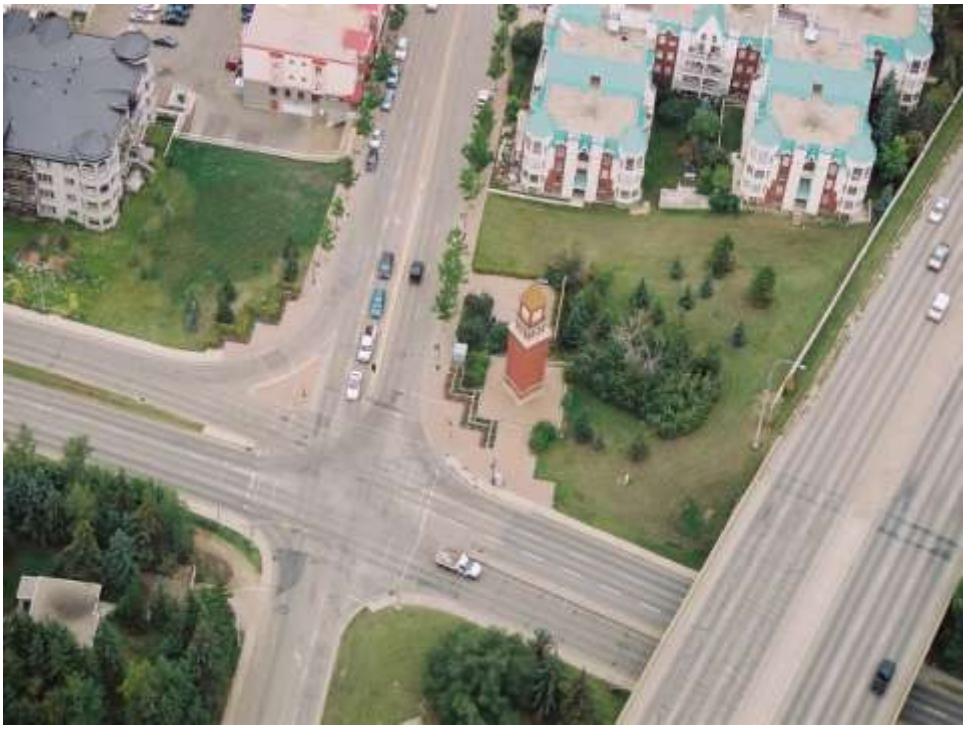
THE CITY OF St.Albert

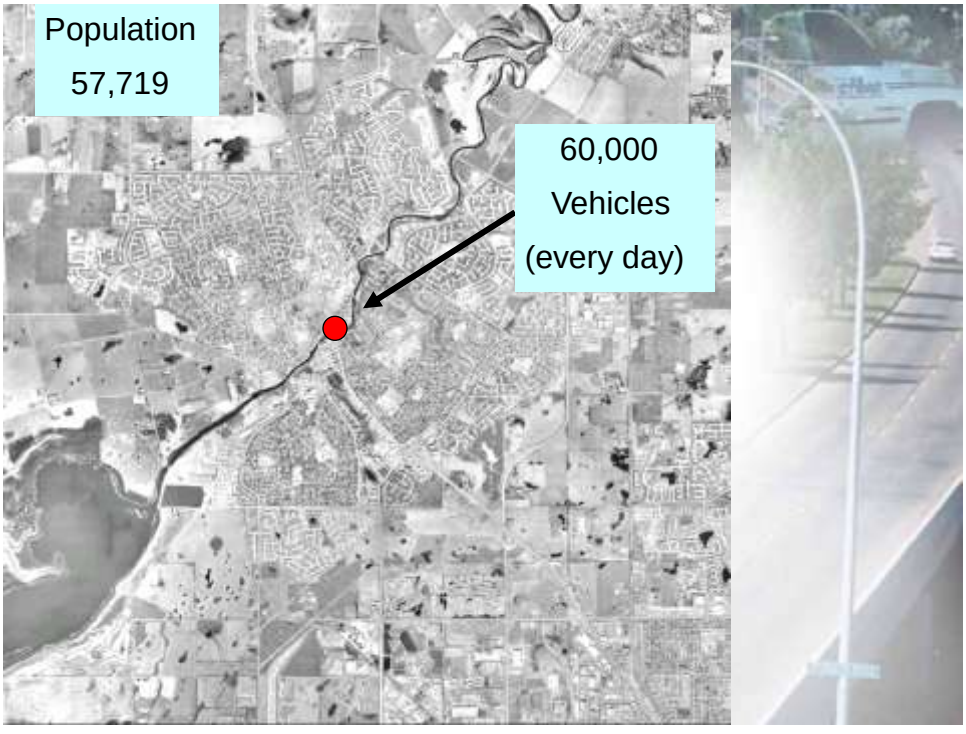
Presents

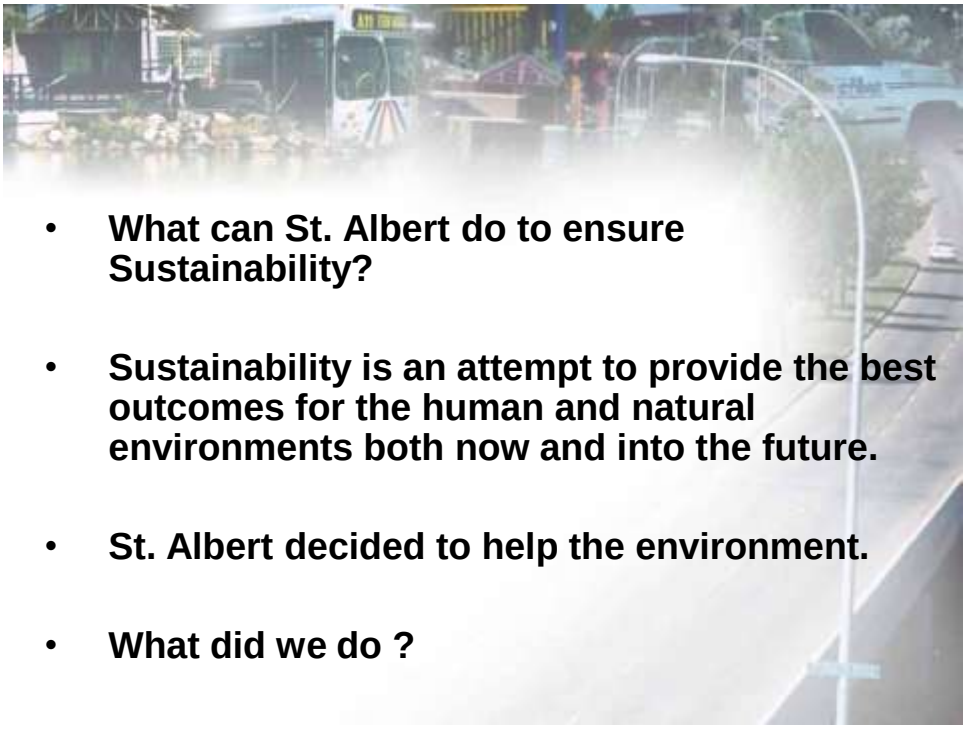
Conversion To LED Traffic Signals

Municipal Sustainability Workshop
Friday April 20, 2007
Todd Wyman,P.Eng. Director of Engineering

What is St.Albert ?



