

Safe Routes to School Final Report

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Overview

Introduction

Top 10 Child Pedestrian Injury Risk Factors

How to Improve Child Pedestrian Safety?

Risk Assessment

Data Collection and Analysis

Recommendations

Manitoba Health

- Vehicle collision – **2nd leading cause of injury death** in Manitoban children
- In Canada, about **10,000 children age 12 years and under** are injured in traffic collisions
- About **75** of these injured children die each year



Report on Annual School Safety Assessment

- More than **1,100 incidents of risky and illegal behaviours** were caught during the annual Winnipeg school zone safety test in **2017**
- **352 motorists** were found by the Winnipeg Police Service (WPS) to be **exceeding the 30 kilometres an hour speed** limit in marked school zones
- **103 stopping violations** (i.e. drivers failing to stop properly at crosswalk or stop sign)
- **218 other infractions**



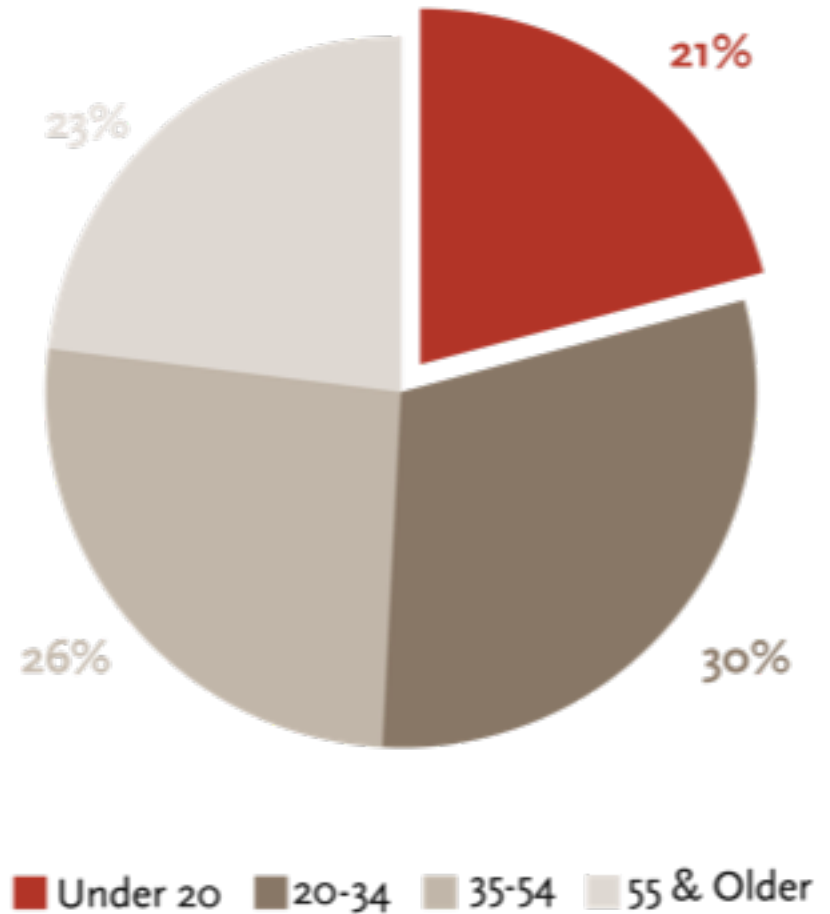
Snap Shot of Five Locations Safety Assessment (2018)



RISKY PEDESTRIAN BEHAVIOURS	RISKY MOTORIST BEHAVIOURS
30 – Distracted while crossing (using phone)	88 – Didn't stop for activated lights
22 – Failure to activate lights	77 – Stopped within the crosswalk
7 – Lights activated but pedestrian proceeded before traffic stopped completely	109 – Drove forward while pedestrian crossing
19 - Jaywalked	5 – Distracted driving through crosswalk
2 – Cyclist failed to dismount before crossing	1 – Bus drove through a crosswalk while the pedestrian was still crossing

MPI TRAFFIC COLLISION REPORT 2016

Annual Average of Pedestrian Victims by
Known Age Group:



MPI TRAFFIC COLLISION REPORT 2016

- Nearly 21% of all pedestrian victims are involved in traffic collisions between Noon and 3 p.m. (2011-2015)
- 25% between 3 p.m. and 6 p.m. (2011-2015)

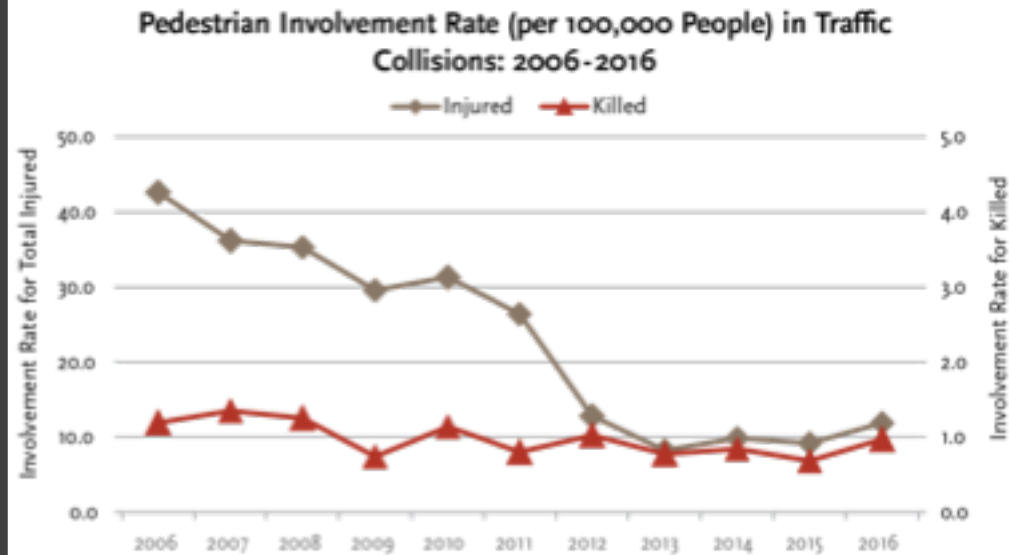
Proportion of Pedestrians Killed and Injured by Time of Occurrence: 2016



Note: Due to a small number of pedestrians killed, i.e. 13 deaths, caution is advised when interpreting those results.

