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Case 7 : Going Beyond Bike Racks and Pedestrian Crossovers: Achieving Health Equity in School Travel Planning

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CASE 7

Going Beyond Bike Racks and Pedestrian Crossovers: Achieving Health Equity in School Travel Planning

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James Marshall is preparing for the Elgin-St. Thomas, London-Middlesex, and Oxford Active and Safe Routes to School (ASRTS) steering committee meeting. He is sitting in his office trying to determine what the strategic priority areas should be for this year's ASRTS steering committee working groups. He begins by reviewing the School Travel Plans from this year to understand key gaps in programming. James knows that addressing these gaps are critical to better supporting schools in implementing and sustaining effective school travel planning.

As the ASRTS steering committee Co-Chair and Senior Project Coordinator at the Human Environments Analysis Laboratory (HEAL) at Western University, James has witnessed firsthand how engaging in cross-sector community collaborations can better support a school community's engagement in active school travel – defined as commuting to and from school by human-powered modes, such as walking, scootering, or biking. As James continues to review data from the School Travel Plans in preparation for the ASRTS steering committee meeting, he notices a trend—most schools are in suburban, high-income neighbourhoods. He knows that the ASRTS steering committee has a responsibility to take action to address this inequitable program access across the tri-county region.

James realizes that to help more families choose active modes of travel, the ASRTS steering committee needs to identify and address issues within the current processes, resources, and system that are preventing school communities from participating in the program. Although he is confident he can draw on the unique skills and resources of the ASRTS steering committee partners to develop recommendations, James is unsure about how to proceed. What tools can the ASRTS steering committee use to identify how the school travel planning program impacts school communities in different ways? What strategies can they adopt to address these contextual implementation challenges in lower socioeconomic school communities?

ELGIN-ST. THOMAS, LONDON-MIDDLESEX, AND OXFORD ACTIVE AND SAFE ROUTES TO SCHOOL PARTNERSHIP

When children use active modes of travel (e.g., walk, scooter, bike) to get to and from school, the health and safety of a school community improves. Specifically, improvements can be seen in children's physical and mental health, traffic volume, air quality, and community connectedness (ASRTS, 2013). Active school travel is also an important source of physical activity for children (Larouche et al., 2014). Despite these benefits, active school travel has consistently declined in Canada since the 1980s (Buliung et al., 2009). It is estimated that only

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37% of Canadian children and youth five to 19 years of age use active modes of travel to get to and from school (Ontario Active School Travel, 2018). This is problematic because physical inactivity is associated with adverse health outcomes such as type 2 diabetes, cancer, and obesity across the life course. A national movement known as school travel planning emerged to encourage families to choose active school travel through the implementation of multicomponent, school-based health promotion interventions.

The ASRTS partnership coordinates the facilitation of school travel planning across Southwestern Ontario, targeting elementary school-aged children and their families. The multidisciplinary organization consists of community partners from across the tri-county region who have a shared vision of promoting children's health and well-being. Some of the 20 stakeholders include the City of London, the Middlesex-London Health Unit, the London District Catholic School Board, the Thames Valley District School Board, the HEAL, Southwestern Public Health, and Southwestern Ontario Student Transportation Services (ASRTS, 2013).

The mission of the ASRTS partnership is to work in partnerships to improve the health and safety of all children and the environment by encouraging active school travel and by removing barriers through comprehensive health promotion strategies (ASRTS, 2013). Their community-based model is grounded in the following principles (Green Communities Canada, 2018):

- education, encouragement, engineering, enforcement, and evaluation (the 5E's approach);
- tailor to the needs of each school community;
- school community engagement;
- strengths-based programming; and
- capacity building.

The ASRTS steering committee supports the advancement of school travel planning across Elgin, Middlesex, and Oxford counties and the cities of London and St. Thomas. The role of the steering committee is to (1) guide program planning, (2) identify priorities, (3) monitor program quality, and (4) make decisions related to program changes. As a member of the ASRTS steering committee, James has gained valuable insight into the social, political, and economic factors that impact school travel planning across different school communities. He knows that the steering committee needs to have an open conversation about the current trends in program participation and how to achieve health equity in school travel planning.

