

# GTAA 2004

## Sustainability Report



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# Message from the President



2004 will be remembered as an historic year for the Greater Toronto Airports Authority and Toronto Pearson International Airport. On the morning of April 6th, the first phase of new Terminal 1 was opened. While the event was celebrated by the arrival of the first flight from Vancouver, and received considerable media attention, what must not be forgotten is the hard work and dedication of all staff and contractors who worked tirelessly to ensure that the building would function efficiently, not only on opening day, but for the life of the building.

The new terminal is a tangible representation of the future of Toronto Pearson. The success of the Airport Development Program illustrates the GTAA's commitment to sustainability. The operation of the terminal includes many energy conservation measures that provide both economic and environmental benefits.

The GTAA recognizes that current and future airport operations must be considered in light of economic, social and environmental impacts and benefits. Work continues to refine operations to ensure ongoing safety and efficiency.

It is also important that the GTAA continues to strive for the balance of continued economic growth while ensuring the well being of employees and the surrounding communities which are served by the airport.



Environmental considerations are taken into account whenever possible in making operating and strategic decisions to help minimize any potentially negative impacts.

The GTAA continues to place a high priority on the environment, and the programs in place at Toronto Pearson help to ensure continuous improvement. In the spring the environmental management system was successfully audited by an external company to verify its value once again. In 2004 the GTAA led the way with the completion of Toronto Pearson's Air Quality study and the information collected will be used to identify and implement programs and policies to help reduce air emissions. The Energy Management Committee continues to make great strides at identifying areas to reduce consumption throughout the airport campus.

As always there are many challenges ahead, and the GTAA will continue to examine and explore new ways to improve and continue to incorporate economic, environmental and social considerations into the decisions that are made concerning the future of Toronto Pearson.

The GTAA continues to strive for the balance of continued economic growth while ensuring the well being of employees and the surrounding communities which are served by the airport.



# Corporate Vision

The GTAA's mission is to build upon the cornerstones of its business to create an airport system which contributes aggressively to economic development.

**Safety and Security:** The GTAA has developed and operates a safe and secure airport, with all necessary precautions in place and emergency teams kept in a state of appropriate readiness. These teams work in conjunction with outside agencies to ensure that the safety of airport users, employees and communities is paramount in all airport activities.



**Customer Service:** Developing Toronto Pearson International Airport into a global standard for airports to meet the travel and cargo needs of the flying public, the business community, the Greater Toronto Area and the country will always be at the heart of the GTAA's decision making.

**Financial Responsibility:** The GTAA is committed to financial responsibility and building its revenue base. Every reasonable and appropriate business opportunity will be pursued, and revenues will be reinvested into the further development of the regional system of airports.

**Environmental Sensitivity:** As the first North American airport authority to earn certification under the ISO 14001 international environmental standard, the GTAA is committed to prevention of pollution, continual improvement and compliance with legislation.

# Company Profile

The GTAA was incorporated in March 1993 as a corporation without share capital, constituted under Part II of the Canada Corporations Act. The GTAA was recognized as a Canadian Airport Authority by the federal government in November 1994, an acknowledgement that it was constituted fully in accordance with the terms of the National Airports Policy.

The GTAA is authorized to operate airports within the Greater Toronto Area ("GTA") on a commercial basis, to set fees for their use and to develop and improve the facilities. In accordance with this mandate, at the present time, the GTAA is operating Toronto Pearson International Airport (the "Airport" or "Toronto Pearson"), and is undertaking the planning work at the request of the federal government for a potential airport on the Pickering lands located to the east of Toronto.

The responsibilities of the GTAA for the operation, management and development of the Airport are set out in the ground lease with the federal government which was executed in December 1996 (the "Ground Lease"). The Ground Lease has a term of 60 years, with one renewal term of 20 years. The GTAA's priorities are to operate a safe, secure and efficient Airport and to ensure that the facilities provide the necessary services, amenities and capacity for current and future requirements for air travel for the GTA.

## Report Scope

If more information is required about this report, contact Randy McGill, Environment Manager via e-mail at [randy.mcgill@gtaa.com](mailto:randy.mcgill@gtaa.com). Further information can be obtained on the Greater Toronto Airports Authority and Toronto Pearson International Airport at [www.gtaa.com](http://www.gtaa.com).

### **Reporting Period**

The reporting period is from January 1, 2004 through December 31, 2004. Where available, this report includes historical figures for the 2002 and 2003 operating years. As this is only the second sustainability report produced by the GTAA, some of the required data has not been collected for 2004 and previous years.

### **Boundaries of Report**

The information presented in this document is for the GTAA's operations at Toronto Pearson International Airport in Toronto, Ontario, Canada. Only where indicated does the information pertain to the operation of other airports or potential airports.

### **Report Profile**

This second sustainability report from the GTAA is intended to build on last year's report and the feedback from that report. Through feedback from stakeholders, the Authority aims to gauge the effectiveness of the manner in which the information is presented and improve upon the format

for ease of access to data. Global Reporting Initiative guidelines were utilized when available and additional indicators have been incorporated to thoroughly cover areas of operations, particularly our environmental performance. Some information has come from the GTAA's 2004 Annual Report and other publications, all of which are available online at [www.gtaa.com](http://www.gtaa.com).

#### **Internal Report Assurance**

GTAA management assumes overall responsibility for the content of this report. A number of mechanisms are in place to ensure effective verification of presented material.

#### **External Report Assurance**

At this point in the creation and reporting of sustainable activity, the GTAA has yet to determine a single source to provide verification of content. Financial information has been derived from the 2004 GTAA Annual Report, a document externally audited for financial accuracy by Deloitte and Touche, however they have not had involvement in any form on this publication. The Airport Authority will continue to investigate appropriate external auditors to provide assurance of information in future reports.

#### **Additional Information**

More information and reports about economic, environmental, and social aspects of the GTAA's activities can be found on the Authority's web site at [www.gtaa.com](http://www.gtaa.com) or by calling 416.776.3580 or by faxing a request for information to 416.776.7593.

## Corporate Governance

The GTAA is governed by a 15-member Board. Effective in 2003, and with the prior approval of the Minister of Transport, the GTAA implemented changes to the nomination and appointment process for Directors. Five Directors are appointed from municipal candidates.

Each of the Regional Municipalities of York, Halton, Peel and Durham and the City of Toronto are entitled to provide, on a rotating basis, the names of three candidates, and the Board will appoint the most suitable or qualified candidate for each available position as a Director.

Three Directors are appointed by the Board on a cyclical basis from candidates solicited by the Board itself. Finally, the Government of Canada and the Province of Ontario are entitled to appoint two Directors and one Director, respectively. No current Director is a member of the management of the Corporation.

The GTAA's By-laws provide that nominees are to be appointed by the Board for a three-year term. When the transition to the new nomination process is complete, no Director may serve in such a capacity for more than nine years.

The GTAA's Board meets on a monthly basis and views its principal responsibility as overseeing the conduct of the business of the GTAA and supervising management. The Board ensures that long-term goals and the strategies necessary to achieve them are established and are consistent with the GTAA's objective of developing a regional network of airports that are operated in a safe, efficient and cost-effective manner. The Board also ensures that the necessary systems are in place to manage the risks associated with the GTAA's business and to monitor and measure management's performance in carrying out the Corporation's objectives.





# Financial Sustainability

Over the past several years, the GTAA has managed an extensive redevelopment program, while operating the existing facilities in a constantly changing environment. Many components of the ADP are now complete, including the first phase of the new Terminal 1 which successfully opened in April 2004. With much of the construction complete, the GTAA has shifted its focus to be more operational in nature, while continuing with the ADP and other capital projects. The GTAA recognizes the importance of an airport system which supports the economic development and cultural diversity of the GTA, and providing aviation facilities and services that achieve:

- the highest standards of safety and security
- excellence in customer service
- environmental stewardship and sustainability
- cost effectiveness and efficiency

From an operations perspective, this includes consideration of customer service, meeting or exceeding industry standards for safety and security, achieving high environmental standards, cost efficient operations and revenue generation. From a capital investment perspective, it includes replacing aging infrastructure, designing and constructing facilities based on future demand as well as current travel needs, optimizing the utility of the Airport's infrastructure through common use strategies and the effective management of capital expenditures.

The ADP, a major capital program which includes passenger facilities, runways, taxiways, utilities, roadways, and other facilities, has required ongoing capital funding. As a non-share corporation, the GTAA has established an overall program to enable ongoing access to the debt capital markets to fund the ADP and other capital projects.

## Operating Activity

Passenger activity levels are one of the most important performance measures for the GTAA and directly impact its financial results. During the 2001 to 2003 period, there were several significant events which had a negative impact on passenger activity and consequently on the financial performance of the GTAA. These included the terrorist attacks on September 11, 2001, the bankruptcy of Canada 3000 in November 2001, and the outbreak of Severe Acute Respiratory Syndrome ("SARS") in Toronto in 2003. With passenger volumes increasing significantly in comparison to prior years, 2004 was a year of recovery. At 28.6 million passengers, volumes for 2004 were just slightly below the peak of 28.9 million passengers handled at the Airport in 2000, and an increase of 15.8% over the 24.7 million passengers in 2003.

There are three traffic sectors at the Airport: domestic, or flights within Canada; transborder, or flights between Canada and the United States; and international, or flights between Canada and destinations outside of Canada and the United States. The most significant year-over-year increase was noted in the second quarter of 2004, since the second quarter of 2003 was the most severely impacted by SARS. The recovery in passenger volumes continued in the last quarter of 2004 with a year-over-year increase of 14.3% in that quarter.

