A New Kind of Bus Afoot

Walking school buses — reducing carbon emissions the old-fashioned way

by Elise Houghton



emember walking to school in your childhood? Until the 1970s most urban children went to school in environmentally-friendly, cost-efficient fashion — on foot. Along the way, they enjoyed the

company of siblings and friends and a bit of healthy exercise. Twenty-five years ago, nearly 80 percent of grade three students in Canada walked or biked to school unaccompanied by adults. Today that figure is down to 10 percent. In the United States, it is estimated that only 13 percent of students walk to school.2 With traffic congestion growing in urban centers and concern about child molestation or abduction on the rise, more and more parents routinely drive their children even short distances to school. The results: social isolation. more car traffic, less vibrant (and often less safe) city streets, poorer air quality around schools, and reinforcement of the habits and attitudes that have made our society so dependent on

fossil fuels and private automobiles.

A new movement is now afoot to reverse this trend. Following the lead of parent groups in Europe and Australia, more than a thousand schools in North America have initiated walk-to-school programs in recent years. Many have been inspired and assisted by national programs such as "Active and Safe Routes to School" in Canada and "Walk a Child to School" in the United States. At their fullest expression, walk-to-school programs focus on the following practical activities.

 Mapping the school neighborhood to determine the safest routes to and from school. As part of the social studies curriculum, students as young as seven years old participate by drawing maps and discussing the best routes for walking and cycling to school.

◆ Organizing "Walking (or Cycling) School Buses" led by parent "bus drivers" who take turns accompanying their own and neighboring children safely to and from school along set routes.



- Creating a "No Idling" area around schools, requiring that parents, bus drivers and others who stop near schools turn off their engines to improve local air quality.
- ◆ Conducting "walkabout" surveys with parents, police and city planners to examine conditions in the school neighborhood that lead to reliance on cars, to assess traffic and other hazards, and to develop solutions.
- ▶ Participating in International Walk to School Day (IWALK) held each year in early October. This increasingly popular event honors walking school bus programs and exposes parents and children to the joys of walking. In 2000, an estimated two and a half million students from eight countries participated,³ including

150,000 Canadian and 500,000 American students.⁴

❖ Scheduling weekly or monthly Walking Wednesdays to maintain the interest and momentum generated by International Walk to School Day in October. Friendly competitions are often held to entice new walkers to join, with awards given to classes with the highest rates of participation.

Healthier bodies, better air

A motivation behind many walk-to-school programs is rising concern about children's health and fitness. Childhood asthma, a respiratory disease commonly triggered (continued on page 34)

Organizing a Walking (or Cycling) School Bus

- **1. INVITE** interested members of the school and community to participate in a walkabout survey of school access points and adjacent streets during morning and afternoon pick-up and drop-off times. Identify concerns about safety, traffic, sidewalks, bicycle storage, etc., as well as potential solutions. Invite municipal planners and
- as well as potential solutions. Invite municipal planners and police to share their expertise in this initial assessment.
- 2. SEEK SUPPORT in the school and the community. Present the survey findings to school staff and parent councils and establish an organizing committee. Recruit additional partners from the school board, local residents' groups, police, health department and any other
- community agency that may have resources and expertise to assist you. Ask local businesses to donate printing services for newsletters and announcements, or clothing such as bright scarves or reflective shoelaces which will give visibility to the walking/cycling school bus.
- **3. CONDUCT PRELIMINARY SURVEYS,** asking students and parents about present modes of transport, the reasons for these choices and whether they would consider joining a walking/cycling school bus (see the "Student Survey" on page 42 which may be adapted or extended for this purpose). The responses will help you gauge the interest and concerns of students and parents, and will form a baseline for comparison when evaluating the effectiveness of your program later. Distribute a summary of the survey results to students, teachers and parents.

4. PUBLICIZE the walking school bus in school newsletters and announcements and on posters in the neighborhood. Ask students or parent volunteers to translate materials being sent home into all languages commonly used in your community.



- **5. ESTABLISH BUS ROUTES.** In a meeting with interested parents and caregivers, ask participants to put colored pins or stickers on an enlarged map of the school neighborhood to show where they live and how many of their children attend the school. The clusters of pins will help in determining where bus routes are needed, which families will participate in each, and the safest potential routes. Encourage each group of parents to walk these routes before the walking school bus is launched.
- **6. AGREE ON THE RULES.** Each group should establish rules on matters such as waiting for latecomers and notifying drivers of children's absences, along with basic safety rules. Ensure that each "bus driver" has a list of the names and addresses of students and the home and work phone numbers of their parents.

- **7. MAKE THE BUS VISIBLE** by having everyone wear something that is readily identifiable such as reflective shoelaces or zipper pulls on jackets.
- **8. TAKE A TRIAL WALK** with students and parents to establish a pick-up schedule, identify the least safe parts of the route and resolve any unforeseen concerns. Post signs in the neighborhood and school showing the bus routes and after-school meeting places.
- **9. CELEBRATE WITH AN OFFICIAL LAUNCH** and invite local dignitaries and the media to attend. Display students' artwork portraying special sights on their walks to and from school.
- **10. MAINTAIN SUPPORT** by discussing with students the health, environmental and safety benefits of walking and cycling as opposed to driving to school. Include the latest findings on these issues in school newsletters, along with students' stories about their "bus" experiences.
- 11. EVALUATE YOUR EFFORTS after one year. Survey students and parents again and compare responses with those in the preliminary surveys. Report the results to community partners and develop a strategy for the next year. Seek to have walking/cycling school buses incorporated into school policies and student registration forms.

