

# CLEAN AIR HAMILTON 2019 PROGRESS REPORT

December 7, 2020  
Hamilton Board of Health



**Clean Air Hamilton**  
**2019 Air Quality Progress Report**  
**November 2020**

**Bruce Newbold, Ph.D.**  
Chair  
Clean Air Hamilton

**[www.cleanairhamilton.ca](http://www.cleanairhamilton.ca)**

*Photo courtesy of Tourism and Culture  
Division, City of Hamilton*

# Clean Air Hamilton

## Members:

Local Citizens

Ontario MECP

Health Canada

Environment Canada

ArcelorMittal Dofasco

Stelco

Friendly Streets

Green Venture

McMaster University

MIHE

Mohawk College

Environment Hamilton

City of Hamilton

Public Health

Planning

Public Works



- Science based / Diverse / Inclusive / Facilitated Consensus
- CAH established as an implementation committee to act on recommendations contained in 1997 Hamilton Air Quality Initiative Reports
- Community based initiatives
- Internationally recognized
- Meet 2<sup>nd</sup> Monday of each month

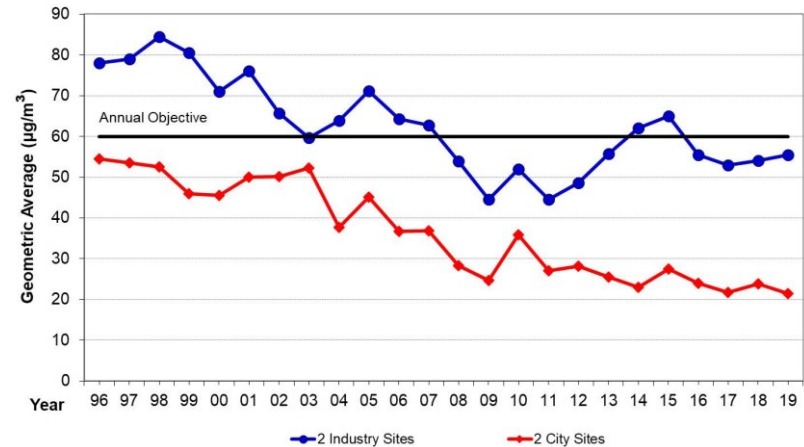


# Hamilton's Air Quality Trends

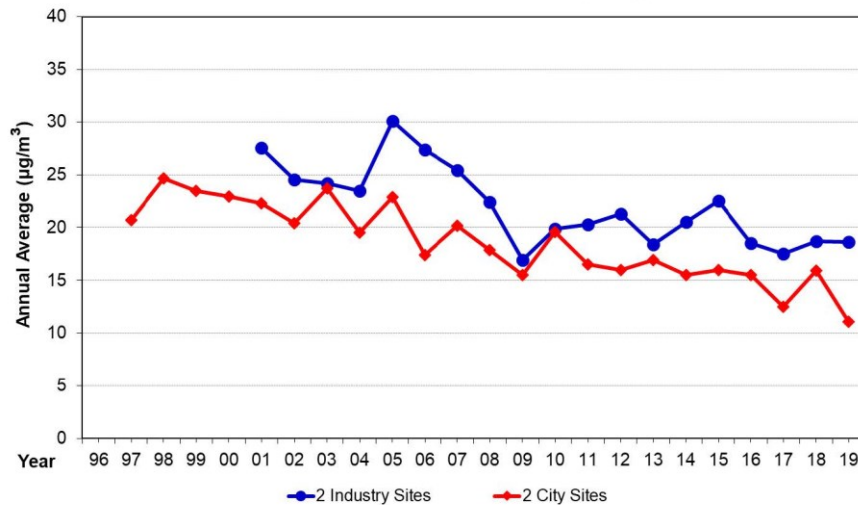
## Particulate Matter (TSP, PM<sub>10</sub>, PM<sub>2.5</sub>)