### Rate Setting Approach

Aeronautical rates and charges are set by the GTAA annually to cover the projected operating costs on a breakeven cash basis for each year. To calculate the rates and charges for the subsequent year, projections are developed for passenger activity, air traffic (number of aircraft movements and Maximum Take Off Weight (MTOW)), non-aeronautical revenue, operating costs and capital costs, including debt service (interest and principal). In calculating these rates in a given year, certain capital expenses, such as debt service, reserve funds and reinvestment requirements, for facilities that are operating or will be operating for a portion or all of the year, are included. The amortization of these operating assets is not included in the rate calculations. In addition, capital costs, including interest, for projects under construction are funded through debt and are not included in the annual rates and charges until the assets become operational.

The two main components of the aeronautical rates and charges are the landing fee and the general terminal charge. Landing fees are set as a rate per tonne of MTOW to cover the projected operating costs associated with the airfield, plus ground rent, payments-in-lieu of real property taxes ("PILT") and specific debt service costs, offset by the projected non-aeronautical revenue and a specified amount of Airport Improvement Fee ("AIF"). General terminal charges are set to cover the operating costs for the common areas in the three primary passenger terminals and the Infield Terminal as a rate per landed seat, regardless of whether the seat is occupied by a passenger. The common areas include holdrooms, check-in counters, passenger processing areas and arrival halls, but exclude space that is exclusively leased to a tenant, such as office space, ticket counters, retail and concession space.

### Operating Expenses

The GTAA's operating expenses include the cost to operate and maintain the Airport, together with the interest and financing costs and amortization of assets. It is important to note that the expenses that are reported in the financial statements are on an accrual basis and are not entirely consistent with the expenses used in the calculation of aeronautical rates and charges. Specifically, amortization is not included in the calculation of the landing fee, while the principal component of debt service, which is not an operating expense, is included in the landing fee calculation.

### Taxes Paid

The Ground Lease sets out the calculation of the annual ground rent payable by the GTAA to the federal government based on a fixed amount per revenue passenger, adjusted for inflation. For the purpose of calculating the payment, the annual number of revenue passengers was capped at 25

## GROUND RENT

\$130.4  
MILLION:

Amount paid to the  
Federal Government in  
2004.

million for the first fifteen years, 26 million for the subsequent five years, and 27 million passengers thereafter. The reference to revenue passengers excludes certain passengers such as airlines employees, and will be lower than total passengers. The first threshold of 25 million was achieved in 1998, but in 2002 and 2003, revenue passengers dropped below the threshold, reducing the ground rent payments.

The ground rent reported reflects the amount due in accordance with the terms of the Ground Lease. In 2004, it was determined that the actual number of revenue passengers for 2002 and 2003 was lower than originally estimated, and an adjustment of \$12.4 million was made in 2004, reducing the 2004 ground rent reported from \$142.8 million to \$130.4 million. In July 2003, the Minister of Transport announced a 24-month ground rent deferral program for a total of \$41.6 million for Toronto Pearson in recognition of the impact of SARS. This reduced the amount of rent actually paid to the federal government by \$10.0 million and \$21.0 million for 2003 and 2004 respectively, but the full annual amount is recorded as an expense. These deferred amounts will be repaid over 10 years commencing in 2006 and therefore are recorded as a liability of the GTAA. These deferrals reduced the cash requirements for each year and the ground rent used in calculating the landing fee.

### Public Donations Guidelines

The GTAA recognizes its responsibility to the communities in which it operates. To demonstrate its understanding, the Authority makes a number of community contributions throughout the year in addition to contributing to scholarships. A policy has been introduced to govern the activities of sponsorship provided by the GTAA.

On an annual basis, funds permitting, the GTAA will contribute to charitable organizations where there is a direct link to the activities of the Authority. This includes organizations where there is participation by a significant number of GTAA employees and where the GTAA receives promotional exposure for its contribution. A recent example of this type of contribution includes the annual United Way campaign. Contributions are also undertaken when there are links with the operations of Toronto Pearson, such as Dreams Take Flight and Peel Crime Stoppers.

## Risks and Uncertainties

The past several years have emphasized the fluctuating nature of air travel and the additional volatility in demand due to external sources such as economic conditions, geopolitical unrest, government regulation and the financial uncertainty in the aviation industry. The significant increase in passenger volumes in 2004 confirms the strength of the demand for air travel in the GTA and has had a positive impact on the financial results of the GTAA. This is in contrast to the negative impact of events in 2003 such as SARS, Air Canada filing under CCAA, extreme weather conditions and the power blackout in August. The GTAA responded to these challenges with adjustments to short term development plans and active cost control measures, but given the long construction schedule for terminal and other airport facilities, the GTAA has remained committed to its long-term vision.

The financial stability of the aviation industry remains a risk for the GTAA, and certain losses have been incurred in prior years from airlines ceasing operation, declaring bankruptcy or seeking protection under CCAA. Although there is some risk from industry changes or exposure to a dominant air carrier, this is mitigated by the fact that approximately 70% of the passenger activity at the Airport originates or terminates at Toronto Pearson. In early 2004, WestJet moved its operations to Toronto and expanded further with the addition of United States destinations in the fall, and other air carriers have also added capacity. In addition there have been several requests for new air carriers wishing to commence operations at Toronto Pearson. This supports the premise that the origin and destination passenger base for Toronto will encourage other air carriers to enter the Toronto market to meet the demand.

The GTAA uses MTOW to calculate the landing fee per tonne and the number of seats on an aircraft to calculate the general terminal charge per seat. The risks inherent to this approach are that expenses may exceed projections, or aeronautical revenue may be lower than expected if passenger or aircraft activity volumes are not realized or non-aeronautical revenue projections are not achieved. In setting fees, the underlying rationale is that the airlines only pay for those assets for which they are receiving an operational benefit. As a result, with portions of the new Terminal 1 becoming operational in 2004, the debt payments associated with the operational portions of this asset were included in the rate calculation for 2004. The resultant increases caused some airlines and their trade associations to express concern about the effect of the increase in the GTAA's aeronautical fees. It is anticipated that the impact of these increases will be mitigated by continued increases in passenger activity, the high level of origin and destination passenger traffic in Toronto and the added value of improved facilities and service levels for passengers and airlines. The GTAA has the right to set fees and to implement a mid-year adjustment to aeronautical fees. Since assuming responsibility for the Airport, the GTAA has set rates annually with no mid-year adjustments to the aeronautical fees.

Any large construction project is subject to risks relating to costs, schedule, and other events. In 2004, the GTAA successfully opened the first phase of the new Terminal 1, reducing the ongoing construction risk from the levels that the GTAA had faced in prior years. During 2004, the

demolition of old Terminal 1 was completed and the construction of Pier F and the international hammerhead of new Terminal 1 commenced. The magnitude of the remaining construction is much smaller and so are the associated risks. It is anticipated that the GTAA will continue to meet the specific goals of the ADP within its construction budget and schedule.

There is always risk when raising funds in the capital markets, such as the cost and availability of funds at any point in time. External factors such as economic conditions, government policies, catastrophic events and the overall state of the financial markets can impact the GTAA's ability to access the capital markets at certain points in time. The debt program for the GTAA has been well received by the capital markets in Canada. The GTAA monitors the overall debt markets and works with its financial advisors to select the timing, size and term of issues to ensure continued access to the markets and to maximize opportunities. The GTAA has issued debt with a broad range of terms to provide a stable debt maturity profile for the future.

As part of the debt program, the Trust Indenture sets out certain covenants that the GTAA must meet, including two specific coverage tests for operating expenses and debt payments. If revenue or expenses are substantially different than projected there is a risk of not meeting the tests defined. The operating covenant states that the total revenue must at least cover all operating expenses, including interest and financing costs. The debt service covenant states that the net revenues, which may include available credit, must be at least 1.25 times the total interest and financing costs, including notional principal. In meeting these tests, the AIF revenue included is the amount transferred out of the AIF Reserve Fund, and may not be the same as the AIF earned. If the debt service covenant test is not met in any year, the GTAA is not in default of its obligations under the Trust Indenture so long as the test is met in the subsequent year.

The availability of adequate insurance coverage is subject to the conditions of the overall insurance market and GTAA's claims and performance record. In previous years there have been significant changes in the insurance markets for aviation, largely driven by the events of September 11, 2001 which limited certain insurance products and resulted in higher pricing. The GTAA has been successful in placing all of its insurance needs and recently noted some savings in pricing due to changes in the market and its claims record.

**PICKERING AIRPORT  
DRAFT PLAN  
REPORT**

Released in November of 2004, the draft plan report outlined possible scenarios for the Pickering Lands.

### **Pickering**

Over the past four years, members of the GTAA's Pickering team have been hard at work developing a plan for a potential future airport on the Pickering Lands. This process, which involved extensive community participation, culminated in November 2004 with the release of the Pickering Airport Draft Plan Report. The work completed by the GTAA is now undergoing a review by Transport Canada.

Following this review, an environmental assessment conducted by the Canadian Environmental Assessment Agency will begin. At the end of this process, the Federal Government will determine if an airport in Pickering should proceed. The earliest an airport could be operational is Pickering is 2012.

Shortly after the release of the Pickering Airport Draft Plan Report, the GTAA held a series of seven public opens houses to receive feedback from the public on the proposal. The GTAA has incorporated this input into the planning process and the development of a Project Description, and is now preparing to begin the environmental assessment phase of the project.

In advance of the environmental assessment, Transport Canada is undertaking a review of the work completed by the GTAA. Once both this review and the environmental assessment have been completed, the process will continue on track with a decision on the Pickering Airport by Transport Canada at or around 2009.

