



2004 Community and Sustainability Report



Leading Transportation Innovation and Growth

Table of Contents

Introduction.....	4
Vision, Mission, Values.....	5
In Our Community.....	6
Community Consultation.....	11
Supporting Employees.....	13
Sustainable Development Environmental Initiatives	15



Introduction

The Winnipeg Airport Authority is a community-based, organization that is not only responsible for managing and developing the air transportation needs of our stakeholders, we are also a contributor to the betterment of our community.

When the Stevenson Aerodrome first opened in 1928 – named after the great bush pilot, Capt. Fred J. Stevenson – it was located in relatively the same location as the later-named Winnipeg International Airport is situated today. Over the past 75 years the Winnipeg International Airport built a solid foundation, and its influence on the economic and social well-being of our community continues to be far-reaching.



Today the airport is an economic driver and facilitator within our community. We support nearly 21,000 direct and indirect jobs, generating economic output of \$2.6 billion considering multiplier impacts.

But the airport has more of an impact on the community than just the transportation infrastructure it provides. There are social impacts, such as the work our employees do with community organizations and sponsorship

opportunities we support. There are programs and projects the WAA undertakes to protect the environment. And then there are cultural opportunities we participate in, including the entertainment we provide in the food courts for events such as Folklorama, or school choir performances. There are also many indirect, but none-the-less important impacts we have on various facets of our community involving tourism, education, urban and industrial planning to name a few.

In one form or another, the WAA collectively influences the quality of life in our community. That's why it is imperative that we work with, and provide open dialogue with, the people we serve.

The following report is an overview of WAA's footprint on our community. It outlines our contribution to the people we serve in Manitoba and surrounding regions of Northwest Ontario, Eastern Saskatchewan, Nunavut, and North Dakota.

This document demonstrates the value WAA and its subsidiaries bring to our region, and it is a statement of our investment in our community.

In one form or another, Winnipeg Airports Authority influences the quality of life in our community.

Vision, Mission, Values

Community is the reason for our existence and clearly identified in our strategic direction...

Vision

To Lead Transportation Innovation and Growth

Mission

With our community, provide excellent airport services and facilities in a fiscally prudent manner.

Values

Respect, Integrity, Service Excellence

Strategic Directions

Be an effective community partner

We will be a source of pride for our community and a leader in its growth and development.

Deliver and operate excellent facilities and services

We will deliver safe, secure, and environmentally sound facilities and services incorporating universal design principals.

Enhance customer service and value

We will understand our customer needs and assure value through measurements relevant to them.

Develop new revenue streams.

Develop and realize employee potential.

Attract and inspire excellence. Have the right people in the right place with the right training.

Expand air service to and from Winnipeg Airports Authority Inc.

To improve Manitoba's links to the world, we will build on our 24-hour access and our intermodal connectivity.

In our Community

The WAA's community-appointed Board of Directors serves an important role in the governance and direction of the airport, upholding the best interests of its stakeholders and the community.

The community-based WAA Community Consultative Committee and its sub-committees also take community input another step forward by ensuring that airport operations continually respect the quality of life of our neighbors through programs and initiatives that protect the environment, control noise, and conduct our business in harmony with community objectives and development plans.

Economic Impact

The WAA is an economic facilitator, partner and leader in our community. We participate in the movement of goods and services that flow through our region and enable companies to capitalize on the speed and efficiency of air transportation services.

24-hour cargo operations make the Winnipeg Airport one of the top 4 air cargo transportation hubs in Canada. Approximately 140,000 tonnes of cargo moved through YWG in 2004, the fourth consecutive year of growth in this area. Having a robust cargo facility, able to integrate transport service with close proximity to major rail and trucking routes, is a competitive advantage for Winnipeg airport and an economic advantage for our community.

In 2004 the Winnipeg International Airport was designated as an International Air Cargo Transshipment facility by the Minister of Transport – Mr. Jean LaPierre. The Transshipment designation enables Winnipeg airport to serve as a drop off point for cargo destined for other locations. For example, cargo can be flown from the U.S. to Winnipeg, stored temporarily, then flown on to Europe. Or, cargo can come from Europe, be stored in Winnipeg, then shipped by rail or truck into the U.S. The designation provides significant opportunities for Winnipeg transport carriers and other logistic facilitators to capitalize on the province's central geo-

graphic location within North America.