SCHOOL TRAVEL PLANNING

School travel planning is a community-based approach used to promote and encourage active school travel among elementary school communities (Green Communities Canada, 2018). The program's goals are to: (1) raise awareness about the benefits of active school travel; (2) create convenient and safer options for active school travel; (3) build confidence in using active school travel; (4) and motivate families to choose active school travel (Green Communities Canada, 2018). The level of priority a school community places on achieving each of these goals varies based on the contextual challenges they face (Green Communities Canada, 2018).

School travel planning depends on engaging multisectoral stakeholders (Exhibit 1) (Green Communities Canada, 2018). This occurs at the local and regional level with a regional committee and a school committee (Green Communities Canada, 2018). At the regional level, a steering committee of local community stakeholders, such as the ASRTS steering committee, guides strategic program planning across a geographic area (Green Communities Canada,

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2018). In addition, each school creates a school travel planning committee (e.g., teachers, students, parents, and staff) to develop and implement tailored strategies to encourage active school travel in their community (Green Communities Canada, 2018). Over the course of two years, the school committee moves through five phases: set up, collect baseline data, develop an action plan, carry out action plan, and evaluation (Exhibit 2) (ASRTS, n.d.a). During this time, the school travel planning facilitator (e.g., public health nurse, student transportation service coordinator) acts as a liaison between these two groups (Green Communities Canada, 2018).

James recognizes the role of the ASRTS steering committee in educating facilitators about the importance of a health equity lens and how to apply it when implementing school travel planning. While ASRTS has the capacity to provide educational resources and guiding recommendations to integrate equity principles, facilitators play a significant role in identifying and implementing these strategies at the frontline. How can recommendations be established to support facilitators in ensuring equitable access to school travel planning? James added this question to a slide in his PowerPoint presentation so that it can be discussed during the steering committee meeting.

CONTEXTUAL CHALLENGES

James recognizes the importance of understanding and considering context-specific factors during school travel planning program planning, implementation, and evaluation. A school's ability to successfully implement school travel planning depends on school leadership, collaboration and communication, and community and parent engagement (Buttazzoni et al., 2018). He questions whether current school travel planning processes and resources fail to consider how these factors may differ between lower and higher SES school communities.

James thinks about an urban school where a large proportion of families are recent immigrants experiencing poverty, limited literacy, and unstable employment. Using current school travel planning practices and resources, facilitators may not meaningfully engage this school community if the current strategies do not align with these families' values, identities, and lived experiences. He realizes that for the ASRTS steering committee to build sustainable programs and increase active school travel among children and families, every school needs a different level of support from a facilitator and strategies will need to be tailored to the community's lived experiences.

HEALTH EQUITY

To achieve health equity, the ASRTS steering committee needs to address the negative impacts of the social determinants of health (Ministry of Health and Long-Term Care [MOHLTC], 2018). At the last steering committee meeting James attended, Sandy, a public health nurse at Middlesex-London Health Unit, explained four public health roles used by the unit to guide health professionals in reducing health inequities. He realizes the ASRTS steering committee needs to (NCCDH, 2013):

- **Assess and Report.** Discuss the presence and impact of health inequities and strategies to address these inequities.
- **Modify and Orient Interventions.** Implement strategies to reduce inequities, recognizing the unique lived experiences of these communities.
- **Partner with Other Sectors.** Collaborate with multisectoral stakeholders to identify methods to improve the health status of populations of interest.
- **Participate in Policy Development.** Advocate in collaboration with other stakeholders in policy analysis and development related to the improvement of health equity.

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The Health Equity Impact Assessment Tool

While James is on his way to the steering committee meeting at the Middlesex-London Health Unit, he determines that the ASRTS steering committee needs to create a list of the contextual factors and social determinants of health that could impact a school community's ability to participate in school travel planning. As he reflects on this, he remembers a tool a colleague had told him about that could help them identify the potential unintended health impacts of school travel planning on marginalized groups—the Ontario Health Equity Impact Assessment tool (HEIA) (National Collaborating Centre for Methods and Tools [NCCMT], 2012).

