Appendix D. Education

Active and Safe Routes to School (ASRTS) is a national and international movement to help more children bicycle and walk to school. Active and Safe Routes to School can include a variety of multi-disciplinary programs aimed at promoting walking and bicycling to school and improving traffic safety around school areas through education, incentives, law enforcement, and engineering measures. Active and Safe Routes Programs typically involve partnerships among municipalities, school districts, community and parent volunteers, and law enforcement agencies. The primary goals of ASRTS are to improve safety, health, and fitness habits for children while improving air quality and diminishing traffic congestion. Most ASRTS programs focus on elementary and middle school travel.

This appendix describes the need for Active and Safe Routes to School (ASRTS) leadership in the CRD and recommends specific initiatives to meet this need.

Needs and Trends

The CRD has identified sustainable transportation as a key strategic goal. Guided by the *TravelChoices* Strategy (adopted in 2005), the Region, with its 13 municipal partners, has a mandate to significantly reduce the frequency and length of trips taken by automobile. A substantial portion of the 1.2 million trips taken each day in the region are school-based trips, of which nearly 50% of the trips are taken by automobile.

Although the problem of auto-reliance has been accurately identified, the solutions are not as easily addressed. With respect to school-based trips, it is not enough to simply "encourage" schools and parents to tackle this multi-faceted problem on their own. In light of the policy, environmental, and health mandate for restoring physical activity to school transportation, the CRD should make a long-term commitment to Active and Safe Routes to School programs in the region.

Existing and Past Efforts

The CRD benefits from a significant number of individuals and organizations working on ASRTS in the region. Groups such as Victoria Active School Travel (VAST), Hub for Action on School Transportation Emissions (HASTE), Capital Bike and Walk Society, and Bike to Work Victoria all have resources and expertise to offer, as do talented individuals working in the field such as Shelley Brown (with the City of Victoria), Deborah LeFrank (previously with Safer School Travel), Bernadette Kowie and Shoshana Litman (previously with Way to Go!), John Luton (formerly with Capital Bike and Walk Society, now City Councillor in Victoria), and others.

The region also has been home to several noteworthy ASRTS efforts in the past. The Way to Go! School Program (a BC-wide school trip reduction program aimed at families), the Safer Saanich School Travel planning effort that completed School Travel Plans for 18 elementary schools in the municipality, the KidsCAN Road Skills Course pilot completed last year, and the HASTE-managed International Walk to School Day are all examples of significant accomplishments in the region towards changing school travel habits.

Existing Organizations

Victoria Active School Travel (VAST)

Victoria Active School Travel is a currently dormant organization comprised of professionals with previous experience in active transportation and school travel planning. The members include: John Luton and Julie Higginson with Capital Bike and Walk Society, Deborah LeFrank and Lana Taves (previously of Safer School Travel), Shoshana Litman (previously with Way to Go!), and Shelley Brown with the City of Victoria.

Victoria Active School Travel brought together stakeholder and community interests to identify challenges, barriers, gaps in infrastructure, and programs that, when addressed, will help children and their families choose active means of transportation like cycling and walking for more of their trips to and from school.



Figure 1. In-classroom education is an important part of a robust Active and Safe Routes to School Strategy.

VAST received several grants between 2008 and 2010 that enabled the organization to work with two grade 4/5 classrooms at Sir James Douglas Elementary School in Victoria. The program was based on HASTE web based tools and other initiatives to help the children learn about the effects their school travel choices have on both their health and the health of the environment. The project culminated with a fantastic Clean Air Day event at the school.

VAST also participated in the planning and execution of "The Way Forward 2010: Summit on Child and Youth Friendly Planning", on the 16th of April. This was a cross-sector summit to enable planners, public health professionals, elected officials, community groups, and NGOs in the Capital Region to tap into "low-hanging fruit" opportunities to turn the region into a national leader in child and youth friendly planning, while decreasing GHG emissions and achieving positive health impacts.

Hub for Action on School Transportation Emissions (HASTE)

HASTE supports schools and their communities taking action on reducing transportation emissions in British Columbia by providing online resources, training, materials, and plans for school and classroom emissions reductions campaigns, as well as a centre for networking for students, teachers, and schools to improve the health of individuals, communities, and the environment. HASTE is a project of the Environmental Education Action Program Society and is funded by the BC Ministry of Environment, the Ministry of Education, the Ministry of Transportation, the Ministry of Healthy Living and Sport, LiveSmart BC, and the Climate Action Secretariat.

