

You Can Clear The Air: Sending TDM Back to School

Organization

Region of Waterloo

Status

Initiated January 2002, ongoing

Overview

You Can Clear the Air is an educational resource unit targeted toward elementary school aged children in Grade 3 to create awareness about more sustainable transportation choices and the impacts their transportation choices have on the environment. The resource is also intended to encourage teachers, parents and the larger community to become more sustainable in their travel choices.

The project was developed through a unique partnership involving an inter-departmental municipal government team (including Transportation Planning and Grand River Transit staff), two local School Boards, an educational consultant, teachers and children from pilot classes.

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Resources

- Region of Waterloo (www.region.waterloo.on.ca)

Community context

The Region of Waterloo is a community of 470,000 spread over an area of 1,382 square kilometres in southwestern Ontario. The regional government is made up of three municipalities and four townships. Two school boards operate 130 schools in the Region with over 7,000 grade 3 students in about 300 classes.

As with other communities in the area, the Region has been noted as having poor air quality, increasing traffic congestion, high automobile usage, and worsening incidences of obesity and asthma.

The Region of Waterloo and Grand River Transit have a reputation as leaders in innovation; have embraced

sustainable urban transportation; and, currently operate an aggressive transportation demand management program and new transit marketing initiatives.

Policy context

The development of the You Can Clear the Air resource unit was supported by several key regional transportation policies and documents.

The first and most important is the Region's Transportation Master Plan which was adopted in December 1999. The strategic plan incorporates an automobile reduction strategy which emphasizes maximizing use of the existing transportation system and targets a 7% reduction in total automobile trips by the year 2016. The plan recognizes TDM strategies focusing on public transit enhancement, cycling and pedestrian facilities as the principal means of achieving the planned automobile reduction target. One of the plan's thirteen action steps identifies educating the public on automobile reduction and TDM.

You Can Clear the Air also supports the Region of Waterloo's Clean Air Plan, the Regional Official Policies Plan and the recently completed Regional Growth Management Strategy (RGMS). The RGMS encourages "transportation choice", a key component of the You Can Clear the Air project.

The project is also supported by Grand River Transit, the region's public transportation provider, in its five year business plan.

Rationale and objectives

The negative environmental, health and economic impacts associated with Canadian's increasing auto dependence pose a critical challenge to today's municipal officials. In the Region of Waterloo the challenges are particularly acute.

According to most recent surveys and reports, 84% of home based AM Peak Hour trips were made by automobile in the Region of Waterloo, with many of these trips involving parents driving their children to school. The Region's auto dependence has not only resulted in a record number of smog alerts, but also earned the region the ignominious honour in 1998 of having the worst air quality

conditions in the country according to Canadian Geographic magazine. Recent studies by the local newspaper have found that 39,000 people in the region suffer from asthma and that up to sixty people die prematurely every year because of the region's poor air quality.

In addition, numerous community leaders had also identified the negative impacts of parents driving their children to school, including poor air quality around schools and pedestrian safety concerns.

The long-term goals of the You Can Clear the Air project are to educate youth in the Region of Waterloo about transportation options and the impacts they have on air quality and climate change as is appropriate to the age group. Specific objectives include:

- encouraging children and their parents to evaluate their travel choices to make the wisest travel choice;
- helping children see how choices about transportation and land use affect their community;
- introducing children to using public transit;
- fostering the development of environmental and health-driven travel choices early in a child's development; and,
- educating teachers about these key issues and fostering their willingness to support the educational efforts in the classroom as part of their curriculum delivery.

Actions

You Can Clear the Air is a Regional Transportation Demand Management tool that is a supplement to the Grade 3 Ontario school curriculum. The project provides materials for teachers to educate young children and their families about their role in making wise transportation choices.

The unit targets Grade 3 children to try and establish positive transportation habits and to build a strong environmental awareness that will be the foundation of more sustainable transportation decisions later in the child's life. The project was initiated by the Region of

Waterloo in response to the fact that personal travel behaviours are often well established by the time children reach the age of sixteen.

The project also seeks to fill gaps in the current curriculum on providing information about environmental stewardship. You Can Clear the Air includes a Teachers Guide, a public transit tour component with the region's transit service (Grand River Transit), and a promotional campaign called "Our Kids Say..."

