



# YCAS News

Vol. 1, No. 1 (Spring 1999)

## Newsletter of the York Centre for Applied Sustainability

### CHILDREN AND CAR CULTURE: RESEARCH IN SUSTAINABLE TRANSPORTATION

*Catherine O'Brien*

If you had to choose between protecting a child and protecting a car, which would you choose? For most of us, our hearts say, "The child of course!" However, our actions often say, "The car."

This is a central concern in the research of Dr. Catherine O'Brien, this year's Canadian Pacific Post-Doctoral Fellow at YCAS. The aim of the fellowship is to carry out applied research on Sustainable Transportation. We only need to look at our congested streets and highways to recognize that we've lost the balance amongst cars, people and the environment.

Some of the consequences of this are obvious: increasing air pollution, with smog that is visible in most cities; streets that are unsafe for walking and cycling (particularly for children and seniors); environments that are unpleasant for pedestrians due to noise and the predominance of asphalt over green spaces. There are, however, enormous consequences which are less evident. Hospital admissions for respiratory symptoms increase in proportion to rising levels of air pollution. Ground-level ozone is a pollutant that causes inflammation in the lungs. Children may be particularly vulnerable to airborne pollution because of their narrower airways and increased need for oxygen relative to their size. (Transportation, Air Quality and Human Health Conference Proceedings, 1996). Arable farmland is lost to highways and urban sprawl. And then, there is the big one – greenhouse gas emissions. "Transportation in Canada is on an unsustainable path, with the transport sector generating about 30% of all greenhouse gases arising from human activity" (NRTEE, State of the Debate, 1997).

Many recommendations have been offered to reduce the impact of cars on our health and the planet. Technological innovations will provide some reduction in pollution. Various economic incentives have been suggested which would

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### SUSTAINABILITY REPORTING

*Michael Keating*

The York Centre for Applied Sustainability is a major partner in a project to create Canada's first report on sustainability trends. The report will present a package of key trend lines on environmental, economic and social issues, showing the inter-linkages among these sectors.

It will allow Canadians to see and understand the driving forces of change—such as rising population and consumption—and their impacts. These impacts, particularly environmental damage, are undermining long-term prospects for economic sustainability and human health. The report will use high-quality information from credible sources, but for the first time will assemble the key information in one place, and put it in context. The working title is *The State of Canada Report*.

The report will be produced by a newly formed group, known as the Sustainability Reporting Program. The report will first appear on the World Wide Web, a strategy that allows it to be built in stages, and modified as needed. Web technology also allows the report to electronically show the

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## DIRECTOR'S NICHE

*David Bell*

Since its establishment YCAS has always been a bit ahead of itself. It seems that we were all so eager to get down to work—and there is no shortage of work to do in applying sustainability—that it is only now (thanks to the fine work of our editor Alex Latta) that I finally have the pleasure of presenting the first issue of our newsletter. Here you will find information about some current YCAS initiatives. In the coming years I hope that this newsletter will become a regular affair, serving both to spread the word about our activities and to archive some of our accomplishments.

Although YCAS is no longer a new face on the York campus, it hardly seems right to introduce our first newsletter without including a bit of background on the Centre itself. For those who desire further information about YCAS's history, objectives, structure and current activities, a Web site address is included on the back page.

The idea that society should meet the requirements of today without compromising the ability of future generations to meet their own needs is not new. Its essence is contained in the Aboriginal idea (which has been around for thousands of years) of "Planning for the Seventh Generation." But the concept was popularized by the work of the United Nations Commission on Environment and Development (the Brundtland Commission) which published its report entitled *Our Common Future* in 1987. The concept of sustainable development is now being incorporated into policy discourses at all levels from the global to the local. It serves as a world-



wide focus for efforts to integrate economic, social, and environmental values; as well as to encourage decision making that is democratic, participatory, and respectful of all stakeholders.

Despite the common sense appeal of the basic notion of

sustainability, the world has been disappointingly slow to shift gears and put the concept into practice. The earth's natural resources continue to be exploited at alarming rates, leading to rapid species loss, the near complete collapse of certain heavily affected ecosystems, and troublesome changes in the earth's atmosphere. This environmental destruction is paralleled by a growing gap between rich and poor in human populations, with a concomitant decline in living conditions and life expectancies for those in the lower echelons of the wealth spectrum.