Key tools and programs from HASTE include:

 MyTravel Emissions Calculator and Tracking Program: Helps students calculate the impacts of their travel, make a plan on cutting their emissions, and track the progress made by both individuals and a whole class.

- Walking/Cycling Route Planning Tool: Helps plan walking or cycling routes to and from school and produce and share finalized routes with others.
- Anti-Idling Cookbook: Offers ideas and tools for conducting an anti-idling program at schools.
- Walking School Bus/Bicycle Train Program: Advice, support, and training for organizing escorted student travel programs.
- encouragement program. School Travel Planning: An STP Facilitator works with community representatives (school boards, municipalities, police, public health professionals, parents, educators, and children/youth) to identify and solve their school transportation problems. Each school writes a School Travel Plan which includes an action plan section containing infrastructure recommendations, education and encouragement program ideas, and other support programs.
- iWalk: International Walk to School Week
- Bike to School Week

Current and Past Efforts

Way to Go! School Program

The Way to Go! School Program offered direct support to parent volunteers around British Columbia in reducing school auto trips. The program offered a how-to manual and a resource kit to participants as well as training and staff support.

During the program's prime, the RoadSense Team (a partnership between autoplan brokers in B.C. and the Insurance Corporation of British Columbia) funded the necessary staff and program resources to make Way to Go! available to all elementary and middle schools in the province of British Columbia. The cost of the program was \$180,000 per year towards Way to Go! staff, travel costs, resource development and production, distribution of information and resources, and all communication and administration costs related to providing the program province wide.



Figure 2. Walking School Buses are just one type of

Figure 3. Parent volunteers become part of the effort.

Way to Go! was funded from December 1997 to the end of June 2008 when the funding was discontinued as an aspect of the accord between the brokers and ICBC. In the summer of 2008, many Way to Go! resources were transferred to Hub for Action on School Transportation Emissions (HASTE: www.hastebc.org).

School Travel Planning Pilot

In the past few years, through the efforts of Green Communities and the Canadian Active and Safe Routes to School Partnership (http://www.saferoutestoschool.ca/partnership/) and through funding from the Canadian Partnership Against Cancer, B.C. has been involved with pilot and second stage work on School Travel Planning (STP).

School Travel Planning is a community-based approach that has been used with success to increase the number of children and families choosing active transportation modes to get to and from school.

The STP approach requires a much more significant commitment from the local government authority in supporting the planning and infrastructure to allow for children's safe and active travel to school. The School Travel Planning Guide and Toolkit are available from the project website (http://www.saferoutestoschool.ca/schooltravel.asp).

Key community stakeholders (school boards, municipalities, police, public health professionals, parents, educators, and children) work together with an STP Facilitator to identify and solve their school transportation problems.

Each school writes a School Travel Plan which includes an action plan section describing steps they plan to implement such as:

- Education (e.g., safety training for walking and cycling, awareness raisin);
- Encouragement (e.g., celebrations of physical activity and environment, event days, recognition and rewards for walking/biking); and
- Engineering improvements at or near school sites (e.g., pedestrian crossings, adult crossing guards, repairs and upgrades to sidewalks, signage, and bike racks).

KidsCAN Road Skills Course

The CRD launched the KidsCAN project as a pilot in 2008 in partnership with the certified CAN Bike instructors at Bike to Work Week Victoria to adapt the curriculum and teach the course to 50 grade seven students. The program was funded by the

Ministry of Education's Community Connections program.



Figure 4. Students learn bicycling safety during a road skills course.

The KidsCAN program was based on the well-respected one-day adult cycling skills training course taught by Bike to Work Victoria. At CRD's direction, Bike to Work Victoria modified the course for use in schools. The final curriculum included four hours of in-class time followed by four hours of escorted on-road instruction. The course was held during school hours and was integrated into the teachers' workplans every Friday for the month of November. In advance of the course, students were provided with a bike safety checklist with tips for ensuring their bicycles would be roadworthy for the course. A bike mechanic was on site to perform safety checks before students took the on-road portion of the course.