# Environmental Sustainability

## ISO 14001 Environmental Management System

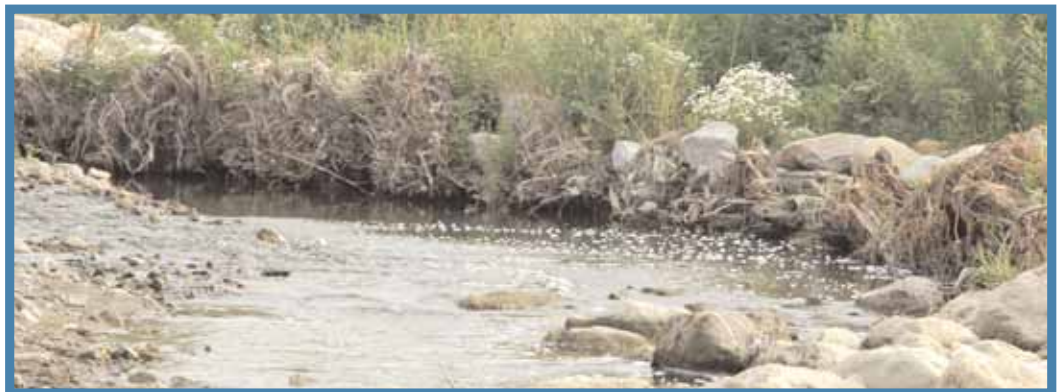
### Changes to our EMS in 2004

Each year as part of the ISO 14001 Environmental Management System the GTAA is required to review all significant aspects. During the annual aspect review, the GTAA reassessed three aspects to determine if they were still significant. These included: hazardous substances, contaminated sites and procurement and contracting.

When re-evaluating the significance of the hazardous substance aspect, the GTAA examined the numerous achievements that had been made in this area since we first started. As new workplace safety programs have been implemented eliminating many of the hazardous substances, the focus of the aspect has changed from health and safety to one of environmental protection. The current targets and programs that have been created under this aspect of hazardous substances deal with products such as pesticides and road salt. As a result, the new aspect “Ecology” has been introduced. Previous programs and procedures that were created to help with the management and replacement of hazardous substances use at the airport are still in place and will continue to be followed.

During re-evaluation of the contaminated sites aspect, it was noted that the remaining known contaminated sites are impacted through airport development. Since this is the case it was decided to include this aspect under the existing airport development aspect.

The procurement and contracting aspect was reassessed and it was decided that with the implementation of new programs, procedures and policies now in place, future concerns are being addressed. The aspect will remain part of the ISO 14001 EMS, and will be managed accordingly, but will no longer be considered significant.





### ISO Certification

In April 2004, the GTAA successfully completed its external Maintenance Audit to verify that all requirements outlined in the ISO 14001 standard are still being met. Based on the audit, there was one Minor Corrective Action raised and two Opportunities for Improvement identified. The findings of the audit follow below:

#### Minor Non-Conformance

Clause 4.6 Management Review: Although evidence was provided to demonstrate that members of the Board of Directors, Environment Management Representative and environmental staff were involved in the 2003 quarterly management review, objective evidence could not show that the President and CEO had been involved in the reviews. It is also noted that the Board of Directors are non-executives of the GTAA. ISO 14001 clause 4.6 requires top management (executives) to review the possible need for changes to the policy, objectives and other elements of the EMS in light of EMS audit results, changing circumstances and commitment to continual improvement to ensure its continuing suitability, adequacy and effectiveness.

#### Opportunities for Improvement

OFI 4.2 Policy: The policy could explicitly include ecology to provide a framework for developing objectives and targets.

OFI 4.5.1 Monitoring & Measurement: The organization should ensure that Certificates of Analysis for calibration gases utilized for the CO sensor are retained and included as environmental records when the next supply is purchased through central stores. Also, Table 1 - List of Procedures, Monitoring & Records - Environment Department could more clearly differentiate between maintenance and calibration records.





## Air Quality

Air quality is always a concern for an airport. One of the GTAA's ISO objectives is to 'improve air quality at the airport to ensure meeting Federal/Provincial air quality guidelines'. The GTAA monitors the air on a continual basis and makes every effort to control emissions where possible.

### Air Quality Study

After approximately three years, Toronto Pearson's Air Quality Study, the most extensive study of its kind ever to be undertaken at a Canadian airport is complete. The objective of the study was to determine the impacts on local air quality of existing and future activities at Toronto Pearson relative to other activities in the area, and assess the corresponding risk to human health. The study domain encompassed a 15km by 15km area with the airport located at the centre. The objectives were addressed in five phases:

**Phase 1** - Detailed inventory of air contaminants emissions at Toronto Pearson;

**Phase 2** - Emissions from vehicular traffic, biogenic sources, industrial, commercial and domestic activities within the study boundary, excluding the airport itself;

**Phase 3** - Determine the current and predicted the future combined impacts on air quality from both airport and surrounding off-airport activities based on the Phase 1 & 2 inventory data;

**Phase 4** - Establish an air quality impact of airport activities through concurrent monitoring of pollutants at locations upwind and downwind of the airport; and,

**Phase 5** - Human Health Risk Assessment.

For more information on the Air Quality Study, please visit the GTAA's website at [www.gtaa.com](http://www.gtaa.com).

#### AIR QUALITY

## TARGET:

'improve air quality at the airport to ensure meeting Federal/Provincial air quality guidelines'.



### Air Emissions

Operations at an airport can result in several different types of air emission. The GTAA wants to be aware of what substances are being emitted into the air in order to put together a meaningful emission reduction program.

The GTAA reports annually to Environment Canada's National Pollutant Release Inventory (NPRI) which includes a section on air contaminants including carbon monoxide, oxides of nitrogen, particulate matter, sulphur dioxide and volatile organic compounds. The GTAA is required to report if a threshold value is met. Air emissions are calculated from boilers, generators, storage tanks and the cooling towers that are located at the airport and operated by the GTAA. In 2004, the reporting threshold was only reached for both Particulate Matter 10 and 2.5 (PM10 & PM2.5).

Greenhouse Gas Emissions were also calculated for the GTAA and in 2004 were approximately 35,983 tonnes of CO<sub>2</sub> equivalent. The GTAA sources contributing to this were stationary combustion emissions from boilers, generators and the fire training area as well as the on site vehicle transportation of GTAA fleet vehicles.

In addition to both of these, the GTAA also reports any release it has of ozone depleting substances. In 2004, there were eight releases of R 22 totaling 0.008 tonnes of CFC-11 equivalent.

(Specific emission data is presented on page 36 - Environmental Data Summary)



## VEHICLE EMISSIONS

The GTAA fleet has recently been reduced by 10 vehicles.

### Emissions Reduction Program

The GTAA is in the preliminary stages of developing an Emissions Reduction Program to fulfill its target requirements to 'prepare an agreed upon Emission Reduction Program based on Emissions Modeling Study and Human Health Risk Assessment Study. Implement components identified for 2005'.

A list has been created identifying different areas where a reduction in emissions can be realized. At the end of 2004 the *Low emission internal combustion & electric vehicle in and under the terminals policy* was developed and implemented.

### Vehicles Emissions

In addition to the above policy, to help reduce the GTAA's vehicle emissions the following initiatives have also been taken:

- Clean Air emissions testing is an ongoing activity for GTAA fleet vehicles. A total of 144 vehicles were done in 2004.
- Initial order placed for implementation of the Fast Charging Electric Vehicle System in Terminal 3.
- Nine of the diesel buses have had Oxidation Catalytic systems added to the exhaust system to reduce emission levels.
- The fleet size was reduced by ten vehicles in 2004 - eight lease returns and two vehicles removed from service.



## Noise

Noise is always a concern for communities surrounding the airport. As a result, one of the GTAA's ISO objectives is to **'ensure continual monitoring of aircraft noise; serve public concerns and inquiries regarding noise, and to influence airlines and air traffic control (Nav Canada) to minimize noise'**. To help achieve this objective, three targets were in place during 2004.

The GTAA is continually improving its monitoring of aircraft noise throughout the surrounding communities and exceeded its target to **'Improve the monitoring of aircraft noise and increase the effectiveness of aircraft noise analysis by installing six fixed Noise Monitoring Terminals in communities around Toronto Pearson International Airport'**. By the end of 2004 the GTAA had installed seven new Noise Monitoring Terminals and is on track to have an additional two operational by the end of 2005.

To enhance public awareness of the airport's noise management program and associated mitigation efforts, the GTAA is in the process of developing and publishing an annual **'Noise Management Report which will provide the public with information concerning the GTAA's Noise Management Program, community issues, noise and complaint data, as well as noise management issues and the GTAA's mitigation initiatives.'**

The final target currently in place is to work with air traffic control and airline operators to **'Mitigate the noise impacts on communities by developing VFR (Visual Flight Rules) departure routes over areas of least residential'**.

For more information on Noise, refer to the Noise Management Section located on the GTAA's website - [www.gtaa.com](http://www.gtaa.com).



## Waste Management

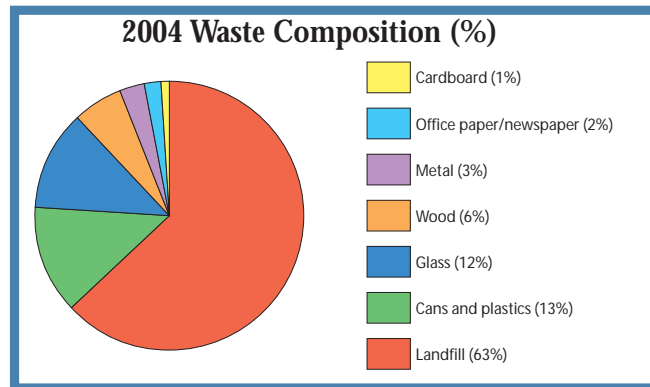
When operating an airport with three terminals and numerous other support building it is important to maintain an adequate waste management program. The GTAA's ISO waste management objective is to **reduce waste and promote recycling programs**. The GTAA is not only concerned with the typical non-hazardous and hazardous waste but also has put forth great efforts to manage our construction and demolition waste.

To help minimize the amount of waste that is sent to the landfill, several programs and targets have been established for the different areas where waste is produced.

### Non Hazardous Waste

The GTAA has implemented recycling programs at each of the facilities it operates. Recyclable material includes: cardboard, office paper, newspaper, cans and assorted plastics, glass, wood and metal.

