

Development of
School Area Traffic
Safety Guidelines
for Manitoba

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Manitoba



Presentation Outline

- Introduction
- Guidelines
 - Process
 - Toolkit
 - Prioritization
- Next Steps





INTRODUCTION

Background

- Project was originally initiated to address public concerns about school area traffic safety
- MB had no formal means to address this issue

Background

- Some of the traffic safety issues facing MB schools include:
 - Inadequate sidewalks leading to schools
 - Congestion on school property and the surrounding street network during pick-up and drop-off periods
 - Inattentive drivers not obeying basic traffic rules
 - Old school sites that are difficult to retrofit with new parking areas or bus loops
 - New schools being built without adequately addressing traffic issues in the planning stage

Background

- MMM Group was hired to complete the development of guidelines for a school area traffic safety assessment toolkit and procedural manual



Consultant Tasks

- Literature review
- Stakeholder workshops
- Report writing



Scope

- All roadways adjacent to school grounds and surrounding operational areas
- Drop-off and pick-up facilities for school buses and private vehicles
- Pedestrian access and crossing safety
- Speed zones in the immediate vicinity
- Traffic control devices near the school
- Education and enforcement

Guiding Principles

- Safety
- Consistency
- Cost-effectiveness
- Effectiveness of Measures



Intended Users

- **School teams** (consisting of parents, school staff, resident groups, etc.)
 - Non-technical
- **Transportation Authorities** (engineers and planners of local governments)
- The Guideline should apply to **rural, urban and suburban schools**

Steering Committee

- Manitoba Infrastructure & Transportation
 - Traffic Engineering Branch
 - Legislative & Regulatory Services
- Manitoba Education
 - Pupil Transportation Unit
 - Public Schools Finance Board
- City of Winnipeg
- Manitoba Public Insurance
- Green Action Centre
- RCMP
- Manitoba School Boards Association