Student participants enjoyed the course and showed measurable increases in comprehension of key road skills (such as riding on the sidewalk, riding with traffic, wearing a helmet, and fitting a helmet properly). Media

coverage was positive, school officials in the participating school district were very supportive of the program, and other schools and school districts have contacted the CRD asking to be included in the program.

Suggestions also received from the community identify the importance of offering parents similar road safety courses to ensure positive modelling and accurate, consistent road skills among children and adults, alike.

Municipal Efforts

All municipalities were surveyed about current cycling and pedestrian efforts. Their reported efforts relevant to Active and Safe Routes to Schools are listed below.

Colwood

Colwood Council passed a resolution to establish an "Active and Safe Routes to School" committee, but at the time of writing this has not yet been done.

Oak Bay

Oak Bay funded an Active and Safe Routes to School study in 2007.

Saanich

In 2002, Saanich initiated the "Safer City" effort, jointly funded by the Saanich Police and the Insurance Corporation of B.C. (ICBC), to develop a road safety plan for motorists, cyclists, pedestrians, and all other road users. One part of the program was the implementation of School Travel Planning at 18 schools in Saanich between 2003 and 2007.

Victoria

Early in 2009 the City of Victoria (representing Victoria Active School Travel – VAST) received a grant from the Victoria Foundation to support VAST's active school travel initiative with Victoria schools. This grant

enabled VAST consultants to work with two classrooms of grade 4/5 students at Sir James Douglas School on projects promoting active school travel and the impacts of car travel on both the environment and students' health.



Figure 5. Local law enforcement is often involved with Active and Safe Routes to School efforts.

One of the projects the students worked on was promoting an "idle free" school program in coordination with Clean Air Day. The students produced art work for both a bilingual brochure and school posters and encouraged peers, parents, and school employees to leave the car at home on Clean Air Day.

Students in target classrooms also participated in the web-based MyTravel program from HASTE (Hub for Action on School Transportation Emissions). This web program enabled students to calculate the greenhouse gas (GHG) emissions related to their school travel, pledge to change their behaviour, and track the GHG reductions resulting from new school travel habits.

Need for CRD Leadership

The survey of regional Active and Safe Routes to School efforts indicated that the region needs a clear lead agency to convene existing ASRTS resources and to take a significant step forward in addressing active school transportation. CRD is well poised with both the mandate and the reach to serve this role.

CRD is also uniquely qualified to serve as a leader based on its strong policy support for increasing active transportation and improving the health of residents in the region. The CRD also has direct experience managing social marketing changes to effect individual behaviour change (for example, in the areas of water conservation and recycling).

It is anticipated that CRD's role in ASRTS leadership would be that of a regional coordinator and project manager; this recommendation is not intended to replace or make redundant any of the existing organizations or projects currently in existence. Rather, the CRD's role should be to enhance, support, and synergize with existing resources towards a truly regional, more efficient, and sustained program.

Possible Roles for the CRD

The following regional and collaborative roles are proposed for the CRD in ASRTS leadership:

- Convener: Bring the right people together.
- Coordinator: Assist interested parties in working in concert.
- Adviser: Develop deep and broad expertise around Active and Safe Routes to School, and become the repository of institutional memory.
- Public voice: Create a campaign to educate and engage the public directly on youth school travel issues.
- Monitor: Develop an evaluation strategy, see that evaluation metrics are collected and report back to funders, stakeholders, decision makers, and the general public about the results of ASRTS efforts.
- Funder: Fund ASRTS efforts directly, from its operating budget, and indirectly, by leading and participating in efforts to secure additional funding (e.g., from the Province, health agencies, foundations, etc.).

Staffing Structure

In order to make significant progress on Active and Safe Routes to School in the region, it is absolutely necessary to create staff who are specifically assigned to working on these efforts. The following staff positions are identified as essential components to ensuring a successful ASRTS program.

It should be noted that while these positions may be hired by and housed under CRD, it is also possible for the CRD to contract with other organization(s) or individual(s) to fulfill these functions. In any case, the CRD should take a leading role in securing funding for these positions, hiring the right people for the job, setting their duties and work plan, and supervising their work. Because of the coalition nature of ASRTS efforts, it may make sense to fund, hire, and supervise staff in partnership with other agencies.



Figure 6. There is substantial interest around the region for bicycling skills training for schoolchildren.