By using this tool, the ASRTS steering committee can evaluate the impact of the school travel planning program on different school communities to develop recommendations to improve program access (NCCMT, 2012). To conduct a HEIA, the committee will need to complete five steps (NCCMT, 2012):

1. **Scoping.** Identify populations who are at risk of experiencing unintended health impacts of school travel planning and potential unintended health impacts on those groups.
2. **Potential impacts.** Use available data to assess the unintended positive and negative impacts of school travel planning on identified groups.
3. **Mitigation.** Develop evidence-based recommendations to minimize negative impacts and optimize positive impacts on identified groups.
4. **Monitoring.** Determine how implementation of the recommendations will be monitored to evaluate the impact on identified groups.
5. **Dissemination.** Share results and recommendations for building equity into school travel planning provincially, nationally, and internationally.

IMPLEMENTATION SCIENCE

James' experience in community-based research has helped him to recognize how important it is for the ASRTS steering committee to develop recommendations that are relevant to the real-world practices of facilitators. While the ASRTS steering committee can create educational resources and guiding recommendations to integrate equity principles, they are meaningless if facilitators cannot operationalize these strategies on the frontlines.

James recalls the definition of implementation science – “the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into real-world settings” (Bauer, et al., 2015). Using this approach, the ASRTS steering committee will be able to collaborate with facilitators and school communities to develop context-specific strategies that address frontline barriers to implementation (World Health Organization, 2014). James knows that these social, political, and economic factors are contributing to variability in program participation across school communities.

CONCLUSION

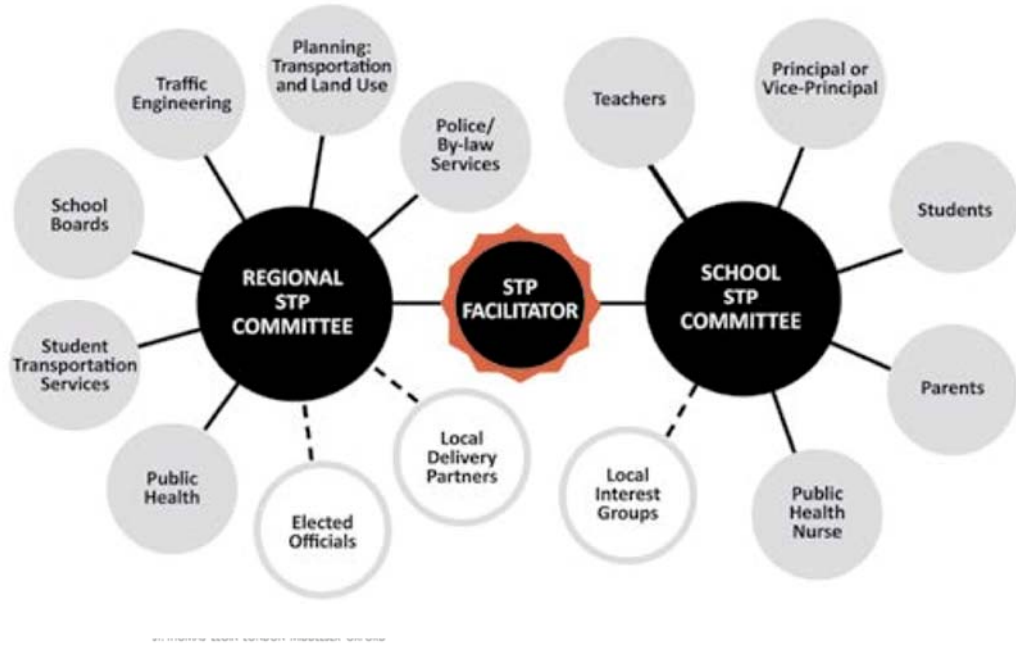
James begins his PowerPoint presentation to the steering committee. He explains the key gaps in programming he identified from this year's School Travel Plans. As he presents the current trends in school sociodemographic composition, he pauses to gauge the response of the committee. As they reflect on these trends, an open discussion about achieving equitable access to school travel planning emerges. A consensus decision is made to develop a School Travel Planning Equity Working Group.