The Teachers Guide is a 100-page document that provides teachers with activities, games, facts and exercises. The guide provides links to other relevant documents and websites, activity outlines and other resources. The guide's activities and learning modules all work to get the message to students, parents and teachers that the majority of automobile trips made could easily be made by foot, bicycle or transit.

Activities include a 7-day "family travel audit" that assesses how families travel and identifies opportunities for change, and a bus tour that introduces children to public transit safety and use. The bus tour is particularly popular among students. All activities stress interactivity and creativity. In one, students see first hand the emissions motor vehicles make by placing a clean sock over a vehicle's tail pipe (in one case, a principal's SUV was used in this experiment with astonishing results).

The unit was developed to complement Active and Safe Routes to School programs and references the use of this tool in the teachers guide as a further way to encourage walking and cycling for school trips.

The module culminates with an exercise that asks students to educate others about what they have learned. In the project's first two years, this segment resulted in exterior ads being placed on Grand River Transit buses which then brought the message to the rest of the community.



One of the student posters placed on local buses

Results

In its first two years of operation, You Can Clear the Air has been successfully delivered to 28 classes and 690 students. “Teachers have embraced the learning unit,” says JoAnn Woodhall, the Region’s Transportation Demand Management Planner. “Some teachers have even successfully adapted it for delivery to older grades,” she adds, “while others were so motivated by the unit that they ended up working to have their schools adopt an environmental stewardship theme for school pageants. This has helped deliver our message to an even wider audience.”



The cover of the You Can Clear the Air teachers' resource book

Participants

The Project involved people from a variety of organizations including, the Region of Waterloo the region’s two School Boards and an external consultant. The project was also assisted by local newspapers who gave permission to reproduce various articles on the transportation-related subjects.

Internally, the project involved regional staff from a number of departments and divisions, including Planning, Housing and Community Services, Transportation Planning, Corporate Resources, Transportation and Environmental Services, and Grand River Transit.

With clear project goals and previous positive experiences, the Region was successful in achieving a high level of participation from the two local School Boards.

Project organizers also met with various community group members who were developing their own educational projects on transportation, air quality and related projects in order to avoid duplication of efforts.

Resources

A budget of \$25,000 was allocated for initial development and implementation over an 18 month period. The Region’s Travelwise program and Grand River Transit provide the operating budgets for ongoing project costs which include the student take-away packages and the annual update of local transit map sets. Tours with Grand River Transit buses are provided free of charge.

The two School Boards have helped market the program to teachers through regular mailings, provide copies of the unit for downloading from their websites and delivered a teachers’ workshop on the unit during a professional day.

Lessons learned

The pilot and follow-up years have provided project members with a number of valuable lessons for those considering starting a similar program. Some of the key lessons include:

- **Get senior management buy-in.** Getting the support of senior management at all of the organizations and keeping them informed of project developments helped move the Let’s Clear the Air project through several ‘sticking points’.
- **Build partnerships.** The project owes much of its success to the strong inter-departmental and inter-organizational partnerships that were developed. These partnerships have also helped to ensure the continued implementation and success of the project.
- **Include take-home exercises.** Including take-home exercises as part of the project helped to ensure that parents would hear the messages if they had not heard them from their children already.
- **Find project champions.** Project champions create other champions in the community and can help broaden the impact of the project.
- **Build a product ‘brand’.** Using similar graphics throughout ensured product recognition for all parties.
- **Teacher input can be difficult to get.** Although teacher input is critical to achieving a product that will be used in the classroom, input was hard to secure due to teacher workload. Lengthy time periods are needed to get their feedback, but it is well worth the wait.

- **Do the teaching before getting children to board the bus.** The information session provided by the Grand River Transit facilitator and driver was first conducted outside by the bus. Once the children queued to board the bus it was difficult to gain their attention for any learning experience.

Next steps

It is fully expected that the You Can Clear the Air project will continue in future years. Resources have already been identified for the Grand River Transit Tour, the student take-away package components, and the production of the physical resources. A hard copy of the unit is available in all school teacher resource libraries and can also be downloaded from each of the two School Board's servers. Specifically, some next steps include:

- introducing an additional interactive learning tool called a "Resource Lab" where children can learn about the federal government's One Tonne Challenge program;
 - identifying marketing opportunities for the curriculum resource unit through teachers' professional development programs; and,
 - developing a program unit for Grade 5 students with more advanced messaging, focusing on energy systems and, potentially, bicycling safety.
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