MPI TRAFFIC COLLISION REPORT 2016

- Over the last 11 years, pedestrian injuries resulting from traffic collisions have declined
- Underlying reasons
 - Changes in population size
 - Improvements in road safety
 - People are walking less



TOP 10 CHILD PEDESTRIAN INJURY RISK FACTORS

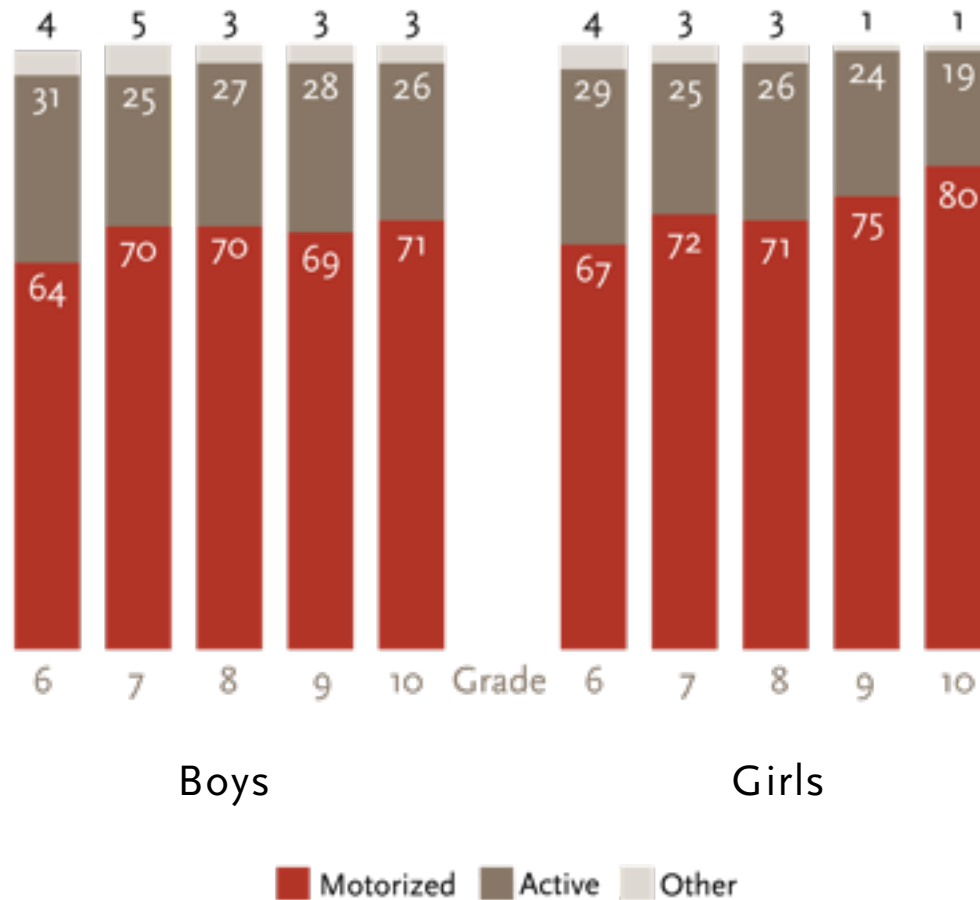
- **Driver Behaviour**
- **Road Environment**
- **Intersection Characteristics**
- **Crosswalk Characteristics**
- **Sidewalks**
- **Enforcement of Driving Rules**
- **Child Behaviour**
- **Adult Supervision of Child**
- **Pedestrian Proximity to Traffic**
- **Time of Day and Amount of Daylight**

CANADA

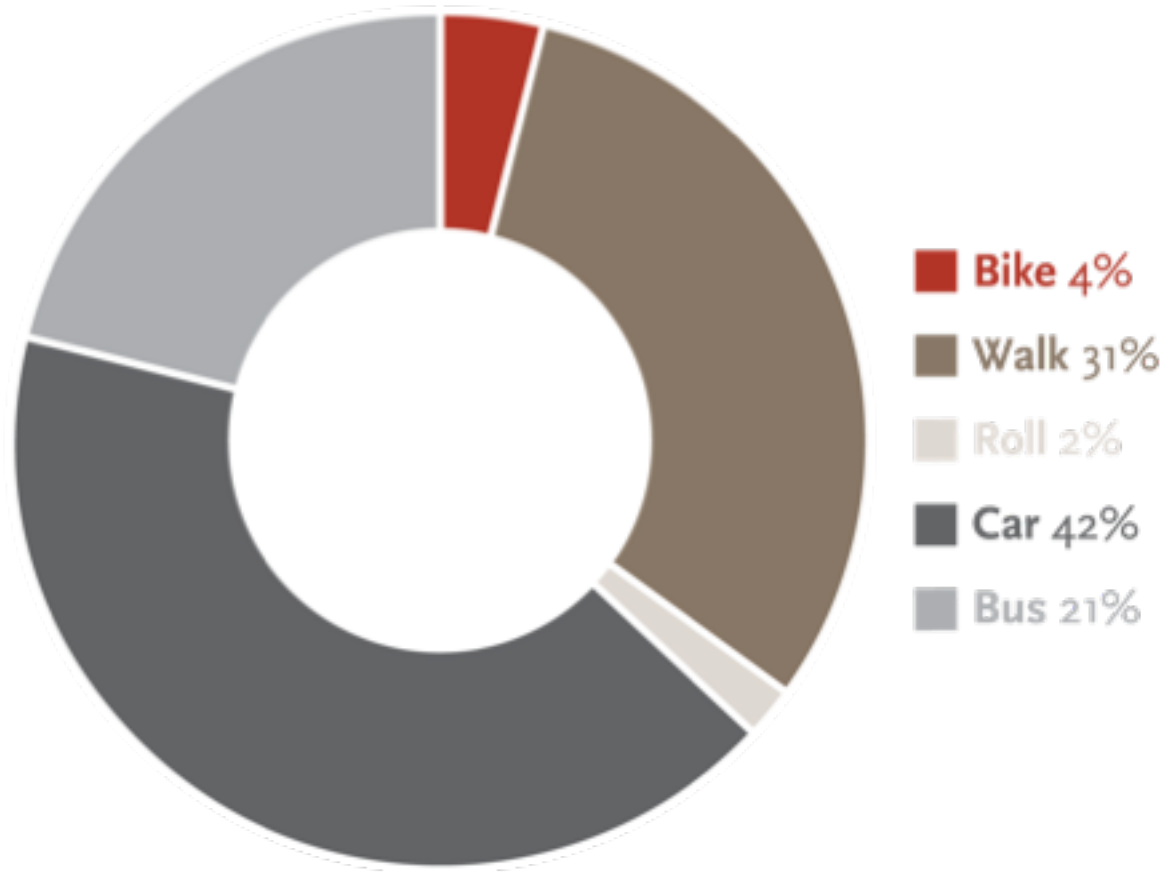


CANADA

Primary mode of transportation to school reported by students, by grade and gender (%) in 2015



