St. Albert's Report
On the Environment 2004-2006

Mission: ***The City of St. Albert is committed to the maintenance of a clean, healthy environment.***

Since the establishment of the Environmental Policy in 2003, the City of St. Albert has moved forward with major environmental initiatives and made significant accomplishments.

Initiatives Completed:

- The development of an Environmental Management System (EMS) for St. Albert Transit. St. Albert is the first municipality of its size to have an ISO 14001 certified Transit Department in Alberta.
- The establishment of an Environmental Advisory Committee, which provides strategic advice and expert information on both corporate and community environmental initiatives.
- The completion of the Stormwater Management Master Plan.
- The completion of External Energy Audit and long term retrofit plan for major City facilities and traffic lights.

Initiatives Being Worked On:

- Parks & Open Spaces Management Action Plan.
- Riel Park Recreation Master Plan.
- Former Landfill and Sewage Lagoons Site Management Action Plan.
- Stormwater Quality Monitoring Program expansion.
- Continuation of the 'Hydrocarbon/Grit Interceptor' program which includes plans for a constructed wetland and fish habitat enhancement project at Outfall #17/Boudreau Bridge.
- Water conservation measures including a Rain Barrel program.
- River Edge Enhancement Project (REEP) Community Partnership.

Upcoming Initiatives:

- Environmental Strategic Plan.
- Environmental Management System for Public Works.
- Extensive Community Water Conservation Campaign.



AIR

- St. Albert has predominantly good outdoor air quality, as measured by the Alberta Environment Air Quality Index.

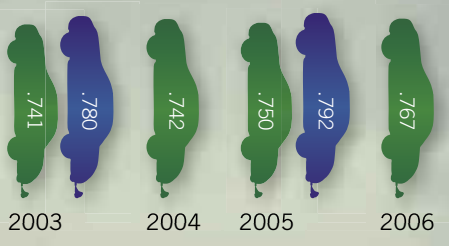
Air Quality

Automobile Use

In St. Albert, automobile use is the major contributor to air pollution and greenhouse gas emissions. St. Albert residents average 0.792 vehicles per person, just a slight increase from the average of 0.780 we had in 2003.

St. Albert has on average 2.24 cars per household, which is one of the highest averages in Alberta.

Vehicles per Capita



Registered Vehicles Per Capita

Stats for St. Albert available only for 2003 & 2005

Alberta St. Albert

Improving Air Quality – Initiatives

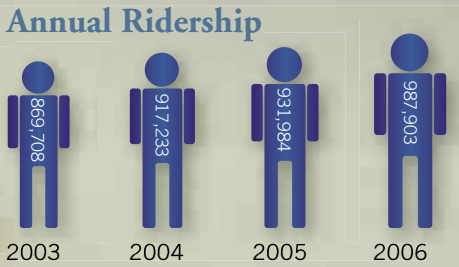
Public Transportation

The number of people who use St. Albert Transit has increased over 13% since 2003. St. Albert Transit has improved its service by increasing its fleet size to 46 more fuel efficient buses. St. Albert residents are finding that taking transit is more convenient and less costly than driving and it creates 65% fewer greenhouse gas emissions!

Check out St. Albert Transit at ***www.ridestat.ca***

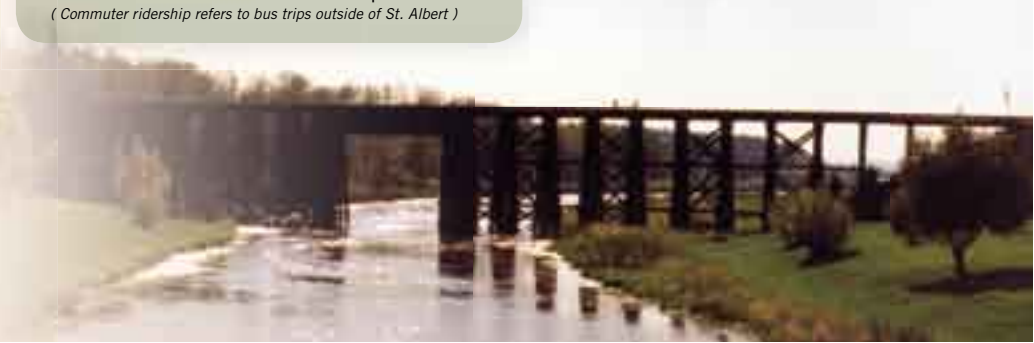
St. Albert Transit makes it easy for you to do something good for our environment by offering FREE bus services on Clean Air Day – the first Wednesday of June each year.