But there is much more to the Winnipeg airport than just the processing of people and cargo. The airport is a place for industrial development, for research and technology in the aeronautical sector, it's where people train at Red River College's Stevenson Aviation Centre, or where retailers sell their wares at the terminal.

All these activities create and maintain employment. A WAA study conducted in 2003 on the economic impact of Winnipeg airport showed that 9,300 jobs were directly related to airport operations, while another 11,600 jobs were created from indirect or induced airport-connected activity. In total, 20,800 jobs, generating \$780 million in wages were the result of Winnipeg International Airport's impact on the community.

YWG and activities connected to the airport also generate tax revenues to three levels of government. In 2002, total taxes paid to government totaled nearly \$200 million. This includes property taxes to the City of Winnipeg, GST collected for the Federal government and PST to the provincial government.



Further economic stimulus will be realized with the airport site redevelopment at Winnipeg International Airport which will provide 6,500 person-years of employment, \$270 million in wages, and \$340 million in GDP.

Tourism Partner

The City of Winnipeg and the province of Manitoba have an abundance of tourism opportunities and events to attract thousands of tourists every year. For many of these visitors, the first impression they have of our community is the airport.

While the WAA endeavors to ensure that every traveler's experience at the airport is favourable, we often take an extra step in working with community partners to ensure that visitors to our region have a memorable and positive impression of our region, from the time they step off the aircraft to when they return.

In 2004, the WAA provided special event services to 45 community organizations and event organizers, including:

- Supporting the Destination Winnipeg kiosk inside the Winnipeg terminal offering visitors useful information on Winnipeg events and attractions.
- Providing 'in-kind' sponsorship to events in the city and region with free advertising space for banners to be hung in the terminal, luggage belt displays, street banners and posters in the terminal area.
- In-kind advertising space on our Flight Information Display screens for key community events.
- Kiosk space in the terminal to display information and/or for community groups to provide atten-



dants to raise funds for community causes.

- Free VIP parking for the drop-off and pick-up of special dignitaries visiting the community.
- Free parking passes for event organizers, volunteers, special participants.

Goldwing Ambassadors

A significant component to making everyone at the Winnipeg International Airport feel welcome when they arrive, or leave, our community comes from the volunteer services and friendly smiles provided by our Goldwing volunteers.

This crew of over 100 'customer-focused' ambassadors of Winnipeg International Airport are always on hand to provide directions for passengers, greet incoming tourists, work with community organizations in providing information on events and activities, conduct group tours, and generally be of assistance to those who need a helping hand.

The Goldwing Ambassadors conducted 58 tours to schools, cadets, scouts/guides, and other clubs in

2004, with 974 children and 313 adults taking part in the airport tours. In total, over 103 hours in volunteer service was logged conducting community tours, and educating people about airport operations.

In April, 2004 the Goldwing Ambassador Program at the Winnipeg International Airport was awarded an Ambassador Volunteer Tourism Award by the Manitoba Department of Heritage and Tourism for its promotion of Winnipeg and Manitoba through its volunteers who provide warm hospitality and quality customer service.

Goldwing Ambassadors conducted 58 tours to schools, cadets, scouts/guides, and other clubs in 2004, with 974 children and 313 adults taking part.

Community Sponsorships

The Winnipeg Airports Authority not only serves customers in providing excellent facilities and services, it also recognizes that community sponsorship, either monetary or in-kind, is a valuable conduit between the airport and the community. While many events and endeavors are worthy of support, the WAA follows a Sponsorship Policy that targets its sponsorship opportunities. These targets are generally focused on health, education and welfare.

Sponsorship applications are evaluated for consistency with WAA's Mission, Vision and Values and assessed by WAA according to the following criteria:

- Availability of funds or in-kind materials or space
- Relationship between the level of sponsorship sought and proposed benefit to the community
- Community visibility
- The applicants' demonstrated ability to manage projects and sponsorship funds.