MANITOBA



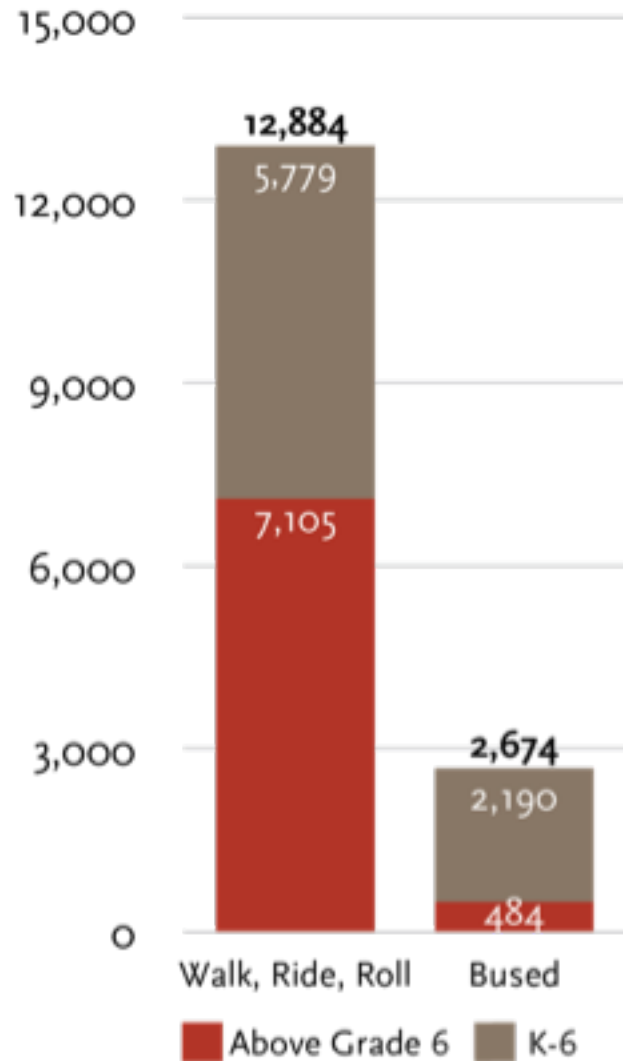
*Roll includes wheelchairs, skateboards, scooters and roller blades.

BARRIERS TO ACTIVE TRANSPORTATION

- **Vehicle collision – 2nd leading cause of injury death** in Manitoban children
- **1000+ “risky driving behaviours”** caught during annual Winnipeg school zone safety test in 2017
- **Children under age 12** don't necessarily understand exactly how traffic behaves and how to use crosswalks
- Environment
- Personal safety
- Lack of proper infrastructure
- Sedentary lifestyle
- Increased dependence on vehicles



LRSD STATISTICS



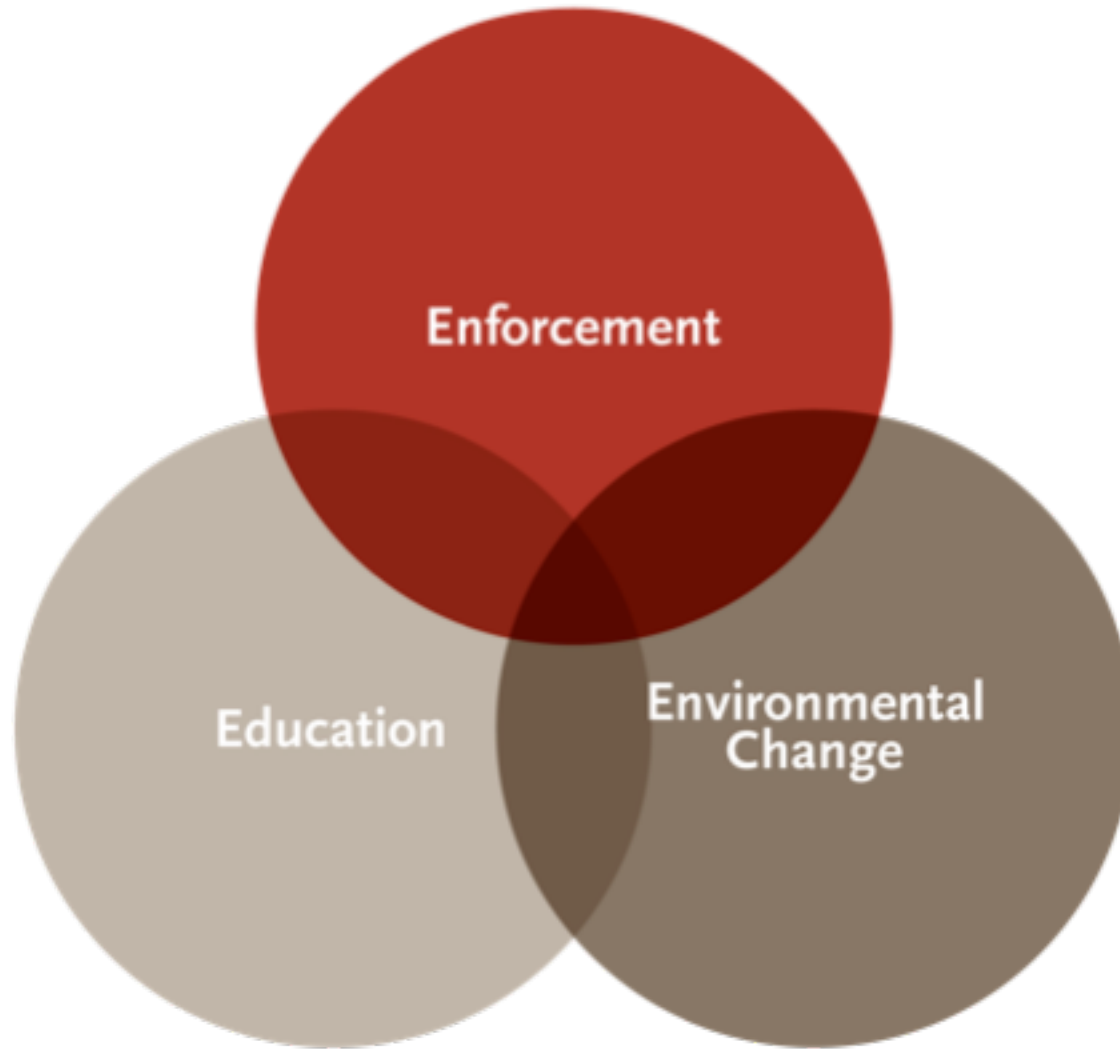
*Roll includes wheelchairs, skateboards, scooters and roller blades.