• Regional ASRTS Coordinator: This person should be charged with implementing the ASRTS recommendations contained in the Pedestrian and Cycling Master Plan (PCMP) as well as implementing the strategic plan to be developed by an ASRTS Working Group. The Regional ASRTS Coordinator should receive training to become an expert in the field, serve as the liaison to the Working Group, manage the School Travel Planning effort (including serving as the facilitator on all or some of the projects), oversee regional ASRTS evaluation efforts and reporting, and supervise

ASRTS Outreach Staff. This position would ideally oversee a youth cycling skills program (building on the KidsCAN Cycling Pilot project) and could report to a regional Pedestrian and Cycling Coordinator (PCMP recommendation), should such a position be developed.

ASRTS Outreach Staff: Outreach staff will be needed for the School Travel Planning effort and to
deliver a comprehensive KidsCAN Skills Safety Course. Depending on the desired programs to be
implemented, these staff may be hired as part-time temporary staff, or it may be possible to combine
several staffing needs to create one or more full-time outreach positions (such as having them work
on SmartTrips targeted marketing outreach in the summer).

CRD Primary Functions

Expand Organizational Capacity and Expertise

The key to establishing a successful ASRTS program is to identify and support a champion – often in the form of a designated staff person. Typically, at the outset, the portfolio is added to an existing job description, but in the long term the ASRTS coordinator is ultimately a stand-alone position. The Regional ASRTS Coordinator should receive training on School Travel Planning facilitation, the national Active and Safe Routes to School approach, and the KidsCAN Cycling Road Skills program.

The importance of having dedicated staff capacity cannot be overstated. No successful ASRTS program in North America or Europe has been sustained without the institutional memory, expertise, and relationships that a dedicated staff position bring.

Regional Communication and Coordination

There is great interest in ASRTS in the region and numerous individuals and organizations with significant knowledge in this arena. At present, though, there is no central clearinghouse for sharing information, coordinating efforts, and developing a common vision for the rollout of ASRTS efforts.

The CRD should coordinate a quarterly ASRTS Working Group, staffed by the Regional ASRTS Coordinator, to bring together representatives from all four school districts, municipalities, law enforcement, and HASTE. Other possible partners include the Vancouver Island Health Authority, the Insurance Corporation of British Columbia (ICBC), the Directorate of Agencies for School Health (DASH BC), and Bike to Work Victoria.

The ASRTS Working Group would be charged with:

- Reporting on infrastructure projects that affect school travel;
- Developing a strategic plan for implementing the region-wide ASRTS efforts (including School Travel Planning and the KidsCAN Cycling Road Skills program);
- Securing and expanding long-term, stable funding for ASRTS efforts in the CRD; and
- Developing an evaluation strategy and collecting data for evaluation.

School Travel Planning

A key component of ASRTS programming is School Travel Planning (STP). The STP work could be integrated into responsibility of the Regional ASRTS Coordinator with assistance from Green Communities Canada and/or HASTE.

KidsCAN Cycling Road Skills Course

In 2008, the successful KidsCAN Cycling Road Skills Course pilot project demonstrated that there is great interest around the region, especially at the school district level, in providing substantive bicycle skills training to schoolchildren. Building on this success, the ultimate goal is to expand the program to all four school districts, with the hope of reaching every seventh-grader in the region. CRD Regional Planning is currently developing a business plan to explore the costs and strategy options for region-wide implementation.

Recommendations coming out of the pilot program suggest that the curriculum developed should be used for future phases, but engaging video segments should be developed, along with a loaner bike program to ensure that all children are able to participate in the on-road component. The ASRTS Working Group could be tasked with developing a phasing strategy for reaching schools in the region and resolving outstanding logistical issues such as the provision of program insurance, an evaluation strategy, and the role of the municipalities in program implementation. The Regional ASRTS Coordinator could be responsible for managing the program, scheduling and supervising teachers, promoting the program, and communicating with the media, seeking in-kind donations, and managing evaluation.