YCAS is dedicated to closing the gap between rhetoric and action. The challenge which the Centre has taken on as its central goal is to work towards making the concept of sustainability a reality—in the university, in government, in business and in people's everyday lives.

At its birth, YCAS had a close link with the Ontario Round Table on Environment and Economy (ORTEE). When ORTEE was disbanded in 1995, the Government of Ontario bequeathed York University with the Round Table's legacy; which included ORTEE's publications, resource centre, equipment and furnishings, but no funding. YCAS was formally approved by the York Senate in 1996 as an "organized research unit" (ORU) with a University-wide mandate but a home in the Faculty of Environmental Studies. Since that time, the scope of YCAS operations has become national and international, and its activities have come to encompass an exceptionally diverse array of initiatives.

The contents of this newsletter indicate both the diversity and the innovative character of YCAS's initiatives. Catherine O'Brien, who is the first holder of the Canadian Pacific Post-

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### The YCAS Mission

**The mission of YCAS is to promote the application of sustainability principles and practices throughout society, including in the public sector, the private sector, the civil sector, and in education.**

Doctoral Fellowship in Sustainable Transportation, puts our automobile dependency in a different light. Demonstrating the impacts of car culture on children, Catherine gets to the heart of the intergenerational issue that forms the core of sustainability thinking, and opens new avenues to changing unsustainable attitudes and behaviours.

Michael Keating's national sustainability reporting initiative—which has stimulated wide interest from both government and non-government sectors, as well as national and international experts in the field—is leading the way towards sustainability monitoring in Canada.

Annie Cheung's contribution is illustrative of the international scope of research interests held by YCAS Fellows. Understanding sustainability in an international perspective is an important feature of YCAS's vision.

Gustavo Moran's report highlights YCAS's innovative use of technology to promote sustainability, providing new tools for planning, management and education.

The report on YCAS's Sustainability on the Campus initiative demonstrates both the extent of the Centre's involvement in the broader York University community and its national role in promoting sustainability practices.

Mila Kletsky's article encourages us to think about the connections between sustainability and human health in an often neglected area, the home.

Finally, the Executive Summary of *Advancing Sustainability in the Great Lakes Basin* demonstrates the pro-active role YCAS plays in helping to set the agenda on national and international sustainability issues.

Together these articles offer at least a partial window onto the exciting ideas and projects to be found at YCAS. I would like to remind any interested readers that our doors are always open to new ideas and offers of collaboration or support. And of course, keep an eye out for the next edition of YCAS News. □

## THE UNIVERSITY: MODEL FOR SUSTAINABILITY

“The university is a microcosm of the larger community, and the manner in which it carries out its daily activities is an important demonstration of ways to achieve environmentally responsible living.”

*Principles of Sustainability in Higher Education*  
(Essex, Massachusetts, February 24–27, 1995)

The vision of the university as a model of a more environmentally sustainable way of life is one which remains sadly far from achievement at most educational institutions across the continent. Nevertheless, changes have begun to take place, and the York Centre for Applied Sustainability is spearheading efforts in Canada to generate discussion on this issue. In 1999 YCAS plans to host a major conference on campus

sustainability. Participants will share their experiences and consider new approaches to sustainability practices and principles in university operations and academic programs.

Themes at the conference are expected to include:

- Knowledge and skills in the area of sustainable development which progressive employers are looking for
- The campus as part of the learning experience
- Developing leadership skills around sustainable development projects and activities
- Partnerships between universities and businesses to solve problems, enhance student learning and save money
- The role of the university community in supporting facility operations and reducing costs
- Environmental management on the campus
- New approaches to sustainable facilities—excellent working and learning environments, outstanding facilities and resources, and minimal impact on the natural environment, at the lowest life cycle cost

At the end of April, YCAS will sponsor a workshop on campus sustainability to help plan the conference. The workshop will bring together leaders in the field of applied sustainability, including senior administrators in both operational and academic sectors from three different universities, along with two counterparts from the private sector. Participants in the workshop will share experiences and consider new approaches to campus sustainability, forming a groundwork for the up-coming conference. □