GUIDELINES

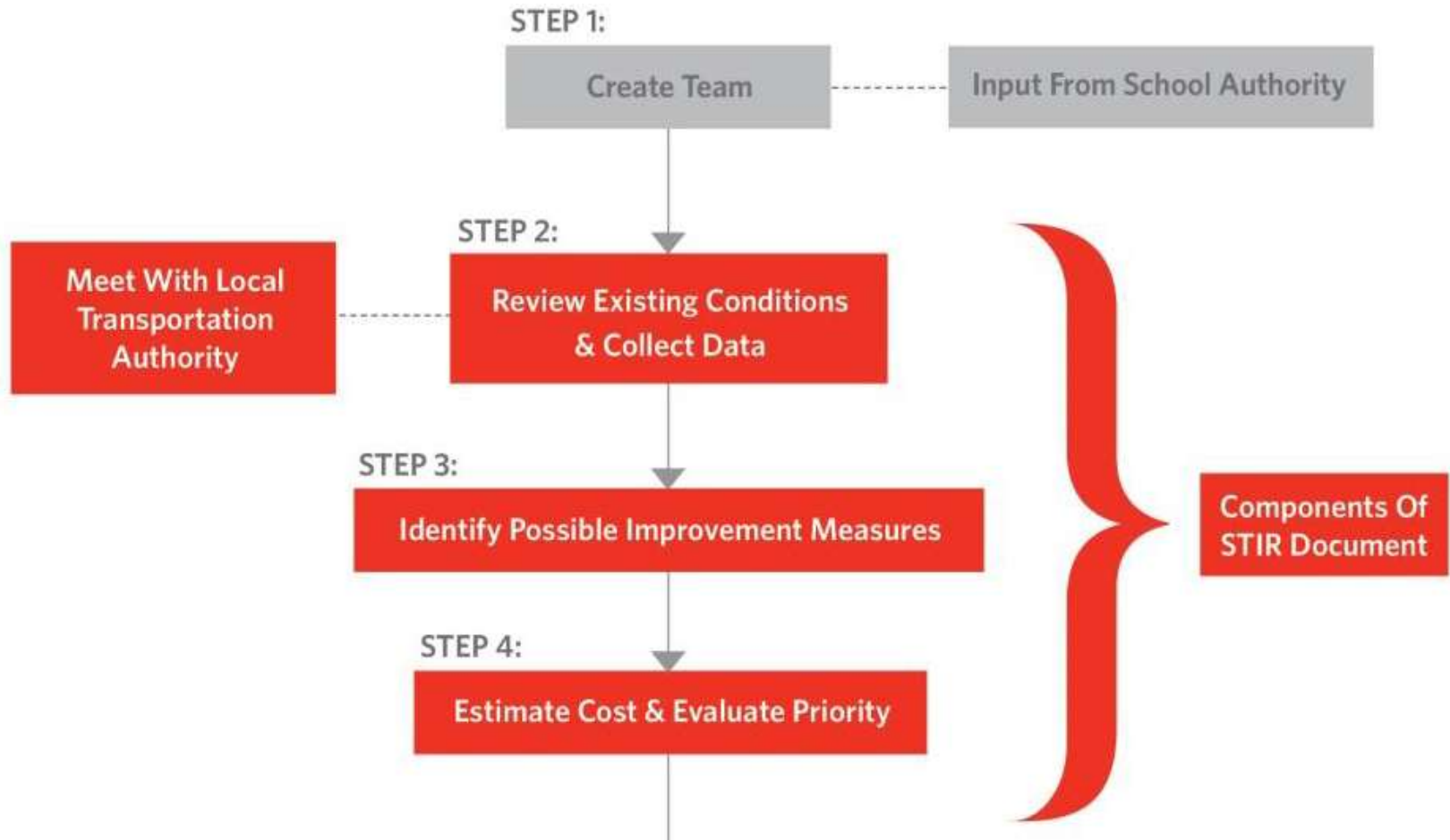
Planning for New Schools

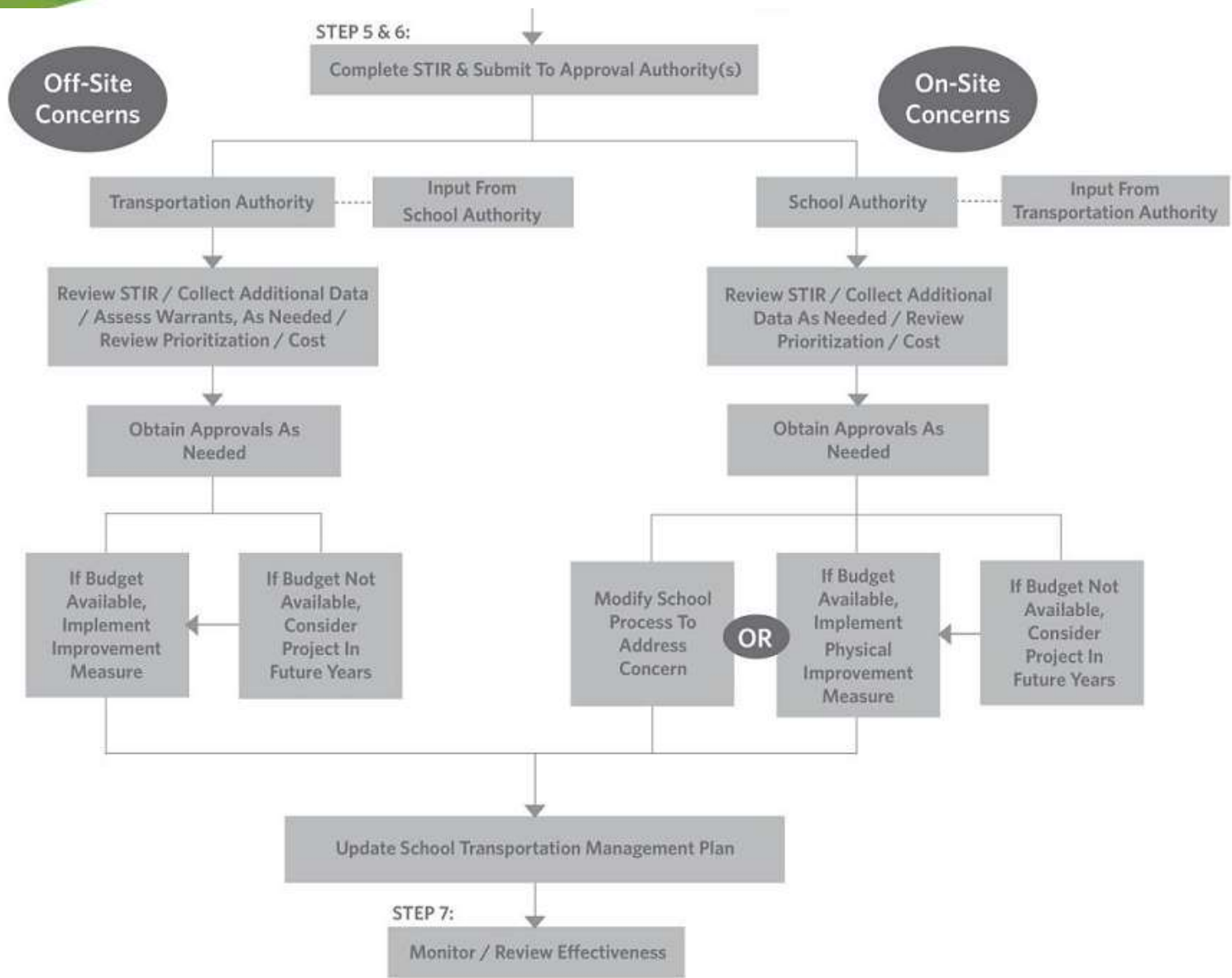
- Traffic safety should be a consideration in the planning of new schools from the start
- Detailed checklist included in the guide
 - Site selection
 - Surrounding road network & land use
 - Parking and loading
- **Intended Audience:** local municipal planning authorities & school divisions

User Guide for Existing Schools

- Purpose is to review traffic safety concerns at existing schools