Developing a Standardized Evaluation Approach

CRD, with the assistance of the Active and Safe Routes to School Working Group, could develop a consistent evaluation strategy for ASRTS in the region. The evaluation should be on two fronts:

- Evaluating the regional program: One of the ASRTS Working Group's annual tasks should be evaluating the state of ASRTS efforts in the region. To this end, they should develop a set of benchmarks that are published annually in a report. These benchmarks should be grounded in the ASRTS strategy and work plan developed by the Working Group.
- Evaluating individual schools: An evaluation strategy should be developed for individual schools, which will be initiated as part of the School Travel Planning process. The methodology and materials can be those developed by the Green Communities ASRTS Planning, including the classroom hands-up student survey and the family survey.

CRD Secondary Functions

The following programs are currently offered by other organizations in the region. The CRD could support these programs through the ASRTS Working Group and, as capacity allows, through the Regional ASRTS Coordinator, but not take the lead in managing the program.

• iWalk (International Walk to School Week): HASTE currently hosts International Walk to School Week every October. Schools can sign up online and receive a planning resource, incentive packet, and entry into a grand prize drawing. The iWalk effort is one that successfully introduces a large number of children and families to walking to school. In 2010, for example, approximately 85,000 children participated

internationally.



Figure 7. International Walk to School Week draws large numbers of children and families to walk to school.

- The MyTravel Emissions Calculator and Tracking Program: HASTE offers the MyTravel Calculator as an easy to use online tool for individuals and groups to measure the greenhouse gas emissions (GHGs) arising from their travel to and from school. The MyTravel Database allows the user to collect, review, and track a group, classroom, or school's travel data submitted through the MyTravel Online Calculator. Anyone interested in tracking a group's emissions can register with
- Anti-Idling Campaign: Based on the greenhouse gas reduction mandate, the Climate Action Project
 at the CRD is already working on public anti-idling campaigns. An ASRTS program would provide
 opportunities for cross-departmental work with this group. HASTE also provides anti-idling
 materials (including signs, fact sheets, pledge forms, and monitoring forms) and scalable campaign
 plans for schools to implement an anti-idling campaign.
- Walking School Buses/Bicycle Trains: HASTE provides numerous online resources to assist interested parents and community members in setting up a Walking School Bus or Bike Train. Online route planning tools can help develop a good route to school, while several webinars provide training and advice.

Active and Safe Routes to School Resources

HASTE and sign up and use the database.

School Travel Planning

School Travel Planning brings together community stakeholders to identify barriers to active transportation for each school and develop a written action plan for addressing those barriers. The flexibility of the School Travel Plan framework being tested in this pilot project allows communities to customize their approach to fit local circumstances.

Through a five-step process each school, with assistance from the community stakeholders, writes a School Travel Plan that includes an action plan describing steps they plan to implement such as:

- Engineering improvements at or near school sites (e.g., pedestrian crossings, repairs/upgrades to sidewalks, signage);
- Introduction of school infrastructure (e.g., bike shelters, bike racks, lockers);
- Education (e.g., traffic safety education for pedestrians and cyclists, education about personal security);
- Community mobilization (e.g., walking school buses, walking buddies, ride sharing);
- Encouragement (e.g., celebrations of physical activity and environment); and
- Event days, recognition and rewards for walking/biking.

Schools create a School Travel Plan (STP) to show how they intend to make travel to and from their sites safer and more sustainable for pupils, parents, and teachers. The STP document itself should then link in with the school's development or improvement plan. It is an important tool in reducing the number of pupils who travel to school by car. STPs are created in consultation with the whole school community. They are all very different, as each considers the local situation and current trends. In addition to safer travel, STPs are about improving health, broadening education, and combating social exclusion. They contribute towards making the local community greener and improving the quality of life for everyone.

We	eb Address
	c://www.sustrans.org.uk/assets/files/Safe%20Routes/resources/infosheets/SRS_Develog_an_STP_ST16.pdf
	o://www.saferoutestoschool.ca/partnership/downloads/Green-Communities-STP-Pres- r2-3-09.pdf
http	o://www.saferoutestoschool.ca/schooltravel.asp

Model Programs

International Walk to School Day/Month (iWalk)

International Walk to School Day (iWalk) is the annual, premier event of the Active & Active and Safe Routes to School program. It is a mass celebration of active transportation and its related issues are used to introduce communities to the AASRTS program.