(Specific waste data is presented on page 35 - Environmental Data Summary)



The GTAA needs to be aware of the type of waste being produced as a result of new operations or facilities to allow us to then determine the most effective methods to decrease the total quantity ending up in a landfill. In acknowledgment of the new Terminal 1 (opened April 2004) the following target was created:

### Monitor waste streams in New Terminal 1 to set baselines for 2006 diversion rate.

Significant effort was put into waste management during the terminal design. However, since the building is new, an examination of the waste types and quantities produced needs to be tracked in order to be able to determine what wastes are being produced and how best to manage them. It is important to note that the existing programs for recycling and diverting waste are already in place throughout the terminal. In addition, the recycling program has been complemented by an Organic Waste Slurry System which is a grinder for food waste produced by the preparation kitchens. As the restaurants do not have access to this system but also have a large amount of food waste, an Organic Stream is set to be added to the waste management program at Terminal 1 in 2005. This will prevent food waste and coffee grounds from the restaurants ending up in the landfill.

### Logistics Centre

All food and supplies for the terminals first pass through a central logistics centre. This provides an opportunity to control the amount of packaging and ultimately, the amount of waste entering these facilities. As a result of the Logistic Center's operation the following two targets were developed to again help reduce the amount of waste unnecessarily making its way to the landfill.

**Develop a baseline for future recycling of shrink wrap associated with the Logistics Centre.**

**Develop a baseline for future diversion of recyclable waste form landfill associated with Logistics Centre.**

Since the Logistics Centre is relatively new, it is important again to track the amount of waste and recyclables that are being handled to then determine if there are any areas where an improvement can be seen. Once a reliable baseline is determined, future targets to ensure continued improvement can be set.

### **Hazardous Waste**

To ensure that hazardous waste is handled and managed appropriately at the airport several initiatives have been undertaken:

- Procedures have been developed for handling and disposing of hazardous materials.
- A Petroleum, Oil, Lubricants Storage Building is used to stored waste product until it is disposed of, at least every three months as required. This compound is routinely inspected to ensure that conditions do not arise that could be harmful to the environment.
- In 2004, the GTAA disposed of approximately 178,442 litres of hazardous materials on 38 manifests.
- In 2004, 19682 lamps were sent for recycling. From this the following materials were recovered: 5331 kg of glass, 76 kg of metals, 73 kg of phosphor powder and 0.9 kg of mercury.
- Unused computers are also sent for recycling.

(Specific hazardous waste data is presented on page 35 - Environmental Data Summary)

When hazardous products need to be re-ordered the possibility for using an alternative product is assessed. A procedure is in place to continually research and ask the supplier if there is a more environmentally friendly product that could be used.

## CONSTRUCTION WASTE

### TARGET:

Reuse and recycle 85% of construction and demolition waste - including concrete, metals and wood.

#### Construction and Demolition Waste

It was important that the GTAA recognize the possible impact the Airport Development Program currently underway could have on the environment and put in place the necessary actions to minimize these impacts. To ensure that large amounts of waste are handled in a responsible, environmentally sound manner targets were established and programs developed that will remain in place until the development is complete.

#### Reusing & Recycling

Targets were incorporated directly into the project contracts. Measures such as saving the concrete from the old Terminal 1 as it was demolished and crushing it on-site then using it to stabilize the new apron helped to achieve the target '**reuse and recycle 85% of Construction and Demolition waste**'. The success of this target has not only been measured with environmental achievements but also financial savings.

#### Remediating Soil

As a result of the many years of aircraft fueling, construction activities uncovered contaminated soil under the apron areas during excavation. Again, trying to minimize the impact on the environment the GTAA set another target to '**remediate a minimum of the 95% petroleum hydrocarbon and glycol impacted soil/gravel encountered at Pearson Airport at the Soil Remediation Facility, for reuse on-site**'.

(Specific construction and demolition data is presented on page 36 - Environmental Data Summary)



## Improving Water Quality

The airport land is home to two creeks. Potential pollutants, if not managed properly, may end up in one of these creeks. A couple of the GTAA's ISO objectives are to 'improve storm water quality at the Airport' and 'influence reduction of frequency and severity of spills'. A detailed water sampling program and efficient response to environmental incidents, including spills helps ensure that the water leaving the airport has not been impacted.

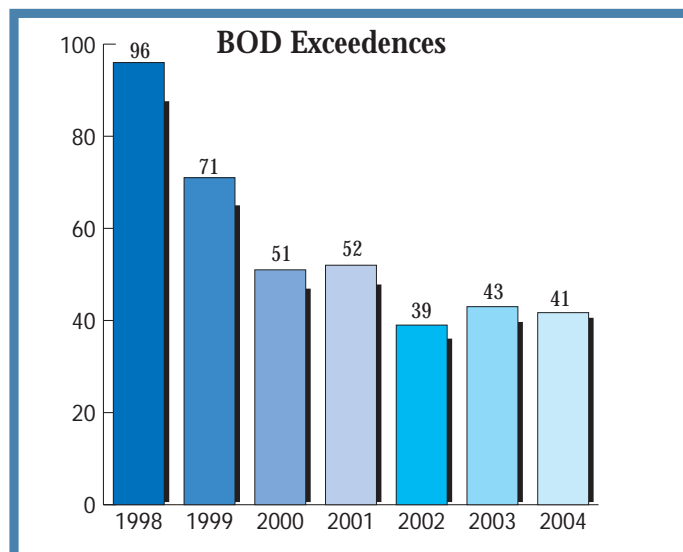
### Water Quality Program

#### Monitoring

Surface water sampling is conducted on a weekly basis at the airport to identify any problems and ensure that the runoff leaving our property is within Federal Guidelines. As part of our ISO 14001 EMS, a long term target has been in place to 'Achieve 0 exceedences of Federal Guidelines for stormwater.' While this target may never be reached, the total exceedences for all measured parameters have dropped 5% from 2002.

Stormwater management plays a vital role at the Airport. Many plans and projects have been put in place to ensure that drainage is managed appropriately. As a result, there have been significant reductions in exceedences from 1998 to 2004; all despite increasing aircraft and terminal operations, continual construction activities and routine maintenance. Within the last year, improvements have been made to the stormwater program to assist in achieving this target. Small enhancements such as better education of contractors, tenants and employees regarding earth moving, type of products used and the occurrence of potential spills has helped to control stormwater pollutants. In addition, the development of the airport has allowed us to control and localize environmental risks if they arise. Stormwater sampling at the airport includes the following parameters: Ammonia, BOD, Nitrite, Oil and Grease, Phenol, Phosphorous, TSS and Glycol.

(In addition to the graphs shown for BOD, TSS and Glycol, sampling results for the past 3 years are presented on page 36 - Environmental Data Summary)

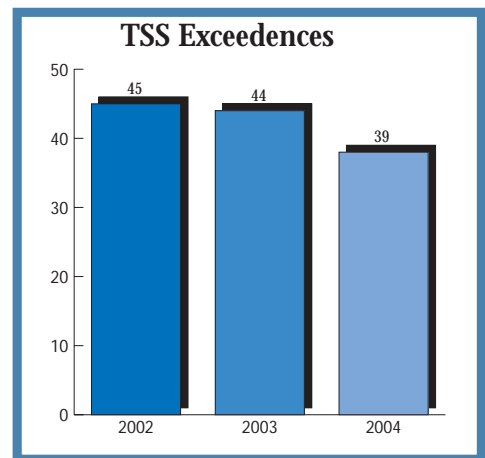




Stormwater Facilities

Toronto Pearson has four significant stormwater facilities which were constructed to assist in managing stormwater runoff from airport property. These facilities were designed to deal with both water quantity and water quality. Three of these facilities are large underground storage facilities equipped with oil/water separators and sedimentation tanks, while one is a bioengineered wetland system. In addition, there are a large number of surface retention ponds around the airport that also assist in managing the quantity of water that leaves airport property.

These facilities are capable of controlling the amount of sediment and removing any fuel or oil that has potential to enter the creeks. In addition, they also have the ability to divert water to the sanitary sewer if required. Over the course of the 2004/2005 winter season almost 300 million litres of water contaminated with deicing chemical was collected airport wide and prevented from entering the environment. During annual maintenance of the facilities over 1 million litres of sediment and sludge was removed from these structures allowing minimization of the sediment loading that could have impacted the environment. Over all, total suspended solids have decreased over the last few years as a result of these facilities; despite increased construction activities.

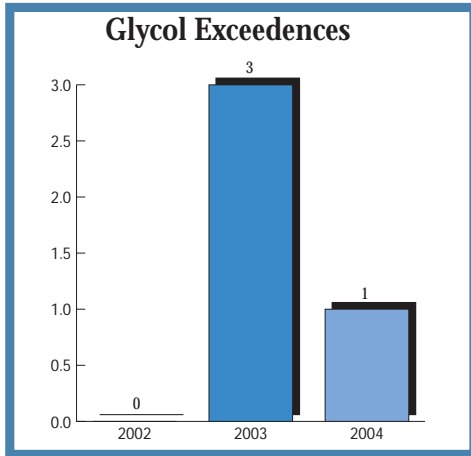


(Specific effluent data is presented on page 36 - Environmental Data Summary)



### Deicing Operations

Deicing activities during the winter months can have a serious impact on the surrounding environment. As a result many measures have been implemented to mitigate our impact on the natural environment, some of which include developing targets to ensure that our plans and procedures are effective. This winter season was cooler than the last and also received more wet precipitation. An increase in both weather conditions and the number of aircraft movements resulted in an increased use of deicing chemicals. This year alone, more than 7 million litres of deicing chemical was applied to more than 15,000 aircraft. Even with an increase in chemical usage, and despite continuous controls and efforts, there is potential for some fluid to escape. In the year 2004, one exceedence was identified and occurred as a result of analytical laboratory error. Further procedures were put in place to rectify the problem and no reoccurrence has taken place since.