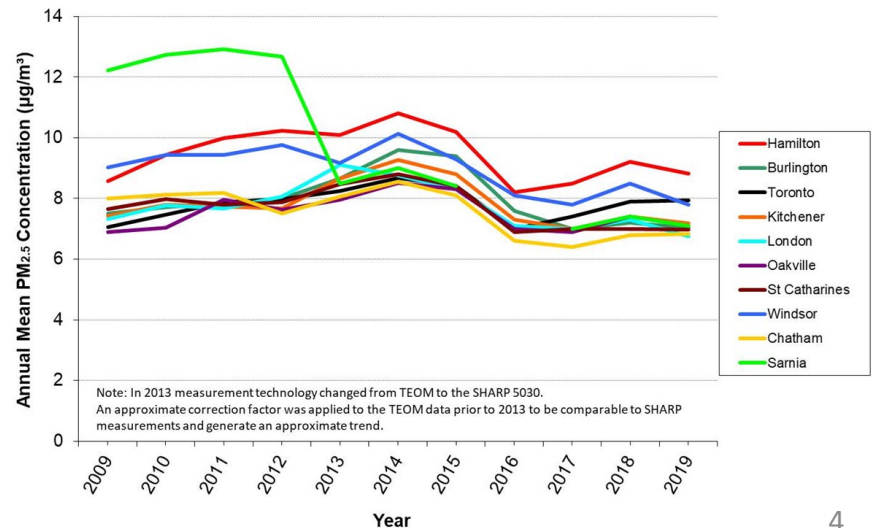
Suspended Particulate Matter Trend



Inhalable Particulate Matter (PM<sub>10</sub>) Trend



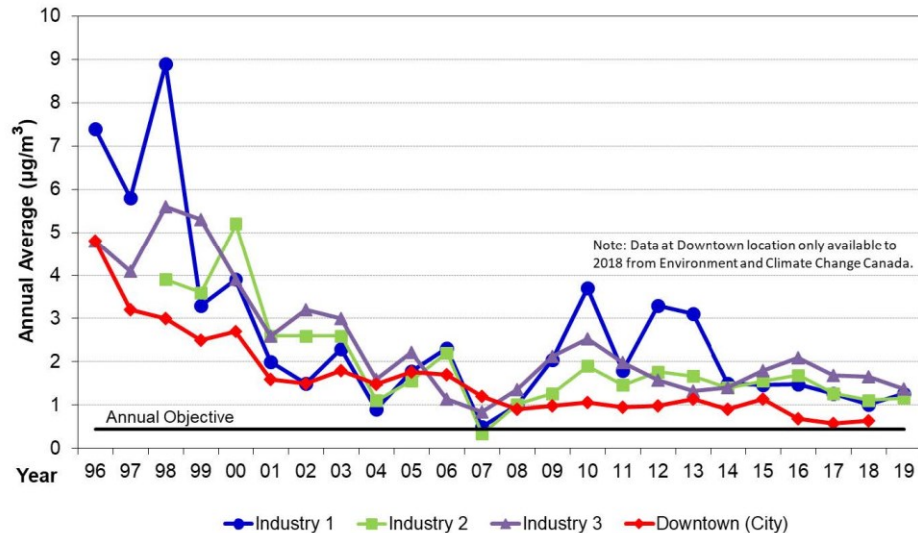
11-Year Trends for PM<sub>2.5</sub> (Ten Cities)