Resources Available	Web Address
IWALK logo and flyer downloads	http://www.iwalktoschool.org/downloads.htm
IWALK Promotional Flyer	http://www.saferoutestoschool.ca/downloads/guide/chapter4/chap4_iwalk_form1.pdf
Sample media releases	http://www.saferoutestoschool.ca/downloads/guide/chapter4/chap4_iwalk_media1.dochttp://www.iwalktoschool.org/downloads/iwalk_release_2010.rtf
Sample PSAs	http://www.saferoutestoschool.ca/downloads/guide/chapter4/chap4_iwalk_PSA1.doc
Colouring Sheet	http://www.saferoutestoschool.ca/downloads/guide/chapter4/chap4_iwalk_colour1.pdf
IWALK Student Pledges	http://www.saferoutestoschool.ca/downloads/guide/chapter4/chap4_iwalk_pledge1.pdf

Walking/Wheeling Wednesdays

Whatever name your school gives it, the idea is to designate one day per month or one day per week as a Walk to School Day, starting right after International Walk to School Day in October. Families do not need to make a commitment to walk every day, just on walk to school days, giving them opportunities to slowly break the driving habit and adjust their schedules accordingly.

Resources Available	Web Address
Cross Canada Map Distance Chart	http://www.saferoutestoschool.ca/downloads/guide/chapter4/chap4 wwwed chart1.doc
Student Travel Log	http://www.saferoutestoschool.ca/downloads/guide/chapter4/chap4_wwwed_log1.pdf
Notice to Teachers	http://www.saferoutestoschool.ca/downloads/guide/chapter4/chap4_wwwed_notice1.pdf
Sample Walking Wednesday Flyer	http://www.saferoutestoschool.ca/downloads/guide/chapter4/chap4_wwwed_flyer1.pdf

Anti-idling Campaign

An anti-idling campaign educated students, parents, school faculty and staff, and bus drivers about the harmful effects of idling and debunks myths about the advantages of motor vehicle idling. This type of program can include an awareness campaign, pledges for those who drive to and from schools, and data collection and analysis activities for students.

Resources Available	Web Address
No Idling Information Card	http://www.saferoutestoschool.ca/downloads/guide/chapter4/revised_info_card-dec05.pdf
Observation Form	http://www.saferoutestoschool.ca/downloads/guide/chapter4/chap4_ni_observ1.pdf
Commitment Intervention Form	http://www.saferoutestoschool.ca/downloads/guide/chapter4/chap4_ni_inter1.pdf

Neighbourhood Walkabout

A neighbourhood walkabout should engage students, parents, teachers and administrators, local government staff, and anyone else with a vested interest in walking and bicycling safety near schools. The walkabout is an opportunity to audit the walking (and/or) bicycling conditions near school, identify hazards or barriers to walking and bicycling, and identify next steps to improve conditions.

Resources Available	Web Address
Neighbourhood Walkabout Guide	http://www.saferoutestoschool.ca/downloads/guide/chapter4/chap4_nw_process1.doc
Walkability Checklist (USA)	http://drusilla.hsrc.unc.edu/cms/downloads/walkability_checklist.pdf
Bikeability Checklist (USA)	http://www.bicyclinginfo.org/pdf/bikabilitychecklist.pdf
Urban Neighbourhood Assessment	http://drusilla.hsrc.unc.edu/cms/downloads/Pennsylvania Keystone%20Healthy%20Routes Urban.pdf
Interactive Walkability Checklist (USA)	http://www.rwjf.org/files/newsroom/interactives/walkability/walk_app.html
Interactive Bikeability Checklist (USA)	http://www.rwjf.org/files/newsroom/interactives/sprawl/bike_app.jsp

Walking School Bus

Parents and guardians often cite distrust of strangers and the dangers of traffic as reasons why they do not allow their students to walk to school. Walking School Buses are a way to make sure that children have adult supervision as they walk to school. Walking School Buses are formed when a group of children walk together to school and are accompanied by one or more adults (usually parents or guardians of the children on the "bus"). As the walking school bus continues on the route to school they pick up students at homes or designated meeting locations. Walking school buses can be informal arrangements between neighbours with children attending the same school or official school-wide endeavours with trained volunteers and structured meeting points with a pick-up timetable.