### SIGNPOSTS TO SUSTAINABILITY

*Mike Nickerson*

#### Sustainable activities:

- Use materials in continuous cycles
- Use continuously reliable sources of energy
- Come mainly from the qualities of being human (i.e., creativity, communication, movement, appreciation, and spiritual and intellectual development)

#### Non-sustainable activities:

- Require continual inputs of non-renewable resources
- Use renewable resources faster than their rate of renewal
- Cause cumulative degradation of the environment
- Require resources in quantities that undermine other people's well-being
- Lead to the extinction of other life forms

reduce the subsidy for private car usage and encourage people to use their cars less often. There is an immediate and positive solution that every car owner can provide - simply drive less. Canadian families take an average of 7 trips per day. Many of these trips could be reduced through careful trip planning, car pooling, walking, cycling and public transit.

While the solution is simple, our car culture is so pervasive that most drivers do not even think about the impact of using their car. Dr. O'Brien's research is exploring car culture and the potential triggers for changing driving behaviour. She believes that one of the triggers may be our love of children. She is compiling a body of research, which demonstrates the enormous impact of our auto-dependency on children. Studies are showing a rising level of physical inactivity in children, which has health professionals seriously concerned. Add to this an increase in child obesity and the fact that the majority of children are now driven to school and organized recreational activities.

Our car culture has invaded kids' culture. Locations for spontaneous play have been drastically diminished. Sociologists report that the spontaneous social interaction with other children is vital to child development. Developing a sense of place in the community evolves through contact with the physical and human environment. However, our car culture is forcing children to take "adult-sized" trips rather than "kid-sized" trips. They are moved through their environment, rather than exploring it along the way. Children are now less independent in their mobility and some authors believe that we are establishing a pattern of powerlessness.

James Garbarino has stated that, "In the modern sense of the term, childhood is a protected niche in the human ecology, a special time when we have a special claim upon those who bear us. We have a right to receive support from our families and our communities, regardless of our economic value." Our love affair with the car is infringing on the rights of children today as well as future generations. As a society we need to confront the paradox of our values.

Our economy is intertwined with the automobile and political will to move towards sustainable transportation is sluggish as a result. Many economic opportunities exist in the sustainable transportation sector and politicians will need clear indications from society in order move in this direction.

Dr. O'Brien's work will elevate the profile of children in the sustainable transportation discourse. Her aim is to raise awareness regarding the impact of car culture on children so that parents and policy-makers can make more informed choices.

Dr. O'Brien has proposed that a video, which focuses on children and cars, will be an effective communication tool. She believes that a video that allows us to hear the ideas and feelings of children will help drivers to reflect on their own actions. This will be intertwined with factual information and alternative options to the car.

In addition, Dr. O'Brien is collaborating with David Engwicht from Australia who has created a Traffic Reduction Treaty Kit for neighbourhoods. She will document a series of Engwicht workshops in Toronto, which are designed to explore triggers for changing car culture. One of the components of the Traffic Reduction Treaty Kit is a "Kids' Traf-

fic Buster Treaty". Children who sign their Treaty agree: not to nag their parents to drive them everywhere; help their family use its car less; and help their family drive slower in other Kids' streets.

As each of us settles down behind the steering wheel of our car we might ask ourselves, "Is this trip necessary? What about the children?"

"The world of young children is so full of miracles, the word miracle can have no precise meaning for them."