No glycol exceedences were identified exiting the CDF, thus achieving the target to: **'Reduce number of exceedences from the CDF by 50% per annum from the year 2000 base of 16 exceedences'**.

Also glycol exceedences were discovered coming from Terminal 3 helping us achieve another target: **'Achieve 0 glycol exceedences of stormwater quality from Terminal 3'**.

A target was set to **'Implement a new glycol processing (recycling) system for high concentrate spent deicing fluid from the CDF'**.

In April 2004, the GTAA released a Request for Proposals (RFP) for the processing of all of the Central Deicing Facility's high concentrate glycol.

The GTAA has recently completed negotiations with Inland Technologies to process the glycol to a 50% concentration for resale to other markets; primarily the automotive industry. The GTAA hopes to have the recycling plant on site by the end of 2005. The glycol processing will begin in 2006.

### Construction

To prevent sediment loading in the creeks resulting from construction activities, such as excavation, exposed soil and caisson drilling, all airport projects must have a Sediment and Erosion Control Plan. In addition, GTAA Environment Staff monitor the different construction sites to ensure measures are in place and plans are being followed.

## Spills

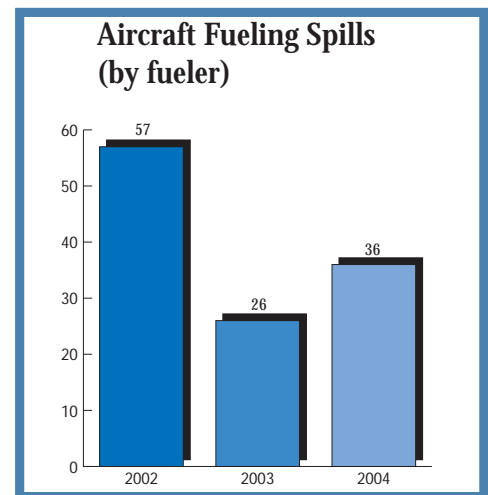
As a result of the many different activities that take place everyday at an airport and the number of employees and different equipment, a spill is always possible. Prevention is always our first priority, but in the event a spill does occur the GTAA has developed and follows the following two documents: Disaster Plan and Emergency Procedures Plan (DPEP) and the Environmental Emergency Contingency Plan (EECP). The GTAA also has a contract with environmental emergency response companies should a large incident occur and their services are required.

In addition to fuel spills that can result from equipment, human error, vehicular or aircraft incidents we also can have hydraulic spills, lavatory spills, oil, hazardous cargo and glycol.

(Specific data on spill frequency is presented on page 36 - Environmental Data Summary)

### Aircraft Fueling Spills

Since aircraft fueling is an ongoing activity at the airport which has potential to result in spills a target was established to achieve **'10 % less spills during aircraft fuelling by fueller on a per flight basis, on the airport apron over 2002 baseline'**. Since 2002, despite a slight increase in spills in 2004 there has been an overall reduction of 33% in spills. Quarterly Fuel Spill Committee Meetings aid in determining causal factors and implementing rectifying action. Regular fuel spill inquiries with the fueling companies have also contributed to achieving the target.



### **Emergency Planning**

Many different incidences can arise at an airport. To be better prepared the GTAA established a target for **'Preparing an Airport risk and hazard analysis review in order to obtain an up-to-date baseline against which to measure response and action plans'**. To date, historical data on occurrences and identified hazards has been collected and the probability of occurrence has been estimated. This information will be used to create an airport risk profile.

## Improving our Lands

The GTAA is always concerned about the land and habitat in and around the airport. Ensuring that our impacts are minimized has become a key focus of ours. Our EMS has identified both Ecology and Wildlife Control as significant aspects.

### Ecology

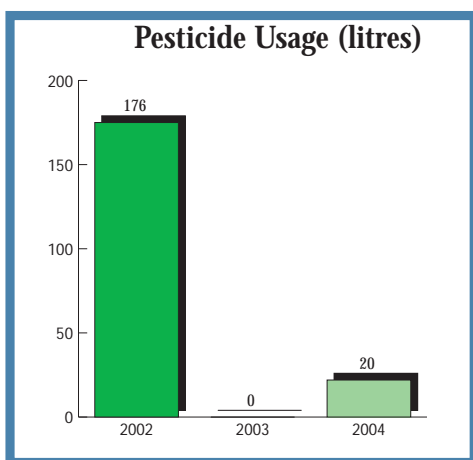
As part of our commitment to improving the environment in and around the airport, the GTAA makes every effort to identify different ways that chemical substance use can be reduced.

### Sodium Chloride

Sodium Chloride, more commonly known as road salt, is used as a deicing agent to ensure the safety of people in the winter on roadways at the airport (sodium chloride is not used on any surface that can be accessed by aircraft). Recognizing that it can have some effects on the environment, the GTAA set a target to 'develop a baseline and management strategy for future reduction in sodium chloride usage'.

In order to achieve this goal there are two main objectives that must be completed. The first is to collect data and information from the past three years. The baseline data is from the 2004/05 winter season. Data is being compiled into a report indicating the not only salt usage but also temperature and precipitation as both these have a direct impact on quantities used. The second objective is the development of a salt management plan. The GTAA is currently in the process of outsourcing a consultant to develop and manage the process.

(data on usage provided on page 36 - Environmental Data Summary)



### Pesticides

The GTAA has programs in place to reduce its application of pesticides. Annual vegetation inventory and assessment is conducted at the airport to determine pesticide treatment requirements. This includes the following:

- Turf area assessment - identify and prioritize areas which require fertilization, reseeding and/or noxious weed control.
- Concrete surface and pavement area assessment - identify and prioritize areas which require non-selective vegetation control.
- Tree/shrub health assessment and preservation report - identify and prioritize trees and shrubs which require implementation of fertilization, pruning, replanting, disease and/or insect control.

- Alternative method assessment - determine the feasibility of using alternative methods to reduce the applications of pesticides.

As an alternative to traditional pesticide use, the GTAA also treats areas with Horticultural Vinegar in place of Gylosphate (a non-selective herbicide).

The West Nile virus was first discovered in Southern Ontario in the spring of 2001 and in order to combat the spread of the infectious disease the Region of Peel, working with various health organizations has developed a control program. The Mosquito Abatement Program for the airport has been in place since the summer of 2003 to work in conjunction with the Region of Peel to combat any further spread of the virus.

(data on usage provided on page 35 - Environmental Data Summary)

#### Creek Rehabilitation

To improve the creeks running through the airport, a target was set to '**Complete aquatic and riparian habitat improvements on Etobicoke and Spring Creek**'.

#### COMMUNITY ACCESS

Planning is underway to investigate the feasibility of a pedestrian/cycle trail along Etobicoke Creek from Highway 410 to Derry Road.

Under this target, three main projects are underway:

##### *Spring Creek Retrofit*

- A temporary irrigation system was installed in July 2004 and will be utilized in 2005.
- The project is under warranty to ensure that the vegetation has established.

##### *Region of Peel Sanitary Sewer Twinning*

- This project began in December 2004 and occurs along the Etobicoke Creek.
- Included in this work are five minor restoration sites along the lower and upper reaches of Etobicoke Creek.

##### *Creek Rehabilitation*

- A business case for this work has been approved.
- A monitoring program began in late 2004.

#### Pedestrian/Cycle Trail

In addition to protecting and improving the natural habitat at the airport, the GTAA is interested in making some of it available for the surrounding communities to enjoy. The initial planning and feasibility for our target to '**Plan for a Pedestrian/Cycle trail along Etobicoke Creek from the 410 to Derry Road**' is underway.

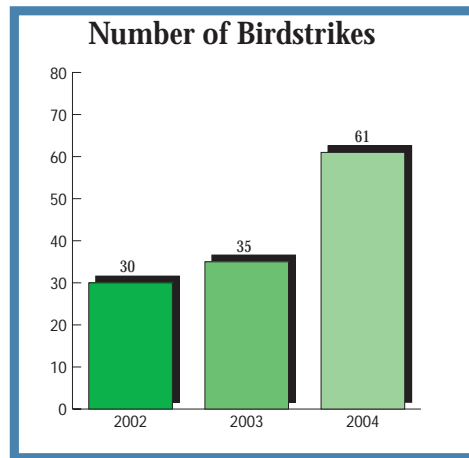
WILDLIFE  
CONTROL

## TARGET:

Reduce the annual number of wildlife strikes by 10%.

### Wildlife Control

Toronto Pearson is home to many bird and animal species. The GTAA contracts Wildlife Officers that are on patrol from one hour before dawn to one hour after sunset to ensure wildlife will not interfere with airport operations. The GTAA has a target in place to achieve a 'reduction in the annual number of wildlife strikes and bird weight per 1,000 flights by 10% by end 2005 based on the last three year's average data'.



Within the last year there has been a tremendous growth in the bird population around Pearson Airport - an increase of approximately two times the number of birds. That coupled with an increase in traffic movements and a 25% better reporting rate is making this target a challenge to achieve. The following are a few initiatives that are in place to help achieve the target:

- A very complex wildlife program is on-going at the airport. It is constantly being fine-tuned through the use of a computerized database to clearly identify deficiencies.
- Monthly Wildlife Control Meetings are proving to be an effective forum for strike reduction, in conjunction with establishing a sustainable long-term vegetation plan and increasing communication between agencies.

## Minimizing our Consumption

Operating an airport and all the associated activities requires the use of a large amount of resources. The GTAA realizes the importance of doing our part to conserve our resources wherever possible.

### Employee Awareness

To ensure employees realize what they can do to help minimize our overall consumption, a target was set to 'develop an Environmental Awareness Program for resource consumption'.

In an effort to educate GTAA employees, Resource Consumption was the theme for the GTAA's annual Environment Week activities. Each day a display was set up to provide employees with simple tips and general knowledge on what they could do to help reduce consumption at work and at home. The displays included: Office Supplies - 3Rs, Energy Consumption, Clean Air and Climate Change, Water Consumption and Nature-Ecology.