Resources Available	Web Address
School Checklist	http://www.saferoutestoschool.ca/downloads/guide/chapter4/chap4_wsb_checklst1.doc
Sample parent letter	http://www.saferoutestoschool.ca/downloads/guide/chapter4/chap4_wsb_letter1.doc
Sample parent flyer	http://www.saferoutestoschool.ca/downloads/guide/chapter4/chap4_wsb_flyer1.doc
Sample parent survey	http://www.saferoutestoschool.ca/downloads/guide/chapter4/chap4_wsb_survey1.doc
Family Checklist	http://www.saferoutestoschool.ca/downloads/guide/chapter4/chap4_wsb_checklst2.doc
Sample Name Tag	http://www.saferoutestoschool.ca/downloads/guide/chapter4/chap4_wsb_tags1.pdf
Walking School Bus Guide (USA)	http://www.saferoutesinfo.org/guide/walking_school_bus/pdf/wsb_guide.pdf

Curriculum Integration: Lesson Plans

Class Transportation Survey

Students will learn to measure, analyze, and interpret transportation data. They will better understand the impact of their transportation choices on CO2 emission levels. This is an excellent lesson plan to use in conjunction with HASTE's MyTravel Emissions Calculator and Tracking tools. Grade level: 7-12

Source: Cool School Challenge: http://www.coolschoolchallenge.org/index.aspx

Materials: http://www.coolschoolchallenge.org/Downloads/Activities/ClassTransportationSurvey.pdf

Barriers to Change: The Myths about Vehicle Idling

In this lesson, students will learn the common misconceptions about vehicle idling, the effects of idling on climate change, and the logic of social marketing (marketing towards behaviour change with information and positive reinforcement). When the students understand that misconceptions about idling are contributing to climate change, they'll realize that they are in a position to initiate change. Grade Level: 7-12

Source: Climate Change North: http://climatechangenorth.ca/

Materials: http://www.hastebc.org/files/LP_27_print.pdf

Backgrounder for Sustainable Transportation and Investigating Options for Sustainable Transportation

This lesson covers the impacts of transportation emissions, infrastructure, and manufacturing and discusses cleaner and more sustainable transportation options. Students begin by reading a backgrounder on sustainable transportation, then conduct research into options for transportation that could be implemented where they live. The final product is a community transportation plan that incorporates maps and descriptions of required technologies, communicated by means of a report and/or presentation to the class.

Source: The Pembina Institute: http://www.pembina.org/

Materials: http://www.hastebc.org/files/sustainable-transportation-bg.pdf

Travel Solutions to Global Warming

In this lesson, the teacher demonstrates a burning candle experiment, with students posing hypotheses, to review the relationship of the carbon cycle, fossil fuels, and the atmospheric CO2 level. Students then graph the relative populations and production of CO2 by different countries and discuss the results. Students follow up by using a personal trip log to discover simple but powerful solutions. Grade Level: 5-8

Source: Northeast Sustainable Energy Association: http://www.nesea.org/

Materials: http://www.hastebc.org/files/travel%20solutions.pdf

Idle-Free Teacher's Resource Kit

This kit contains tools for 4th, 5th, and 6th grade classes to learn about idling and to take action. Each grade has grade-specific lessons that are aligned to the expected outcomes. These lessons provide the teacher with solid background information that will lead students to a better understanding of the problematic nature of idling. Once students and teachers understand the importance of having an idle-free school and decide to undertake making the school idle-free, the kit provides ways to implement an action plan for each grade level.

The kit also provides links to downloadable posters, information sheets, and other support pieces. Grade Level: 4-6

Source: Clean Nova Scotia: http://www.clean.ns.ca/

Materials: http://www.hastebc.org/files/IdleFree_Intro&Bkgd_0.pdf

A Teacher's Guide to Clean Air

This guide is for grade five teachers in British Columbia. Anywhere in BC, teachers will find an activity or piece of information that will help bring the clean air topic into the classroom. Much of the guide's content and clean air actions are meant to be shared with parents, so it is encouraged for the discussion topics to find their way home with students. Grade Level: 5

Source: BC Transit: http://www.bctransit.com/

Materials: http://www.hastebc.org/files/Clean%20Air_Guide_final.pdf

Idle Off

This activity is designed to help students understand the environmental impact of leaving an engine idling. Students will sort out myth from truth on the topic of engine idling and transportation and compare and create guidelines for when to turn engine motors off.