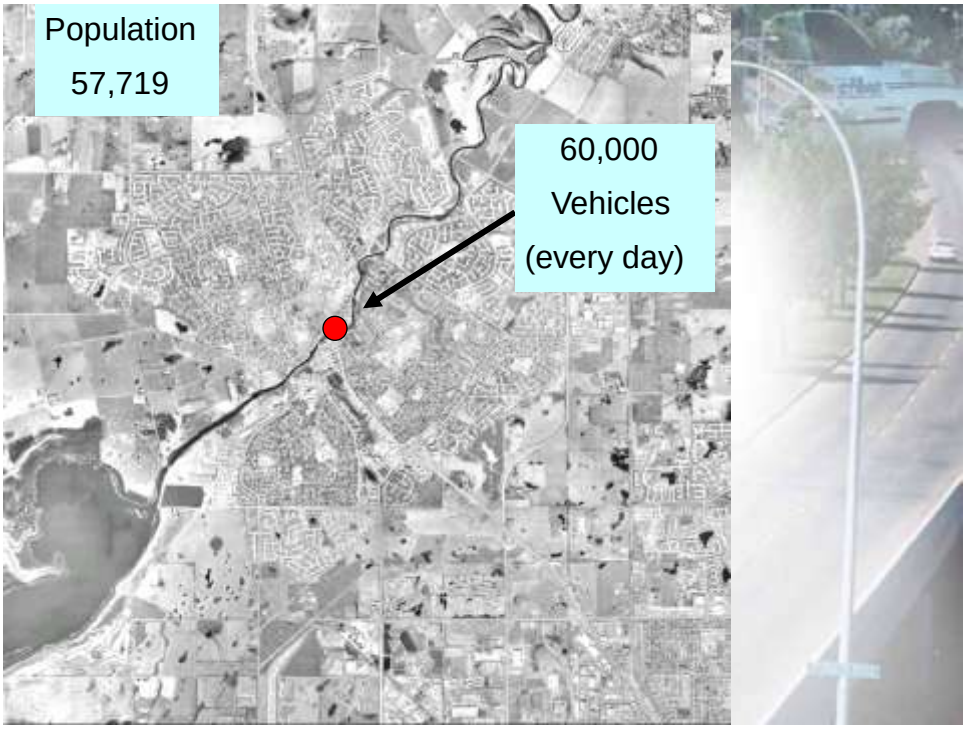

Population
57,719
60,000
Vehicles
(every day)

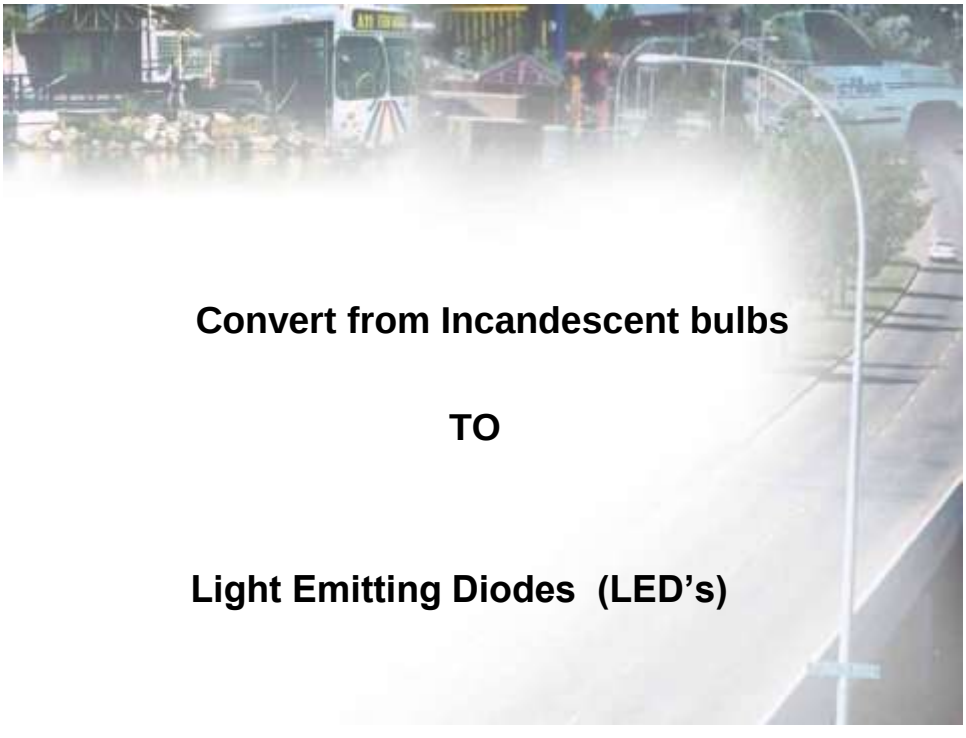


- **What can St. Albert do to ensure Sustainability?**
- **Sustainability is an attempt to provide the best outcomes for the human and natural environments both now and into the future.**
- **St. Albert decided to help the environment.**
- **What did we do ?**

