

# **Surface Mobile Monitoring for Victoria 2011**

Cyril Durrenberger

Jarett Spinhirne

Elena McDonald-Buller

David Allen

The University of Texas at Austin

# Surface Mobile Monitoring

The purpose of surface mobile monitoring

- Monitor air pollutants over a large area where CAMS are not located
- Evaluate transport into the Victoria area
- Evaluate the impact of industrial facilities
  - Power plants
  - Chemical plants
  - Oil and Gas production areas
  - Gas compressor plants
- Evaluate the impact of emission sources in urban areas
  - Specific sources
  - Area source emissions
  - Mobile source emissions
    - Vehicle idling near schools
- Compare measurements with model predictions

# Surface Mobile Monitoring Platform

- General Motors suburban platform
- Measured Ozone, SO<sub>2</sub>, NO<sub>x</sub>, CO, Methane and THMHC
- GPS used to determine location of vehicle
- Power for the instruments was supplied by two portable 2,000 W gasoline powered generators that were mounted on a cargo platform attached to the rear of the vehicle
- The intake was mounted on the roof and elevated to 8' above the surface to prevent self contamination from the generator exhaust
- VOC canister samples were collected at times and locations of interest based on real time rapid evaluation of sampling results

# Mobile Sampling Platform