HOW TO IMPROVE CHILD PEDESTRIAN SAFETY?

Haddon's Matrix and child pedestrian safety risk factors

	Host (child)	Agent (driver, car)	Physical environment	Social environment
Pre-Event (prevention phase)	<ul style="list-style-type: none"> • road crossing behaviour • adult supervision • knowledge • child's age • child's gender 	<ul style="list-style-type: none"> • vehicle speed • driver attitude • driver behaviour • driver knowledge • driver experience • vehicle design 	<ul style="list-style-type: none"> • presence/condition of sidewalks • pedestrian proximity to traffic • road design • signage • crosswalks • type of housing • weather • daylight • time of day 	<ul style="list-style-type: none"> • value placed on pedestrian safety • policy/promotion of pedestrian safety measures • law enforcement • neighbourhood socio-economic conditions

Three **E**'s of Prevention



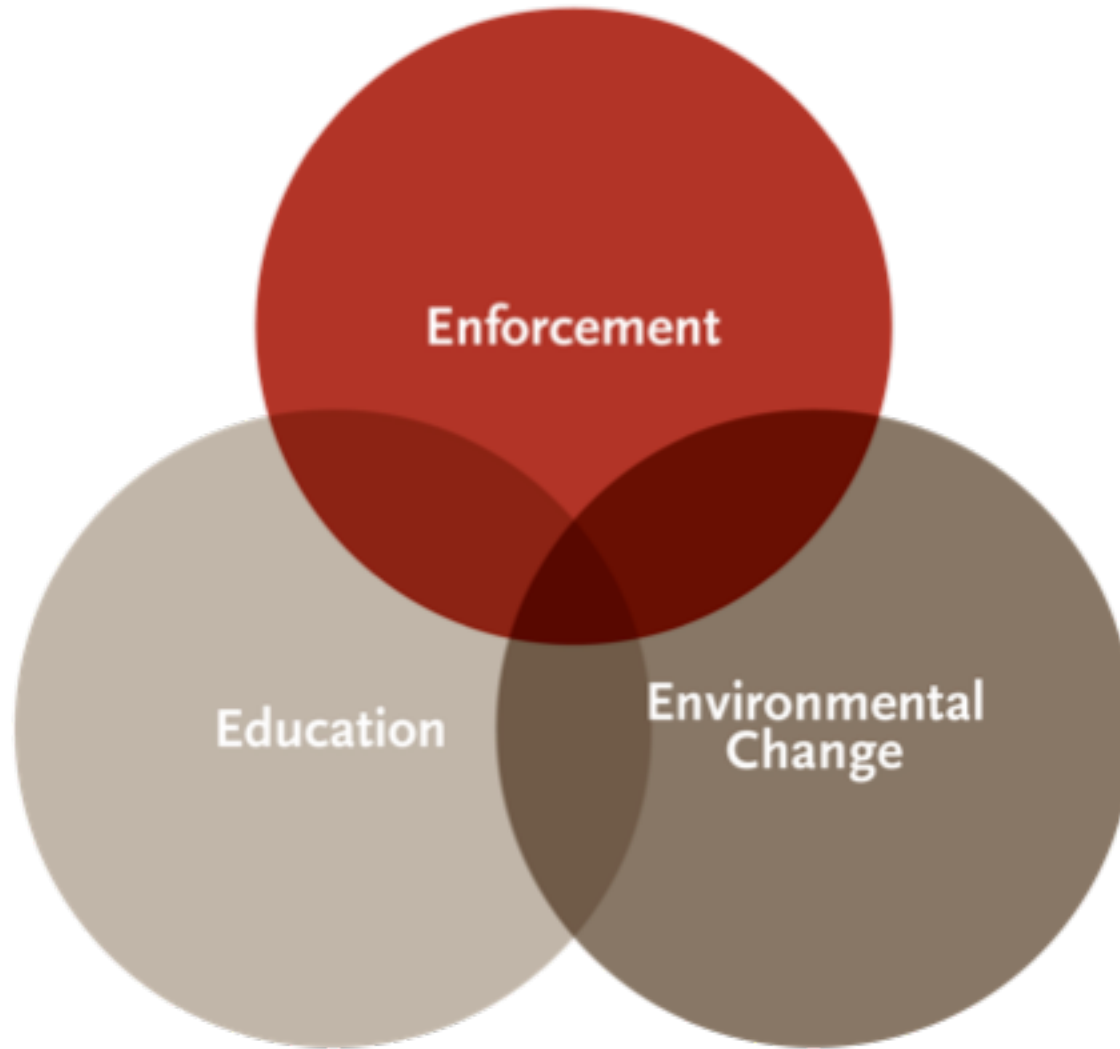
	Host (child)	Agent (driver, car)	Physical environment	Social environment
Education	What can we do to educate/improve child knowledge and behaviour?	What can we do about educating drivers?	What can we do to improve physical road conditions?	What can we do to educate to build awareness and support for valuing pedestrian safety?
Enforcement	What can we do about enforcement of safe crossing behaviour?	What can we do about enforcing or influencing the enforcement of safe driving behaviour?	What can happen to ensure traffic control installations are used as intended?	What can we do to influence laws and policies that improve pedestrian safety?
Environmental change	<p>What can we do about increasing adult supervision near the road?</p> <p>What can we do to change road crossing behaviour conditions (e.g., traffic lights)?</p>	What can we do about vehicle modification?	<p>What can we change about the physical environment:</p> <ul style="list-style-type: none"> • to slow traffic? • to separate traffic and pedestrians? • to improve safe crossings? 	What can we do to advocate for pedestrian safety?

