Reducing Health Risks from Traffic Related Air Pollution (TRAP)

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The Environment & Energy Division is reporting back on the findings of a City-wide cumulative air modelling study and the important contribution of transportation to air pollution in Toronto.

Toronto Public Health is a partner in this work, reporting on the health impacts.
This report:

- Highlights the extent of exposure to TRAP in Toronto; and
- Presents recommendations that can be taken to reduce exposure, especially for vulnerable populations.
Importance of Addressing TRAP

- Traffic is largest source of air pollution emitted in Toronto
- TPH estimates indicate that each year:
  - 280 premature deaths &
  - 1090 hospitalizations

  can be attributed to air pollution from traffic travelling within Toronto
TRAP Exposure Zones in Toronto – A City-wide Problem
TPH staff estimate that approximately:

- 35% of residential areas
- 50% of all child care centres,
- 43% of schools (private and public), and
- 63% of long term care homes are located within a TRAP exposure zone.
Interventions to Reduce TRAP

The recommendations in this report fall into three categories:

• Improving air quality by reducing emissions at the source
• Modifying the environment in new construction and reducing exposure in existing buildings
• Improving our understanding through ongoing research and review
Recommendation: Improve Air Quality by Reducing Emissions at the Source

There are different ways to reduce the amount of pollution that is released into the air:

- Pursue opportunities to reduce TRAP through the Toronto Congestion Management Plan
- Evaluate the City’s street sweeping service levels
- Request stricter emission standards for new and existing vehicles, especially heavy-duty diesel trucks
Recommendation: Modify the Environment in New and Existing Buildings

- Develop feasible best practice guidelines that could be implemented on City properties and promoted among other agencies and professionals in the private sector.

- These may include guidelines about:
  - The placement of outdoor amenity areas
  - The layout of the building
  - The use of barriers, including vegetation
  - The type and design of the ventilation system

- Implement funding/financing mechanisms for building retrofits needed to reduce exposure to traffic-related air pollution.
Recommendation: Improve Understanding of TRAP in Toronto

- Request Public Health Ontario to conduct air quality monitoring near buildings occupied by vulnerable populations.
- Request MOECC to estimate the social, environmental, and health costs associated with TRAP.