Making Tracks: Active & Safe Routes to School – Walking, Cycling, In-line Skating and Skateboarding

Co-Authors

Dr. Andrew Foranaforan@stfx.caCheyenne DickinsonJanet Barlowasrts@ecologyaction.caDr. Dan Robinsondrobinso@stfx.caZac CrouseJennifer McGowanwalk@ecologyaction.ca

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Abstract

The end of March 2009 marked the successful wrap-up to a year-long pilot of an innovative new Active Safe Routes to School initiative called Making Tracks (MT), and in 2009-2010 the program experienced many more successes. Launched in April of 2008, MT was created to provide hands-on, experiential active transportation skills training to children and youth in the province; training that up until that time had been essentially unavailable. Making Tracks focuses on four transportation modes: walking, cycling, in-line skating and skateboarding. Following a "train the trainer" approach, older youth and/or adults learn the skills needed to teach other children and youth. Rather than a one-off training session, the program is offered over multiple sessions to allow participants to hone and build on their skills. Response to the pilot was exceptional. More than 430 children and youth participated in five walking, three cycling and six skateboarding modules through schools and recreation centres (with distribution divided equally between schools and recreation centres; seven sessions at each across the province). Participant response to the program was wholly positive, with 75% saying they would use active transportation more after their training. Ninety-two percent also stated that they knew more about active transportation safety after the program, and 100% of Youth Mentors felt they could find safe routes for children after participating in Making Tracks. In 2009-2010, over 700 more children and youth took part in the program. Thanks to a three-year funding commitment from the NS Department of Transportation and Infrastructure Renewal, Making Tracks continues to offer crucial safety skills education to children and youth.

Introduction

The Public Health Agency of Canada (2002) describes active transportation (AT) as any trip made for the purposes of getting yourself, or others, to a particular destination, as long as it is *active* and does not involve a motorized means. Walking and cycling are usually the most popular forms of active transportation due to their convenience, practicality, and compatibility with existing infrastructure, but AT also includes activities such as in-line skating, skateboarding or jogging. These modes can use on-road and offroad facilities (sidewalks, bike lanes, multi-use trails) and may also be combined with public transit, especially for trips to and from work, shopping and entertainment areas, school and other community facilities such as recreation centers (SGE Acres Ltd, 2006). The focus of this article is to present the Making Tracks program, part of a Nova Scotian AT solution to creating active and safe routes to school by teaching the safety skills children and youth need to walk and wheel safely.

Partners and Context

AT is a central concept of the Active & Safe Routes to School program (ASRTS), offered by Ecology Action Centre (EAC). This program had its origins in Ontario and British Columbia and was supported nationally by Go for Green. ASRTS employs a comprehensive approach to increase the use of active transportation by children and

youth, and make it safer for them to commute to school and throughout their communities. ASRTS is part of a national and international movement. Many Canadian provinces run similar programs and Safe Routes to School programming is found in many countries including the US, UK, Japan and Australia. As a result of a partnership between ASRTS and St. Francis Xavier University, Faculty of Education (as well as other partners), the Making Tracks program launched in June 2008.

The vision of ASRTS in Nova Scotia is to create a cultural norm in which walking, cycling or using other forms of active transportation is a popular and safe choice made by children, youth and their families for the trip to and from school or any of the other places kids may go. ASRTS aims to reduce greenhouse gas emissions and air pollution from cars and increase physical activity and traffic safety. Overall, ASRTS fosters community cohesion and safer, calmer streets and neighborhoods through active transportation. According to The Public Health Agency of Canada (2002), transportation is one of the largest producers (25 %) of greenhouse gases. The Public Health Agency maintains that for distances up to five kilometers, cycling is the fastest mode of transportation – not to mention efficient and money saving. If more Canadians choose to use AT instead of their car, the health of our environment and the quality of life in our neighborhoods would improve dramatically.

Why aren't kids doing it?