Source: Destination Conservation: http://www.dcplanet.ca/

Materials: http://www.hastebc.org/files/idle_off-2_0.pdf

Color our World

In this lesson, students examine the concept of ecological footprints and learn how we can alter our actions to decrease our footprint and the demand we place on the earth. This activity is meant to help students think more critically about how their everyday actions impact the earth. In analyzing their footprints, students will have a chance to see firsthand how everything we do is connected to the people and world around us. The curriculum considers school transportation as one of the important contributing factors in reducing one's ecological footprint.

Source: Better Environmentally Sound Transportation: http://www.best.bc.ca

Materials: http://www.best.bc.ca/pdf/Colour_Our_World_Classroom_Guide.pdf

How to Reclaim Your Street

This curriculum is not specifically designed for students, but can be used for older grades. It is based on BEST's "Offramp" program, designed by Arthur Orsini for use in high schools. The lesson includes an overview of the causes and outcomes of auto-oriented transportation systems and auto-dominated travel behaviour. Participants are encouraged to examine actions they can take to reduce car use, reuse street space, and reach out to others about travel behaviour.

Source: Better Environmentally Sound Transportation: http://www.best.bc.ca

Materials: http://www.best.bc.ca/downloads/15-downloads.html

Active and Safe Routes to School Curriculum

This spreadsheet summarizes opportunities to integrate Active and Safe Routes to School topics into mathematics, science and technology, health and physical activity, arts, and language curricula from first through eighth grades.

Source: Green Communities | Active and Safe Routes to School

Materials: http://www.saferoutestoschool.ca/downloads/guide/chapter7/chap7 curr connect1.doc

Evaluation

Resources Available	Web Address
Sample parent transportation survey	http://www.saferoutestoschool.ca/downloads/guide/chapter5/chap5_eval_survey1.doc
Sample student transportation survey	http://www.saferoutestoschool.ca/downloads/guide/chapter5/chap5_eval_survey2.tif
Walkability Survey	http://www.saferoutestoschool.ca/downloads/guide/chapter5/chap5_eval_survey3a.tif http://www.saferoutestoschool.ca/downloads/guide/chapter5/chap5_eval_survey3b.tif
YWalk Sustainable Transportation Survey	http://www.ywalk.ca/downloads/sustainable_transporation_survey.pdf

Special Topics

Resources Available	Web Address
Involving Students with Disabilities in ASRTS (USA)	http://www.saferoutesinfo.org/resources/collateral/Involving%20students%20with%20disability_web.pdf
Managing a Crisis (USA)	http://www.saferoutesinfo.org/guide/media/managing_crisis.cfm
Implementing Safe Routes to School in Low- Income Schools and Communities	http://www.saferoutespartnership.org/media/file/LowIncomeGuide.pdf
Reducing Liability Concerns and Getting Kids Active through Safe Routes to School (webinar – USA)	http://bit.ly/a6QtVr
Secondary School TDM Inventory	http://www.urbanthinkers.ca/sites/default/files/Sec%20Sch%20TDM%20Report%20- %20August%202009.pdf
Liability from Active School Travel Assessment	http://www.saferoutestoschool.ca/downloads/Risk_Mgmt_and_AST-Apr_2010.pdf

Organizations

Organization	More Information
Victoria Transport Policy Institute	An independent research organization dedicated to developing practical tools for incorporating social and environmental values into transportation decision making. http://www.vtpi.org/
Better Environmentally Sound Transportation (Vancouver, BC)	http://www.best.bc.ca/
Green Communities Active and Safe Routes to School	http://www.saferoutestoschool.ca/
Urbanthinkers	http://www.urbanthinkers.ca/
National Center for Safe Routes to School (USA)	http://www.saferoutesinfo.org/guide/encouragement/mileage_clubs_and_contests.cfm
Safe Routes to School Online Guide (USA)	http://www.saferoutesinfo.org/guide/
National Highway Traffic Safety Administration (USA) Safe Routes to School Guide	http://www.nhtsa.gov/people/injury/pedbimot/bike/Safe-Routes-2002/toc.html
International Walk to School	http://www.iwalktoschool.org/
Hub for Action on School Transportation Emissions (HASTE)	http://www.hastebc.org/
Bike to Work BC	http://www.biketowork.ca/contact
YWalk	http://www.ywalk.ca/
Manitoba Student Transportation Network	http://www.resourceconservation.mb.ca/gci/MSTN/