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The working group will consist of representatives from the Middlesex-London Health Unit, the HEAL, the Thames Valley District School Board, the London District Catholic School Board, Southwestern Public Health, the Southwestern Ontario Student Transportation Services, and the City of London (Exhibit 3). The objective of the group will be to use the HEIA to evaluate the inequities in current programming by identifying populations, potential impacts, and strategies. These strategies will be applied to the development and revision of school travel planning resources over the next year.

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EXHIBIT 1 Overview of Stakeholder Involvement



Source: Green Communities Canada, 2018. Copyright: Green Communities Canada. Used with permission.

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EXHIBIT 2 Five steps of School Travel Planning

5 STEPS

Following the **5 steps of School Travel Planning (STP)** will help you and your school achieve success. The steps are meant to be sequential, but the process is not completely linear. For example, as **Action Plan** items are implemented (step 4) new ideas may be generated and added to the **Action Plan** (step 3)

1. SET UP	Tabs 1 & 2
<ul style="list-style-type: none">• Contact school Principal and arrange meeting to introduce STP• Review STP Manual and answer any questions about the program• Complete School Readiness Checklist• Complete School Agreement Form• Engage school community (teacher, students, parents, community volunteers) and create a STP committee by:<ul style="list-style-type: none">▪ Sending out Newsletters to parents and teachers▪ Conducting presentation(s) to introduce STP to parents, students, and school community (i.e., present to existing committees such as School Council, Safe School Committee, Healthy School Committee, etc.). Note that an existing school committee could have the STP as a subcommittee rather than creating a new committee▪ Provide a Sign-Up Sheet at the presentation and in the school's main office• STP committee to establish a timeline and details for planning and implementing the STP• Keep everyone well informed: continue to use the school's newsletter to communicate plans, progress and upcoming events with the school community	
2. COLLECT BASELINE DATA	Tabs 3, 4, 5
<ul style="list-style-type: none">• To understand the challenges affecting active transportation to and from school, 4 types of data are collected:<ol style="list-style-type: none">1) School Profile (tab 1)<ul style="list-style-type: none">▪ Fill in details specific to the school to assist in moving forward, such as: number of students in each grade and number of families (assists with knowing number of Consents and Family Surveys to print and distribute), percentage of bussed students, etc.	



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2) **Youth and Family Surveys** (tab 3)

- **Family Surveys** to be sent home with students in Grades FDK to 3. **Family Surveys** AND **Consent Forms** for **Youth Surveys** to go home with students in Grades 4 to 8. Students with returned **Consent Forms** will complete a **Youth Survey** during school time
- Surveys and consents need to be coded using the **Copying & Coding Process** to maintain confidentiality. Assistance for coding can come from the HEAL at Western University (see **Contacts**)
- Data entry and analysis will be provided by the HEAL at Western University. Results are then summarized and presented to the STP committee

3) **Traffic Counts & Observation** (tab 4)

- Recruit volunteers to count active and motorized transportation use, number of students, and traffic pattern observations and concerns at identified locations around the school
- Take place at the beginning and end of 3 consecutive school days

4) **Walkabout** (tab 5)

- Areas of concern along student's routes to and from school are identified through a map on the **Family Survey** and assist in planning the **Walkabout** – a community supported walk along a designated route based on identified checkpoints of concern
- Who to invite on the **Walkabout** - municipal transportation staff, facilities staff from Boards of Education, police officer for the school, city councillors, parents, etc. Take notes and share observations and ideas for improving active transportation following the event
- Have a 'debriefing' session directly after the **Walkabout** to share observations and ideas for improving active transportation. This will become the basis for the **Action Plan**

3. DEVELOP ACTION PLAN

Tab 6

- Work with the STP committee to consider all collected data and the results of the **Walkabout** to complete the **Action Plan** with:
 - Measureable, clear and realistic recommendations
 - 'Who' is responsible; and
 - Timeframe