Annual Ridership



Total Commuter Annual Ridership

(Commuter ridership refers to bus trips outside of St. Albert)



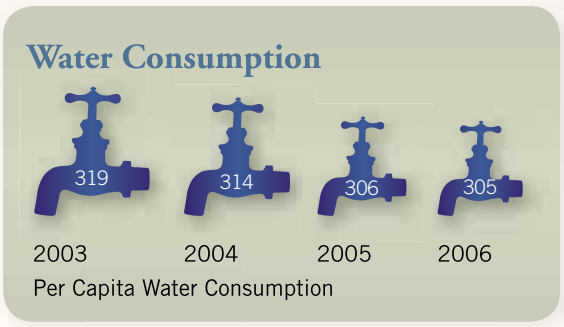
WATER

- Although the City gets its drinking water from the North Saskatchewan River, there are still high demands on the Sturgeon River and its resources.

Water Consumption

Average daily water consumption has reduced from approximately 320 litres per capita in 2003 to 305 litres per capita in 2006. Although St. Albert's water consumption is decreasing each year, the City is significantly above the residential per capita water consumption of Edmonton, which is 225 litres per person per day. Reducing outdoor water use and checking for indoor water leaks will help St. Albert reduce our overall consumption even further!

Do your own water audit at ***www.epcor.ca/customers.***



Improving Water Consumption – Initiatives

Rain Barrel Program

In 2006, the City of St. Albert sold 600 rain barrels to residents at a subsidized cost of $50 as part of our water conservation program. Twenty-five rain barrels were also donated to St. Albert schools to promote water conservation awareness. The response was overwhelmingly positive and the program will be held again in coming years.

An average household in St. Albert uses approximately 300,000 litres of water per year.

Stormwater Management

A major impact on the Sturgeon River is the increase in silt and pollution from stormwater runoff. Stormwater quality is affected by the amount of sand or salt we put on our roads, the drips of oil and gasoline from our vehicles and the fertilizers and pesticides we use in our yards.

Improving Stormwater – Initiatives

Stormwater Master Plan

In 2004, the City completed a Stormwater Master Plan aimed at protecting and preserving the Sturgeon River and the natural environment. Five high priority outfalls were identified for the addition of sediment/oil separators. The City also initiated a stormwater quality monitoring program to identify the contaminant levels in eight of the City's outfalls.

St. Albert's intensive spring cleaning program collects 70-75% of sand used on roads over the winter.

Best Management Practices

Since 2003, the City has been consistently reducing the amount of sand and salt on our roads. To further reduce the amount of sand and litter getting to the river, the City has an intensive spring cleaning program and vacuums out over 1000 storm drains a year as part of our catch basin cleaning program.

The largest contributors of pollution to the Sturgeon River are fertilizers and pesticides from residential yards.

Yellow Fish Road Program

The City of St. Albert has been a partner of the Yellow Fish Road Program since 2003. This program is designed to teach the public about the impact of dumping household chemicals and waste down stormwater drains. Many people don't realize that these chemicals enter local rivers untreated and have a negative impact on the water ecology. Yellow Fish Road volunteers paint "yellow fish" symbols beside storm drains and distribute fish-shaped brochures to nearby households.

For more information visit ***www.yellowfishroad.org****.*

Check out Environment Canada's website ***(www.atl.ec.gc.ca/epb/factsheets/12_steps)*** on 12 easy steps to Get your Lawn off Drugs.

ENERGY

- The majority of our power comes from burning fossil fuels such as coal, oil and wood, which generates carbon dioxide and other greenhouse gases (GHG).

Improving Energy Management – Initiatives

Energy audit

In 2005, the City of St. Albert conducted an energy audit on its major facilities and services. By completing all of the energy initiatives outlined in the audit, the City is projected to reduce carbon dioxide emissions by 3,149 tonnes per year, and save 29,562,078 MJ/year of energy.

In 2005, the City of St. Albert changed all the Christmas lights downtown to Light-Emitting Diodes (LED). The LED lights use 90% less energy than incandescent bulbs and are easier to maintain.

In 2006, the City initiated traffic signal light changes from incandescent bulbs to Light-Emitting Diodes (LED) panels. The City expects to save between $50,000 -$80,000 in energy costs per year, resulting in 449,600kWh energy reduction and a decrease in 446.1 tonnes of carbon dioxide per year.

