Pickering City Centre **Transportation Master** Plan



Public Information Centre April 23, 2025

Welcome!

The purpose of this Public Information Centre (PIC) is to:

- Introduce the Pickering City Centre Transportation Master Plan Study
- Summarize the work completed to date
- Present the proposed directions for meeting future transportation needs in the City Centre area
- Explain the next steps in the process
- Invite and receive your feedback

Please fill out a comment sheet!

Questions?

Please ask any member of our project team in attendance. We are happy to assist!



Study Background

What is the City Centre Transportation Master Plan?

The City of Pickering is preparing the **City Centre Transportation Master Plan (TMP)** to identify future transportation needs and challenges in the City's downtown core.

The TMP will review existing and planned road, transit, bicycle, and pedestrian connections in the City Centre area and identify any new facilities or policies needed to serve potential development.



Study Process



About the Pickering City Centre

The **Pickering City Centre** serves as the western "Gateway" to Durham Region – the first major commercial and employment centre east of Toronto as well as a significant mobility hub with major GO Transit and Durham Region Transit service connections.

With its prominent location, along with recent transit initiatives, the City's Official Plan promotes the City Centre as the primary focus for high density residential development, employment opportunities, and the highest diversity and intensity of services in Pickering.





Study Area

The study area extends beyond the City Centre limits shown in the City's Official Plan to capture all potential development lands that could impact future transportation conditions in the City Centre.

Key transportation corridors in the study area include:

- Highway 401
- GO Lakeshore East rail line
- Kingston Road (with future bus rapid transit lanes)
- Bayly Street (with future high occupancy vehicle lanes)



Finch Avenue Ro Glenanna Roa Stroud's Lane Sheppard Aven



Current Transportation System





Roads

- Highway 401
- Regional Roads
- City Roads

Durham Region Transit • 10 routes







GO Transit

- Lakeshore East
- Pickering/ Mississauga
- Hamilton/ Pickering
- Oshawa/ Yorkdale

Pedestrian Facilities
Sidewalks
Pedestrian Signals, Crossovers and Crosswalks



Cycling Facilities

- Multi-Use Paths
- On-Road
 Bike Lanes

Planning Context and Policy Framework

The City Centre TMP is based on the land use and transportation planning context set out by the City of Pickering, Durham Region and Province of Ontario (Metrolinx).

The long-term road, transit and cycling improvements identified in the City of **Pickering Integrated Transportation** Master Plan (ITMP) and Durham **Region Transportation Master Plan (TMP)** provide the basis for the future City Centre transportation network. Both master plans assume a 2031 horizon year.





Note: BRT = Bus Rapid Transit, MCEA = Municipal Class Environmental Assessment

• Durham-Scarborough BRT Project

 Transportation Master Plan Vision Zero Strategic Road Safety Action

Capital Budget and Forecast

 Integrated Transportation Master Plan Kingston Road Intensification Study Walnut Lane Extension MCEA Highway 401 Road Crossing MCEA (Notion Road to Squires Beach Road) Sandy Beach Road Reconstruction

Capital Budget and Forecast

Long-Term Transportation System **Road Network**



Source: Map 1, City of Pickering Integrated Transportation Master Plan (2021)







| | New C | onnec | tion | |
|------------|--------------------|---|---|--|
| | 2 Lanes | | | |
| | | 3 Lanes | | |
| | | 4/5 Lanes | | |
| Lane | | 5 Lanes | | |
| date | | 6/7 Lanes with HOV Lane | | |
| | Road Modifications | | | |
| | 8 | Railway Grade Separation New Crossing of Hwy 401 | | |
| ons | 4 | المرعدية | | |
| Expansion | | | City of Pickering Municipal Boundary | |
| | | | Expressway / Freeway Road | |
| change | | | Rail Line | |
| | | | Hydro Line | |
| | | | Watercourse | |
| nange | | | Waterbody | |
| ation (MTO | | | Wooded Area | |
| | | | | |

Note: HOV = High Occupancy Vehicle

Long-Term Transportation SystemTransit NetworkCycling Network



Source: Map 1B, Durham Region Transportation Master Plan (2017)





Source: Map 5, City of Pickering Integrated Transportation Master Plan (2021)