- **Dec 2004 - Complete Energy Audit**
- **Proactive towards energy conservation**
- **Reviewed all facilities**
- **Including Traffic Signals**

- **ME first program Launched in Sept 2003**
- **Interest free loan for Municipal Energy Efficiency Assistance**
- **Instead of something hidden in a building…… upgrades to heating system etc..**

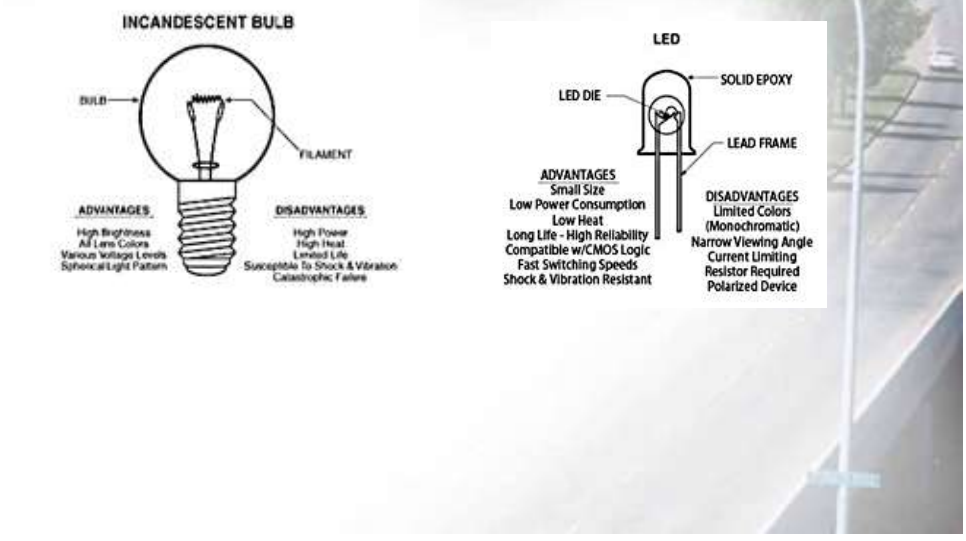


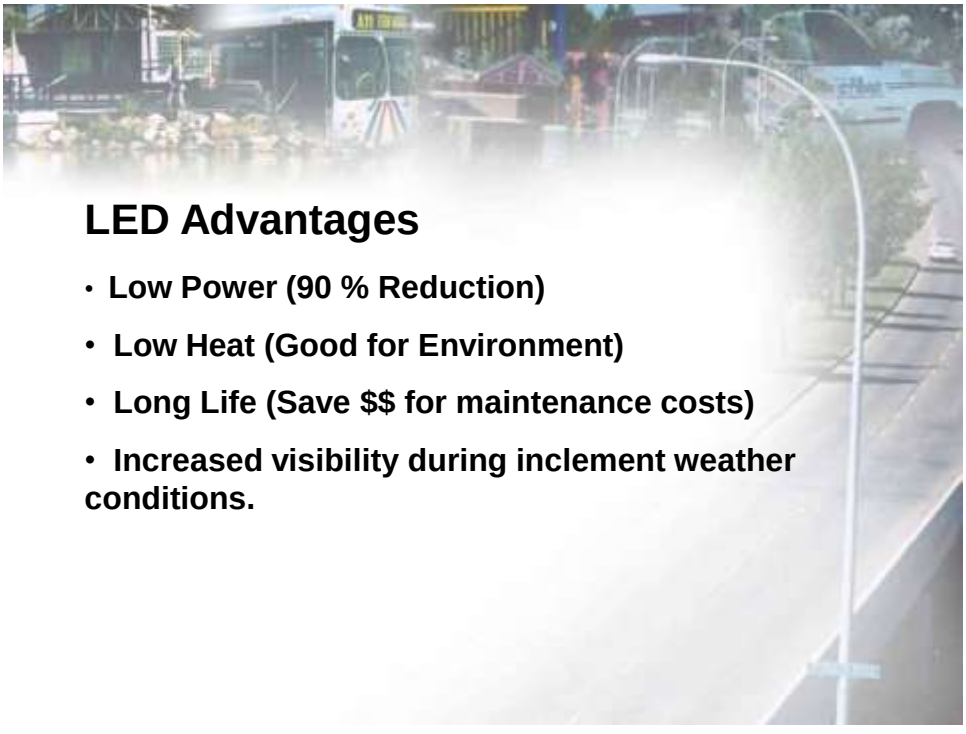


Convert from Incandescent bulbs

TO

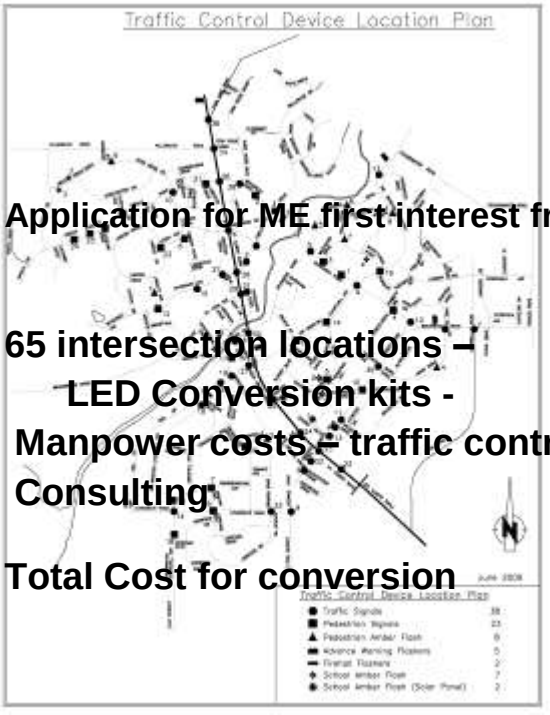
Light Emitting Diodes (LED's)





LED Advantages

- **Low Power (90 % Reduction)**
- **Low Heat (Good for Environment)**
- **Long Life (Save $$ for maintenance costs)**
- **Increased visibility during inclement weather conditions.**



