

The Regional Municipality of York

Committee of the Whole
Transportation Services
October 8, 2020

Report of the Commissioner of Transportation Services

Traffic Bylaw Amendment to Support High Occupancy Vehicle Lane Designation

1. Recommendations

1. Lane Designation Bylaw No. 2020-06 be amended to designate high-occupancy vehicle lanes on Major Mackenzie Drive West (Y.R. 25) between Highway 27 (Y.R. 27) and Islington Avenue (Y.R. 17).
2. The Regional Clerk circulate this report to the Clerk of the City of Vaughan, York Region Rapid Transit Corporation and Chief of York Regional Police.
3. The Regional Solicitor prepare the necessary bylaw.

2. Summary

This report seeks Council approval to designate an high-occupancy vehicle (HOV) lane on Major Mackenzie Drive West between Highway 27 and Islington Avenue (see Attachment 1).

Key Points:

- Council previously approved HOV lanes on all new six-lane roads to maximize people-moving capacity through the Regional road network
- Major Mackenzie Drive West is being reconstructed to six lanes with HOV lanes between Highway 50 and Highway 400
- Opening sections of Major Mackenzie Drive West as they are completed enables maximized people-moving capacity and supports economic growth through an improved goods movement network
- Major Mackenzie Drive West between Highway 27 and Islington Avenue is likely to be completed ahead of schedule
- HOV lane designation is required on Major Mackenzie Drive West between Highway 27 and Islington Avenue
- Staff will report back to Council on the remaining sections of Major Mackenzie Drive West as they near completion

3. Background

Council previously approved high-occupancy vehicle lanes on all new six-lane roads to increase the total number of people moving through the corridor

In October 2006, Council approved implementation of HOV lanes for projects involving a road widening to six lanes as part of the Towards Great Regional Streets Design Guidelines. Fulfillment of these objectives requires investment in transit corridors and strong policies to promote and facilitate transit-oriented development.

HOV lanes increase the total number of people moving through the corridor, may provide substantial savings in travel time and offer a reliable and predictable trip for travellers. Traditional HOV lanes are located in the curbside lane for the exclusive use of motor vehicles with two or more persons, motorcycles, scooters and bicycles. The Region and City of Toronto follow a similar approach in which these vehicles have exclusive use of HOV lanes. Single-occupant electric vehicles with green licence plates do not support the intent to maximize people-moving capacity. Based on this rationale, the Region and City of Toronto do not permit their use in HOV lanes, contrary to Provincial HOV lanes on 400-series highways.

Designating an high-occupancy vehicle lane requires a bylaw approved by Council

Bylaw No. 2020-06 designates lanes on Regional roads for the exclusive use of certain classes of vehicles. To add or remove an HOV lane designation the bylaw must be amended.

In [April 2017](#), Council amended the lane designation bylaw for Major Mackenzie Drive West between Pine Valley Drive and Highway 400.

Major Mackenzie Drive West is being reconstructed to six lanes with high-occupancy vehicle lanes between Highway 50 and Highway 400

The reconstruction of Major Mackenzie Drive West from Highway 50 in the west to Highway 400 in the east in the City of Vaughan is underway to accommodate growth and economic development, improve traffic flow, provide public transit connections and more travel options for all travellers. To meet the needs of our communities while addressing future growth requirements, the reconstruction of Major Mackenzie Drive West will include the following improvements:

- Widening from two to six lanes in which the curb lanes will be reserved as dedicated HOV lanes
- Providing a connection to the future Highway 427 extension
- Realigning Major Mackenzie Drive West between the Canadian Pacific Railway tracks and Highway 27 to provide a continuous connection

- Constructing a grade separation over the existing Canadian Pacific Railway tracks to reduce delays to travellers
- Infrastructure improvements include bridge construction and culvert replacement
- Implementing cycling and pedestrian infrastructure with improved street lighting

The Regional road sections listed in Table 1, as identified through the Environmental Assessment Study, support the requirement for HOV lanes and satisfy minimum thresholds for passenger volumes.

In 2017, the first section of Major Mackenzie Drive West from Highway 400 to Pine Valley Drive was completed and included widening the road from two to six lanes with an HOV lane dedicated for the exclusive use of transit and passenger vehicles with two or more persons, motorcycles, scooters and bicycles from 7 a.m. to 10 a.m. and 3 p.m. to 7 p.m., Monday to Friday.

The remaining sections of Major Mackenzie Drive West scheduled for completion are detailed in Table 1 and may require future HOV lane designation. Staff will seek Council approval for HOV lane designation at that time.