ISO Significant Aspects		<b>Air Quality</b>	<h3 style="text-align: center; margin: 0;">GTAA Environmental Policy</h3> <p>The Greater Toronto Airports Authority (GTAA) is committed to operate airports in an environmentally responsible manner, in compliance with relevant environmental legislation and regulations. Our commitment is reflected in GTAA's day-to-day operations to minimize impacts on the natural environment and local community.</p> <p>The GTAA is committed to continual improvement and the prevention of pollution. It is our policy to set environmental objectives and targets and implement action plans for significant environmental aspects identified at the airport. It is also our policy to monitor progress, utilize best management practices and apply cost-effective technology to strive to improve environmental performance.</p> <p>To successfully implement this policy, the GTAA utilizes an Environmental Management System (EMS) which meets the specifications of the ISO 14000 international standards series and which includes:</p> <ul style="list-style-type: none"> <li>• utilizing environmental audits to ensure compliance with applicable laws, regulations, as well as policies, objectives and targets;</li> <li>• conducting regular environmental monitoring of environmental aspects such as water quality, air quality, noise, airside development, hazardous substances and spill incidents;</li> <li>• continually developing and promoting environmental standards applicable to day-to-day airport operations which impact the environment;</li> <li>• integrating environmental assessment and management practices into the decision-making process used to plan, design, construct and operate the airport;</li> <li>• communicating environmental policy, roles, responsibilities, objectives and targets to GTAA staff; and</li> <li>• producing an annual environmental performance report to ensure regular reporting to the CEO and Board of Directors, GTAA employees, and the interested public.</li> </ul> <p style="text-align: right; font-size: 0.8em;">April, 2004</p>
		<b>Airport Development</b>	
		<b>Ecology</b>	
		<b>Environmental Emergency Planning</b>	
		<b>Noise</b>	
		<b>Property Management</b>	
		<b>Resource Use</b>	
		<b>Spills</b>	
		<b>Waste</b>	
		<b>Water Quality</b>	
		<b>Wildlife Control</b>	

### Energy Consumption

Operating an airport requires a lot of energy. In addition to the energy requirements of the terminals and other support buildings, the airside runways, taxiways and aprons all require lights. The GTAA realizes the importance to be energy smart and has set a target '**Through energy conservation and retrofitting, reduce existing electrical energy demand in each GTAA managed facility by 1% per year**'. The GTAA's Administration building decreased its energy consumption by almost 26% in 2004 as compared to its usage in 2003. The individual tracking of other GTAA buildings did not begin until February 2004.

The total amount of electricity used at the airport in GTAA facilities and airside in 2004 increased by approximately 57% over 2003 consumption numbers. This sizable increase can be attributed to the following activities or changes that occurred in 2004:

- opening of the New Terminal 1 in April 2004 and the continued operation of old Terminal 1 until it was demolished later that year in November;
- new Terminal 1 parking garage;
- additional inset lighting on airfield;
- continued construction activities; and,
- commissioning and opening of Infield Terminal.

(data on energy consumption is provided on page 35 - Environmental Data Summary)





### Energy Management Committee

An Energy Management Committee was established at the GTAA to identify areas where energy consumption could be reduced and cost savings realized. In 2004 the implementation of conservation measures began and the following initiatives were undertaken:

- lighting schedules were implemented to reduce lighting in non-operational areas;
- photocells were used for interior lights to take into account natural light;
- HVAC systems were scaled back and temperatures lowered at night;
- three new escalators were installed that use lower voltage when there is no load (person) using the equipment; and,
- relamping occurred at the Moore Creek Stormwater Facility.



#### ENERGY CONSUMPTION

The energy saving initiatives outlined in this report will result in not only a reduction in energy consumption, but an increase in cost savings.

Several initiatives were also identified and scheduled for 2005. These include:

- implementing a lighting program to turn lights off in rooms after a certain period of time and to decrease light levels in unoccupied areas;
- relamping light fixtures from 100 W incandescent to 15 W compact fluorescents;
- installing photo cells to take advantage of natural light whenever possible; and,
- installing 37 additional escalator motor control devices.

The implementation of these initiatives will result in a reduction in energy consumption and reap associated cost savings.

**WATER  
CONSUMPTION**

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**TARGET:**

Achieve a 20%  
reduction of water  
consumption at the  
airport.

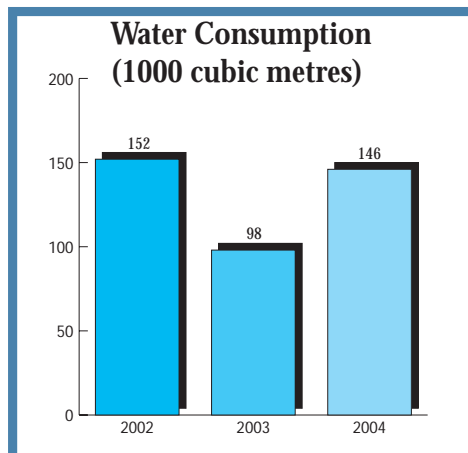
**Water Consumption**

Water is consumed at the airport through various activities. In addition to normal building usage, a large amount of water is used for construction purposes and in the GTAA's Central Utilities Plant (CUP) during the heating/cooling process. Water main breaks, if and when they occur, also increase the water consumption for the GTAA.

The following list of incentives has recently been actioned to help achieve our ISO target, which was to 'Achieve 20% reduction of water consumption at airport from 2000 baseline'.

- Preventive maintenance program is in place to inspect all washrooms to ensure water-conserving fixtures are serviceable and adjusted to specifications;
- All new tenant areas are now equipped with water meters and new leases have tenants responsible for water consumption;
- Fire hydrants (new installations and existing inventory) are now equipped with anti tamper devices to prevent theft of water at Toronto Pearson;
- Working closely with Utilities Department to ensure CUP runs efficiently to reduce water used for H.V.A.C; and,
- Review targets and goals with employees.

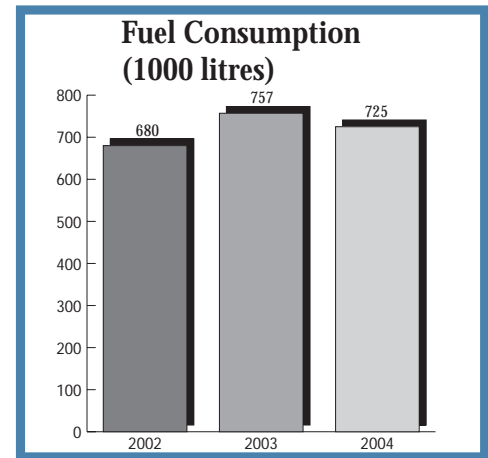
Despite the GTAA's efforts, this target was not achieved. A new target for 2005 will be to 'Establish a reliable baseline for water consumption'. As the airport infrastructure has grown greatly in size over the past five years, it is important to establish a new baseline that takes this into consideration. From this baseline, reduction goals can be set.



### Fuel Consumption

Despite efforts, our target to 'reduce light vehicle fleet average fuel consumption by 10%, based on 2002 data' was not achieved. In 2004 the average consumption per GTAA vehicle was 2662.73 liters per year, representing a 1% decrease when compared to the 2687.65 liters per vehicle that was used in 2002.

Total Fuel consumption has only increased slightly over the past two years, despite the larger increase seen in 2003.



(data on fuel consumption is provided on page 35 - Environmental Data Summary)

### Fleet Rationalization Study

A fleet rationalization study is underway to determine if we need all of the fleet vehicles that we have. In addition to reducing the actual fleet size, the study includes looking at the type of vehicle and its use. Where possible, smaller, more environmentally friendly vehicles are replacing older, larger vehicles. The fleet size has been reduced by 10 vehicles to date while adding several hybrid cars.

### Biodiesel

A B10 blend of biodiesel was used throughout the winter months. Minor difficulties have been encountered with the heaters in the buses and will be monitored to determine if it continues.

Biodiesel has accounted for approximately 25% of total diesel fuel used in 2004 exceeding the target to 'Convert 15% of diesel fuel use to biodiesel'.

(for detail see page 35 - Environmental Data Summary)

## Environmental Compliance & Fines

The GTAA conducts environmental compliance audits on both its own facilities as well as tenant facilities. The audits are conducted to ensure that all regulations are being followed and to suggest best management practices.

As a result, a target was established 'To audit and enforce the storage of hazardous materials by GTAA tenants'.

The GTAA's Fire Department conducts inspections of tenants to ensure that they are meeting all the requirements of the National Fire Code, which includes the storage of flammable and combustible hazardous substances. If a tenant is found not in compliance steps are taken to rectify the issue and insure compliance.

In addition to the audits conducted by the GTAA, Environmental Canada also performs inspection on various environmental issues at the airport. In 2004, both PCBs and Halocarbons were inspected.

### PCBs

Annual inspection by Environment Canada of the PCB Storage Compound verified compliance with the regulation.

### Ozone Depleting Substances (Halocarbons)

An inspection by Environment Canada to verify compliance to the Federal Halocarbon Regulation resulted in the issuing of a Warning Respecting an Alleged Violation. The following alleged violations were identified:

- Failure to keep record of the information contained in the dismantling, decommissioning or destruction notice;
- Failure to keep record of the information contained in the leak test notice;
- Failure to conduct a leak test at least once every 12 months; and,
- Failure to maintain record in which information is entered whenever the system is installed, service, leak tested or charged.

As a result of these findings, a Halocarbon Management Committee was formed and procedures and standard leak test tags, decommissioning notices and service logs were put into place. A training session was also provided to employees to outline the legal requirements of the regulation.