Long-Term Transportation System

Durham-Scarborough Bus Rapid Transit (DSBRT) Line

The DSBRT project will add 36 kilometers of bus rapid transit infrastructure along Kingston Road (Highway 2) and Ellesmere Road connecting Oshawa, Whitby, Ajax, Pickering and Scarborough. Once completed, the Line will play a critical role in achieving the transportation objectives for the City Centre area, offering:

- Frequent service (15 minutes or better) all day, with a bus every 5 minutes or less during peak hours
- Dedicated bus lanes and signal priority measures
- Efficient transfers between routes







Source: https://www.metrolinx.com/en/projects-and-programs/durham-scarborough-brt

Traffic Volume Forecasts

A travel forecasting model was developed to assess the transportation impacts of potential development in the City Centre. The model forecasts intersection traffic volumes for typical weekday conditions during the AM and PM peak hours, which generally reflect the highest demand on the road network. Forecasts were prepared for two future years (2033 and 2041) to align with anticipated development timing.

Forecasting Process



¹ Potential development plans in the study area could add another 36,700 residential units and 708,000 ft² of non-residential floor space by the year 2041.



Traffic Volume Forecasts

2033 PM Peak Hour Traffic Volumes



Traffic volumes are forecast to increase over time as development occurs in the study area.

Note: The forecasts assume implementation of all City and Regional roadway expansion projects identified in the recommended long-term road network in the City's ITMP (Map 1) by the year 2033 except for the proposed Hydro Corridor connection (assumed by the year 2041).



2041 PM Peak Hour Traffic Volumes



Intersection Traffic Operations

Base (2022) and future (2033 and 2041) year intersection traffic operations were analyzed to assess the impacts of potential development on the study area road network. The table below explains how to interpret the volume-to-capacity (v/c) ratios shown on the maps.

| v/c Ratio | Descrip |
|-------------|-------------------------------|
| 0.00 - 0.85 | Within ca Minimal c |
| 0.85 - 1.00 | Approaching Delays mag |
| > 1.00 | Exceed car Excessive delay |



otion

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delays

capacity

y occur

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Base Year (2022) PM Peak Hour Intersection Volume to Capacity Ratios



In 2022, most study area intersections operated within capacity. A few intersections along Brock Road and Liverpool Road experienced moderate to extensive delays.

Intersection Traffic Operations

2033 PM Peak Hour Intersection Volume to Capacity Ratios



By 2033, many intersections along Kingston Road are projected to approach or exceed capacity. A few intersections along Brock Road and Liverpool Road also experience delays.





2041 PM Peak Hour Intersection Volume to Capacity Ratios

By 2041, all intersections along Kingston Road are expected to approach or exceed capacity. Many intersections along Brock Road and Liverpool Road also experience delays.

Other Road Expansion Alternatives

Outside the recommended long-term road network plan shown in the City's ITMP, two additional road widening projects were considered to help relieve Kingston Road:

- Pickering Parkway to 4 lanes between Liverpool Road and Notion Road (City Road)
- Finch Avenue to 5 lanes between Altona Road and Brock Road (Regional Road)¹
- The 2017 Durham Region TMP proposes the widening of Finch Avenue to 3 lanes by 2031. Any expansion beyond 3 lanes would require further study and approval by the Region.



2041 PM Peak Hour Traffic Redistribution with Pickering Parkway and Finch Avenue¹ Widening



Both potential projects would divert traffic away from Kingston Road. The widening of Pickering Parkway would divert more traffic away than the widening of Finch Avenue¹.



Potential Implications

Anticipated traffic demands generated by potential development plans in the study area will likely exceed available road capacity in the future.

Planned improvements to transit and active transportation and the introduction of broader Transportation Demand Management (TDM) initiatives will help change travel behaviour over time.





A shift in auto driver mode share from 73% (as predicted for the City Centre area by the Durham Region Transportation Planning Model) to about 50% would help in addressing projected traffic congestion. Mode shares in this range are consistent with targets set out in the Durham Region TMP for the City Centre (and other Urban Growth Centres in the Region).

Change in Mode Choice

2041 PM Peak Hour Link Volume to Capacity Ratios with 73% Auto Driver Mode Share (per Durham Model)



Decreasing auto driver mode share would help relieve over capacity conditions on roads in the study area.

