



REPORT

To: **COUNCIL**

Date of Meeting: March 2, 2009
Deferred from the January 29, 2009
Budget Task Force

Prepared by: Paul Willms, Environmental Planner on
behalf of various City Departments

Department: Planning & Building Services

Date to Management Committee: January 28, 2009

Report No.: P/09-13

File No.: D03.03.02.06

Ward No.: City-wide

Subject:

**POTENTIAL COSTS
ASSOCIATED WITH AN
ANTI-IDLING PROGRAM**

Recommendations:

THAT Cambridge City Council receive Report P/09-13,
Potential Costs Associated with an Anti-Idling Program, as
information.

PURPOSE

To provide information to the Budget Task Force of the potential costs associated with suggested elements of an anti-idling program.

BACKGROUND

At its January 12, 2009 meeting, Council approved in principle the following motion, and directed that it be referred to the Budget Task Force:

“THAT the City of Cambridge develop an Idling By-Law focused on school zones;

AND THAT the City develop an education campaign that enhances the effectiveness of the Idling By-Law;

AND THAT the City install signs and enforce a no idling policy at City Hall;

AND THAT Cambridge Council supports the non-profit Reduce the Juice anti-idling education program in concert with the Region of Waterloo and the Cities of Waterloo and Kitchener;

AND FURTHER THAT Report CEAC-10-08, as amended, be circulated to all Council Members as Background.”

Direction: *That this motion be accepted in principle; and that this item be referred to the Budget Task Force, as it has budget implications; and that comments from Legal Staff on the basis and feasibility of this type of activity be brought forward.”*

Estimated Enforcement Costs - School Zone Focused Anti-idling By-Law

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| Anti-idling by-law enforcement in budget: \$39,000 - \$87,000 |
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The major costs associated with an anti-idling by-law revolve around enforcement at 53 locations (schools) as well as at the City Hall properties. It is assumed that enforcement would be based on the following parameters:

- enforcement will largely be on a proactive, not complaints-based, basis; complaints-based enforcement is seen as logistically unworkable as Enforcement Staff would need to take time to travel (up to 30 minutes) to the site in question and the idler may already be gone; complaints may receive responses for “chronic idlers”.
- enforcement would take place at specific periods during the day at 53 known locations but would likely concentrate on the pick-up time (approximately 1 hour in the afternoon as morning/afternoon drop-off/pick-up times feature the greatest amount of idling and pollution in school zones (see *Attachment 1: Timing of Emissions and Vehicle Idling Outside Schools (Hamilton Example)*)).
- each school will be visited (at least) once during the school year;
- in addition to school zones, enforcement would also take place at the City Hall and associated properties (as a No Idling Zone) especially on smog advisory days (estimated and averaged at 7 per year).

Staff have investigated the use of existing staff resources in Transportation and Public Works (the Corps of Commissionaires) and Planning and Building Services (By-law Enforcement Officers). Incorporating enforcement of the anti-idling by-law within existing staff resources is not an effective option.

Currently, the Commissionaires enforce parking regulations at schools. With current resources, most schools are visited once per week and the remainder less frequently – and this is seen as insufficient to address the parking issues at schools. Enforcement of the anti-idling by-law would reduce the amount of time spent on parking enforcement which could result in more complaints from residents living near schools with a parking problem.

Use of By-Law Enforcement staff for the anti-idling by-law would reduce the amount of time spent enforcing other by-laws. Also of concern is the scheduling impacts of staff. The hiring of new officers in 2008 was intended to cover weekend/evening hours. Changing shifts to enforce the idling by-law during the day would have an impact on service levels on weekends/evenings.

Transportation and Public Works staff suggest that it would cost approximately \$87,000 to use Corps of Commissionaires for anti-idling enforcement. This would include:

- two additional officers
- attending each school for one bell time approximately every two weeks; and,
- 10-15 visits per school per school year.

Planning and Building Services staff suggest that it would cost approximately \$78,000 to use By-law Enforcement staff for anti-idling by-law enforcement. This would include:

- one additional officer (salary, benefits, equipment);
- attending each school for one bell time approximately once per month; and,
- 7-8 visits per school per school year.

The minimum amount of enforcement is estimated at 34 days (calculated at a half day for each school, ensuring that the enforcement presence is visible especially from 2:45-3:30 p.m., at least 1-2 times per school year, plus 7 smog advisory days (on average) enforcing the City Hall location). A part-time officer would be needed to fulfill this minimal workplan.

Enforcement options may involve the Commissionaires (on contract with Transportation & Public Works), by-law enforcement (Planning & Building Services), City Hall security services, and/or delegated authority to principals at schools for enforcement within their school zones. The two most likely options involve Commissionaires or By-law Enforcement officers. Enforcement by City Hall Security, and/or principals, poses additional challenges such as prosecution abilities and associated duties, liability concerns, evidentiary skills, and level of public engagement training among other issues. The Director of Legal Services will be providing an incamera report on the legal implications of implementing and enforcing an anti-idling by-law.