Despite the fact that active transportation is a cheap and environmentally friendly alternative to motorized vehicular transportation, it is not yet prevalent practice in most Nova Scotian communities. A variety of reasons explain this lack of common sense. Our society is increasingly focused on safety and minimizing all risks for our children (Hern 2007). Gas powered forms of transportation, often seen as safer and more convenient, are favoured at the expense of children's health, of the quality of neighborhood environments (through air and noise pollution), and a loss of street literacy, all the while fostering a false sense of mechanized independence. Human-powered travel becomes risky for children because many just do not know how to navigate our current forms of streets and sidewalk infrastructure.

So just what are the kids doing when it comes to moving themselves around their worlds? Active Healthy Kids Canada (2008) released a report, which showed that Canadian kids are falling behind in physical activity levels and only about 23 percent of Nova Scotia children are using active transportation to school. The Canadian Fitness and Lifestyle Research Institute's Physical Activity Monitor (2000) reported that, in Nova Scotia, 24 per cent of children aged five to 17 walk or bike to school each day. This is lower than the national average, which is 29 per cent. As community members, and professionals working in public schools, we can attest, from the look of the empty bike racks and the line up of cars dropping children off at the front doors, that this number has progressively declined over the last 10 years. Hence the motivation to develop a provincial AT program that would motivate and encourage students and parents to take ownership of community health through Making Tracks and to reclaim a sense of street literacy, moving past the notion that we should fear walking to school or work.

Street Realities

According to Eyler et al. (2007) North Americans' increasingly sedentary lifestyles have led to childhood obesity rates of epidemic proportions. Unger (2009) purports that our youth have become disconnected from the outside world in the name of safety. What has caused this fear of our community sidewalk? "Sometimes parents obsess about their children's safety because when their kids get hurt, they perceive it reflects badly on their own parenting and caring skills" (Hern, 2007. p. 49). The result is what social worker and researcher Unger (2009) refers as *bubble wrapped children* that do not know how to be active or recognize how to handle daily risks associated with everyday living, resulting in negative consequences for the psychosocial development of our youth. When we protect our children from all forms of risk, they do not develop the skills needed to function independently and to develop active lifestyles. The trend in public education over the past 20 years of reducing physical education programs and shortening recess and lunch times has also resulted in fewer opportunities for children to be physically active during the school day.

Barriers and Road Blocks

Eyler (2007) discusses the challenges of implementing AT programs: they require co-operation between different and multiple agencies, are influenced by the existing built infrastructure and how it interacts with the existing environment, and are affected by numerous regulatory policies. Each layer poses numerous barriers and complexities to AT initiatives. These barriers include, but are not limited to the following:

- existing unfavorable or hazardous conditions on the route to/from school;
- municipal, provincial and federal policies (i.e. local by-laws that prohibit skateboarding as a form of transportation);
- distance from destination (resulting from urban sprawl);
- quality and condition of sidewalks or trail systems (free of snow or debris);
- existence of crossing guards and crosswalks;
- degree of funding for AT initiatives (minimal to date);
- natural environment, topography, terrain, and weather;
- school start/dismissal time (in relation to parents' work schedules);
- school zone speed limit and enforcement policies;
- parental fears for their children's' safety;
- and convenience and time-saving related to car travel

When the EAC conducted its own provincial survey they determined the following impediments beyond distance: lack of education on AT safety, traffic safety concerns (especially speeding), and lack of infrastructure. The result was a program creation between ASRTS, the EAC, and St. Francis Xavier University (and other organizations), referred to as the Making Tracks program (MT), which offers a realistic-experiential education solution.