# Environmental Data Summary

GRI Index	Environmental Indicators	Unit	2002	2003	2004
<b>Materials</b>					
EN1	Pesticides - Selective and non-selective	litres	176	0	20
	Larvicide - West Nile	kgs	n/a	4.94	10.2
	Total Glycol Used	cubic metres	7,594*	4,078*	7,240*
	Total Road Salt Used	tonnes	dnc	5,500	4,500
	Total Paper Purchased	sheets	5,941,500	7,005,000	7,515,000
		sheets per employee	7,193	7,844	8,012
<b>Energy</b>					
EN3	Electrical Consumption	kWh	dnc	274,046,030	431,518,706
	Natural Gas Consumption	cubic metres	dnc	10,900,895	14,702,814
	Total Unleaded Fuel Consumption	litres	692,673.64	759,411.58	724,626.69
	Total Diesel Fuel Consumption	litres	734,602.42	1,463,410.98	1,707,390.50
	- Total Biodiesel Fuel Consumption	litres	n/a	n/a	443,832
		% of total diesel use	n/a	n/a	25%
<b>Waste</b>					
EN11	Total of Non-Hazardous Waste (includes recyclables)	tonnes	2,986.15	3,214.40	4,325.68
	Amount of Waste sent to Landfill	tonnes	2,121.84	2,121.83	2,677.17
	Total of Recyclable Waste	tonnes	958.88	1,092.57	1,648.51
		%	32%	34%	37%
	- Cans and Assorted Plastics	tonnes	116.85	107.63	142.39
	- Glass	tonnes	174.16	186.26	241.51
	- Wood	tonnes	8.47	41.13	54.88
	- Metal	tonnes	67.1	67.82	75.58
	- Office Paper/Newspaper	tonnes	284.64	327.74	536.71
	- Cardboard	tonnes	307.68	361.98	580.6
	- Organics	tonnes	n/a	n/a	16.84#
	Total Amount of Hazardous Waste	litres	186,068	73,500	178,442

n/a - not applicable (product was not used)

dnc - data not collected

\* - water monitoring season 2002 (April 02 - March 03), 2003 (April 03 - March 04),  
2004 (April 04 - March 05)

# - new program, effective December 2004

GRI Index	Environmental Indicators	Unit	2002	2003	2004
EN11	Total Amount of Demolition Waste	tonnes	88,570.67	42,203	408,588
	Amount of Demo. Waste Recycled	tonnes	81,518.17	30,211	399,920
		% recycled	91.80%	71.60%	97.80%
	Total Contaminated Soil Encountered	tonnes	24,522	540	247
	Total Cont'd Soil Remediated	tonnes	24,552	540	247
		% remediated	100%	100%	100%
<b>Emissions, Effluents</b>					
EN8	Total direct CO2 emmissions from fossil fuel combustion	tonnes	dnc	dnc	35,983
EN9	Total ODS used on site (CFC-11 equivalent)	tonnes	dnc	4.843	4.973
	Total ODS Released (CFC-11 equivalent)	tonnes	dnc	0.002	0.008
EN10	VOC Emissions	tonnes	0.97	1.19	6.53
	NOx Emissions	tonnes	10.68	20.41	16.36
	SO2 Emissions	tonnes	0.28	3.71	1.74
	CO Emissions	tonnes	11.39	14.28	18.18
	Total Particulate Matter	tonnes	0.46	0.72	2.13
	PM10	tonnes	0.46	0.6	2.07
	PM2.5	tonnes	0.46	0.51	0.59
EN13	Total Spills	number	963	1197	957
	Total Fuel Spills	number	307	375	313
	- Aircraft Fueling Spills by fueler	number	55	27	37
	Hazardous Cargo	number	2	5	5
	Glycol	number	3	2	2
	Hydraulic Spills	number	180	226	182
	Lavatory spills from aircraft (may be contaminated)	number	73	135	99
	Oil	number	255	319	248
	Asbestos	number	2	1	1
	Other - diesel, unknown, transmission fluid, antifreeze sediment, etc.	number	141	134	107
	Total Stormwater				
	Guideline Exceedences	number	173	215	165
	- Ammonia	number	1	9	0
	- BOD	number	39	43	41
	- Nitrite	number	50	48	28
	- Oil and Grease	number	0	0	0
	- Phenol	number	38	67	54
	- Phosphorous	number	0	1	2
	- TSS	number	45	44	39
	- Glycol	number	0	3	1
<b>Biodiversity</b>					
	Wildlife strikes	number	31	35	61

n/a - not applicable (product was not used)

dnc - data not collected

\* - water monitoring season 2002 (April 02 - March 03), 2003 (April 03 - March 04), 2004 (April 04 - March 05)

# - new program, effective December 2004

# Social Sustainability

The GTAA is not only committed to being a responsible corporate citizen and a good neighbour in the Greater Toronto Area, but also to positioning itself as an "Employer of Choice" within the community. The GTAA continues to refine and shape its HR programs and policies in order to attract and retain a highly skilled, diverse workforce that is committed to the principals of continuous learning and professional development.

Year	Total Employees (permanent, full time)	Annual Employee Turnover Ratio
2004	996	5.8%
2003	952	9.1%
2002	885	4.7%
2001	822	6.2%

## EMPLOYEES

The GTAA recognizes that any organization is only as strong as the employees that are a part of that organization. From front line workers dealing with the public and passengers on a daily basis, to support staff and behind-the-scenes workers, the GTAA is tremendously proud of its employees and their exemplary work.

## UNION CONSULTATION

The GTAA supports regular union/management consultations, where both parties meet to discuss on-going issues.

### Union Representation

Roughly three-quarters of our employees are unionized. Following our inception, initial GTAA efforts were concentrated on labour relations, bringing some 25 bargaining units represented by 9 bargaining agents together into two bargaining units. The first group, the larger of the two, is represented by the Public Service Alliance of Canada (PSAC). This group encompasses staff from administrative, skilled trade, technical and operations functions, among others. The other smaller bargaining unit is the Pearson Airport Professional Fire Fighters Association (PAPFFA).

The GTAA is committed to providing a useful and constructive method in promoting understanding and problem solving between management and the union. For this purpose, the GTAA supports regular and ongoing union/management consultation, where both parties meet on a regular basis to discuss issues such as policies, working conditions, problems and programs. To accomplish this, union/management consultative committees were established. The committees meet at least four times annually to achieve this objective, and they can be convened at any time upon request of the members.

### Student Employment Programs

The GTAA is committed to providing valuable, hands-on work experience to talented university and college students through our Co-operative Education Student and Summer Student Employment Programs. During their work terms, students receive a competitive salary, but more importantly, gain valuable work experience that will be of benefit to them throughout their careers. In fact, a number of the students employed through these programs have gone on to permanent employment with the GTAA.

The GTAA has established relationships with several universities and colleges throughout Southern Ontario. Through these relationships, we are able to offer students employment through the Co-operative education stream. Students come from various academic disciplines, and are given work opportunities in such diverse fields as Engineering, Aviation, Information Technology & Telecommunications, Business & Administration, Architecture, and Firefighting, just to name a few. At the completion of their work terms, co-op students also receive credit towards completion of their academic program of study.

Throughout 2004, the GTAA employed approximately 60 Co-op students in each of the three academic semesters (January to April, May to August, and September to December). Similar to the co-operative education program, the GTAA also offered employment to roughly 50 Summer Students in 2004. Those who are eligible for Summer Student employment include university, college and high-school students that will be returning to school in the fall.



### Employee Benefits

Permanent, full time GTAA employees are provided a comprehensive suite of benefits, which includes extended health care, emergency travel assistance, dental care, life insurance coverage, accident insurance and long-term disability. Employees are also provided with generous paid and unpaid leave policies, including vacation, education and personal needs, among others. For employees going on maternity and parental leave, we provide an allowance that tops them up to 93 per cent of their weekly salary for up to 30 weeks.

An additional benefit that is available to eligible employees is participation in one of our Pension Plans. All eligible employees who joined the GTAA since our incorporation on December 2, 1996 participate in our Defined

Year	Salaries, Wages & Benefits (\$000s)
2004	\$95,553
2003	\$85,504
2002	\$77,870
2001	\$71,796

Contribution (DC) pension plan. Employees who transferred to the GTAA from Transport Canada participate in our Defined Benefit (DB) pension plan, which provides similar benefits to the federal government plan. At the time of transfer, these employees were given the option of participating in the DC plan, which some exercised.

### Employee Assistance Program

The GTAA provides a confidential counselling and referral service to all employees and their family members, in order to foster and maintain their well-being and productivity. The program is designed to help employees and/or their family members deal with personal problems or issues before they have an impact on health, family life or job performance. These can include any of a broad range of personal or work-related concerns, including: personal and/or job related stress; relationship issues; eldercare or childcare issues; addictions; harassment; separation and loss; parenting issues; balancing work and family; financial and/or legal concerns.

The program is fully funded by the GTAA, is administered by an external vendor, and is available to employees 24 hours a day, 365 days per year, via a toll-free 1-800 number. If long-term or specialized counselling is required, employees can be referred to other resources within their community.

During 2004, 75 employees or members of their family made use of this service.

## CARE

The CARE program gives employees an anonymous reporting hotline for concerns regarding unethical or illegal business practices.

### Ethics

In order to enhance public confidence in the integrity of the GTAA, a Code of Conduct and Conflict of Interest policy has been established to clearly define the high standard of conduct which all employees are expected to adhere to. The objective of this policy is to minimize the possibility of conflicts arising between the private interests of employees and their duties and responsibilities. The policy details the expectations of how employees are to conduct themselves during their employment with the GTAA. Examples of other issues that employees are expected to promptly and confidentially report during their employment include:

- Any private interests, holdings or outside employment that could give rise to conflict of interest with respect to their duties; or,
- Receipt of gifts, hospitality or any other benefit that could reasonably be expected to influence their judgment and performance of their duties.

Also in support of these initiatives, an ethics hotline was introduced. Under the CARE (Confidential, Anonymous, Reporting Employees) program, employees can file a confidential, anonymous report concerning possible workplace-related incidents of unethical or illegal business practices.