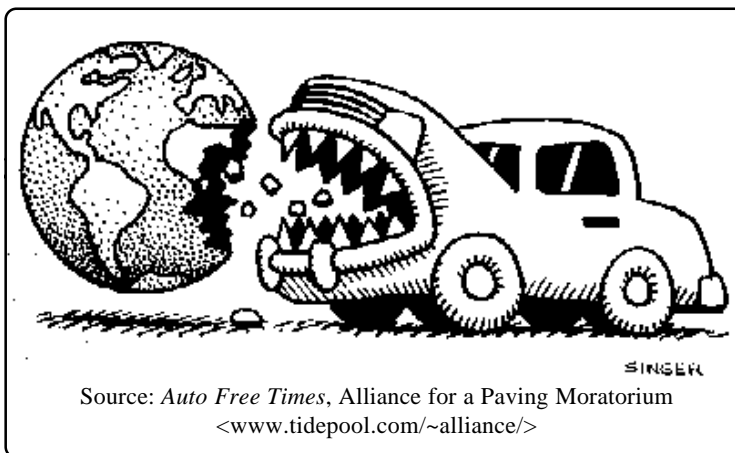
M. H Mathews □

## ENVIRONMENTAL ASSESSMENT—HONG KONG & THE PEARL RIVER DELTA

Y. Annie Cheung

In the interest of communication and the sharing of ideas, I offer the abstract of my Ph.D. Thesis (April, 1997), *An Environmental Assessment Approach for Hong Kong and the Pearl River Delta Area: Principles and Practices*. I draw your attention, in particular, to the attempted leap from thought to action and institutional innovation.

Environmental degradation is the result of a society deeply caught in an economic framework, which gives a low priority to the quality of life. In order to keep up with the business sector's momentum in pursuing prosperity, many governments have turned themselves into corporate states, at the expense of a disenfranchised public. The deteriorating envi-



Source: *Auto Free Times*, Alliance for a Paving Moratorium  
<[www.tidepool.com/~alliance/](http://www.tidepool.com/~alliance/)>

ronment illustrates what happens when public policies do not defend the common goods: humanity and the quality of the environment. Sustainable development is not possible without the government's commitment.

The region of Hong Kong and the Pearl River Delta Area is presently one of the fastest growing economies in the world. The area's economic development is a direct response to the demands of the country. China's population pressure, economic needs, natural resource conditions as well as her culture, history and policies are the forces shaping the development in the Pearl River Delta Area. Since the whole region seems to be emulating the Hong Kong style of development, the Hong Kong social and economic history and experience offer insights that would be beneficial to the planning of the future of the entire region. One of these is that there is a critical need to de-couple economic growth and environmental degradation.

Presently, both jurisdictions have Environmental Impact Assessment (EIA) requirements, but in both cases, EIAs are mainly used for lowering the level of impacts through mitigation requirements rather than for the prevention of pollution. In spite of EIA, new pollution sources continue to degrade the environment.

The struggle towards sustainable development involves the leadership of a compassionate government, and a vigilant society. EIA should be both a means and a strategic point of intervention in the decision making processes, where human concerns must be the focus; and a forum where science and technology are combined with public knowledge and values, thus potentially moving China in the direction of sustainability.

The challenge posed by this study arises out of the imperative to co-ordinate environmental policy and the environmental assessment process in the environmentally interdependent region of Hong Kong and the Pearl River Delta. Blue prints are avoided. But the fundamentals of an institutional initiative are clear: integrate (i) the guidance system of the PRC; (ii) the new regulatory framework of Hong Kong; (iii) the sustainability vision; and (iv) the environmental assessment processes. Some possible, viable approaches for incorporating these features are suggested, including the European Community approach—common goals and standards with a high degree of autonomy in their application. At this stage in the development of the area, however, an exploratory stance is necessary. Barriers and opportunities have to be recognized. And a mechanism, a sustainable development public policy research institution, is proposed as a means of reaching towards a valid institutional solution.

The integration of the opportunities offered by EIA with its inherent research and learning capacity should be the strategic device for a government in search of sustainability. The Government of the Pearl River Delta Area, and the Administration of Special Administrative Region of Hong Kong may also find in the struggle for sustainable develop-

ment an invaluable opportunity for mutual understanding and co-operation, and for invoking the principles of coexistence and co-ordination. □

#### SUSTAINABILITY REPORTING... continued from page 1

interconnections among sustainability issues. The web-based reporting system will provide people with an easy-to-use starting connection and guide into the daunting array of sustainability information that is now available on web sites around the world. The plan is to develop a print report later.

Among key elements of the reports will be: trend lines for major sustainability issues, stories illustrating the trends, background information and references, and analyses of changes in public opinion and corporate attitudes toward sustainability issues. The first output will be a national report that shows Canada in the context of global changes that are shaping our future.