City Education Campaign that Enhances the Effectiveness of the By-law

Cost to be considered for city-wide education products: \$20,000 - \$100,000

The "city" education campaign would complement the social marketing campaign in the schools (Reduce the Juice, below) but would also complement and support the educational aspects of by-law enforcement.

Public Education programs can range in price depending on their scope and duration. The Director of Communications has identified a minimum Basic Campaign at \$20,000 (strategic planning, print ad, web presence, short radio campaign, etc.) to an Advanced Campaign at \$100,000 (longer duration of material exposure, frequency of print and radio ads, website ads, non traditional/non-mainstream ads, school campaign).

Cost to be considered for signage in budget: \$15,170 - \$28,420

City Hall and School Zone By-Law Signage

City of Cambridge legal staff have indicated that signage would need to be posted both at City Hall and at school zones. For evidentiary reasons as well as notification of the by-law in specific locations with boundaries (school zones, City Hall No Idle Zone), signs must be installed at each zone location. Public Works has estimated the installed per sign cost to be \$160 - \$250 per sign depending on the type of installation (i.e. existing post or U-channel). This estimate is consistent with the recent City of Kitchener installation cost of 300 signs at \$240 each (February 2007).

Additional costs may be incurred if boundaries are required to be delineated (for example, asphalt painting of No Idle Zones or other delineation techniques acceptable to Transportation and Public Works).

The Gold-LEED designated City Hall, and associated properties such as the Cambridge Centre for the Arts, Fire Museum and Education Centre, Historical City Hall, David Durward Seniors Centre, and Farmers Market and their parking lots could be designated No-Idle Zones in much the same way as the Civic Square / City Hall parking lots were designated smoke-free in February 2008. Approximately 12 signs would define the No-Idle Zone around City Hall properties and could be installed on existing posts (\$160 each) - this equates to a cost of \$1,920.

If 1-2 signs are to be installed at each of the 53 school locations (53-106 signs) this would equate to \$13,250 - \$26,500 (assuming U-channel installation at \$250 each).

In total, signage for City Hall properties and school zones would cost approximately \$15,170 - \$28,420 pending site investigations and the need for additional zone demarcation if required.

Community-Based and Schools-Focused Social Marketing Campaign

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| Cost to be considered for Reduce the Juice partnership in budget: \$5,000 |
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Reduce the Juice (RTJ) is a non-profit organization that engages youth in emission reduction initiatives and encourages youth leadership on these subjects (refer to Attachment No. 2). By working with high schools on emissions reduction and climate change projects through the curriculum, RTJ can expose youth to innovation and technology. RTJ then works in the community around the high school by conducting youth-led outreach programs that utilize Community-Based Social Marketing strategies. In turn, elementary feeder schools are also brought into the project.

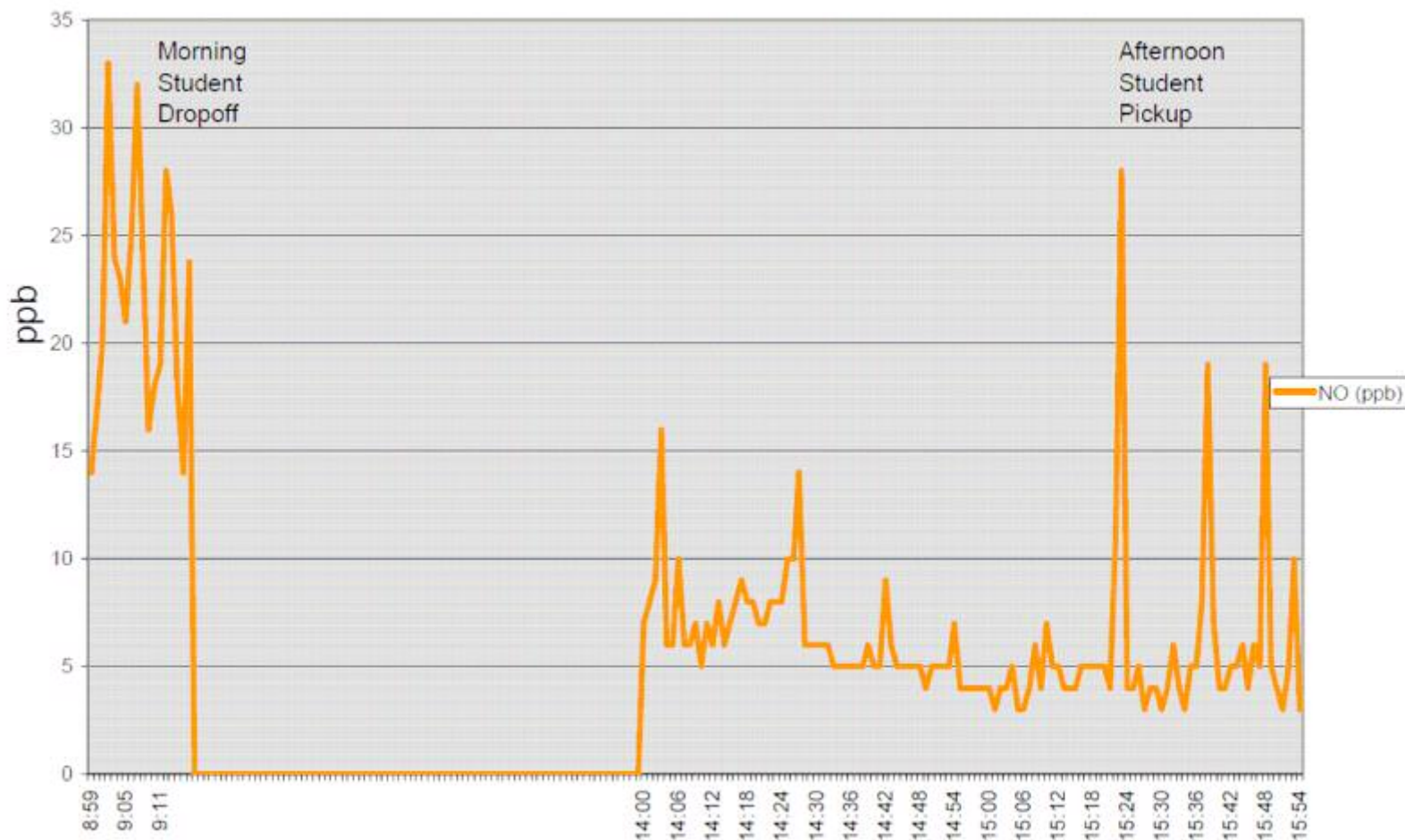
RTJ piloted a program in 2007 in Waterloo and wishes to expand to Kitchener and Cambridge in 2009. The program is designed to encourage residents of Waterloo Region to reduce their emissions from personal vehicle use by 5%. The approach involves going to three elementary schools and a high school and their surrounding residential communities in Kitchener, Waterloo, and Cambridge and developing and delivering a range of air quality, emissions reduction, energy conservation, and anti-idling programs and products.