In 2004, the WAA supported some 144 organizations and events through sponsorships, donations in-kind or prize donations.

In total, corporate sponsorship at WAA amounted to approximately \$111,000 in monetary or in-kind contributions.



Prize and merchandise materials – items such as hats, pins, books, commemorative prints, provided to community groups for fund raising auctions, gift bags for event attendees, tourism promotion or other promotional purposes – amounted to approximately \$12,000 worth of items donated to over 100 community events and causes.

In 2004 the WAA also contributed parking, landing and terminal fees, valued at over \$3,000 per event, to two events focusing on special children:

- Dreams Take Flight, a special Air Canada flight for 160-plus children with health challenges to experience Disney World for a day.
- North Pole Express – WAA, along with Variety Club and Skyservice provided 140 children from William Whyte Elementary School in the core area of Winnipeg the ride of a lifetime sponsoring a half-hour flight with a special visit from Santa Claus.

In 2004, the WAA:

- **Contributed \$111,000 worth of in-kind or monetary donations.**
- **Donated \$12,000 worth of promotional items for over 100 community events.**
- **Supported 144 organizations and events through sponsorships, donations or prizes donations**
- **Raised \$12,000 for the Fire Fighters Burn Fund at its charity golf tournament**
- **Raised \$39,000 for the United Way.**

Employee Involvement

A simple tally of corporate sponsorships, however, does not highlight the many efforts and time contributions WAA employees dedicate to community causes throughout the year.

Many WAA employees volunteer their time, efforts and expertise to a variety of community committees, non-profit, fund raising organizations or professional associations and the like.

WAA's annual 'Greening Day' involves WAA employees pitching in to spruce up the airport with flowers and perennials and plant crops in the airport grounds garden. This enhances our community's image as visitors arrive in Winnipeg. Also, the crops are harvested in the fall by WAA employees with vegetables going to Winnipeg Harvest. Due to less than ideal growing conditions 2004's harvest was lower than expected yielding 2,100 pounds of vegetables. Regardless, the garden-grown vegetables were a welcome addition to Winnipeg Harvest's food stocks .

WAA employees have the spirit of giving, demonstrated by the personal contributions our employees make to causes such as the United Way.

In 2004, WAA employees raised over \$18,000 to the United Way. These funds are matched equally by the WAA Inc., and when combined with over \$2,500 raised in WAA United Way events such as the annual Pancake Breakfast at the Winnipeg terminal Exchange Restaurant or the annual WAA Chili Cookoff, in total \$39,000 was raised for the United Way – a 25% increase over the year prior and making WAA eligible to receive a Quantum Leap Award for its campaign contribution.

WAA employees were also instrumental in

assisting the United Way's Annual Kick-Off event in 2004 which featured a CargoJet 727 plane pull competition at Stevenson Aviation and a staged entry of United Way Chair Hartley Richardson in the WAA Blue Bombers aircraft used in the Winnipeg Blue Bomber Football games. Operation crews disassembled and reassembled perimeter gates and fencing in order to move the 727 onto the Stevenson aviation apron for the competition.



Also notable in the fund raising category in 2004 was WAA's Charity Golf Tournament. Thanks to volunteer efforts of WAA 's employees organizing the tournament, funds from the tournament entries, prizes and subsidiary events were matched by WAA Inc. and provided \$12,000 towards the Fire Fighters Burn Fund in Manitoba.

On top of its own fundraising efforts WAA employees are also actively involved in many volunteer and charitable efforts within the community, including:

- Dragon Boats – WAA employees compete in the annual Manitoba Dragon Boat Festival, raising funds

for Cancer research.

- Love and Share program for the Christmas Cheer Board. WAA employees and Goldwing volunteers donate non-perishable food and toys and distributes them to needy families for Christmas.
- Coats for Kids, another United Way program that provides warm jackets for under-privileged children in the community.

Social, Cultural and Historical Significance

Winnipeg International Airport is the gateway for our community. The first and last impression of any community is often influenced by the condition and environment of the airport.

In this regard the airport takes an active role in showcasing the social and cultural attributes of our community.