- End result is a STIR document
 - **S**chool **T**ransportation **I**ssues **R**eport
- STIR submitted to local traffic authority and/or school authority for consideration
- **Intended Audience:** School teams consisting of a variety of technical and non-technical individuals

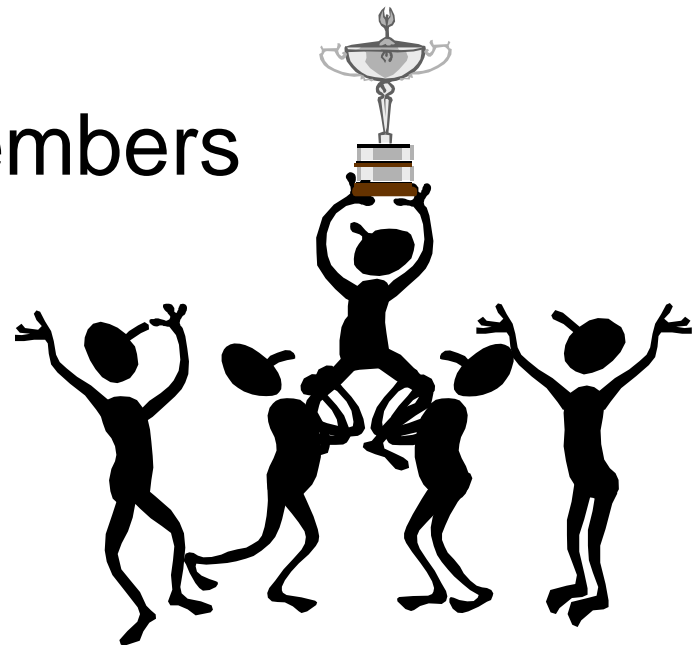
Creating a **STIR**





Step 1: Create Team

- Parents, school staff, local municipal officials, school division representatives, students, etc.
- Approximately 10 members