Source: Go for Green. To obtain more detailed instructions, background information and reproducible surveys, contact Go for Green's Active and Safe Routes to School coordinator at (888) 822-2848, www.aoforgreen.ca.

Curriculum links

Language arts: Create bulletins and flyers to inform parents of the program; write stories for the school newsletter about observations and experiences along the walking route; compare and debate the advantages and disadvantages of different modes of transportation.

Art and music: Compose a theme song for a walking school bus; create works of art that portray the people, plants, animals and interesting buildings in the school neighborhood; design colorful badges, sashes or headbands to wear on the walking school bus.

Math: Keep individual and class logs of the distances travelled monthly on foot, by bicycle and by car. Graph the results,

calculate percentages, and monitor changes over several months. Calculate the school's reduction in carbon dioxide emissions as a result of the walking program (1 liter of gasoline produces about 2.35 kg of CO₂; 1 U.S. gallon of gasoline produces about 18.8 lbs. of CO₂).

Science and Health: Investigate the impacts of various forms of transportation on human health and the environment; investigate how calorie intake and physi-

cal exercise are related to body weight; en route to school, monitor seasonal changes in trees and plants and the migration of birds; observe cloud patterns and practice weather predictions.



Youth Challenge Internationa

Steps in a new direction

- ❖ Students at Maurice Cody Public School in Toronto, Ontario, are taking a "virtual walk to the east coast" by plotting their combined walking miles on a map of Canada and learning about the cities and sights along the way.
- → One day each week during the fall and spring, school bus drivers bringing children into the small community of St. George, New Brunswick, drop students at a designated spot one kilometer from the school. They are met by parent and teacher volunteers and walk the rest of the way to school along foot trails. Traffic and pollution around the school are

reduced considerably, and kids start the day with a healthy dose of exercise and fresh air.

- → In Tacoma, Washington, students at Northeast Tacoma Elementary called attention to the lack of sidewalks in their neighborhood by walking along the road carrying signs demanding "Safe Streets for Kids." The resulting media attention spurred the city to install sidewalks.
- In Montréal, Québec, a 7
 "Biking School Bus" has eased

parents' concerns about children travelling to and from school through the many shaded and secluded areas of a large urban park. Students who cycle to École Le Plateau meet at a designated spot and are led through the park by a parent cyclist.

- → The walking school bus "passengers" at John Norquay School in Vancouver have a theme song for their daily walks to and from the school.
- ❖ Schools in South Carolina can apply to the Governor's Council of Physical Fitness for mini-grants to initiate walking and cycling programs, a process that encourages schools to develop more ambitious, long-term goals. In California, the Department of Education requires all schools to have a transportation policy that encourages "walk-pools."

For information on organizing walking or cycling school buses, contact: Canada: Active and Safe Routes to School, c/o Go For Green, Ottawa, (888) 822-2848, www.goforgreen.ca. Ontario schools should contact Greenest City at (416) 488-7263, www.greenestcity.org. British Columbia schools should contact Way to Go at (877) 325-3636, www.waytogo.icbc.bc.ca. United States: Walk Our Children to School Day, c/o Harold Thompson, National Safety Council in Itasca, Illinois at (800) 621-7615 x 2383, www.nsc.org/walkable.htm.

by automobile air pollution, has increased four-fold in the past 20 years.⁵ And in these days of watching television, playing computer games, and being chauffeured by parents, few children get the exercise they need. In the United States, 35 percent of children watch five hours or more of television each day, and 78 percent fall short of getting the recommended 30 minutes of moderate exercise daily and 20 minutes of vigorous exercise a few times each week.⁶ Similarly, the Canadian Fitness and Lifestyle Research Institute reported in 1995 that two-thirds of Canadian children are not active enough to lay a solid foundation for future health and well-being. As

many as 20 percent are overweight, and obesity has increased by more than 50 percent in six- to eleven-year-olds in the past 15 years.

Not only does walking help to improve children's physical fitness, it has also been demonstrated that active children tend to perform better academically. Communities, too, are safer and cleaner environments when parents leave their

cars at home. For every ten children who join a walking school bus instead of being driven by a parent, there are eight to ten fewer cars creating a traffic hazard and polluting the air in front of the school. In Danish communities where walking programs have been in place for several years, traffic injuries involving children have decreased by as much as 67 percent.⁷ After participating for one year in a walking school bus, nine families at a Toronto school calculated that they had prevented about 1,000 kilograms (2,200 pounds) of greenhouse gases from being released into the atmosphere.⁸

As the morning rush-hour traffic grinds slowly along North America's main thoroughfares, parents and children are rediscovering the simple pleasure and freedom of pedestrian travel through the side streets of their neighborhoods. Besides being companionable and fun, walking school buses are a visible reminder of the health, safety and environmental advantages of an old-fashioned and eminently sustainable mode of transportation. §

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Notes

- ¹ Go for Green, Active and Safe Routes to School coordinator, 2001.
- ² U.S. Center for Disease Control and Prevention, Atlanta, Georgia, 2001.
- National Safety Council, www.nsc.org/walkable.htm, 2001.
- Go for Green, 2001; Loren Marchetti, Highway Safety Research Center, University of North Carolina, 2001.
- ⁵ Go for Green, www.goforgreen.ca, 2001.
- 6 National Safety Council, www.nsc.org/walkable.htm, 1999.
- ⁷ Sustrans' Safe Routes to School (UK), www.sustrans.org.uk, March 1999.
- ⁸ Pembina Institute, www.climatechangesolutions.com, 2001.