WAA does this by working with community organizations, multicultural groups and special interests in assuring that the City of Winnipeg and our region are depicted as a culturally vibrant and robust community. WAA works with cultural event staff such as Folklorama and Festival du Voyageur to promote their events and ensure awareness is raised in the terminal building.



To capture the flavour of these and other events, as participants or tourists come into

the terminal, stages and performance space are provided to musicians, choral groups, or other forms of entertainment tied to the cultural event at the terminal.

The WAA will also provide parking and pick-up accommodation for special guests for these events in support of the organizations conducting them.

During the Christmas season the WAA invites performances of school choirs at the terminal.

Every January the WAA creates a giant snow sculpture display. WAA airport operations staff move mountains of snow to a key vantage location on Wellington Avenue, the main entrance road to the airport. In recent years the sculpture represents a major event in the community, such as: World Skating Championships; World Curling



Championships; and the Winnipeg Snowman Competition. For 2005, the snow sculpture was dedicated to the 2005 Juno Awards held in Winnipeg, designed and crafted by local artist Miguel Joyal.

In 2003, the WAA commissioned artist Glenn Hayes to create a commemorative print titled 'Spirit of Aviation' in recognition of 100 years of powered flight. The captivating image portrayed the silhouette of the Wright brothers in a cloud formation, overseeing children in neighboring Bruce Park building an aircraft of the future. In 2004 the WAA distributed over 100 Spirit of Aviation prints of varying sizes to community groups, special events, dignitaries and fund raising events.

The WAA also supports Manitoba's burgeoning film production industry in offering airport facilities as locations for nominal fees, from small-budget high school projects to major Hollywood productions.



Stages and performance space are provided to musicians, choral groups, or other forms of entertainment tied to cultural events.

Community Consultation

The WAA is a community-based organization that endeavors to be a source of pride in our community and a leader in its growth and development. In order for WAA to serve our region we must have a finger on the pulse that drives our community's future development. In this regard the WAA invites representation on community committees and organizations, to maintain a constant connection with the region it serves.

Community Consultative Committee

The Community Consultative Committee provides for effective dialogue and dissemination of information on matters relating to the Winnipeg International Airport, including airport planning and development plans, operational aspects of the airport, environmental and municipal concerns.

The committee members are nominated by community-based organizations and municipalities surrounding airport lands, and the traveling public in general. The committee meets with airport management on a quarterly basis. Members are nominated by community entities such as the Winnipeg Chamber of Commerce, Manitoba Aviation Council, Manitoba Aerospace Association, Destination Winnipeg, and various government entities.

Minutes of meetings are available to the public and posted on WAA 's website.

The Universal Design Advisory Committee for the WAA meets regularly to review the accessibility conditions of the airport terminal and grounds. The committee ensures that WAA's current terminal, and the new terminal design, meets the mobility and accessibility needs of everyone who uses airport facilities and services.

Airport Advisory Committee on Environment

The WAA Airport Advisory Committee on Environment meets quarterly to discuss environmental issues as related to airport operations. It is comprised of community representatives and technical advisors. Originally established in 1989 as the Airport Advisory Committee on Aircraft Noise, in 1999 the



committee's scope was expanded to include environmental issues. The purpose of the committee is to provide a direct consultation link between the airport and the community on environmental issues.

Other

As part of building better connections with the community and the air transportation industry, WAA staff maintain professional and knowledge-based links with their associate colleagues and trade associations, through memberships, executive or board capacities.

To ensure transparency and connectivity with the community it serves, the WAA conducts annual general meetings, traditionally in the month of May. The meetings are open to the general public and media. Presentations are made by WAA executive and Board chair, with the financial report of the year ending presented, along with strategic directions outlined for the current year. Updates of the airport redevelopment program are also provided, and information on air transportation trends and market conditions are outlined.

Operational changes such as parking rates or airport improvement fee adjustments are advertised in local newspapers, and posted on our waa.ca website to communicate changes to our services or operations that may impact our community or customers.

Airport Redevelopment Program

Winnipeg Airports Authority is currently undertaking an infrastructure redevelopment of the terminal and auxiliary facilities. By 2009 a new airport terminal will be constructed north of the current existing facility along with a new multi-tiered parkade and surrounding apron.