Step 2: Review Existing Conditions & Gather Data

Existing Conditions:

- Classroom survey
- Take-home survey
- Walkabout survey
- Route mapping



Step 2: Review Existing Conditions & Gather Data

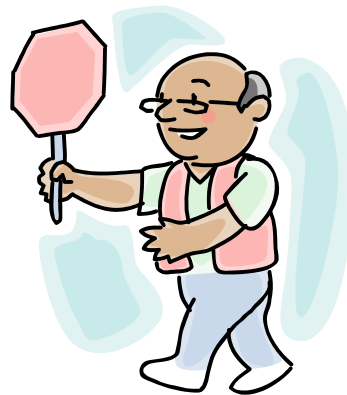
Gathering Data:

- Meet with transportation authority
- School team may be asked to gather
 - Parking counts
 - Vehicle counts
 - Pedestrian counts
 - Speed data



Step 3: Identify Potential Improvements

- Every school is unique
 - there are no “*one size fits all*” solutions
- Guideline provides a **TOOLKIT** of alternative solutions



TOOLKIT

- 4 broad categories to the toolkit
 - Educating Drivers
 - School Processes
 - Off the School Site
 - On the School Site
- Each tool is presented in the guide in terms of it's **definition**, recommended placement and/or specifications, **keys to success**, factors to consider and **cost**

TOOLKIT

Educating Drivers	School Processes	Off the School Site	On the School Site
Education / Enforcement Campaigns	School Bus Loading Protocols	<u>Pedestrian Network</u> Sidewalks/Pathways Walking School Bus (Photo)	Fencing
Speed Reader Boards (Photo)	Private Vehicle Protocols	<u>Crossing the Street</u> Crosswalks Curb Extensions Crossing Guards In-Street Signs (Photo) Etc.	Signs & Pavement Markings (Photo)
PACE Car Programs (Photo)	Staggered Dismissal Times	<u>Cycling Network</u> Bike Lanes Multi-Use Paths Bike Trains	School Driveways (Photo) Bus Loading Areas (Photo)
	Access Protocols	<u>Vehicle Network</u> Stop Signs/Signals Parking/Loading (Photo) Traffic Calming School Speed Zones	Bicycle & Vehicle Parking Areas (Photo) (Photo)

Step 4: Prioritization & Cost Estimates

- Guideline provides “order of magnitude” costs for most improvement measures
 - Recommends finding other means of determining more specific estimates, if required



Step 4: Prioritization & Cost Estimates

- Evaluation of **IMPACT, NEED, & RESISTANCE** to determine prioritization

IMPACT: How significant an impact will this measure have on transportation safety?

NEED: How many students will benefit from the measure?

RESISTANCE: How difficult will it be to implement? Public opposition? Policy changes?

Prioritization

Higher Impact →	5					
	4					
	3					
	2					
	1					
		1	2	3	4	5
		Higher Need →				

Higher Impact →	5					
	4					
	3					
	2					
	1					
		1	2	3	4	5
		Higher Resistance →				