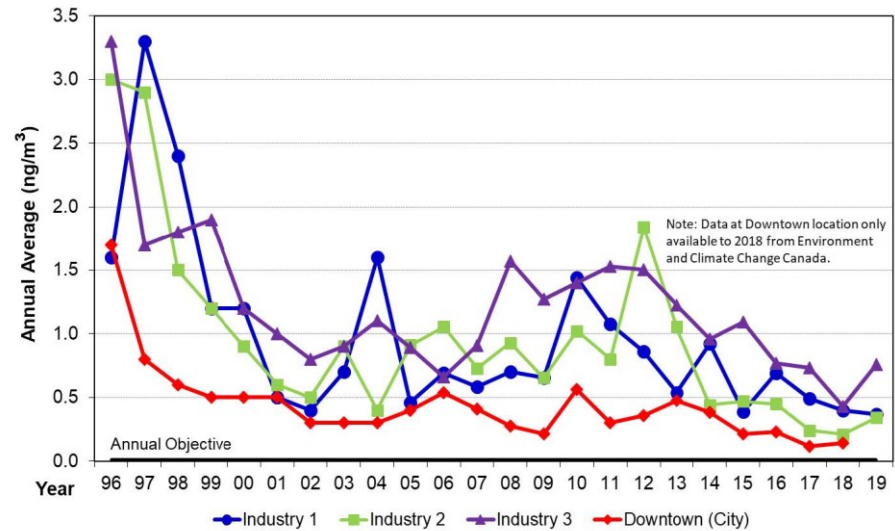
# Hamilton's Air Quality Trends

## Benzene and Benzo[a]pyrene

Benzene Trend



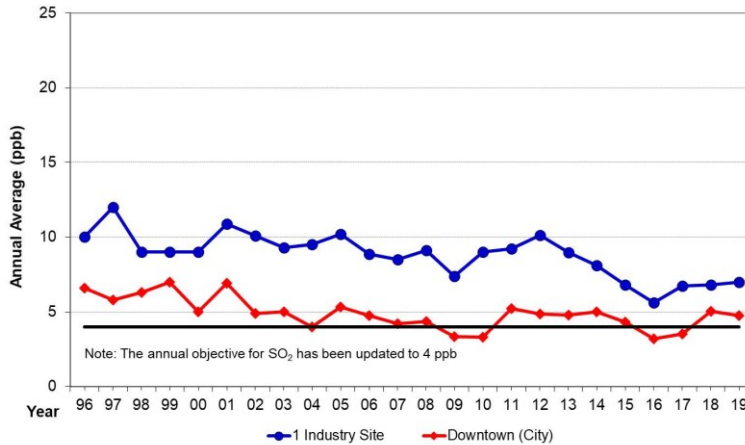
Benzo[a]pyrene Trend



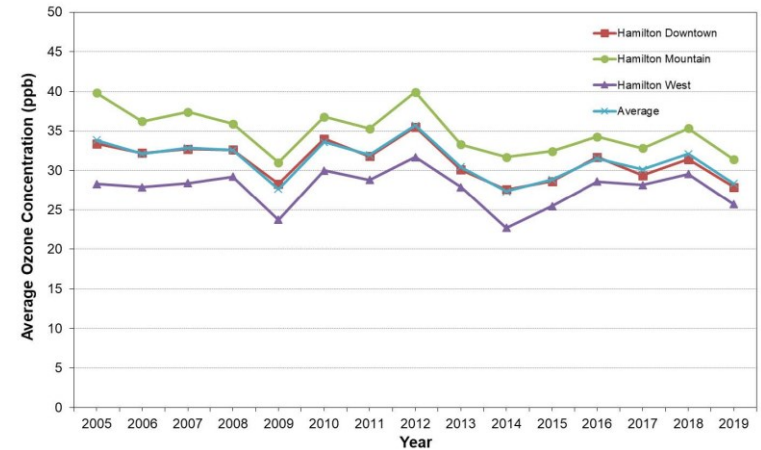
# Hamilton's Air Quality Trends

## Nitrogen Oxides (NO<sub>x</sub>), Nitrogen Dioxide (NO<sub>2</sub>), , Sulphur Dioxide (SO<sub>2</sub>), Ozone (O<sub>3</sub>)