The Sustainability Reporting Program was started earlier this year. A major step was a national workshop of 36 people, including senior experts in sustainability reporting, held at York in June. An editorial team is now working on the design of the Sustainability Reporting Program, and the goal is to have a report by mid 1999.

The project has been developed by Michael Keating, a senior fellow at YCAS, and a former fellow of the Faculty of Environmental Studies. It builds on his earlier books, including *Canada and the State of the Planet*, produced in partnership with the Canadian Global Change Program, and published last year by Oxford University Press.

The Sustainability Reporting Program has received strong support from YCAS, particularly through David Bell, a major participant in the project, and through a number of other people at York, especially staff at FES. Initial major supporters also include Pollution Probe, Environment Canada and the International Council for Local Environmental Initiatives. The steering committee includes representatives from government, business, academe and the non-government sectors. A wide range of experts, including the former heads of the United Nations Environment Programme and the Earth Summit have endorsed the project. So far, the program has received start-up funding from the Laidlaw Foundation, Environment Canada and the Department of Foreign Affairs and International Trade.

As the program develops, the goal is to encourage York faculty and students to see how this sustainability reporting system can help them, and encourage them to play roles in expanding the potential of the project. Two York FES graduate students, John Ryan and Michelle Fernando, have been or are involved in the project as researchers. Anna Baggio and Gustavo Moran designed the current web page, which can be found at:

<http://www.yorku.ca/faculty/fes/ycas/sust.htm> □

## TECHNOLOGY IN YCAS INITIATIVES

*Gustavo Moran*

Since its inception, YCAS has been looking for meaningful ways of adapting technology to its primary mission: promoting the application of sustainability principles and practices throughout society, including in the public sector, the private sector, the civil sector, and in education. This work is carried out by Dr. Grant Sheng, YCAS Research Fellow Gustavo Moran, and a team of excellent graduate and undergraduate students. Since its inception, YCAS has succeeded in attracting an impressive number of technology related grants from various sources:

1. The Canada Trust Foundation for Friends of the Environment granted \$50,000 for the project “Liquid Assets: A Clean Water Initiative” and another \$9,970 for a related project, “Map Reflections.” The Liquid Assets project involves eight secondary schools in water quality monitoring, and is being conducted in partnership with Metro Conservation, the Toronto District School Board, and the Faculty of Education. A pilot is in progress for consideration in Ontario’s Science and Technology Curriculum.
2. A contract with Industry Canada’s Notemaker program provided \$60,672 to support the development of four university on-line courses for CJRT-Open College, including David Bell’s course, “Sustainability: Canadian and Global Views.”
3. Along with a private sector partner, YCAS obtained \$15,000 from the National Research Council for the development of web-based software for electronic communication in pedagogy.
4. The National Research Council also granted YCAS \$15,000 for the “Lotus Notes and Domino Project,” which provides the ability to collate and publish information in a manner making it accessible across an entire organization and affiliated organizations.
5. In kind contributions to YCAS were received from the former North York Board of Education (equipment valued at \$6000 and ARCVIEW/ESRI software valued at \$1,000).

YCAS researchers make every effort to involve participants, users and other affected parties in the design and implementation of technology related projects. Furthermore, it should be emphasized that YCAS’s involvement with technology is based on a critical and selective approach. Indeed, by working to integrate technology into the sustainability “tool kit,” YCAS provides a forum for discussion and debate about the opportunities and pitfalls associated with technological approaches to problem solving. □

## THE SUSTAINABLE HOME CONCEPT

*Mila Kletsky*

Usually environmentalists are more concerned with global environmental problems rather than those arising in their homes. However, it should be no surprise to find that our houses contain highly toxic cleaning, personal and skin care products. Global pollution problems are obviously of great importance and have a major impact generally on human health. But according to data from Environment Canada and the U.S. Environmental Protection Agency (EPA), pollution levels outside our homes are 5 times *less* than those found *inside*. According to the reports from Environment Canada and the EPA, the toxics found in our homes are *three* times more important than air pollutants as a cause of cancer. Of the 4.5 million chemicals known today, 45,000 of them have been commercially distributed. The majority of them have never been tested for their affects on human health, yet come directly into our homes. Annually more than three million children and adults in North America are affected by common household chemicals—and new impacts are discovered every year.