Making Tracks Program

MT emerged from the EAC's ASRTS program, and guidance was provided by the Active Transportation Safety Education working group (comprised of provincial and municipal stakeholders). Funding partners included Transport Canada, the Nova Scotia Department of Transportation and Infrastructure Renewal, the IWK Health Centre Foundation, and the Nova Scotia Department of Health Promotion and Protection. Other partners included the Annapolis Valley Regional School Board and Skate Pass®. The result was the cooperation to move forward with the proposal of developing an AT curriculum that could be integrated into community centers, schools, and youth-serving organizations. After the conceptual framework was established, St. Francis Xavier was invited to participate in the development and implementation of the MT curriculum (with the exception of skateboarding for which the Skate Pass® template was used). The following is a general overview of MT, highlighting some strategies for successful implementation of the program.

MT Overview

MT consists of several educational modules and materials for walking, cycling, in-line skating, and skateboarding. The program is targeted at two levels: expert trainers conduct train-the-trainer sessions with Youth Mentors and Adult Leaders (see Author et al., 2008), who in turn run educational modules directly with children and youth through multiple active-learning sessions in their respective neighborhood settings.

A foundational curriculum organizes the entire AT concept via the *Making Tracks Main Program Guide* and Youth Mentor manuals for each mode of AT; there are supporting manuals for cycling, walking, in-line skating, and skateboarding (Skate Pass®). In an effort to transfer learning to participants' real lives, communication tools called *Passports* are provided. Passports summarize for participants the main educational points of each activity and are filled out at the end of each module, giving participants a sense of accomplishment and completion as they graduate to the next module. The participants' passports are taken home with the intention that they will teach or review what they've learned to their guardians/parents, thereby increasing the chances of learning being transferred into their home lives and motivating the family to engage in AT as a means of practice.

Instructional Framework: Experiential Learning Process

The Making Tracks program's primary instructional method is experiential education. Participants learn by working kinesthetically to use new skills in a real neighborhood setting—their own community. The Youth Mentors, who either work at a community organization, such as a recreation centre, or volunteer as part of their high school curriculum, lead participants safely through the activities contained within each educational session and guide them towards personal growth, increased use of active transportation, and safety awareness. Youth Mentors ensure that participants have positive learning experiences in an environment that is designed to allow personal

success. The foundation of the MT program is based on a learning process that happens through direct experience, reflection upon that experience (with guidance from the Youth Mentors), and application of new skills and knowledge to their real lives.

Experiential learning can be a novel approach for many young people. MT is based on learning in the natural environment, allowing for a break from inside learning and an increased sense of engagement and motivation to learn concretely versus abstractly. This offers a greater chance for participants to remain engaged throughout each session, instead of becoming bored, as with traditional-didactic instruction.

Public School Connections

Material is taught according to the maturity levels of the different age-target participants in the program. For example, Youth Mentors teaching participants in the Walking program use a teaching approach that reaches out to a younger audience (P–3), whereas the Cycling program is aimed at students from grades four to seven and beyond. The In-line Skating program can include a range of participant ages; therefore general instructional approaches are used.

The Making Tracks program is designed to be interesting, creative, engaging, active, and safe, allowing participants to have a positive learning experience. Activities are broken down into achievable tasks so that both participants and Youth Mentors experience success and fun, thus ensuring participant engagement for the duration of the program.

Currently, the Nova Scotia Department of Education does not have a specific program or guideline for including walking or in-line skating in the physical education curriculum at any grade level. There are Mountain Biking and Hiking modules for the Grade 10 Outdoor Pursuits curriculum, but this does not involve teaching an active transportation component for safe routes to school. However, MT connects to specific provincial outcomes and is easily adapted to complement physical education programs from grades P–12.

Nova Scotia's *Foundation for Active Healthy Living: Physical and Health Education Curriculum* (Nova Scotia Department of Education, 1998) states physical education is holistic and embraces knowledge, activity, and values. An experiential AT safety education program such as MT will naturally address these three areas:

- knowledge through the learning of traffic laws, etc.;

- activity through the physical act of the pedestrian, cycling, in-line skating and skateboarding experience; and

- values through exposure to the health and environmental benefits of active transportation as a form of transportation.

These general outcomes guide the learning process for the participants and the result is more active children and youth, communities less dependant on vehicular transportation, and people that are more street literate and independent.