HOW TO IMPROVE CHILD PEDESTRIAN SAFETY

“A multi-disciplinary approach including theory based education, engineering solutions and law enforcement has potential to reduce pedestrian injuries.”

Preventing Traffic Injuries – Center for Disease Control, USA, 2002

Three **E**'s of Prevention



EDUCATION
IS THE MOST
POWERFUL WEAPON
WE CAN USE
TO CHANGE THE WORLD

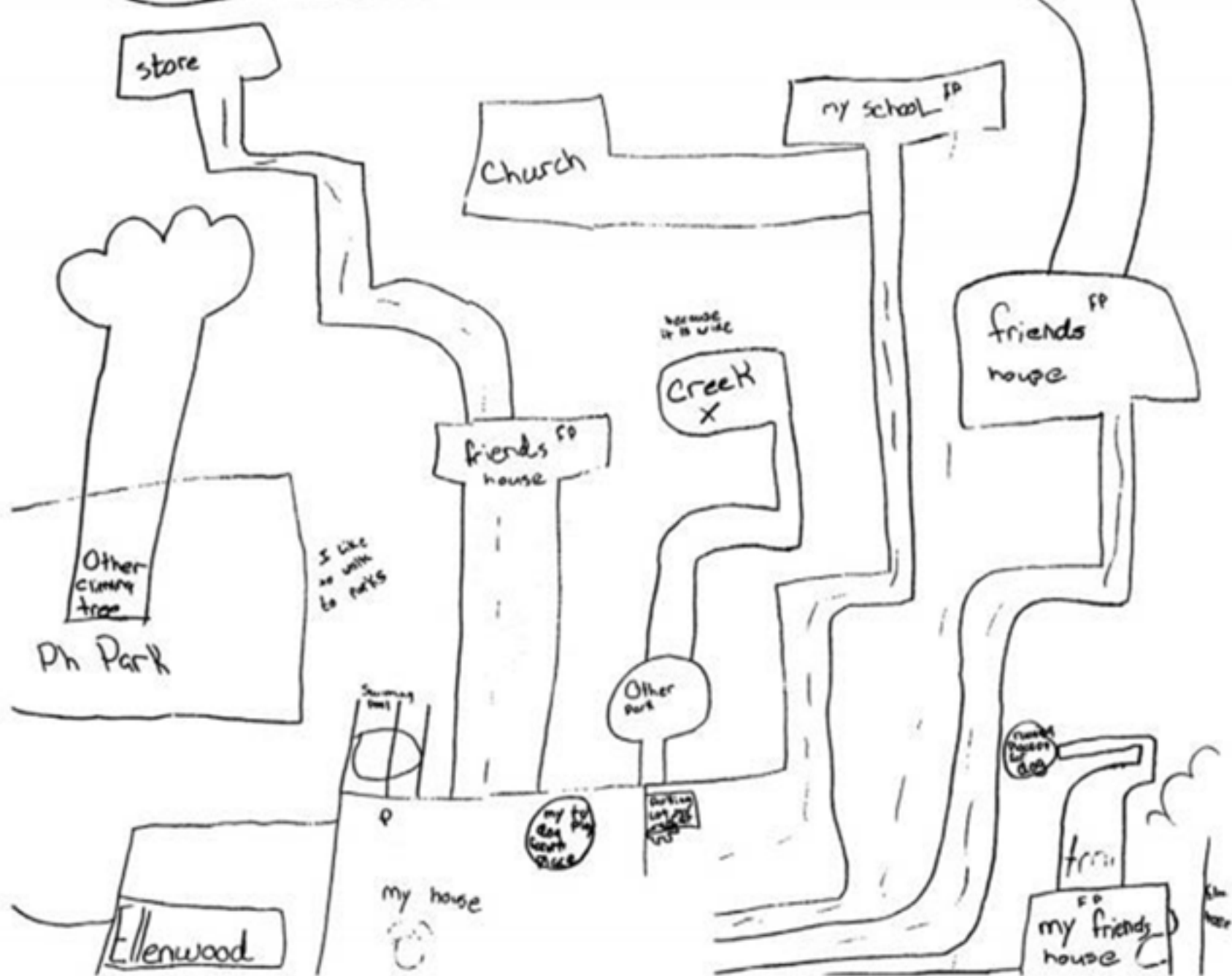
- NELSON MANDELA



Pedestrian and Bicycle Safety Education Program

- In many cities, bicycle and pedestrian education has become a standard part of the school system's teaching curriculum
- Teach road safety skills
 - Practicing pedestrian safety skills
 - Walking and riding together (walking school buses and bicycle trains)
 - Reporting unsafe behaviour to trusted adults (includes parents/guardians, teacher, principal, crossing guards)
 - Mapping safe routes from home to school and vice-versa that indicates crossing guards, safe areas that may have "eyes on the street"
- Interactive lessons can be designed for different age groups
 - K-2: learn basic pedestrian concepts
 - 3-5: bicycle safety fundamentals, rules of the road





Child from Gregory Garden Neighborhood

THE

WOODS

The Big
Canyon
(fern fort)

ladder you
could climb
at night

← hornets
nest

Sunningdale Road

found the
broken glass
↓ diamonds

hide from
bullies

1. our house
2. Forest Hills school
3. The water tower
4. Cave under the cedar tree
5. Path to The Woods
6. My best friend's house

Pedestrian and Bicycle Safety Education Program

Educational methods

- One-time instruction by Resource Officer
- Classroom or physical education lessons
- Lessons integrated into classroom subjects
- Parent Involvement – Complete Traffic Safety Activity book
- Part of an after School program

Structured Skills practice

- Pedestrian - where and when to cross a street and proper crossing procedures
- Bicyclist - bicycle handling drills, supervised group ride in a neighbourhood.