Recently we have become aware of the dangers of ammonia. Ammonia is the most common ingredient in all household cleaning products and it is a poison. It attacks our skin, lungs and eyes. When mixed with bleach it creates chloramine fumes which can be deadly. Another commonly used poisonous chemical is formaldehyde. Millions of kilograms of this product are manufactured annually in Canada and the USA. As reported by the U.S. National Institute for Occupational Safety and Health, it is a known cause of cancer, birth defects, genetic damage, and asthma.

Armed with a better knowledge of some of the harmful impacts of household chemicals, scientists and others have begun to rally support around the concept of the sustainable home. The idea of the sustainable home has been developed in many countries and has strong ties with the growth of environmental medicine in Germany, Norway, Switzerland, Sweden and some other European countries, as well as in Canada and USA. Achieving sustainability in our homes is an important facet of reaching the general goal of sustainable human habitation on this earth. It hardly makes sense to combat pollution of the planet’s water, air and soil, while we ourselves inhabit homes filled with toxic hazards.

In Canada we can find many examples of institutions making efforts to lower exposure to harmful chemicals in their operations. In some elementary and high schools, teachers and management concerned with high allergy rates among the students have made the link to cleaning products used in the schools. In cases where conventional cleaning agents have been replaced with non-toxic alternatives, staff have

reported promising results amongst their students—including declines in asthma, attention deficit disorder, and various allergic reactions on the skin. Of course, in all of these cases the exposure to harmful chemicals in the school or workplace is compounded by similar exposure in the home.

Based on existing knowledge, we can clearly begin to make positive changes in all of our homes and workplaces. But we also need to know more about the impacts of household chemicals on human health and what kind of strategies are most effective in combating the problem. Furthermore, the work of academics in identifying the problems, as well as possible solutions, must be coupled with a campaign of public education. With wider awareness of both the dangers of conventional household chemicals and the alternatives available, the concept of the sustainable home can begin to become truly applied. □

## **ADVANCING SUSTAINABILITY IN THE GREAT LAKES BASIN: EXECUTIVE SUMMARY**

*David Bell, Anna Tilman, and Annie Cheung*

(Prepared for Environment Canada, February 1, 1999)

This paper outlines how the Government of Canada can develop a sustainability strategy in the Great Lakes Region.

The 177 states that attended the 1992 “Earth Summit” gave a strong endorsement to sustainable development, but the five-year review of progress at the June 1997 United Nations General Assembly Special Session (UNGASS) yielded disappointing results. Most countries, including Canada, had not implemented very much of Agenda 21. The members of the UN did, however, support a renewed commitment to move from Agenda to Action.

Building on this (re)commitment, and taking advantage of the fact that all federal government departments are now required to have “Sustainable Development Strategies” (SDSs), an opportunity exists to shift policy toward sustainability using the “search conference” methodology, which has been used in sustainability planning both in Canada and around the world.

Such an exercise would consist of five key steps. The first is a concise summary of the key elements of the existing program, and an analysis of the main “driving forces” that appear to have shaped recent developments (the “wide view”). The second step requires a “business as usual” projection of a renewal of the program following the same parameters that currently exist (the “likely future”). The third step is to outline an alternative future in which sustainability has become a core, integrative theme (“the long view”). Using a backcasting perspective, the fourth step is to identify key

barriers and opportunities involved in moving toward the “desired future” outlined in the “long view.” In its final phase, such a search process would conclude with some recommendations for strategic action related to the long view.

The paper uses the Search Conference framework to illustrate how the government of Canada could undertake an analysis of the prospect for moving the federal Great Lakes program toward sustainability. The paper includes a vision for the program five years and twenty-five years into the future. Though the paper suggests a direction such “out of the box” thinking might follow, it insists throughout that the only authentic authors of this kind of policy are those living in the box, in partnership with many others. The Government of Canada can show leadership by better coordinating the efforts of its own departments; and improving its outreach and partnership activities. The paper provides a matrix that can be used to identify the various departments, agencies and institutions at the provincial, regional, municipal and community levels which need to be part of the process.

