



Sidewalk Stencil Implementation Process

- Research types of activities appropriate for elementary students
- Identify paint colours
- Location Selection Criteria
  - approximately 400-500 m from the school
  - 6-8 ft. in length
  - roughly 50 m-150 m apart.
  - Locations were chosen based on neighborhood walkabout (typically long lawn spacing, parks or near fences)
- Acquire a Road Occupancy Permit through the City
  - Provide Traffic Management Plan
- Provide permit and letters to contractor

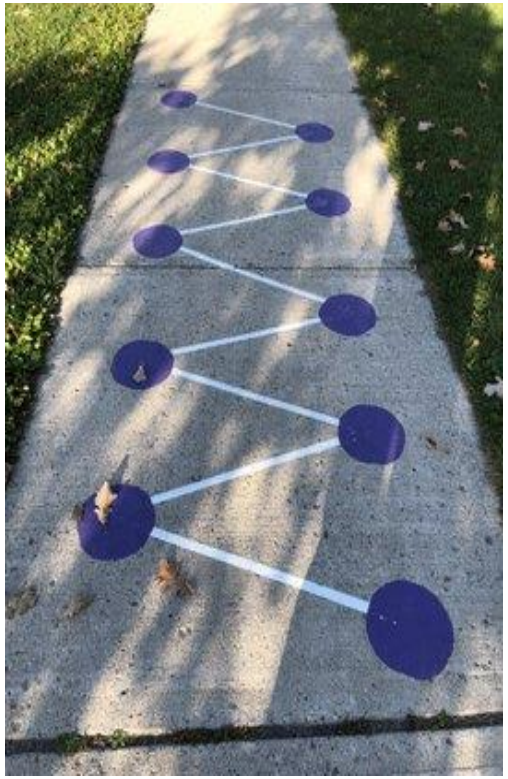
Stencil Installation Plan

Randall PS, City of Markham

Produced by Planning and Property Development Services
(C) Copyright Base Map Data from Regional Municipality of York 2019
Ortho Photography - First Base Solutions 2019

0 45 90 Meters

Sidewalk Stencil Installed Examples



Project Costs

Wayfinding Signage	Sidewalk Stencil
• Approximately $17 per sign (30cmx45cm) • A total of 69 signs are installed*	• Approximately $90.00 per stencil • A total of 105 stencil are installed* • Approximately 3 year lifespan (weather dependent)

* For 7 schools only, 2 schools remained to be completed in Spring 2020

Funding Sources

- York Region District School Board
- City of Markham (Cycling and Pedestrian Advisory Committee)
- Ontario Active School Travel Provincial Grant
- York Region (Transportation Services)

Challenges

- Operations Department
  - Risk/Liability with use of “words”
- Durability of paint material
- Sidewalk replacement program – potentially lead to removal of stencil
- Knowing actual student routes
- Older neighbourhoods vs new neighbourhoods
- Data collection - effective and sustainable method
- Future maintenance

Opportunities

Immediate

- Group Walking
- Enhanced public realm and public awareness of walking/cycling
- Received positive feedback from parents, residents and councilors

Future Opportunities

- Allow for student / parent input with signage/stencil locations
- Expand to more schools in Markham and York Region
- Cost effective and easy to implement

Next Steps

- Continue to implement pilot program till June 2020
- Report to Green Communities Canada
- Evaluate results, determine which tier results in more active school travel
- Presentation to Board and City and/or Regional Council to get support and resources
  - Expand successful components to York Region/Catholic Schools
- Build School Board Active School Travel kit
- Seek out partnerships through private-public sector
- Share pilot experience

Questions?

Thank you

If you have any questions, please contact

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