This \$350 million (2003 value) project will service the region's air transportation needs well into the next century. Airports are valuable assets for any community, whereas the WAA understand that a consultative approach must be taken towards this new development.

Prior to tenders released for the design and construction of the facility, an open forum was held in April, 2004. The forum included local, national and international architecture and design firms to view the preliminary design of the facility and establish a team approach to submitting tenders for the project.

A national and internationally renowned design team – Stantec Architecture and Cesar Pelli and

Associates – was selected. Both organizations are recognized not only for their stunning design work, but also their reputation for accommodating public participation in the design process. This set them apart from many qualified candidates for the redevelopment.

An Environmental Assessment of the redevelopment was completed in 2004. (p. 17) The assessment included input from the WAA's Environmental Advisory Committee. The

assessment ensures that environmentally responsible and sustainable practices are incorporated into the design and construction of the new terminal and infrastructure. The report is available to the public for review and comments.

Throughout the design process public consultations are being held to acquire input and feedback on the

design elements of the new terminal and its auxiliary facilities.

Focus Group sessions and public forums, provide further information and feedback opportunities on the design process. The WAA website and publication of a quarterly newsletter also provide opportunity for public input.



Throughout the design process public consultations are being held to acquire input and feedback on the new terminal and infrastructure.

Supporting Employee Development

Training and Knowledge Investment

One of the WAA's strategic directions is to develop and realize employee potential. The WAA team attracts and inspires excellence, with the right people, in the right place, with the right training.

The WAA recognizes that it's not only the role of the airport authority to employ people to do their job. As a leader in innovation and growth, it is our role to inspire employees to bring innovation, knowledge, and expertise, not just to our airport, but also to our industry and our community.

The WAA internally promotes skills development and professional growth through education and occupational training support for employees who wish to enhance their knowledge or skills, or develop new abilities. To support personal and professional development, the WAA provides the resources they need to do so, including:

- Employer-initiated training, funded by WAA.
- Employee-requested training – based on managerial approval and application to the WAA environment – reimbursed by WAA.
- Tuition and prescribed texts for approved employee training are reimbursed 100% by WAA.

In 2004, WAA employees received more than 2,700 hours of training in various job-related and developmental courses.

The WAA operates in a highly technical and digitally advanced environment. Whereas, it is in the best interest of operating an efficient and innovative airport that computer resources be available for employees at work and at home. That is why the WAA supports its computer purchase plan so that employees can purchase or upgrade their home computers and enhance the digital knowledge base throughout the organization.



Supporting Education

The college students of today are our employees of tomorrow. They are also the community's employees of tomorrow who will also be our customers of the future. That is why supporting knowledge development of universities and colleges is strongly supported at WAA.

The WAA employs summer students in a variety of disciplines during the summer months, and provides office space and resources for a number of internships throughout the year.

In 2004, the WAA supported students in the areas of communications, marketing, environmental studies, finance, and engineering.

Internships for students provide a great opportunity for students to apply their knowledge to the everyday work experience. For WAA the benefits of internship programs at community colleges and universities are reciprocal, with new ideas and fresh perspectives on our operations and practices provided by the students.

The WAA was also involved in a special research project on airport pavement management in cooperation with the University of Manitoba. The WAA contributed \$6,000 towards the project involving a student from the Faculty of Engineering

In 2004, WAA employees received more than 2,700 hours of training in various job-related and developmental courses.



at U of M, conducting research and development of a computer-based airfield management program. The program will predict airfield deterioration and requirements for maintenance and rehabilitation.

Knowledge Growth in the Community

WAA has a vast array of professionals well versed in a broad range of skills and endeavors: from civil and construction engineering, information technology, marketing, maintenance and heavy equipment operations, communications, emergency response, to name a few. Sharing this knowledge and expertise with our community is imperative to our vision as a leader in transportation, innovation and growth.

In 2004, the WAA signed a formal agreement with St. Andrews Airport north of Winnipeg to share knowledge and resources. The agreement provides advantages for both airports and the community. St. Andrews airport can call on WAA for support with resources or expertise when required. Under this agreement, both parties work cooperatively in areas of common interest and industry initiatives to pursue excellence in aviation in Manitoba. In turn, the community benefits by having diversified airport operations that can accommodate a broad range of air transportation needs.

