



Clarkson Transit Station Area Study

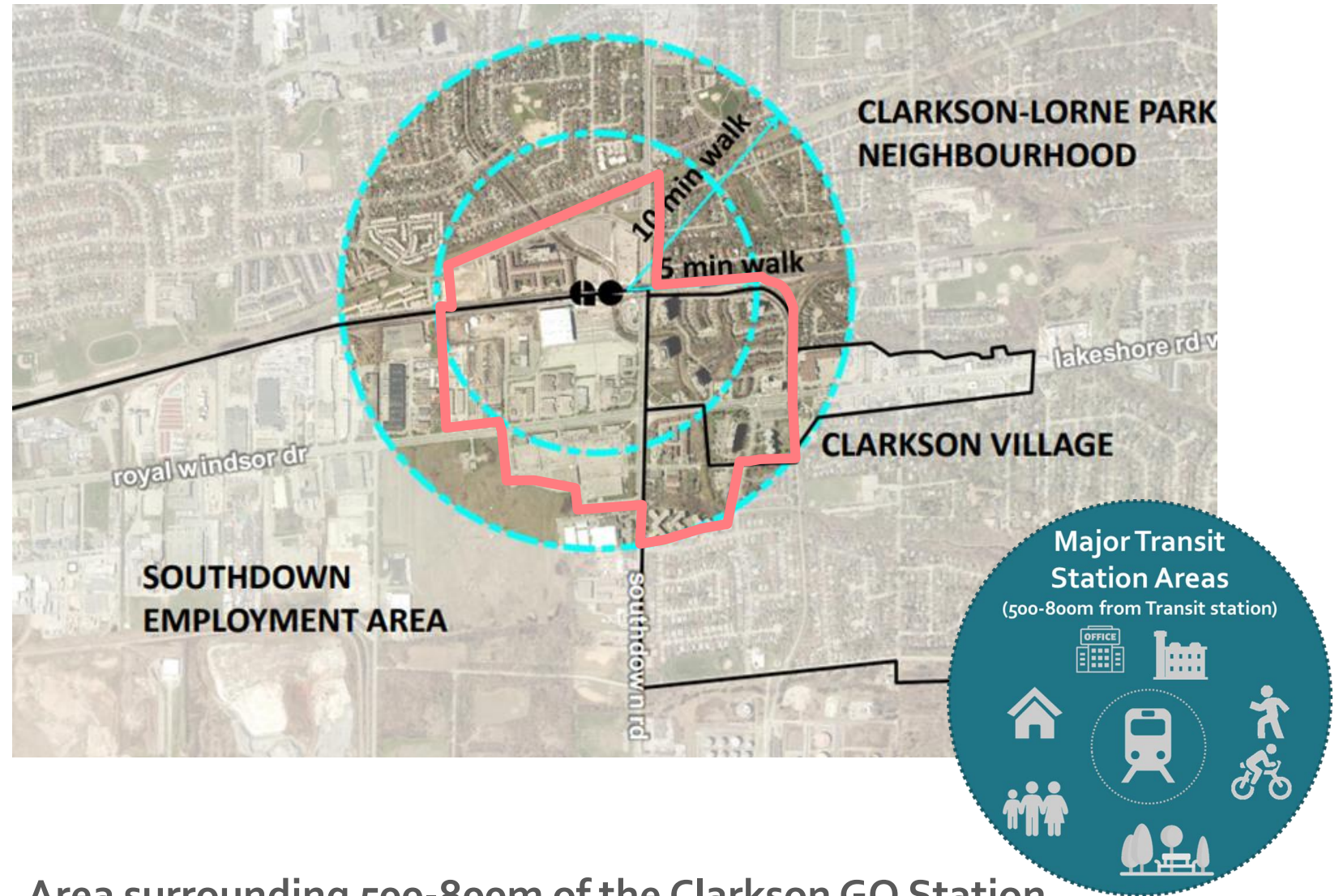
Air Quality Study Findings, Community Feedback, and Next Steps

Planning & Development Committee, May 29, 2023

Romas Juknevicius, Project Lead, City Planning Strategies



In 2018, the City started the Clarkson Transit Station Area Study





Area surrounding 500-800m of the Clarkson GO Station

Technical
studies
+
Community
Feedback
=

Air Quality
MOPA 117, 2020

Requirement of an updated Air Quality Study before planning for new residential growth in the Southdown Employment Area



-  Clarkson Transit Station Area Boundary
-  Southdown Employment Area

A team of experts was set up by the City

The City of Mississauga
City Planning Strategies, Planning & Building Dept.