Community Based Program Connections

The MT program is designed so that it can be used in a wide range of settings: schools, recreation departments, summer camps, clubs, after school activities, or junior-leadership programs. The document wording, description, diagrams, and session activities are designed for a variety of audiences. The language and tone of the MT program is presented to appeal to both schoolteachers and community organizations. Within the existing overall goals of the program each agency or school can modify the MT program so that it is relevant to the participants in their respective areas.

According to a SGE Acres Ltd. (2006) report on AT prepared for the Halifax Regional Municipality (HRM), schools and community organizations can support active transportation by working with various stakeholders to identify safe routes for children while addressing safety and infrastructure barriers; encourage the formation of "escorted walks" for younger children; work with children to identify safe routes and teach traffic and pedestrian safety; and offer cycling and in-line skating skill and safety courses. The Making Tracks program addresses many of the recommendations made by the SGE Acres Ltd report.

Implementation of Making Tracks

Implementation of the MT program required both an educational and community approach. The MT program coordinator, vis-à-vis its working group, decided on potential organizations to target for pilot implementation. Key to this process was the identification of supporting agencies in communities willing to expand their program offering to include the MT program. These included selected schools with teachers willing to expand their physical education offering, community organizations, after-school groups, and Boys & Girls Clubs.

In partnership with each program supervisor, including school principals, a preliminary session was held providing an overview of the program, including the safety aspects built into each session. It was clear from these initial pre-training sessions that the decision makers could see the immediate benefits of the MT program. The next stage required recruiting and educating Adult Leaders in each organization who would take on the coordination responsibility and oversee the implementation of MT. These Adult Leaders then recruited and trained, as part of their own work (or had Expert Trainers train) Youth Mentors: high school or university-aged people who delivered the actual program to participants. Using individuals closer in age to participants increases the chance of a more meaningful connection between the participants and Youth Mentors as they model appropriate behavior for participants. Another reason for this mentoring model is to open the possibilities for schools to engage in more service learning opportunities for high school students in physical education leadership classes. The only

trainers paid as part of the process are the Expert Trainers who first introduce the program to the schools or community organizations through the 'train-the-trainer' process (and are paid per session on an as needed basis, reducing staff costs). The rest of the trainers are typically staff at a school or recreation centre, who take on the program as part of their job and the programming they organize, or are high school students who lead the program as part of a high school leadership, health or physical activity course.

If done thoroughly and methodically, this simple and elegant shared-learning approach can be very effective and efficient for delivering a quality program. This technique also empowers each school or organization to adjust the program so that it is compatible with their specific needs, strengths, and geographic limitations.

Making Tracks: Initial Findings

The MT program was successfully piloted between July 5, 2008 and March 31, 2009 at 12 different schools and community organizations, resulting in over 430 participants. Though collection of evaluation results was challenging for a variety of reasons, results show that participants gained knowledge of, skills in, and an appreciation of active transportation safety skills. The tremendous success of Making Tracks led to the launch of the program province-wide in May 2009 bringing the program to schools and community groups across Nova Scotia. In 2009-10, Making Tracks was offered in 10 schools and community organizations, resulting in over 700 participants. Currently, dozens of schools/organizations have expressed interest in using one or more Making Tracks programs in the coming year, with more inquiries coming in regularly.

Lasting Change

Research has shown that specific components must be in place for an AT program to foster lasting and effective change in youth behavior. Thompson (1996) contends that a program must use practical, hands-on approaches to safety education in order to be the most effective in improving children's behavior in traffic—a corner stone for MT. Oneday pedestrian, or cycling, safety education programs with little opportunity for physical practice of safety skills, such as Columbus, Ohio's Safety City (Luria, Smith, & Chapman, 2000) have been shown to result in little or no change in children's behavior as pedestrians, especially at an early age. Furthermore, a post-pilot study of the Kerbcraft Safe Places Module clearly indicated benefits to programming over a series of sessions at least four or more; in fact, there was a clear statistical advantage to receiving four or more sessions (MVA Consultancy, 2007).