Health and Safety

In 2004 the WAA was the lead participant in a mock emergency exercise called Metro 2004. The

exercise involved the simulated crash of a Metroliner aircraft at Stevenson Aviation and tested the cooperation and coordination of a number of emergency and airport organizations, which included: City of Winnipeg, Winnipeg Fire and Paramedic Services, 17 Wing, Winnipeg Regional Health Authority, Winnipeg Police Services, Emergency Services Organization, Avion, and St. John's Ambulance.

The exercise not only tested WAA's Emergency Procedure Manual but also provided an opportunity for WAA to enhance the coordination and communication procedures between all respective emergency stakeholders in a safe and controlled environment. Full scale exercises such as Metro 2004 are mandatory as per Transport Canada regulations. Table top exercises are also required on an annual basis.

Safety in the airport industry is of paramount importance. This also translates to the workplace environment at Winnipeg Airports Authority.

WAA is committed to providing a safe and healthy work environment for its employees and supports this endeavor in a number of ways:

A joint labour/management team comprises the occupational Health and Safety Committee at Winnipeg International Airport. The committee meets quarterly to review and consult on issues regarding workplace health and safety. Its goal, through mutual cooperation is to strive to attain the safest possible workplace environment for all WAA employees.

Education and awareness of safety and security are promoted through the quarterly 'Sentry' newsletter. Safety Bulletins, operational circulars, and annual promotion of Airport Safety and Security Week.

Any facility modifications at the airport require consideration of safety and security in the planning stage.

WAA works with tenants, suppliers and contractors in ensuring compliance with regulated requirements of safety and security.

Internal safety audits are conducted on WAA operations to ensure compliance and effectiveness of safety and security programs and procedures. Formal reviews and audits are also conducted.

Sustainable Development and Environmental Initiatives

As a community partner, WAA is committed to the principles of sustainable development. Our objective is to minimize impacts on the environment from daily operations and development through continuous improvement of environmental performance.

WAA strives to exceed requirements of applicable environmental laws and regulations. Our intent is to integrate environmental protection into all stages of airport operations and extend environmental awareness and responsibility to our employees, tenants and service providers.

This involves preventing environmental impacts by taking a proactive approach and integrating environmental considerations into our decision-making matrix.

Reuse/ Recycle

In 2004 WAA engineers identified a unique solution to address a parking stall shortage at the Airport. Rather than disposing of asphalt removed during an airside pavement rehabilitation program, 6270 metric tonnes of asphalt millings were reused to create the new parking lot surface. This recycling initiative not only improved customer service and saved construction costs, it also reduced the consumption of natural resources, and eliminated trucking and disposal of asphalt millings off site. A similar project is planned for 2005.

WAA provides employees with 'blue box' recycling bins for

recycling office paper and a recycling program in the airport terminal. There are industrial recycling bins for tin, and waste oil containers for vehicles and airside maintenance machinery. These are some examples of recycling stewardship undertaken by WAA employees. The following graph indicates our product recycling results for 2004:

Product Recycling in 2004

1	cardboard	33,450 kg
2	paper	35,470 kg
3	asphalt	6270 tonnes
4	waste oil	4000L

Green House Gas Emissions

WAA undertook a study to calculate Green House Gas (GHG) emissions from major WAA facility sources. These calculations from this study will provide a baseline for future GHG performance assessments.





Another chemical-reduction initiative in 2004 involved Airfield Maintenance upgrade of the Runway Surface Condition Reporting system used to assess runway ice conditions. The new computerized system ties into the application of runway deicer, ensuring efficient application of deicing fluid. Now fluid is applied only to those locations where ice is present instead of the entire runway surface. This reduces the volume of deicing fluid used over the course of the winter and helps protect the local watershed.