Do your own energy audit on your home at ***www.epcor.ca/customers****.*

Solar Power

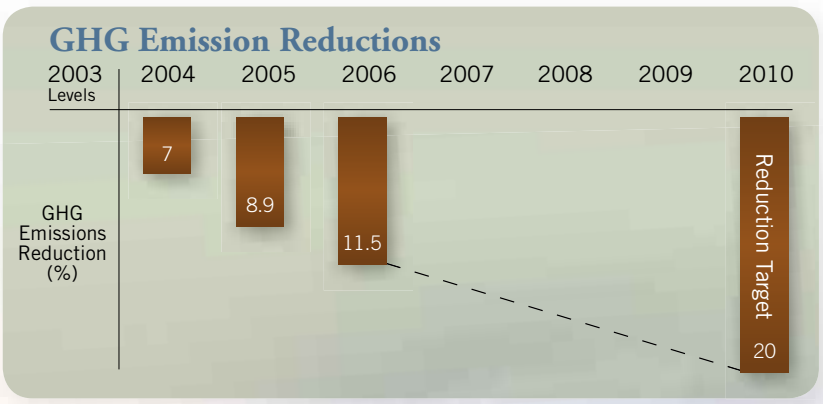
In 2006, the City of St. Albert announced plans to join over 20 municipalities across the province to become a part of a renewable energy project called Lasso the Sun. The City will participate by installing a solar energy panel on the new Fire Hall in North Ridge as a pilot project.

St. Albert Transit implemented an Anti-Idling Policy for all its buses in 2006.

For more information visit ***www.lassothesun.com****.*

Greenhouse Gas Emissions Target

St. Albert Transit has been the leader within City departments by implementing an emissions management program to reduce greenhouse gases. The objective of the program is to reduce GHG emissions per passenger km by 20% by 2010. Transit has already achieved a reduction of 11.5% from 2003 to 2006 levels!





LAND

- St. Albert's area and population have continued to grow steadily over the last three years. The impact of this growth is affecting how we plan our neighbourhoods, parks and open spaces, and how we approach pesticide use, contaminated sites and waste generation.

Land Use

Improving Land Use - Initiatives

Land Use Bylaw
In 2005, City Council approved a new Land Use Bylaw that encourages greater density and smaller residential lots.
This change will reduce the overall environmental impacts of neighbourhoods and contribute to more affordable housing alternatives for St. Albert.

Parks and Open Spaces

Improving Parks and Open Spaces - Initiatives

Parks & Open Spaces Management Work Plan
The City of St. Albert has established a corporate working team to develop a Parks and Open Spaces Action Plan to address key issues such as an inventory of the City's green assets, a tree and natural assets bylaw, park maintenance and landscape standards, and an integrated pest management plan.

St. Albert has approximately 900 hectares of parks and open spaces and over 41 km of trails.

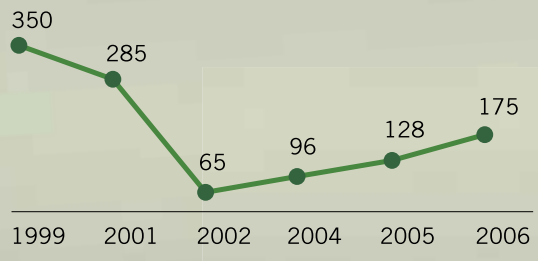
Improving Pesticide Use – Initiatives

Best Management Practices
Pesticides are used for the management and control of pests, noxious weeds and plant diseases. Pesticide use is federally and provincially regulated to ensure appropriate management and safe use for City maintenance.

The City uses many environmentally friendly methods such as manual removal of weeds by trimming.
However, in cases where smaller trees are damaged from weedeaters, the City has been testing the use of herbicides. The gradual increase in pesticide use from 2002 – 2006 can be partly attributed to this practice.

As an alternative to pesticide use the City recently purchased two 'Weed Dragons' to control weeds on sidewalks and brick features. The 'Weed Dragon' applies heat to kill weeds.

Pesticides Use



Total Litres of Pesticides/year

Contaminated Sites

Improving Contaminated Sites – Initiatives

Landfill Risk Management Plan
The City completed a Landfill Risk Management Plan for the former landfill at Riel Park to insure there are no adverse impacts to the Sturgeon River. The plan includes making sure there is appropriate clay capping on the former landfill, surface water is directed off the landfill quickly and monitoring of the groundwater quality continues.