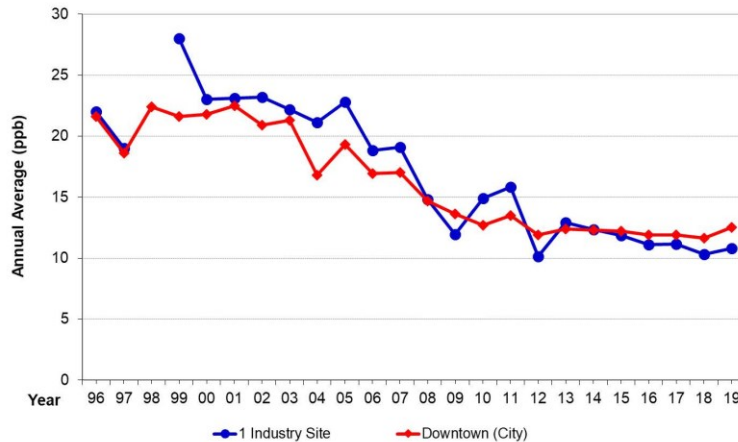
Sulphur Dioxide Trend



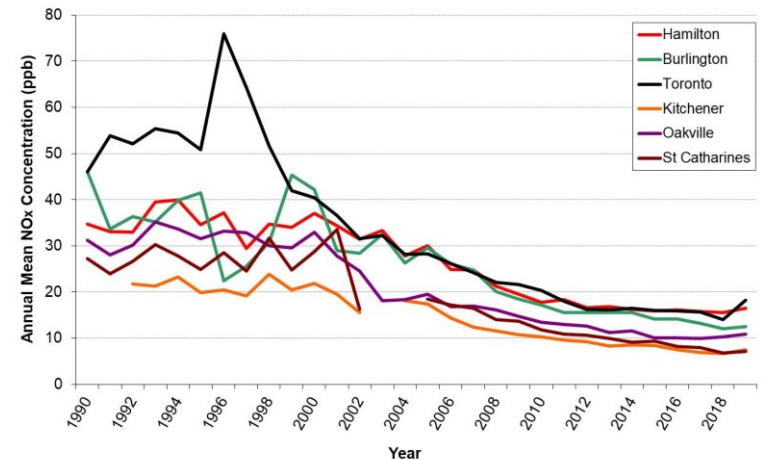
Ground Level Ozone Trend (Summer Months)



Nitrogen Dioxide Trend



29-Year Trends for Nitrogen Oxides (Six Cities)



# 2019 Community Projects Supported Through Clean Air Hamilton

- **Enhanced Fresh Air for Kids** (Green Venture and Corr Research)
  - Famous Fresh Air for Kids program with anti-idling engagement and campaign at participating schools.
- **Friendly Streets Hamilton** (Cycle Hamilton and Environment Hamilton)
  - Conducting street-level audits within a one km radius of the General hospital while educating the public about air quality challenges and measuring PM<sub>2.5</sub>.
- **Trees Please** (Environment Hamilton and the Hamilton Naturalists Club)
  - Collection of air quality and tree inventory data and planting 500+ trees in Ward 4.



# 2020 Community Projects Supported Through Clean Air Hamilton

Approved 2020 Projects through Healthy Environment Division's Operating Budget

- **Fresh Air for Kids** (Green Venture and Corr Research)
  - Mobile air monitoring around four schools across Hamilton, virtual class presentations on results and importance of Air Quality Health Index.
- **Trees Please** (Environment Hamilton)
  - Tree Giveaways, Particulate Matter Monitoring, and introduction of heat sensors in Ward 4 and lower City neighbourhoods.





# Future Actions

- Continue to support education and outreach, air quality monitoring, and using the Hamilton Airshed Modeling System to identify major sources of pollution to prioritize action for maximum air quality improvement and exposure reduction.
- Support initiatives aimed at reducing transportation related green house gas emissions such as expansion of bike lanes and SoBi.
- Support expansion of electric vehicle charging station infrastructure in Hamilton.
- Continue to support groups like Clean Air Hamilton aimed at improving air quality and public health across the City of Hamilton.

## Why?

To ensure the health and well-being of the citizens of Hamilton.





Thank you,  
On behalf of  
***Clean Air Hamilton***