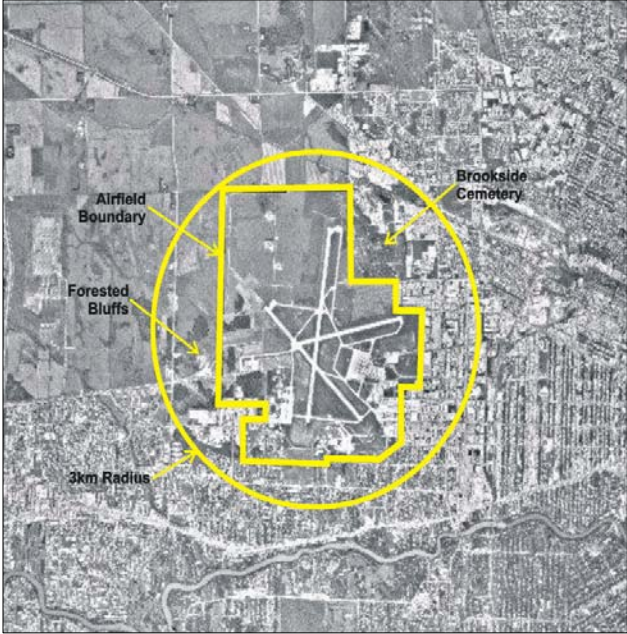
Another airfield maintenance initiative was to reduce herbicide application requirements by replacing the grass adjacent to runway lights which could not be reached by mowers with hard surfaces.

Wildlife Risk Assessment

WAA conducted a Wildlife Risk Assessment for the airport based on wildlife habitat in the vicinity of the airport, as well as local and migratory species and populations. This risk assessment will form the basis for a review and update of the current airport wildlife management program in 2005.

Environmentally Friendly Products

WAA has taken a proactive approach to reduce chemical usage through efficiencies and new technologies, and replacing products containing hazardous materials with non- or less hazardous substitutes. For example, an initiative developed in 2004 was designed to reduce the volume of chemical products which may eventually enter the environment. Softeners for the boilers providing heating to the Administration Building, Air Terminal Building and the Hotel were replaced with efficient Zeolite softeners. The new softeners can be programmed for water hardness and flow rates which reduces the input of softener salt by 50%, and lowers the concentration of salt in the waste water effluent. This initiative has resulted in a reduction of approximately 200kg of salt used per month.



WAA has taken a proactive approach to reduce chemical usage through efficiencies and new technologies.

Improving Energy Efficiency

In 2004 WAA replaced its chiller with an energy efficient model. The new chiller system is approximately 30% more efficient than the industry standard. This new chiller has a dual compression system so it can efficiently operate for cooling during both high and low demand. WAA received a \$50,000 rebate for the purchase of the energy efficient chiller from the Manitoba Hydro Powersmart Program.

Noise Abatement Procedure

2004 saw the full implementation of a noise abatement procedure, developed in response to community concerns regarding nighttime aircraft noise in the Brookland, Garden Grove and Inkster neighbourhoods northeast of the airport.

The noise abatement procedure was the outcome of a cooperative endeavor between the Airport Advisory Committee on Environment, the Airlines, Nav Canada and Winnipeg Airports Authority. The four groups had been actively studying the feasibility of the proposal since 2001; specifically the impacts in relation to noise reduction benefits, fuel burn, aircraft operations and air traffic safety.

The noise abatement procedure specifies that nighttime jet aircraft departing north turn 5 degrees west over agricultural areas as soon as safely able. The procedure was incorporated into 'Canada Air Pilot' and has become a standard operating procedure for jet aircraft departing north on Runway 36 between 11pm and 7am.

Environmental Impact Assessment

All airport projects that ensue a potential risk of creating an environmental impact, undergo an

environmental impact assessment (EIA) prior to completion of design or construction approval. The intent of the EIA is to identify environmental impacts arising from construction and operation of the development and to specify appropriate mitigation measures. This ensures that the development does not create significant impacts on the environment and neighbouring communities.

In 2004, several projects underwent an EIA including improvements to Bison's Transport's Parking Area and the Airport parking lot expansion project.

A comprehensive impact assessment of the Airport Site Redevelopment Project was undertaken with input from the WAA's Airport Advisory Committee on Environment. As part of this review, an environmental impact assessment was conducted to ensure that the new terminal and auxiliary facilities are designed, constructed and operated in an environmentally responsible manner .