Application for ME first interest free loan is approved.

65 intersection locations –

LED Conversion kits -	**$ 300,000**
Manpower costs – traffic control	**$ 150,000**
Consulting	**$ 50,000**

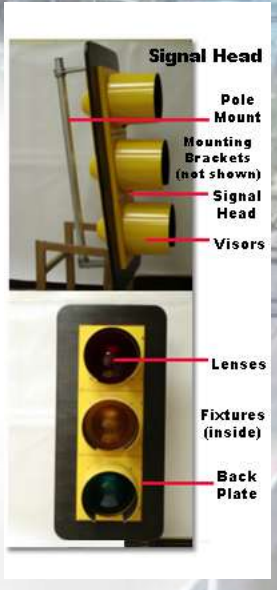
Total Cost for conversion	**$ 500,000**

Why Traffic signals?

Project Construction - Opportunity Analysis

- **Best opportunity – Low capital – Rapid payback**
- **Good opportunity – High capital – Rapid payback**
- **Fair opportunity – Low capital – Long payback**
- **Poor opportunity – High capital – Long payback**

- **In 5 years need to pay loan back**
- **Resulting cost savings from:**
  - **Maintenance**
  - **Energy Savings (Power Consumption 90% reduction)**
  - **Warranty Period (7 Years)**
- **Payback is around 5 years.**




Thank You


Questions