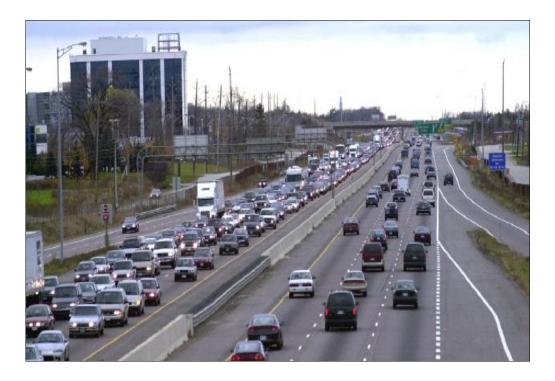


SILVERHILL INSTITUTE OF ENVIRONMENTAL RESEARCH AND CONSERVATION

AIR QUALITY IN ONTARIO

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Air quality in Ontario has improved steadily since 1988 (Ministry of the Environment, 2011). According to Ontario's Ministry of the Environment (2011), air quality is good approximately 90% of the time. The 2009 Ontario Air Quality Report shows a 64% reduction in carbon monoxide (CO) concentrations between the years 2000 and 2009 (Ministry of the Environment, 2011). Moreover, sulphur dioxide (SO₂) has decreased by 54% and nitrogen dioxide (NO₂) by 40% between 2000 and 2009 (Ministry of the Environment, 2011). However, ozone concentrations remain high in most areas.

Analysis of the Historical Air Quality Pollutant Data shows ozone concentrations for the years 2000 and 2009 (Ministry of the Environment, 2011). In order to reflect a broad spectrum of data, Southern and Eastern Ontario, Windsor downtown, Hamilton downtown, Toronto downtown, and Ottawa downtown will be the focus. As well, the years 2000 and 2009 will be analyzed, specifically the month of July at 12pm.

Ozone concentrations in Windsor, Hamilton, Toronto, and Ottawa were similar in 2000 and 2009. In July, 2000, ozone concentrations ranged from 12 to 61 ppb in Windsor downtown; in July, 2009, ozone concentrations ranged from 10 to 65 ppb. Hamilton downtown showed similar concentrations: July, 2000 had ozone concentrations of 4 to 65 ppb, and in 2009, 16 to 52 ppb. Ozone concentrations in Toronto downtown were 13 to 63 ppb in July 2000, and 18 to 46 ppb in July, 2009. Finally, ozone concentrations in Ottawa downtown were in the same range, from 12 to 51 ppb in July, 2000, and 13 to 47 ppb in July, 2009. Although these ranges are a specific point in time, they do not demonstrate any significant reductions in ozone concentrations.

Nevertheless, the 2009 air quality (measuring all pollutants) in Windsor downtown, Hamilton downtown, Toronto downtown, and Ottawa downtown was very good over 40% of the time and good over 50% of the time (Ministry of the Environment, 2011). This measurement includes the pollutants that are most harmful to living things, including ozone. As a result, if the major pollutants are considered, air quality has been improving in Ontario as a result of efforts to reduce contaminants in the air.

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