Monitoring $PM_{2.5}$

Newer Technology, Better Data, Same Air Quality.

Measuring Pollutants in Air

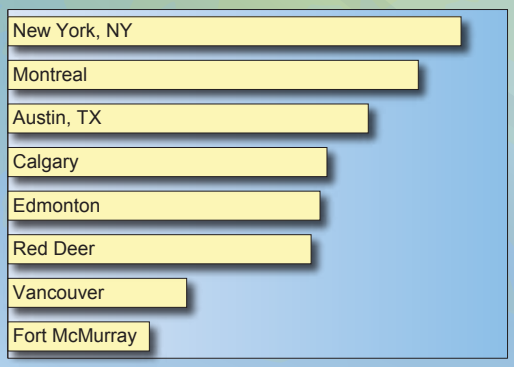
Air pollution can affect the health of people and the environment. Air quality is now reported to the public in real time from over twenty locations. For more information on Alberta's air quality, visit: airquality.alberta.ca.

Comparing the diametres of human hair and $PM_{2.5}$

Human hair (70 micrometres)

Fine PM (2.5 micrometres)

Annual Average $PM_{2.5}$ in Selected Cities (2009)

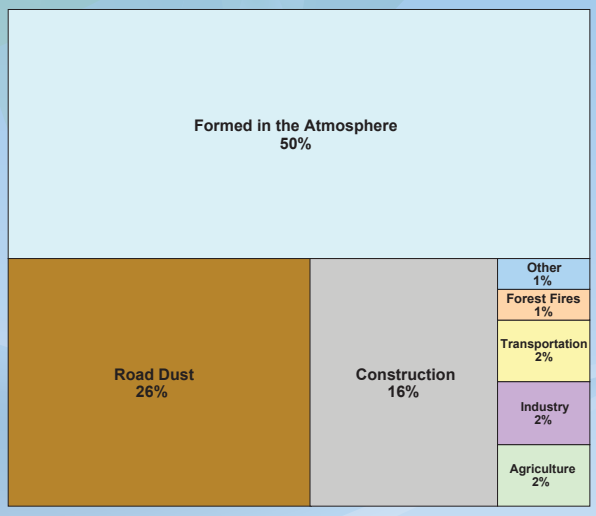


Source: Alberta Environment and Sustainable Resource Development, Environment Canada and World Health Organization.

Measuring Pollutants in Air

Many pollutants are monitored, including fine particulate matter ($PM_{2.5}$) - particles in the air that are less than 2.5 micrometres in diametre. Due to its small size, $PM_{2.5}$ can go deep into the lungs and may impact human health.

Sources of Fine Particulate Matter in Alberta

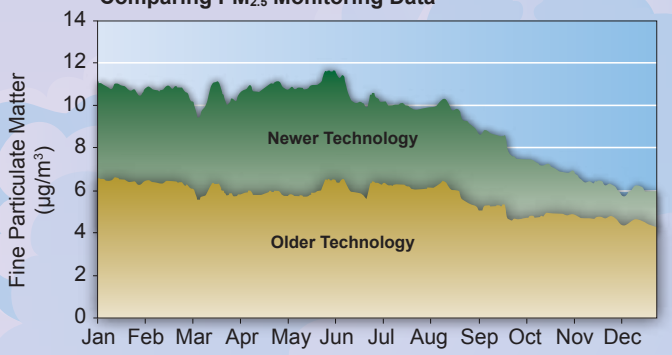


The size of the boxes indicates relative contribution of $PM_{2.5}$ in Alberta.

Same Air, Different Measurement Technology

Since 2009, Alberta has been using newer technology to measure $PM_{2.5}$. Older technology led to loss of some $PM_{2.5}$, while the new technology better retains the whole sample to give more accurate data. With this improvement, it also means that measured values can be higher.

Comparing $PM_{2.5}$ Monitoring Data



$PM_{2.5}$ concentrations from Edmonton McIntyre (2011)

Alberta Values Clean Air

Alberta has implemented better air quality monitoring technology to provide a more complete picture of $PM_{2.5}$. Widescale reporting in Alberta with the new technology began in 2009.

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