### Privacy

The GTAA has established a corporate privacy policy to ensure that all personal information collected or under GTAA control is protected, and to provide guidelines on the collection, use, disclosure, and disposal of such information. Personal information can relate to employees, the public or any other individuals. The GTAA respects the rights of all individuals to have their personal information treated with care and respect. It is for this reason that the Privacy Policy was implemented, to ensure that personal or private information in the care of the GTAA is afforded appropriate protection in accordance with legislation, regulations and best business practices.

## Diversity

The GTAA is committed to maintaining a diverse workforce, with equal access to employment and advancement opportunities, which is reflective of the community at large. In order to achieve this objective, the GTAA continually evaluates employment systems and practices to ensure that there are no systematic barriers to employment or advancement for women, aboriginals, persons with disabilities, or visible minorities. Even with 21.2% growth in the permanent, full-time workforce, workforce participation within the four designated groups has changed minimally, with participation rates at or near the same levels as previous years.

Group	2004	2003	2003	2001
Women	26.3%	27.3%	26.4%	26.6%
Aboriginal peoples	0.9%	1.2%	0.3%	0.1%
Persons with Disabilities	1.7%	1.7%	1.1%	1.1%
Visible Minorities	15.4%	16.0%	12.5%	12.7%

The GTAA's commitment to diversity is reflected throughout many policies, which include Employment Equity, Accommodation, and Anti-Discrimination/Harassment. These policies, and each employee's individual responsibility under them, are reinforced through ongoing training.

## Employment Equity

Under the Employment Equity policy, the GTAA has made a commitment to:

- Identify and remove employment and advancement barriers, if any, for all four designated groups (women, aboriginals, persons with disabilities and visible minorities);
- Take positive steps to facilitate the hiring, accommodation, promotion and participation of qualified individuals from designated groups in the Company's workforce;
- Ensure that Employment Equity is a joint responsibility of management and employees through processes such as workforce surveys and ongoing reviews of employment policies and practices; and,
- Communicate the Employment Equity Policy and Plan to all employees, to ensure full understanding and participation in our business initiatives.

The GTAA views Employment Equity as a joint responsibility with employees and both Unions. As such, regular and ongoing consultation with employees and unions has been, and continues to be an important consideration in the Employment Equity plan and initiatives.

Every person has a right to equal treatment with respect to employment without discrimination.

### **Accommodation**

The GTAA has gone to great lengths to ensure that Toronto Pearson International Airport is accessible and barrier free for employees, tenants, and the travelling public. An example of this commitment was during the planning and construction of the new Terminal 1. Consultation took place with organizations representing the interests of persons with disabilities during new terminal activation trials in order to ensure that the new facility was accessible and barrier free.

The GTAA policy with respect to accommodation is to ensure that there are no barriers to employment and advancement within the organization, as based on the protected grounds as set out by the Canadian Human Rights Act. Once the requirement for accommodation has been established, every reasonable effort will be made to provide appropriate accommodation, up to the point that providing the accommodation would represent an undue hardship.

### **Anti-Discrimination and Harassment**

The GTAA is committed to ensuring that every employee is provided a work environment that respects their dignity and worth, providing for equal rights and opportunities without discrimination. This is in keeping with the Canadian Human Rights Act, which recognizes that every person has a right to equal treatment with respect to employment without discrimination because of race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, religion, sex, sexual orientation, age, family status, or disability. The GTAA further recognizes that all employees have a right to freedom from harassment in the workplace, on any of the grounds described above.

As measures to ensure that this commitment is fulfilled, mandatory Harassment Training is provided to all GTAA employees. This training is provided to all GTAA employees, helping them recognize incidents of discrimination or harassment, and providing them with the skills necessary to intervene should inappropriate activity take place.

In addition to this training, a pool of managers has received specialized Harassment Investigation training. Should a complaint of harassment be received, a two-person team from this group, with the support of Human Resources, will investigate, report and make recommendations with respect to the complaint.

**Policy with Respect to AIDS**

The GTAA ensures that no employee is subject to discrimination on the grounds of having AIDS or being HIV-positive. As long as the employee is able to meet acceptable performance standards, and medical evidence indicates that their condition is not a health or safety hazard to themselves or others, they will be allowed to continue their employment with the GTAA. Medical evidence indicates that AIDS cannot be transmitted through casual contact. The GTAA considers an employee's refusal to work with a person with AIDS or HIV as unacceptable. Should such a situation arise, the GTAA will work with both parties to resolve the issue promptly.

**Human Rights Training Participation**

Course	Number of Participants
Accessibility and Sensitivity	68
Harassment Awareness	102
Harassment Investigation	18
Violence in the Workplace	77



### **Training and Development**

The GTAA continues to support training for all employees, not only to safely and effectively perform their jobs, but to enhance their abilities and develop their skill-sets for future career opportunities. We are committed to maintaining a working environment that is conducive to the effective utilization of human resources.

In particular, the GTAA's Violence in the Workplace training session offers staff information on understanding the potential for violent situations and what can be done to minimize the possibility of these situations manifesting themselves in a work setting. Through case studies and information on resources available to those in need, staff are trained to identify and deal with any potential situation that could escalate to the point of physical or emotional danger.

Staff training is seen as essential to maintaining a workforce of the highest quality, with individuals who have the knowledge and skills required to develop and effectively implement corporate policies and programs, now and in the future, in support of the GTAA's strategic goals and objectives.

Training plans are created for employees annually. These plans facilitate the training and development process by identifying training needs specific to each employee, and assist management in making sound financial decisions regarding training and development at all levels of the organization.

Training and development at the GTAA typically takes place in a traditional classroom setting, but it is also supplemented and supported by sponsorship of after hours programs, conferences, seminars and self-directed resources.

In 2003 and 2004, training efforts were focused towards preparing our employees for the activation of new Terminal 1. For our employees, the average amount of time spent training in 2004 was 22.6 hours per employee, which was down slightly from an average of 23.9 hours recorded in 2003.

# Health and Safety

## A SHARED RESPONSIBILITY

Managers and employees share an equal responsibility in maintaining a safe and healthy workplace.

In partnership with all employees, the GTAA has made maintaining a safe work environment a top priority. The health and safety program was designed to prevent on-duty accidents and occupational injuries, and to promote the physical, mental and social well being of all employees. This is accomplished through policies, safe work procedures, training, and employee events, in addition to strict legislative compliance. The GTAA also ensures that all employees are provided with the Personal Protective Equipment (PPE) such as clothing, footwear, equipment and devices that they need to safely perform their jobs, and that all PPE is properly used and maintained.

### A Shared Responsibility

A cornerstone of our Health and Safety policies and practices is the principle of joint participation by employees, the unions, and management. Managers and employees share an equal responsibility in maintaining a safe and healthy workplace, and ensuring that safe work practices are adhered to. Employees are also expected to immediately report any injury on duty or accident regardless of severity, and to be vigilant in identifying and reporting potential or actual health and safety hazards through our "Employee Health and Safety Concerns" policy.

### Health and Safety Recognition Program

The GTAA has implemented a recognition program to actively promote occupational health and safety and foster a spirit of teamwork and cooperation among employees. Employees are encouraged not just to think about their own safety, but also to be vigilant, taking an active interest in the safety of their co-workers. Under the program, the organization is broken down into "teams". Composition of these teams are based on a number of elements which include size of department, accident/injury history, and a risk assessment based on the type of work performed. As each team meets established health and safety targets, team members are awarded with a token of appreciation from the organization.

### Health and Safety Committees

The GTAA has established Joint Occupational Safety and Health (JOSH) committees with both the PSAC and PAPFFA bargaining units, comprised of employee representatives elected by their peers and management representatives appointed from throughout the organization. As stakeholders in occupational health and safety issues, all members are responsible for promoting safe work practices and ensuring all workers apply these practices. The primary function of the committee is to support, monitor and make recommendations with respect to maintaining a safe workplace, providing an advisory role to management. Another mandate of the committees is to ensure that all GTAA workplaces are inspected annually, ensuring that health and safety standards and procedures are adhered to, identifying any serious hazards that require immediate corrective attention. Certification training is provided by the GTAA to members of the committee as part of our commitment to ensure that committee members have the necessary skills, resources, information and authority to carry its functions.

In addition to the JOSH committees, the GTAA has also established a Policy Occupational Health and Safety (POSH) committee, the mandate of which is to act as an elevated forum on joint labour-management consultation on health and safety issues at the policy level. While the primary function of the POSH committee is to provide oversight on health and safety issues and ongoing review of policies at the corporate level, it is also available to act in an advisory capacity for the JOSH committees, providing resolution to long-standing issues should the need arise.





### **North American Occupational Safety and Health (NAOSH) Week**

A number of Health & Safety themed employee events take place annually in conjunction with NAOSH week. During NAOSH week, informational "Lunch and Learn" sessions are made available to all employees, on topics ranging from nutrition, to smoking cessation, to stress management. Also in conjunction with NAOSH week, employees are given access to such health related services such as hearing testing, orthotic analysis, blood pressure and cholesterol testing, and vaccinations, all of which are also available at any time throughout the year.



### Health and Safety Performance Indicators

Year	No Lost Time Injuries	Lost Time Injuries	Lost Time Injury Frequency*	No Lost Time Injuries
2004	44	14	1.54	6.0
2003	48	19	2.24	54.0
2002	34	11	1.33	5.9
2001	54	18	2.32	18.7
2000	62	17	2.29	10.5

\* injuries per 200,000 hours worked

### Health and Safety Training Participation

Course	Number of Participants
Asbestos	12
Confined Space Entry	70
Environmental Awareness	75
First Aid/ CPR Certification	89
HAZMAT	66
Transportation of Dangerous Goods	122
WHMIS	35
Heartsave Defibrillator	18
Fire Extinguisher Handling	79



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**President and Chief Executive Officer**

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