Reduce the Juice requested \$5,000 from the City of Cambridge, approached Kitchener and Waterloo for the same amount, and has secured \$15,000 from the Region of Waterloo. It is also seeking \$200,000 from Natural Resources Canada and \$33,000 from the Province's Community Go Green Fund. A \$5,000 contribution from the City of Cambridge would help to leverage \$268,000 from other sources and an emissions reduction community-based social marketing campaign. Similar social marketing campaigns developed in the recent past by the Region (Let's Curb Pesticides, water conservation incentives that enhance the water restriction by-law) are on par with the cost and deliverables associated with the Reduce the Juice program.

SUMMARY AND ESTIMATED COSTS

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| Estimated Enforcement Costs | \$39,000 - \$87,000 |
| City Education Campaign | \$20,000 - \$100,000 |
| City Hall and School Zone By-Law Signage | \$15,170 - \$28,420 |
| Reduce the Juice Community-Based Social Marketing Program | \$5,000 |
| Total Anti-Idling Program Cost | \$79,170 - \$220,420 |

ATTACHMENT #1 - TIMING, NITROGEN OXIDE EMISSIONS, AND VEHICLE IDLING OUTSIDE SCHOOLS (HAMILTON EXAMPLE)



Source: February 25, 2008, "Natural Experiment" – vehicle idling outside schools
Upwind Downwind Conference Hamilton

D. Corr, P. DeLuca, J. Wallace, P. Kanaroglou

Rotek Environmental, Centre for Spatial
Analysis, McMaster University

ATTACHMENT 2 BACKGROUND ON THE REDUCE THE JUICE FOUNDATION

Purpose and Origins

Reduce the Juice is a non-profit organization that facilitates the creation of youth led projects designed to reduce greenhouse gas emissions. The Reduce the Juice organization believes climate change is one of the largest challenges that the youth of today are going to have to confront and that with a little help youth are capable of tackling it head on in their own communities.

The goals of the Reduce the Juice Foundation are:

- To unite secondary and post secondary students in climate change solution projects to make a difference both in their own communities and across the province.
- To develop a website which can act as a reference for other communities wanting to run their own youth climate change projects.
- To increase public awareness about climate change solutions on a community by community basis in Ontario through a network of Reduce the Juice inspired projects.
- To lower greenhouse gas emissions.

Reduce the Juice began its first project in 2005 in the Orangeville area. They began as a volunteer organization and were awarded a significant grant for the Ontario Trillium Foundation which allowed them to expand the Orangeville project beyond Dufferin County.

Partnerships

Reduce the Juice has developed partnerships with the City of Waterloo, City of Kitchener, Region of Waterloo, Ontario Ministry of the Environment, Ontario Trillium Foundation, Service Canada, Waterloo Region District School Board, Greater K-W Chamber of Commerce, Natural Resources Canada and various business and community partners in the Orangeville area.

Reduce the Juice Waterloo

Reduce the Juice piloted a project in 2007 in the City of Waterloo. Reduce the Juice Waterloo is a youth led project designed to encourage residents of Waterloo to reduce their emissions from personal vehicle use by 5%. The plan to achieve this objective involves meeting people where they live, work, and shop and offering them easy to implement actions to increase their driving efficiency, reduce driving and use alternative transportation.