The MT program offers Nova Scotians a multi-day experiential program to teach lasting pedestrian, cycling, in-line skating, and skateboarding safety skills to children and youth. The number of sessions depends on the program: Cycling has five mandatory and one optional; In-Line has four mandatory and one optional; Walking has five mandatory and two optional; and Skate Pass has five mandatory, with optional intermediate and advanced programs available. The Passport, a participant-friendly form of evaluation in a

small booklet, follows each child home with the purpose to teach their own family members—a continuous reinforcement of concepts and application (essential for quality experiential learning). The program is taught through the use of games and experiential activities, and allows plenty of time for children and youth to practice their skills and ask questions. For the programs using mechanical devices (bikes, in-line skates or skateboards) time and attention is also paid to maintenance of their gear, along with proper road, device and protective gear safety. Adoption of the Making Tracks program throughout Nova Scotia will mean not only fewer traffic-related injuries among youth due to safer pedestrian behavior, but also a healthier, more engaged group of young students who choose to walk or wheel to school.

Activities in 2009-2010

In 2009-2010, Making Tracks managed to surpass our original goal of 400 children and youth reached by the program. Instead, working with 3 schools and 7 groups, MT delivered 17 educational modules, with the help of 20 youth mentors, to more than 700 children/youth. Typically, in school settings or recreation camp settings, groups consisted of 20-25 children. In school settings, it was typically run as part of a gym class over a number of class sessions, the number depending on the program. In camp settings, the program made up a portion of the day, with parts of the afternoons reserved for other camp activities, such as swimming.

Making Tracks was promoted by contacting schools, recreation departments and youth organizations directly through email and some mailed communications. A promotional brochure was developed for event displays and mail outs. Also, an ad was developed and used in the ASRTS newsletter as well as in The Teacher (the NS Teachers Union monthly newspaper). Press releases were sent out to media about training dates. There were 13 media hits on Making Tracks. Making Tracks was featured in presentations at various conferences and workshops and promoted using various email list serves.

Evaluation

Multiple levels of evaluation were incorporated into the program, including preand post-program questionnaires for participants, parents/caregivers and program facilitators. However, there were difficulties in engaging pilot sites to participate in and return evaluations; as a result, organizations must now sign an evaluation agreement before commencing the program. Not every respondent during the pilot phase answered every evaluation question; therefore, percentages are based on the number of respondents for each particular question as opposed to the number of participants in the pilot as a whole.

Pilot Phase

All respondents rated their overall satisfaction with the MT program as either satisfied (33%) or very satisfied (67%). Seventy-eight percent of respondents thought the

educational approach of the workshop was just right, with 22% indicating it was too basic. All respondents reported that the length of the workshop was appropriate. When asked what they liked most about the workshop, most respondents indicated they liked the games or activities. Several respondents noted they liked getting outside and participating in walking and experiencing pedestrian and skateboarding safety hands on.

2009-2010

According to evaluation data in 2009-2010, 92.8% of participants said they knew more about active transportation safety after the program; 92.3% knew where it was safe to walk, cycle or skateboard; and 94.9% reported they learned how to bike, walk or skateboard safely due to their participation in Making Tracks. Eighty-five percent of participants also said they would walk, bike or skateboard more after taking part in Making Tracks and 90.1% of child and youth participants reported that they knew that using AT was one more way to be active.

For Youth Mentors, 100% said they knew more about AT after teaching Making Tracks; that they could find safe routes for children to use for AT and that they would be more likely to use AT modes – and to encourage others to do so – after delivering Making Tracks.