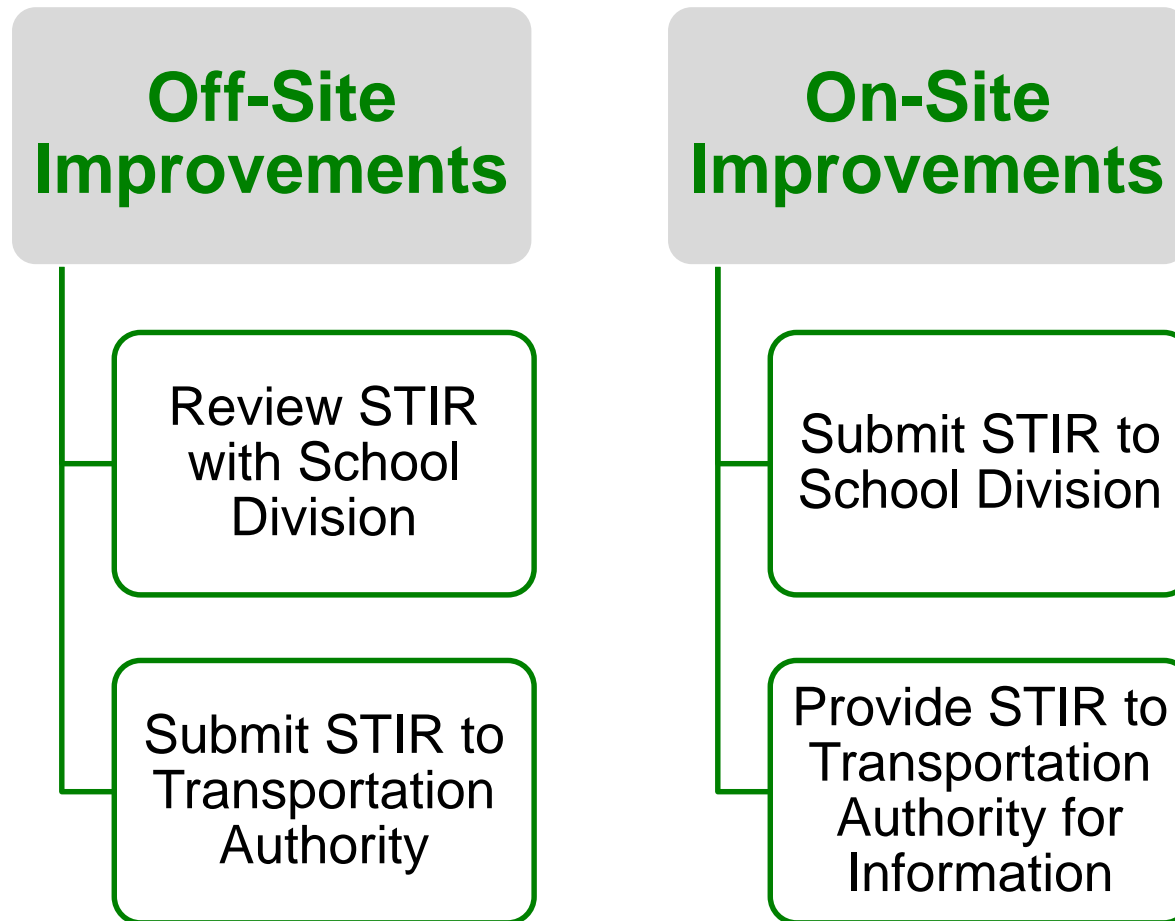
- The approval authority may wish to undertake a similar prioritization process on a system-wide basis.

Step 5: Completing the STIR

- A general outline is given for school teams to follow in preparing their report.

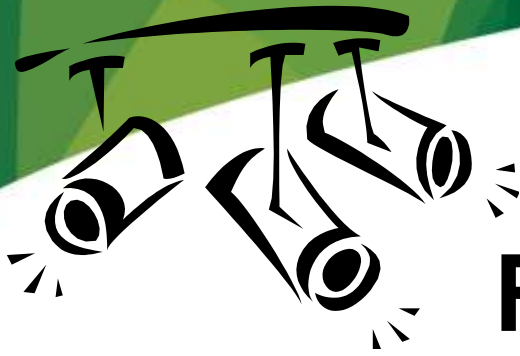


Step 6: Review by Authorities



Step 7: Implementation & Follow-Up

- Measures are programmed and implemented, once approved.
- Post-implementation monitoring is recommended



Report Highlights

- Schools can participate in the data collection
- Flexibility is key – school teams should work with the local transportation authority to determine the best solution rather than being fixed on one single solution

Next Steps

- Communication strategy
 - Release to school divisions and municipalities
 - Posting on MB Government website, among others



Questions?