St. Albert was one of the first communities in North America to implement a pay-as-you throw garbage program. An average St. Albert resident produces 250 kilograms of garbage each year, well below the provincial average of 400 kilograms/person.

Waste Management

Improving Waste Diversion - Initiatives

Recycling
The City of St. Albert was chosen as a test community for an audit conducted by the Alberta Dairy Council Milk Container Recycling Program in 2004.
The results showed that St. Albert residents are recycling 80% of the waste that can be recycled, including 71% of all milk cartons and 77% of all milk jugs.

Electronics collection
As part of the Alberta's new electronics recycling program, St. Albert became one of the 75 collection locations throughout the province available for residents to drop off unwanted televisions and computers. In 2005, St. Albert residents dropped off a total of 101 tonnes of electronics, which is equivalent to approximately 50 average sized cars.

St. Albert residents have one of the highest waste diversion rates in Alberta and are well above the Recycling Association's target of at least 50% waste diversion for all communities in Alberta.



ECOLOGICAL FOOTPRINT

An ecological footprint measures the impact or demand people place on the environment based on natural resource consumption and waste generation.

The ecological footprint is measured in hectares per capita - the amount of land and sea needed to support each person's current needs in the geographic area.

There are only 1.8 hectares of land and sea resources **available** to support each person on earth. The average Canadian has an ecological footprint of 7.25. This means it would take over 4 earths to sustain Canadians at the rate they are consuming resources. St. Albert's ecological footprint is approximately 11.5 hectares/capita, which is almost 40% higher than the Canadian ecological footprint.

High water and energy consumption, as well as our dependency on personal vehicles all contribute to St. Albert's ecological footprint.



Improving St. Albert's Ecological Footprint

Lifestyle changes

There are a number of lifestyle changes St. Albert residents can adopt that will reduce the ecological footprint of the community. Some of these changes include:

- Buying energy and water efficient appliances.
- Retrofitting homes or businesses to be more energy efficient or exploring renewable energy alternatives.
- Buying fuel efficient, low polluting vehicles.
- Walking, cycling, carpooling or taking public transit.
- Buying locally grown foods.

Calculate your own personal footprint at **www.myfootprint.org**

The average world footprint is just over 2.0 hectares/person, which means we are consuming resources faster than the earth can produce them. Europe has a footprint of less than 4.0 hectares/person. North America has the highest average footprint, at 9.5 hectares/person.

How Can You Make a Difference?

Environmental Stewardship

St. Albert residents have said that the environment is one of the most important factors contributing to the overall quality of life in St. Albert. The City of St. Albert is committed to managing our natural assets responsibly and minimizing negative impacts of growth and development on our environment. We are using Environmental Management Systems and Environmental Best Practices to do this at a corporate level.

Improving Environmental Stewardship – Community Initiatives

Leave your Roots in St. Albert

In 2005, community volunteers committed over 3000 hours to City-run environmental programs such as "Leave your Roots in St. Albert." So far, this program has planted or replaced over 3200 trees in St. Albert.

Partners-in-Parks

Through volunteer commitment, Partners-in-Parks maintains flower beds, cul-de-sac islands, portions of parkland or land along a roadway around the City. Volunteer hours for Partners-in-Parks increased from 8,500 to 10,000 over the past year with the number of sites also increasing from 143 in 2004 to 162 in 2005.

Spruce Up St. Albert

Spruce Up St. Albert includes participation by the public throughout the year to clean garbage in public areas and along the Sturgeon River. Spruce Up St. Albert volunteer hours have increased from 6,000 in 2004 to 8,500 in 2005.

River Edge Enhancement Project (REEP)

In 2005, the River Edge Enhancement Project (REEP) was initiated between City staff, local environmental groups and provincial representatives. The efforts started as a pilot project, taking inventory of the Sturgeon River edge, and lead to a long-term strategy to restore the river shore habitat by planting native trees and shrubs.

St. Albert's green spaces continue to be the most frequently mentioned factor contributing to a high quality of life in St. Albert.

Your Opinion Matters

For more information or to provide feedback please contact:

Office of Environment
Telephone: **459-1735** Fax: **458-1974**
E-mail: **environment@st-albert.net**
Or visit our website at: **www.stalbert.ca**

We all realize that there are no quick solutions to the environmental issues that our community faces, but we can all make a big difference by making small changes in our lives.

For things that you and your family can do, check out these websites:
www.ec.gc.ca/eco/wycd/home_e.html, www.environment.gov.ab.ca/edu/homeEd.asp