Pedestrian and Bicycle Safety Education Program

- Educate and Engage Families
 - Parents can serve as role models for safe walking and bicycling behaviour
 - Asking parents/guardians to walk with their child, discuss safe route and encourage their child to use safe routes
 - Informing parents about benefits of walking and biking to school
 - Parents can volunteer to help with classroom and skills practice
 - Designated drop-off zone close to school for families to reduce traffic congestion in front of school
 - Safety awareness campaigns – shifting community safety behaviour around schools so that all users obey traffic laws and share road safely





ENFORCEMENT

SPEED SURVEYS & ENFORCEMENT CAMPAIGNS

- Collaborate with WPS to conduct speed surveys at intersections and school zone
- Enforcement Campaigns
 - rolling through stop signs, not yielding to pedestrians in crosswalks



ADULT CROSSING GUARD PROGRAM

- Green Communities Canada reported that adding Crossing Guards **increases walking to school by 14%**
- **Creating a comprehensive Crossing Guard Program**
 - Hiring and reporting of Crossing Guard
 - Crossing Guard Training Program
 - Develop roster of Crossing Guards
 - Crossing Guard Supervisor informed of any school changes
 - STOP Paddle as the primary hand-signaling device.
 - Crossing Guard to wear – reflective safety vest, hat, etc.
 - Inspecting the area surrounding their posts for hazards
 - Reporting of traffic violations



PLACEMENT OF ADULT CROSSING GUARD

- Traffic Surveys
- Age of students
- Road Conditions
- Sight Distance/Obstructions
- Presence or absence of traffic control devices
- Traffic speed
- Volume of Traffic and pedestrians
- Crash history



SCHOOL SAFETY PATROL

- Since 1936 the Winnipeg Police Service has been involved in the School Safety Patrol Program.
- In the City of Winnipeg, there are more than 8,800 Patrols in seven School Divisions and numerous private institutions that participate in the School Safety Patrol Program.



**Manitoba
Public Insurance**

**Société d'assurance
publique du Manitoba**

Encouragement and Support Program



- Expanded use of high leverage programs
 - Walking school buses
 - Standing Walk+Roll School Day and/or Week
 - Neighbourhood walkabouts
 - No Idling at School
 - Walking Challenge/Kilometre Club
 - Classroom Mapping
- Pedestrian Safety Campaigns
- Supporting at least one annual encouragement activity event for each school
- Offer incentives (bike locks, helmets or lights, etc.)
- Support Crossing Guard and School Patrol Appreciation Day

ENVIRONMENT



INFRASTRUCTURE IMPROVEMENTS

- A **Gap Assessment Study** needs to be undertaken to identify gaps in the infrastructure
 - Student walking routes
 - Location of Sidewalks, crosswalks student crossing infrastructure
 - Historic traffic safety – visibility, blind spots, traffic infractions, incidents, collisions, speeding, stopping compliance
 - Traffic patterns and vehicle parking
 - Road conditions
- **Traffic Calming** measures such as speed humps, traffic speed readers, photo enforcement, parent parking patrols
- **Traffic Garden** for kids and families to practice in low-risk environment



TRAFFIC GARDEN



RISK ASSESSMENT

- Number of students crossing intersections and crosswalk
- Volume of traffic
- Speed of traffic
- Accident history
- Crosswalk location
- Visibility of crosswalk
- Assessing local safety concerns
- Number of adult crossing guards at the crosswalk or intersection
- Number of school patrols



Data Collection

School

- Bell Time Review
- Adult Crossing Guard and School Patrol Review
- Walking School Bus Review
- Survey for School Administration – to gather information related to child pedestrian safety concerns
- Site Survey

MPI

- Accident count at crosswalks and intersections (total of 60)

City of Winnipeg

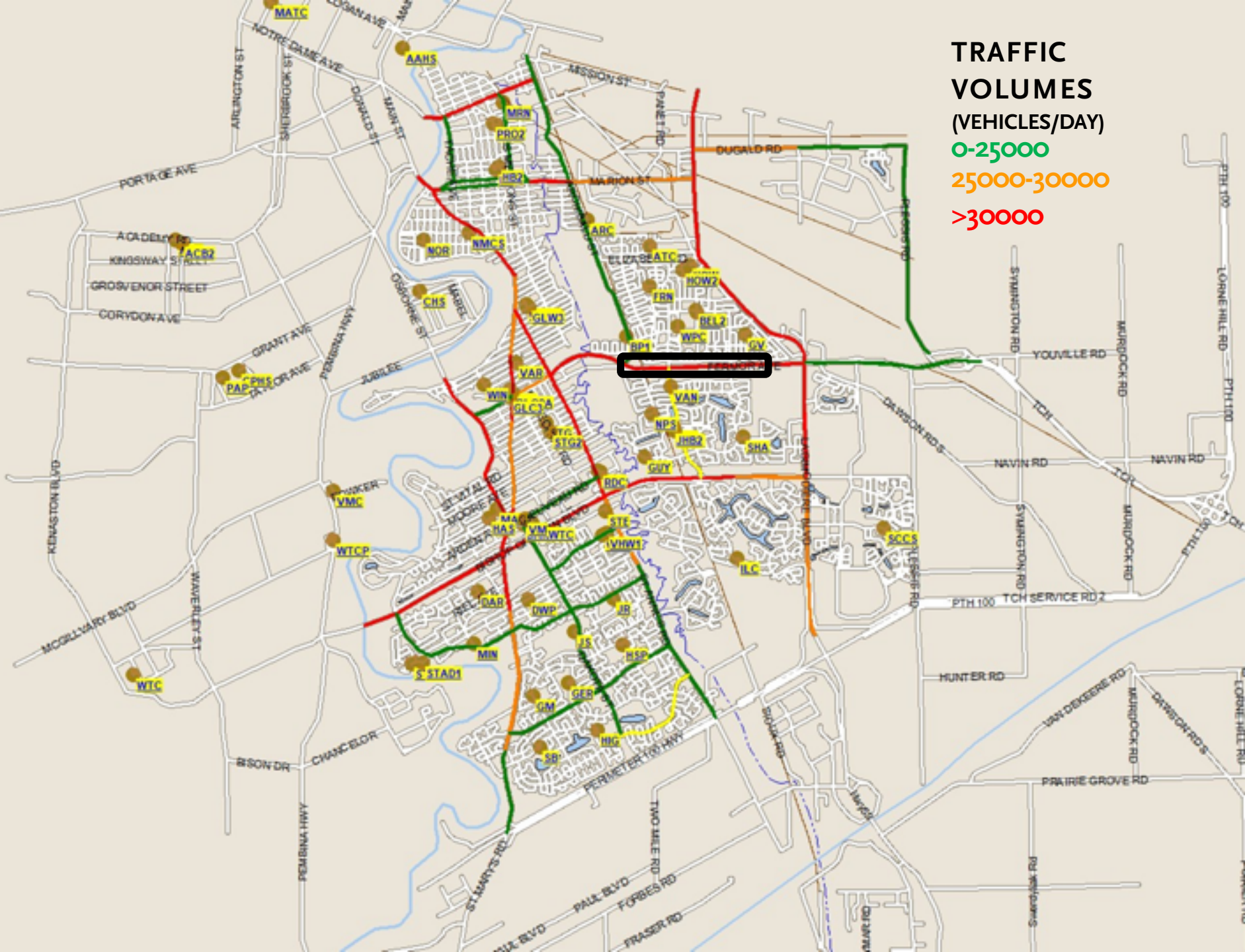
- Traffic counts and speeds

DATA ANALYSIS

- **School data on Adult Crossing Guards, School Patrols and Walking School Buses**
 - **Number of Crossing Guards at each school**
 - **Post Location**
 - **Schedule of Crossing Guards**
 - **Coverage/Replacement**
- **Traffic Accidents report from MPI**
- **Traffic Volume**