Peer Reviewer

Environmental
Expert:
Dillon
Consulting



Expert Review Committee

- Ministry of Environment, Conservation and Parks
- Region of Peel Public Health
- City of Mississauga, Environment Division
- Major Industries : CRH Cement Inc, PetroCanada and CertainTeed

The City identified the requirements for an Air Quality Study to be completed

Terms of Reference

Land Use Compatibility

Determine if additional residential uses are compatible with existing industries

+

Air Quality Monitoring

Monitor air pollutants on-site for at least 6 months

+

Air Dispersion Modelling

Analyze combined impact of all pollution sources

+

Human Health Assessment

Evaluate impacts and risk of increased pollution levels on human health

Air Quality
Study
2020-2023

A landowner completed an Air Quality Study as per the
City's Terms of Reference



- Clarkson Transit
Station Area
Boundary
- Landowner
(2077, 2087, 2097
and 2105 Royal
Windsor Drive)

Air Quality Monitoring

Monitor air pollutants
on-site for at least
6 months

6

months of
Air Quality monitoring
(July 2020 to
January 2021)



Covid shutdown
resulted in reduced
pollution levels



Data adjustments
were made to
select pollutants
to account for
Covid

Air Dispersion Modelling

Analyze combined impacts of all pollution sources



Air monitoring data combined with permitted industrial emissions and traffic data



Account for local weather and wind factors

MECP approved models

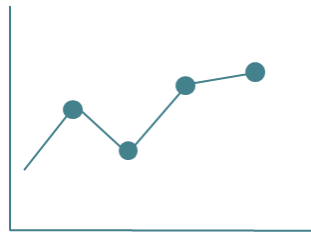


AERMOD +
Shoreline
fumigation +
Screen 3



CALPUFF

Key findings of Air Quality Monitoring and Dispersion Modelling



Pollutants found
above acceptable
levels

(NO_x, PM 2.5, PM 10,
Acrolein, Benzene and
Benzo(a)pyrene)



Transportation is
primary source of
elevated pollution
levels



Similar levels of air
quality have been
noted across GTA

Human Health Assessment

Evaluate impacts and risk
of increased pollution
levels on human health



Air quality levels
represent typical
urban
environment



Elevated pollutant
levels typically found
in urban areas
across GTA



Frequency & source of
elevated pollution levels
do not prohibit
residential
development

Community Meeting March 22, 2023

Air Quality Study
Findings

+

Direction
to complete
Master Plan

+

Next Steps

Are we heading in the right direction?



Residential and mix of uses
near Clarkson GO



Well-connected
public spaces



Protect and enhance
natural features and parks



Vibrant,
animated streets



Safe, reliable walking
and cycling connections



High quality,
Green buildings

Community Meeting # 3 March 22, 2023

What we Heard!



Safe walking and
cycling access to
Clarkson GO



Green spaces



COVID Adjustments?
What are acceptable
pollution limits?



Poll: Majority
Support for
Guiding Principles



Residential & Industrial
Compatibility

PDC to Endorse : Next Steps on Clarkson Transit Station Area Study

**Summer
2023**

Draft Master Plan & Implementation Policies

- land uses, built form, parks, roads, transportation analysis, stakeholder consultation

Review of Development Application

2077, 2087, 2097 and 2105 Royal Windsor Drive

**Fall 2023
(targeted)**

Community Meeting # 4

Draft Master Plan & Implementation Policies

**Early 2024
(targeted)**

Implementation

Official Plan Policies & Zoning as Necessary

Questions?