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4. CARRY OUT ACTION PLAN	Tab 6
<ul style="list-style-type: none">• The Action Plan resides with the school and is a living document that continually changes based on the achievement and development of action items• Communicate the Action Plan to key community partners and to the school community through newsletters and the school web site• Monitor progress through STP committee and regularly update School Council and/or other parent meetings• Be patient- some Action Plan items are easily worked on but some require time, money and coordination with community partners	
5. EVALUATION	Tab 10
<ul style="list-style-type: none">• Approximately 2 years after the start of the STP (after several action items have been implemented), conduct follow-up data collection through evaluation youth and family surveys and Traffic Counts & Observations• Should be conducted during a similar season to initial data collection to reduce effects based on weather (i.e., increased number of walkers when initial data collected in January and follow-up in June)• Analyze the data with help from the HEAL at Western University• Communicate the results: successes, results and next steps• Celebrate Success no matter how small!• Make necessary adjustments (revisions, additions, and removal of action items) to the Action Plan based upon the follow-up data	



Source: Active and Safe Routes to School, n.d.a.

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**EXHIBIT 3
Overview of Health Equity Working Group Member Roles**

Stakeholder	Overview of Role
Human Environments Analysis Laboratory (HEAL) Project Coordinator/Research Associate	<ul style="list-style-type: none"> • to help identify challenges and solutions to school transportation issues within the tri-county region • to collect and analyze baseline and follow-up data and develop the action plan • to summarize and present results to school communities
School Board Representative	<ul style="list-style-type: none"> • to help recruit school communities • to liaise with staff to support ethics reviews, communication, and engagement
Middlesex-London Health Unit Public Health Nurse	<ul style="list-style-type: none"> • to help identify challenges and solutions to school transportation issues within the tri-county region • to liaise with school staff, parents/guardians, and students to support program implementation • to address the health concerns of students within their family, school, and community contexts
Student Transportation Services Coordinator	<ul style="list-style-type: none"> • to help identify challenges and solutions to school transportation issues within the tri-county region • to liaise with school transportation staff to support program implementation
Transportation Demand Management Coordinator (City of London)	<ul style="list-style-type: none"> • to help identify challenges and solutions to school transportation issues within the tri-county region • to liaise with municipality staff to support program implementation and engineering modifications
Southwest Public Health Nurse	<ul style="list-style-type: none"> • to help identify challenges and solutions to school transportation issues within the tri-county region • to liaise with school staff, parents/guardians, and students to support program implementation • to address the health concerns of students within their family, school, and community contexts

Source: Active and Safe Routes to School, n.d.b.

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INSTRUCTOR GUIDANCE

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BACKGROUND

The Elgin-St. Thomas, London-Middlesex, and Oxford Active and Safe Routes to School (ASRTS) Steering Committee have established a School Travel Planning Equity Working Group. The goal of this group is to use the Government of Ontario's Health Equity Impact Assessment tool to evaluate current inequities in school travel planning programming – a community-based approach to addressing barriers to and facilitators of walking and wheeling to and from school – by identifying relevant populations, potential impacts, and mitigation, monitoring, and dissemination strategies (Ministry of Health and Long-Term Care, 2018). The goal of the case is to provide readers with the opportunity to evaluate the inequities in current school travel planning by conducting a Health Equity Impact Assessment.

OBJECTIVES

1. Perform a community needs assessment that considers the unique social, environmental, economic, historical, and cultural characteristics of a community.
2. Recognize how the determinants of health (biological, social, cultural, economic, and physical) influence the health and well-being of specific population groups.
3. Formulate a response for marginalized populations that include community level and context-relevant strategies to improve population health.
4. Discuss the challenges associated with planning, implementing, and evaluating programs across different contexts and propose strategies to overcome them.
5. Describe how Health Equity Impact Assessments can be used to improve health equity among populations living in lower socioeconomic status neighbourhoods.

DISCUSSION QUESTIONS

1. Why is health equity an important consideration in program planning, implementation, and evaluation?
2. Brainstorm a list of contextual factors (social, political, economic, and environmental) that could influence a school community's ability to participate in school travel planning. What implications could these factors have on how the ASRTS working group designs its program? Be prepared to share this list with the class.
3. What are the contextual factors that make implementation in a lower SES school community difficult? How does this guide us to think about community readiness and project adaptability?

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KEYWORDS

Active travel; health equity; healthy communities; healthy environments; implementation science; social determinants of health; socioeconomic status; school travel planning