Note: Both scenarios assume potential Pickering Parkway and Finch Avenue* widenings (*subject to further study and approval by Durham Region)



2041 PM Peak Hour Link Volume to Capacity Ratios with 50% Auto Driver Mode Share



Hydro Corridor Connection

With the Provincial government's decision in January 2024 to refurbish the Pickering Nuclear Generating Station (which will keep the plant operating for at least another 30 years), implementation of a roadway connection in the Hydro Corridor is becoming unlikely.

Without the proposed connection, traffic operations at intersections along Liverpool Road and Brock Road, including the Highway 401 ramp terminals, would be considerably worse.



2041 PM Peak Hour Intersection Volume to Capacity Ratios without Hydro Corridor Connection



Highway 401 Crossing Alternative

A Valley Farm Road/Sandy Beach Road connection across Highway 401 could perform a similar function as the proposed Hydro Corridor connection. The alternative location would still divert traffic away from Brock Road and Liverpool Road, plus form a continuous route over an extended distance through Pickering. It would offer relief to Kingston Road as well.

While the connection offers potential benefits, implementation challenges would need to be addressed including the proximity of the hydro substation, compatibility with development plans, property impacts, technical feasibility and financial viability.



2041 PM Peak Hour Traffic Redistribution with Valley Farm Road/Sandy Beach Road Connection





Note: Assumes potential Pickering Parkway, Finch Avenue* and Valley Farm Road/Sandy Beach Road widenings (*subject to further study and approval by Durham Region)

Potential Active Transportation Network Plan

The City's ITMP shows a robust network of existing and proposed cycling facilities on roads in the City Centre area. No additional facilities are being considered.

Controlled crossings are proposed at signalized intersections and pedestrian crossovers, including:



Glenanna Road/The Esplanade North (signals) Glenanna Road/The Esplanade South (IPS)

Glenanna Road/Pickering Parkway (signals)





Source: Map 5, City of Pickering Integrated Transportation Master Plan (2021)

Potential Road Network Plan

The City's ITMP identifies the recommended long-term road network for the City Centre. Additional expansion projects to be considered include:

- Pickering Parkway widening to 4 lanes between Liverpool Road and Notion Road
- Finch Avenue widening to 5 lanes between Altona Road and Brock Road¹
- New 4-lane link across Highway 401 at Valley Farm Road and Sandy Beach Road, with widening to 4 lanes between Bayly Street and Kingston Road (to replace proposed Hydro Corridor connection)
- The 2017 Durham Region TMP proposes the widening of Finch Avenue to 3 lanes by 2031. Any expansion beyond 3 lanes would require further study and approval by the Region.



2041 PM Peak Hour Link Volume to Capacity Ratios with Potential Expansion Projects and 50% Auto Driver Mode Share



The three potential expansion projects would address over capacity conditions on many roads in the study area.

Potential Road Cross-Sections

"Complete Streets" are public streets that are designed, operated and maintained with the needs and safety of all road users – including cars, buses, cyclists and pedestrians – in mind.

The City will apply a **Complete Streets** approach in the planning, design, operation and maintenance of roads in the City Centre area.









Balancing Mode Share

Land use and transportation plans for the City of Pickering and Durham Region identify a range of potential actions to promote a shift from auto use towards more sustainable transportation modes (transit, walking and cycling). Measures consistent with these policies include:



Build a Multimodal Valley Farm Road/ Sandy Beach Road Connection

Expand Transit Service Options, Coverage and Frequency

(Examples include Rideshare) Programs and Free/ **Discounted Transit Passes**)

What is TDM?

Reduce unnecessary vehicle trips

Re-route trips to less congested roads

Re-time trips to avoid peak demand periods

Re-mode trips using alternatives to singleoccupancy vehicles

Source: Durham Region

Next Steps

After this meeting, we will:

- Review and summarize input received
- Complete remaining technical analyses
- Compile study recommendations
- Prepare report for City Council

Stay Funed...

Visit us online at <u>www.pickering.ca/cctmp</u> to learn more about the study.

Thank you for attending! Please return your comment sheets.

If you have any questions or comments, please contact:

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