Successes

Overall, Making Tracks has had a very successful year, almost doubling the predicted number of children and youth reached to 700. One school (Sackville Heights Jr. High) offered Skate Pass to every single Physical Education class in the school. Also, Clare Recreation successfully hosted the first ever "girls only" Skate Pass clinic (including a female Youth Mentor). Our Expert Trainer pool is also expanding, along with on-going new trainer sessions taking place for all four MT modes. Two new In-Line Skating Expert Trainers were trained in May 2010, at least four new Cycling expert trainers and two new Skate Pass expert trainers are currently being trained, and an Expert Trainer session in Walking is planned for August 2010, with on-going requests for Expert Training Sessions coming in continuously.

A unique partnership with the Compass program based out of the IWK Health Centre's Recreation Therapy department has brought the Making Tracks program to youth-at-risk. Compass organizers report that Making Tracks has tremendously impacted these youth. Most recently, the program trained eleven of their staff in the Cycling program, greatly increasing their ability to offer the MT Cycling program to the youth-atrisk they work with.

Wolfville Recreation, Chocolate Lake Recreation Centre in HRM, Charles P. Allen High School, and Colchester County's MoveOn Colchester program are just a few other recreation centres, programs and schools that have championed the MT program.

Lessons Learned

Even with all the success, a few key difficulties have arisen during the roll out of the program. Follow up has been difficult, especially with summer recreation programs whose summer staff members often leave right after the summer programs are finished. Thus, evaluation and follow-up plans need to be built into the program from the very beginning in a way that is most suitable and easiest for the organization in order to ensure it happens.

Schools/organizations/stakeholders seem to need to hear about the program more than once before they really "get it". Presentations on the benefits and effectiveness of Making Tracks from individuals/organizations outside of ASRTS who are engaged (or have been) in Making Tracks seem to be most effective at sparking people's interest and desire to participate in the program.

Conclusions and Recommendations

MT was launched province-wide in the Spring of 2009 and will continue on an ongoing basis as one of the menu of items available through Active & Safe Routes to School. Discussion is currently underway with several funders to ensure that MT is available to schools, organizations, and children and youth throughout Nova Scotia. More children and youth participated in the pilot than initially expected and many schools/organizations that participated in the pilot are eager to continue with the program and expand the scope of MT programming in their communities. Also, there now exists a significant pool of expert trainers throughout the province who are interested in continuing their participation as trainers in the future. Feedback on program and materials design has been wholly positive. Program participants appreciate the graphic design and well-planned layout of the manuals and passports, and comment that the programming itself is fun and easy to follow. MT is now gearing up for its second year beyond the pilot with the support and endorsement of the Nova Scotia Department of Education. The Nova Scotia Department of Transportation and Infrastructure Renewal, commencing as of April of 2009, has committed three years of partial funding for the program.

The ties to school curriculum that are included in the MT program have been a key motivator for many schools' participation and interest; in particular, its applicability to leadership and physical education classes. School staff and administration are delighted to find a program that provides options beyond traditional sports and activities, while providing real-life relevance and skills.

A tremendous interest in the skateboarding program was expressed, yet as a form of active transportation, it is the most limited and unwelcome in many communities. Provincial regulations and many municipal by-laws do not allow skateboarding on streets or sidewalks. Hopefully, as the use of skateboarding increases, the voices of youth and their families calling for change in the acceptability of it as a form of transportation on our streets will be heard. However, this is changing as many school boards are reconsidering their stance on NO SKATEBOARDS ALLOWED and this move to flex current policy will only motivate more youth to embrace and use AT means to and from school.

Program flexibility has helped to ensure the programs' success. Schools and other organizations appreciated that the program could be offered over multiple sessions in a way that worked best for them (i.e. within class as part of the curriculum, after school/on weekends as an extra-curricular activity, as a summer camp activity, etc.).

The aim is to continue promoting and expanding the program in partnership with 'champions' for Making Tracks (such as supportive schools, recreation centres, and programs like the IWK Compass program, and their associated staff) throughout the Province, reaching an ever increasing number of children and youth, encouraging healthy, active and safe mobility and recreation choices.

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