



Impacts of Reduced Transportation on Air Quality in Alberta Associated with COVID-19 (IRTAQ) PROJECT BACKGROUNDER

1. The Clean Air Strategic Alliance (CASA) is a multi-stakeholder partnership composed of representatives selected by industry, government, and non-government organizations and uses a collaborative consensus process to provide strategies to assess and improve air quality for Albertans.
2. Alberta declared a COVID-19 public health emergency on March 17, 2020. The province implemented several measures to curb the spread of COVID-19 and protect the health care system, including closures of schools and requirements to work from home, where possible. These stay-at-home measures had the potential to significantly reduce air emissions from motor vehicles and provided an unprecedented real-world opportunity to examine the impact of motor vehicle traffic on air quality, and in turn, human health.
3. The project team prepared a summary report to: a) summarize information about air pollution and associated health impacts, and b) summarize existing information on Alberta's ambient air quality and traffic counts before and during implementation of measures to reduce the spread of COVID-19.
4. The intent of including health impacts was to highlight why changes in air quality are meaningful and relevant to Albertans. Such information can help create awareness of the impacts of air quality on human health and generate interest in reducing emissions from transportation sources.
5. The report, while not quantifying the specific health implications or benefits associated with reduced transportation volumes during periods of the pandemic, showed that reduced traffic volumes reduce air pollution. Based on health-based air quality metrics like the Air Quality Health Index (AQHI), reduced traffic-related air pollution levels translate to reduced air pollution-related health impacts with associated quality of life and economic benefits.
6. The project team developed key messages on: a) overall takeaways from the summary report related to vehicle emissions, air quality, and health, and b) actions Albertans can undertake to reduce vehicle emissions and thereby help improve air quality.

7. The project resulted in four consensus recommendations, which CASA provided to Alberta Environment and Parks and other stakeholders to support the delivery of key messages and future traffic and air quality monitoring efforts. This project also highlights the value of and supports the implementation of recommendations for other past and ongoing CASA projects (e.g., CASA ROVER III project and CASA Non-Point Source project).
8. Recommendations:
 - 1) For CASA to provide the final key messages, and guidance on delivering those messages, to its stakeholders and partners.
 - 2) For stakeholders and partners to deliver the key messages to audiences through their networks.
 - 3) For Alberta Environment and Parks to prepare air quality and vehicle count analysis done to date for peer-reviewed publication.
 - 4) Monitoring organizations in Alberta should investigate air quality near major roadways through roadside ambient air monitoring and compare measured values to nearby neighbourhood scale stations.

Copies of the report and more information on CASA and the IRTAQ Project Team can be found at <https://www.casahome.org/past-projects/impacts-reduced-transportation-air-quality-alberta-associated-covid-19-project-team-60/>

The Clean Air Strategic Alliance is a multi-stakeholder partnership. It is composed of representatives selected by industry, government, and non-government organizations to provide strategies to assess and improve air quality for Albertans, using a collaborative consensus process. Every partner is committed to a comprehensive air quality management system for Alberta.

For more information, please contact:

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