The paper concludes with an assessment of the requirements of a Great Lakes program that takes a serious commitment to applying the concept of sustainability. □

### **PRAYER OF THANKSGIVING**

It may not be Thanksgiving, but every day is a good day to give thanks. The following is drawn from the introduction to the first volume of “Looking Forward, Looking Back,” *Report of the Royal Commission on Aboriginal Peoples*.

“Finally, we acknowledge one another, female and male. We give greetings and thanks that we have this opportunity to spend some time together. We turn our minds to our ancestors and our Elders. You are the carriers of knowledge, of our history. We acknowledge the adults among us. You represent the bridge between the past and the future. We also acknowledge our youth and children. It is to you that we will pass on the responsibilities we now carry. Soon, you will take our place in facing the challenges of life. Soon, you will carry the burden of your people. Do not forget the ways of the past as you move toward the future. Remember that we are to walk softly on our sacred Mother, the Earth, for we walk on the faces of the unborn, those who have yet to rise and take up the challenges of existence. We must consider the effects our actions will have on their ability to live a good life.”

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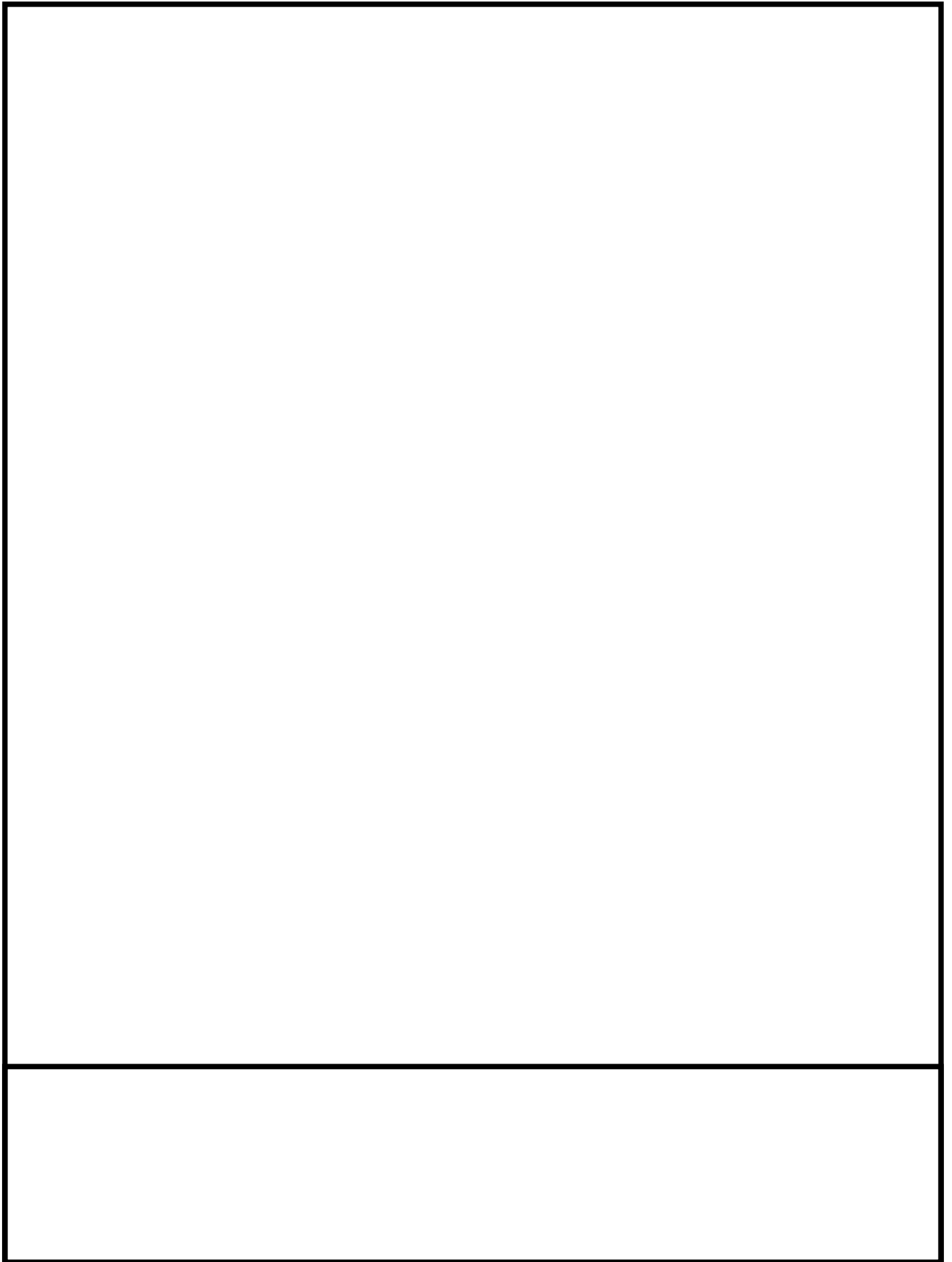
**BESST Representative**