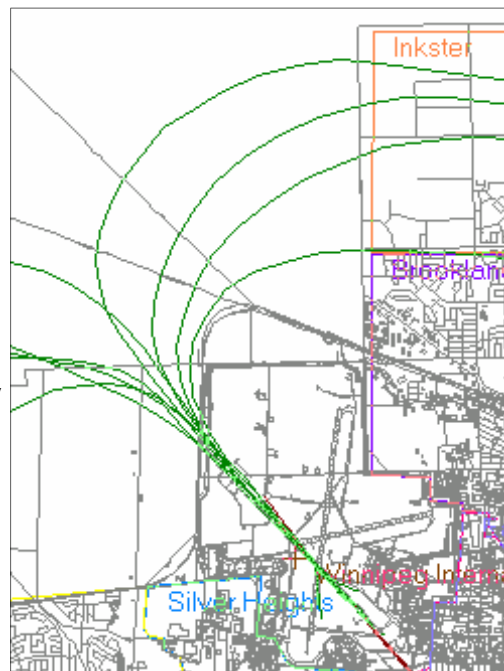
The environmental assessment is consistent with the requirements of the Canadian Environmental Assessment Act and the Canadian Airports Council Environmental Assessment Standard.

The assessment identified environmental impacts that may occur during the various stages of the redevelopment program, from construction and demolition activities, to full operation of the new terminal facilities.

Measures to eliminate, reduce or control potentially negative environmental effects have been identified at all stages of the redevelopment.

For example, contractors will be required to ensure compliance with government regulations and the use of sound management practices.

Negative effects from the operation of the new facilities will be mitigated, in part, through design of the infrastructure itself. For example, non-renewable natural resources for heating and air conditioning can be used more efficiently through better facility design and modern technologies.



The findings of the environmental assessment revealed that, with the application of mitigation measures, the redevelopment program will not result in significant adverse environmental effects. To ensure that these mitigation measures are applied successfully, follow-up reviews such as inspections and monitoring will be conducted over the life of the program through WAA's Environmental Management System.

Central De-icing Facility

In December, 2004, WAA completed construction on a \$6.9 million Central De-icing Facility (CDF) to improve the dispensing, collection and disposal of glycol fluids.

The CDF may be compared to a large open-air car wash. During the winter months, glycol is sprayed on aircraft prior to takeoff to remove ice or prevent freezing. Spent glycol remaining on the de-icing pad is either vacuumed up by ground equipment or eventually flows into apron drains. The drainage is then funneled into storage tanks and later removed for recycling or treatment at a water treatment facility.

The CDF was designed with protection of the environment in mind. Supported by local conservation groups such as Friends of Bruce Park, and the community-based Winnipeg Airport Advisory Committee on Environment, WAA's CDF consists of a specially-designed apron drainage



system used to capture and contain used de-icing fluid.

The facility has incorporated environmentally-friendly features such as:

- Capture of glycol-contaminated snow, or 'pink snow' in a retention area.
- Collection of surface and subsurface runoff from active areas, which is directed to two diversion tanks;
- A state-of-the-art computerized fluid management system in which samples are taken at each diversion tank to determine the glycol concentration. Fluid is then diverted to low or high concentration holding tanks;

- Fluid from the five separate 50,000-litre fiberglass, in-ground storage tanks and pink snow retention area can be loaded into tanker trucks for off-site recycling or disposal at the City of Winnipeg Water Treatment Plant; and,

- Under the pad is a clay liner to prevent glycol contamination of groundwater. A facility control room located at the north end of the Icehouse, coordinates the

movement of aircraft, airline de-icing vehicles and the glycol recovery vehicle. Aircraft are instructed by pad control which bay to taxi into, using the inset lighting as guidance.

The 27,000 square meter concrete pad is capable of simultaneously de-icing up to four mid-size aircraft (A320 or 727), or two large aircraft (B747) at one time. The new facility will supplement WAA's future airport redevelopment plans with provisions for a third bay expansion.

The Central De-icing Facility was designed with protection of the environment in mind.

For more information, visit our website at waa.ca.