Table 1
Major Mackenzie Drive West Construction Schedule

Section of Major Mackenzie Drive West (Y.R. 25)	HOV Lane Designation Requirement	Status
Highway 400 to Pine Valley Drive (Y.R. 57) Clause 6, Report 6 - April 20, 2017	HOV lane designation required for transit and passenger vehicles with two or more persons, motorcycles, scooters and bicycles from 7 a.m. to 10 a.m. and 3 p.m. to 7 p.m., Monday to Friday.	Opened spring 2017
Islington Avenue (Y.R. 17) to Highway 27 (Y.R. 27) (current designation required)	HOV lane designation required for transit and passenger vehicles with two or more persons, motorcycles, scooters and bicycles from 7 a.m. to 10 a.m. and 3 p.m. to 7 p.m., Monday to Friday	Opening fall 2020
Highway 427 extension to Highway 50	HOV lane designation NOT required	Opening end of 2020

Section of Major Mackenzie Drive West (Y.R. 25)	HOV Lane Designation Requirement	Status
Barons Street to Highway 27 (Y.R. 27) (future designation)	HOV lane designation required for transit and passenger vehicles with two or more persons, motorcycles, scooters and bicycles from 7 a.m. to 10 a.m. and 3 p.m. to 7 p.m., Monday to Friday	Opening mid-2021
Pine Valley Drive (Y.R. 57) to Islington Avenue (Y.R. 17) (future designation)	HOV lane designation required for transit and passenger vehicles with two or more persons, motorcycles, scooters and bicycles from 7 a.m. to 10 a.m. and 3 p.m. to 7 p.m., Monday to Friday	Opening end of 2021

4. Analysis

Opening partial sections of Major Mackenzie Drive West as they are completed will add road capacity

Due to complexity and constructability of certain portions of Major Mackenzie Drive West, these improvements will be opened in phases. Opening each road section as it's completed will increase capacity and continue to foster economic growth through an improved goods movement network on Regional roads. Motorists are more inclined to become familiar with how a six-lane road operates with each completed six-lane road section opened. This will help set driver expectations for the future road section openings.

Major Mackenzie Drive West between Highway 27 and Islington Avenue is likely to be completed ahead of schedule

In the summer of 2020, the public was informed Major Mackenzie Drive West between Highway 27 and Islington Avenue would be completed in the fall of 2020. This section of Major Mackenzie Drive West is likely to be substantially completed ahead of schedule and the six lanes will be open to the public in early fall 2020, pending weather conditions. In the event the project is completed ahead of schedule the curbside lanes will be marked HOV and the HOV signs will be bagged until designated.

High-occupancy lane designation is required on Major Mackenzie Drive West between Highway 27 and Islington Avenue

As part of the road widening, dedicated HOV lanes for buses and passenger vehicles with more than one person will help minimize delays to buses and achieve high service frequencies and reliability for transit service along this corridor as well as encourage carpooling.

To expand the transportation network and accommodate travel demand growth, staff propose Bylaw No. 2020-06 be amended to include designation of the six-lane Regional road listed in Table 2 as an HOV lane.

Table 2
Proposed High-Occupancy Vehicle Lane

Portion of Highway	Limit	Class of Vehicle	Times and Days
Major Mackenzie Drive West (Y.R. 25) located in the curb lane	East limit of Highway 27 (Y.R. 27) to west limit of Islington Avenue (Y.R. 17)	Transit buses, motor vehicles with two or more persons, motorcycles, motor-assisted scooters and bicycles and motor-assisted bicycles	7 a.m. to 10 a.m. and 3 p.m. to 7 p.m., Monday to Friday, effective October 22, 2020

Staff will report back to Council as the remaining sections of Major Mackenzie Drive West near completion

As construction for each subsequent section of Major Mackenzie Drive West nears completion, staff will report back to Council regarding required traffic bylaw amendments for HOV lane designation and speed limit revisions.

5. Financial

All costs associated with ground-mounted and overhead lane designation signage are included in the annual Capital works project budget.

York Region Transit will experience a positive financial impact with transit buses using an HOV lane. When reduced travel time is greater than the bus route frequency, buses can be removed from the route while maintaining the same level of service. This reduces operating costs and provides customers with a faster commute. Dedicated bus lanes have shown reductions in travel time between 15-30% compared to general purpose lanes.

6. Local Impact

Local municipal staff has been informed of the recommendations contained in this report. Travellers will be provided with multi-modal travel options and improved transit service offering more sustainable transportation options, including a more connected and efficient transportation network.

7. Conclusion

Staff recommends an high-occupancy vehicle lane be designated on Major Mackenzie Drive West between Highway 27 and Islington Avenue. HOV lanes increase capacity on busy corridors, benefit transit operations and support planned growth to better serve travellers in the Region.

Major Mackenzie Drive West is being widened to six lanes with HOV lanes between Highway 50 and Highway 400. Opening partial sections of Major Mackenzie Drive West as they are completed and designating HOV lanes will increase capacity and continue to support economic growth through an improved goods movement network. Staff will report back to Council as the remaining sections of Major Mackenzie Drive West near completion.

The Regional Solicitor is required to amend Bylaw 2020-06 as described in this report. The Regional Clerk is to notify the Clerk of the City of Vaughan, York Region Rapid Transit Corporation and Chief of York Regional Police of the amendment.

For more information on this report, please contact Joseph Petrunaro, Director Roads and Traffic Operations, at 1-877-464-9675 ext. 75220. Accessible formats or communication supports are available upon request.

Recommended by: **Paul Jankowski**
Commissioner of Transportation Services

Approved for Submission: **Bruce Macgregor**
Chief Administrative Officer

September 18, 2020
Attachment (1)
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