**GESSA Representative**

## Looking for a Look

**YCAS is on the lookout for a catchy new *title* and *logo* for its newsletter. If you have any ideas, we would appreciate your suggestions. Please contact Dianne Zecchino ([diannez@yorku.ca](mailto:diannez@yorku.ca)).**





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**Peter Victor** Dean, Faculty of Environmental Studies, York University

**BESST Representative**

**GESSA Representative**

## Looking for a Look

**YCAS is on the lookout for a catchy new *title* and *logo* for its newsletter. If you have any ideas, we would appreciate your suggestions. Please contact Dianne Zecchino ([diannez@yorku.ca](mailto:diannez@yorku.ca)).**

# YORK





# YCAS News

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## Newsletter of the York Centre for Applied Sustainability

### CHILDREN AND CAR CULTURE: RESEARCH IN SUSTAINABLE TRANSPORTATION

*Catherine O'Brien*

If you had to choose between protecting a child and protecting a car, which would you choose? For most of us, our hearts say, "The child of course!" However, our actions often say, "The car."

This is a central concern in the research of Dr. Catherine O'Brien, this year's Canadian Pacific Post-Doctoral Fellow at YCAS. The aim of the fellowship is to carry out applied research on Sustainable Transportation. We only need to look at our congested streets and highways to recognize that we've lost the balance amongst cars, people and the environment.

Some of the consequences of this are obvious: increasing air pollution, with smog that is visible in most cities; streets that are unsafe for walking and cycling (particularly for children and seniors); environments that are unpleasant for pedestrians due to noise and the predominance of asphalt over green spaces. There are, however, enormous consequences which are less evident. Hospital admissions for respiratory symptoms increase in proportion to rising levels of air pollution. Ground-level ozone is a pollutant that causes inflammation in the lungs. Children may be particularly vulnerable to airborne pollution because of their narrower airways and increased need for oxygen relative to their size. (Transportation, Air Quality and Human Health Conference Proceedings, 1996). Arable farmland is lost to highways and urban sprawl. And then, there is the big one – greenhouse gas emissions. "Transportation in Canada is on an unsustainable path, with the transport sector generating about 30% of all greenhouse gases arising from human activity" (NRTEE, State of the Debate, 1997).

Many recommendations have been offered to reduce the impact of cars on our health and the planet. Technological innovations will provide some reduction in pollution. Various economic incentives have been suggested which would

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### SUSTAINABILITY REPORTING

*Michael Keating*

The York Centre for Applied Sustainability is a major partner in a project to create Canada's first report on sustainability trends. The report will present a package of key trend lines on environmental, economic and social issues, showing the inter-linkages among these sectors.

It will allow Canadians to see and understand the driving forces of change—such as rising population and consumption—and their impacts. These impacts, particularly environmental damage, are undermining long-term prospects for economic sustainability and human health. The report will use high-quality information from credible sources, but for the first time will assemble the key information in one place, and put it in context. The working title is *The State of Canada Report*.

The report will be produced by a newly formed group, known as the Sustainability Reporting Program. The report will first appear on the World Wide Web, a strategy that allows it to be built in stages, and modified as needed. Web technology also allows the report to electronically show the

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