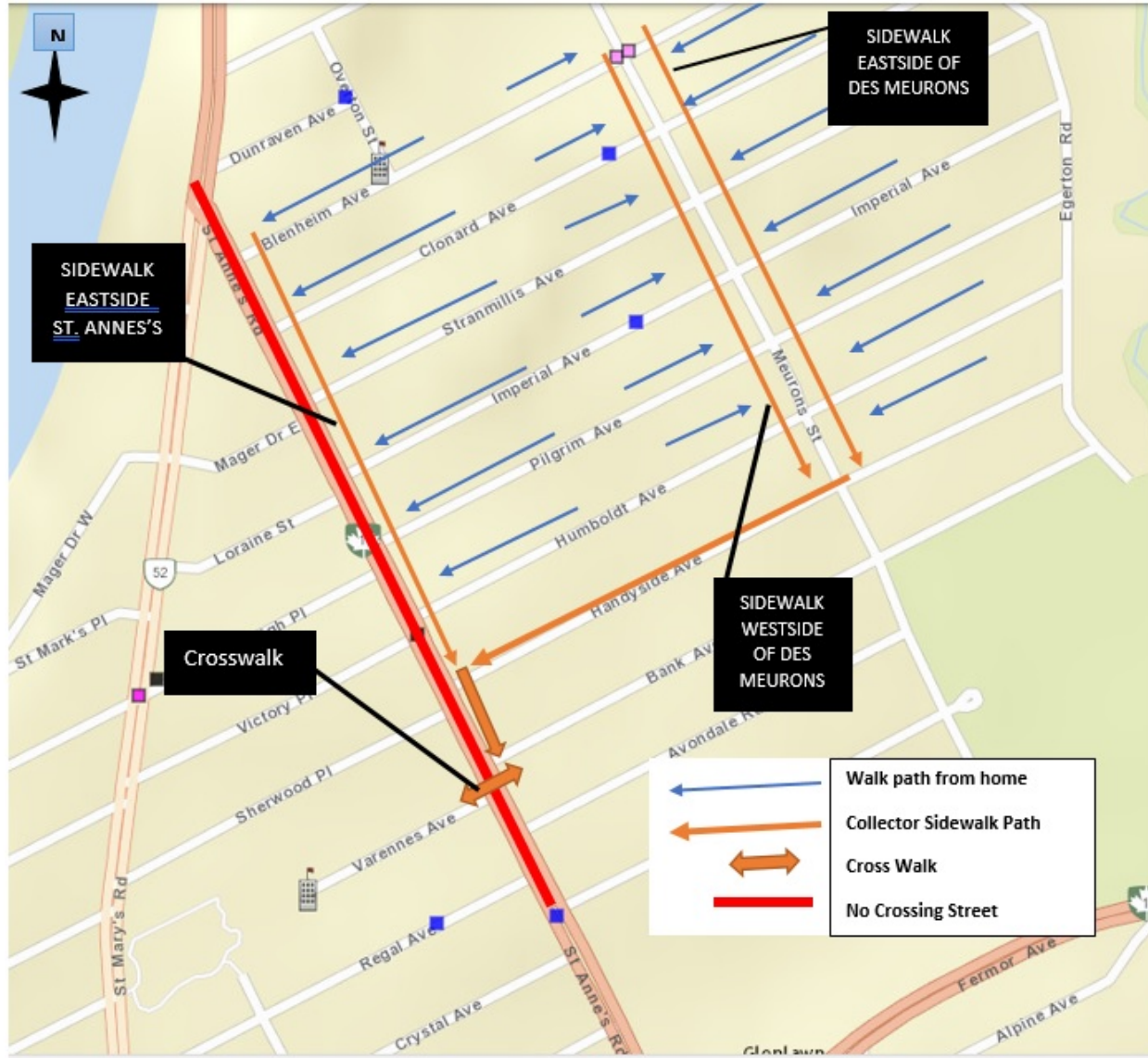
TRAFFIC VOLUMES (VEHICLES/DAY)
0-25000
25000-30000
>30000



Preliminary Results

TOP 10	CROSSING ZONE	POSTED SPEED
1	ST. ANNE'S RD AND MORROW AVE.	60
2	DAKOTA ST. & BELIVEAU RD.	60
3	SHOREHILL DR. AND BISHOPGRANDIN BLVD.	80
4	ST. ANNE'S RD.	60
5	ST. ANNE'S RD.	60
6	ST. ANNE'S RD. & BELIVEAU	60
7	MEADOWOOD DR. AND ST. ANNE'S RD	60
8	DAKOTA ST. AND SOUTHGLEN BLVD.	60
9	DES MEURONS ST.	50
10	DUNKIRK DR.	60

