



Safer Traffic Around Richmond Schools

Mapping Strategies



Mapping of your school catchment area provides valuable information. You can:

- determine where students live;
- divide the catchment area into manageable neighbourhoods; and
- determine the best routes for pedestrians and cyclists to take to school based on existing facilities.

The reasons for mapping are:

- to help determine your school's most appropriate walking and biking strategies; and
- to establish a network of best routes to school.

Strategies are provided for the following maps:

- School and Area Map
- Neighbourhood Boundary Map
- Volunteer Location Map
- Mapping for Best Routes to School



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Mapping Strategies: School and Area Map



School and Area Map

Acquaint yourself with the physical and geographic layout of your school's neighbourhood. If you usually drive your child to school, try walking or bicycling to see what students encounter when they walk or bike.

You can request a school catchment area map from the City's Traffic Operations Department. You will need a poster size map of the school catchment area, ideally with lots and street addresses marked on it. You may need two or three of these large maps for your general mapping.

On one map, use the results of the parent survey and your observations to mark the following information:

- where most children live;
- direction(s) from which most children arrive, and mode of transportation;
- direction most parents travel after dropping off their children;
- direction, drop off and pick up location for school buses arriving and leaving;
- currently favoured drop off points;
- location of actual and perceived dangerous areas near the school (e.g., wooded areas, congested traffic areas);
- controlled or safe street crossing areas near the school;
- areas which currently present the largest traffic problem during pick up and drop off periods. This is the area where there are too many vehicles or where the conflict between cars and child pedestrians or cyclists are most apparent;
- current parking for teachers and administrators;
- nearby secondary schools, community centres, businesses or commercial areas that may contribute to the school's traffic concerns;
- areas such as church parking lots that might possibly be accessed in order to reduce your school site traffic congestion;
- the location of local bus stops;
- any bike paths or multi-use trails;
- the location of bike racks; and
- impassable or difficult terrain such as steep hills, forest, fences or private property.

This map helps to identify potential best routes to school.



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Mapping Strategies: Neighbourhood & Volunteer Maps



Neighbourhood Boundary Map

On another map, you might choose to create a planning map that indicates neighbourhood boundaries. You will need a poster size map as well as coloured markers.

Locate the main travel routes to your school. Establish the general neighbourhood boundaries based on these travel routes. Sometimes these neighbourhoods will be clearly evident; in other circumstances it is useful to work with people who live in these areas to determine what they believe to be their neighbourhood boundaries.

Name or number these neighbourhoods, and identify potential volunteers within each area, either from your knowledge of the parents, or determined from your Contact List.

This map helps to organize walking or biking strategies and event days (e.g., I-Walk) by dividing the school catchment area into manageable neighbourhoods with volunteers identified in each of those neighbourhoods.

Volunteer Location Map

Map the locations of homes of parents who have volunteered. You can then match volunteers to students living in that neighbourhood to organize walking or biking or carpool groups. Designate neighbourhoods where volunteers can choose the best routes to school and decide what alternative transportation strategies are most suitable for the parent volunteers and students involved.



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Mapping Strategies: Best Routes



Mapping for Best Routes

This process is based on the instructions for determining Safe Routes to School as outlined in the ICBC publication "Safe Crossings: Guidelines for School Crossings Programs."

Prepare a map identifying the areas listed below and highlight potential problems or concerns, which may have been noted during the school site walkabout

Although the best routes area usually designated in terms of traffic safety issues, personal safety and security issues are also a consideration. When there are many students and parents walking or biking on a route, students travelling alone are apt to be safer because there are more people travelling this route, by bike or on foot, to the school. When choosing the best routes, ensure that you take into account personal safety and security issues as well as traffic concerns.

A map of the school area and suggested best routes is a useful educational tool for parents and students. Parents who drive children to school may not know how to choose the best route for walking or biking to school. Their regular school route may not be as safe or as short a distance as one available to pedestrians or cyclists. For example, drivers may not be aware of a walkway at the end of a cul-de-sac. Potential pedestrian or cyclist hazards, such as driveways crossing sidewalks, parked cars, congested crosswalks or streets without sidewalks or walkways may escape detection by a driver. Mapping and creating best route maps for students and their families may give parents the confidence to encourage their children to walk or bicycle to school. It will also help those students who are already walking and cycling to choose their best route, as they may not be crossing at the safest place or choosing the best cycling route.

Using colour markers identify the following potential resources for your routes:

- Block Parent homes (BP)
- crosswalks – patrolled (PC), pedestrian signal (PS), marked (MC)
- stop signs (S)
- continuous sidewalk (red line)
- wide shoulder (grass/gravel/asphalt) where there is a safe margin of refuge from moving traffic (orange line)
- no sidewalks but streets with few vehicles and good visibility (yellow line)
- connecting walkways and trails (dashed red line)

Then, using colour markers, identify the following hazards or concerns:

- ditch by road edge – no refuge for pedestrians or cyclists (blue line)
- high volume / high speed traffic on road – no refuge (purple line)
- blind corners – due to hedge, fence, sign (BL)
- high volume / high speed traffic at intersection with no signal or crosswalk (X)
- parked cars or trucks impeding vision (V)
- unexpected traffic movements such as many cars parking and backing up, cars making u-turns in street or in driveways (U)
- muddy trails (brown line)

Source: *Way to Go!* School Program Manual.



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Mapping Strategies: Best Routes

If you need to add more detail, or specific descriptions, place numbers beside key map features and compile an accompanying annotated list with an explanation. This information will be useful when you are identifying areas requiring attention and describing issues to City staff during discussions.

Determine best routes from neighbourhoods to the school based on the data you have mapped. Walk the routes to see how they work, and revise your decisions according to how well the planned routes work on your walk. Make these routes known to families at the school by distributing maps, or through newsletter articles. Test them out for a few months and ask for feedback from the school community. Alter the routes according to what you learn, and redraw the maps to include any changes, seasonal alterations or suggested alternatives.

It is useful to compile the following information if you anticipate making a request to the City to implement physical pedestrian and/or cycling facility improvements:

- list the reasons why a crosswalk, signage, or sidewalk are being requested;
- provide the potential number of students who could be crossing at a specific location, using the School and Area Map that identifies where students live and the Pedestrian Count Form;
- consider other potential users for this location. These may include seniors in your community, recreational users, transit users, etc; and
- remember to bring your maps and completed forms.

If you determine that you would like to consider implementing a patrol at a crosswalk, contact your school liaison police officer or the RDPA Traffic Safety Representative.