VARENNES SAFE WALK PATH TO SCHOOL



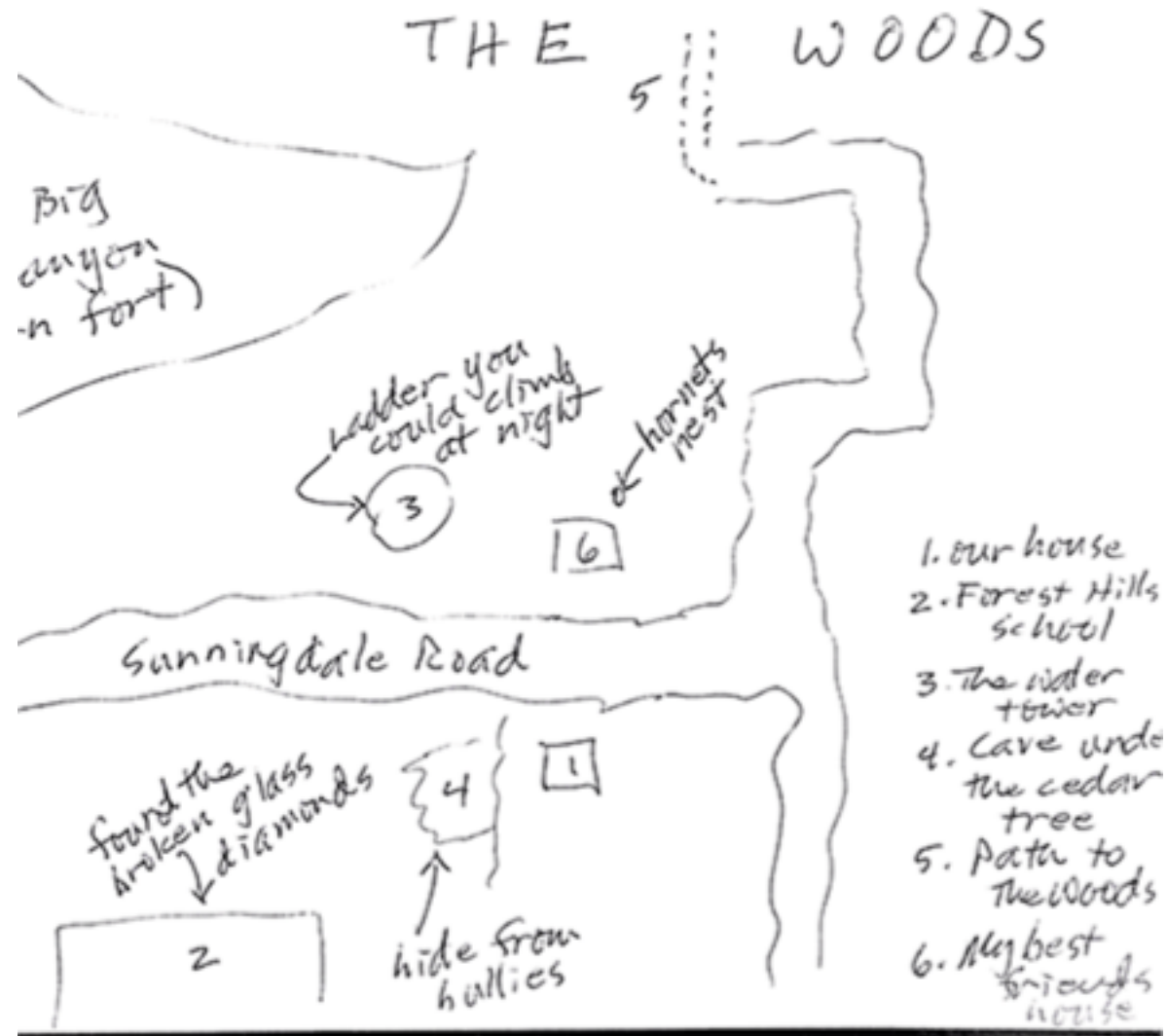


Multiple stakeholders and partners in LRSD to be involved in developing the framework to support a standardized Safe Routes to School Program.

RECOMMENDATIONS

STUDENT

- Create safe walk routes from home to school
- Participate in walkabouts and traffic observations
- Report safety concerns to trusted adults
- Older students lead walking school buses
- Organize active transportation promotions and events
- Make banners and posters



PARENTS / PACs

- **Co-map with the school staff, safe routes to and from school and encourage their child to use safe routes**
- **Walk or bike the route with their children**
- **Assist their children in completing a Traffic Safety Activity Workbook**
- **Identify and communicate safety concerns**
- **Initiate networking activities for other parents and share best practices**
- **Participate in the walkabout and traffic observations**



Parents Involvement

TEACHERS



- Educate students on safety, health and wellness, and the benefits of active transportation
- Deliver a standardized Safe Routes to School program

SCHOOL ADMINISTRATORS

- Help with data collection
- Actively participate in the standardized Crossing Guard Program
- Contribute ideas, advocate and make recommendations for infrastructure improvement initiatives
- Ongoing obligations to update safe walk paths to school
- Work with their Parent Advisory Council to develop and maintain safe pickup and drop off zones at their school
- Provide regular communication on pedestrian safety to families
- Support students to become “change agents” to influence adult behaviours



SUPERINTENDENT'S TEAM

- Provide direction and resources to Leadership Council to support and standardize school safety programs
- Create and integrate a standardized Safe Routes to School program
- Build relationship with the Green Action Centre and other local community organizations
- Encourage and support the use of walking school buses

SUPERINTENDENT'S TEAM

- Advocate for change in provincial legislation to allow the use of “Stop Paddles” by Crossing Guards
- Reconnect with the University of Manitoba’s Faculty of Engineering to initiate gap assessment
- Develop a communication plan for Pedestrian Safety Campaigns in partnership with Winnipeg Police Services, Manitoba Public Insurance, CAA and the media

SUPERINTENDENT'S TEAM

- Create a comprehensive and standardized Crossing Guard Program in partnership with Winnipeg Police Services
- Offer incentives to students to encourage active transportation
- Engage local businesses to sponsor high leverage programs
- Support an Appreciation Day

SCHOOL BOARD

THAT the Board in collaboration with the Superintendent's team advocate to City of Winnipeg staff for traffic studies and infrastructure improvements

THAT the Board review the recommendations related to a standardized Safe Routes to School Program and provide the resources to support the successful implementation of the action plan

THAT the Board continue to promote regular and formal communication between the Board, its senior administration and City of Winnipeg staff



Traffic Impact Studies

MUNICIPAL STAFF

- Advocate for traffic impact studies
- Provide current and historical data on traffic counts
- Liaise with the School Board and its senior administration on ongoing basis to resolve existing issues and address future issues in a timely manner
- Ensure infrastructure improvements recommended by the School Board's study are included in a city master plan and budgets (e.g. signage and road crossing upgrades; walking, biking and traffic-calming built infrastructure)
- Advocate for the development of an action plan for required infrastructure improvements

WINNIPEG POLICE SERVICES

- Support all schools to participate in pedestrian safety education programming by teaching “ **Road Safety Skills**”
- Provide statistics and highlight areas of concerns in the neighbourhood
- Conduct regular speed surveys at high risk intersections and school zones
- Develop enforcement campaigns based on the local issues
- Assist in the training and monitoring of adult crossing guards and school patrols



References

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