Clause 6 in Report No. 6 of Committee of the Whole was adopted, without amendment, by the Council of The Regional Municipality of York at its meeting held on April 20, 2017.

## 6

## Transit/High-Oc c upancy Vehic le Lanes

Committee of the Whole recommends adoption of the following recommendations, as amended, contained in the report dated March 27, 2017 from the Commissioner of Transportation Services:

1. Lane Designation Bylaw No. 2009-23 be amended to designate transit/highoccupancy vehicle lanes on Regional roads as outlined in Table 1.
2. The Regional Solicitor prepare the necessary amendments to the existing bylaw.
3. The Regional Clerk circulate this report to the Clerks of the local municipalities.
4. Staff report back with information on the policies and principles regarding Transit/High-Occupancy Vehicle Lanes.

Report dated March 27, 2017 from the Commissioner of Transportation Services now follows:

## 1. Recommendations

It is recommended that:

1. Lane Designation Bylaw No. 2009-23 be amended to designate transit/high-occupancy vehicle lanes on Regional roads as outlined in Table 1.
2. The Regional Solicitor prepare the necessary amendments to the existing bylaw.
3. The Regional Clerk circulate this report to the Clerks of the local municipalities.

## Transit/High-Oc cupancy Vehicle Lanes

## 2. Purpose

This report seeks Council approval to designate the six-lane Regional road sections outlined in Table 1 as transit/high-occupancy vehicle (HOV) lanes.

## 3. Background

## Designated transit or HOV lanes require a bylaw approved by Council

Bylaw No. 2009-23 governs the operation of transit/HOV lane designations on Regional roads. To add or remove transit/HOV lane designations the bylaw must be amended.

## The primary purpose of transit/HOV lanes on Regional roads is to increase the total number of people moving through the corridor

Transit/HOV lanes increase the total number of people moving through the corridor, provide substantial savings in travel time and offer a reliable and predictable trip for users.

Traditional high-occupancy vehicle 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 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. The Ministry of Transportation of Ontario has permitted single-occupant electric vehicles with green licence plates permanent access at no cost to HOV and high occupancy toll lanes on 400-series highways and the Queen Elizabeth Way, as an incentive to encourage the use of cleaner, more sustainable vehicle technology.

Bus Rapid Transitways are dedicated lanes in the centre of the road allowing rapid transit buses to move out of congested traffic, enabling people to get around York Region's busiest corridors faster. These lanes are for the exclusive use of rapid transit vehicles to provide more reliable and frequent service.

## Transit/High-Occupancy Vehicle Lanes

## Council-approved transit/HOV lanes on all six-lane roads as referenced in York Region's Official Plan and Great Regional Streets Design Guidelines

In March 2007, Council approved implementation of transit/HOV lanes and bicycle lanes for projects involving a road widening from four to six lanes.

The strong relationship between transportation needs and urban form involving a Regional rapid transit network was first recognized in the Region's Official Plan. Subsection 7.2.41 policy objectives speak to the requirement of transit or HOV lanes on all six-lane roads. This was later echoed in the 2008 Towards Great Regional Streets Design Guidelines. Fulfillment of these objectives requires investment in rapid transit corridors and strong policies to promote and facilitate transit-oriented development.

## 4. Analysis and Implications

## Transit/HOV lanes are proposed on six-lane road widening projects

The Regional road sections listed in Table 1 were identified through the Environmental Assessment Study process to support transit/HOV lanes and meet minimum thresholds for passenger volumes.

To expand the transportation network and accommodate travel demand growth resulting from development, staff recommend Bylaw No. 2009-23 be amended to include designation of the six-lane Regional roads listed in Table 1 as transit/HOV lanes.

Table 1
Regional Roads Proposed for Transit/High-Occupancy Vehicle Lanes

| Portion of Highway | Limit | Class of Vehicle | Times or Days |
| :---: | :---: | :---: | :---: |
| Highway 7 (Y.R. 7) located in the centre lane | Bowes Road to Jane <br> Street (Y.R. 55) | Rapid Transit buses | 24 hours, 7 days a week, effective April 20, 2017 |
| Highway 7 (Y.R. 7) located in the curb lane | Sciberras Road to Town Centre Boulevard | Motor vehicles with two or more persons, motorcycles, scooters and bicycles | 7 a.m. to 10 a.m. and 3 p.m. to 7 p.m., Monday to Friday, effective August 1, 2017 |
| Major Mackenzie Drive (Y.R. 25) located in the curb lane | Highway 400 to Pine Valley Drive (Y.R. 57) | Motor vehicles with two or more persons, motorcycles, scooters and bicycles | 7 a.m. to 10 a.m. and 3 p.m. to 7 p.m., Monday to Friday, effective June 5, 2017 |

## Centre lanes on Highway 7 from Bowes Road to J ane Street to be designated as reserved transit lanes

This section of the YRT/Viva Highway 7 West/Vaughan Metropolitan Centre rapidway is a dedicated rapidway for the exclusive use of rapid transit busses with provisions for emergency service vehicles during emergencies. The transportation hub at Highway 7 and Jane Street will have connections in every direction - by subway, bus or car. This project is nearing completion and is expected to be in operation spring of 2017. HOV lane designation is required for the exclusive use of rapid transit on a 24 hour/7 days a week basis. A location plan is provided as Attachment 1.

## Curbside lanes on Highway 7 from Sciberras Road to Town Centre Boulevard to be designated as HOV lanes

The construction of this section of Highway 7 will include road widening from four to six lanes and incorporate enhanced streetscaping, bicycle lanes and City of Markham watermain replacement. This project is scheduled to be completed in the summer of 2017, with YRT/Viva buses running in 2018 once Viva stations are completed. For this section of Highway 7, HOV lane designation is required 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. A location plan is provided as Attachment 2.

## Transit/High-Occupancy Vehicle Lanes

## Curbside lanes on Major Mackenzie Drive West from Highway 400 to Pine Valley Drive to be designated as HOV lanes

The construction of Major Mackenzie Drive West from Highway 400 to Pine Valley Drive is one of multiple sections identified for road widening from four to six lanes. This project is scheduled to be completed in the summer of 2017 and will require HOV lane designation 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. A location plan is provided as Attachment 3.

The remaining sections of Major Mackenzie Drive West will eventually require HOV lane designation. Staff will seek Council approval to designate as HOV at that time. The timeline for these other sections is as follows:

- Major Mackenzie Drive West from Pine Valley Drive to the Canadian Pacific Rail crossing west of Highway 27 is scheduled to begin construction in 2017
- Major Mackenzie Drive West from the Canadian Pacific Railway crossing west of Highway 27 to Highway 50 is to be completed as part of the Ministry of Transportation of Ontario's Highway 427 extension project and is currently in the detailed design stage


## 5. Financial Considerations

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

York Region Transit/Viva will experience a positive financial impact with transit buses using HOV lanes. 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 lanes for rapidway buses have shown reductions in travel time of 22 per cent to 30 per cent compared to general purpose lanes.

## 6. Local Municipal Impact

Cities of Markham and Vaughan staff have been consulted and are supportive of the recommendations contained within this report.

## Transit/High-Occupancy Vehicle Lanes

## 7. Conclusion

Staff recommends implementation of three transit/HOV lanes in the cities of Markham and Vaughan as described in this report. The transit/HOV lanes will increase capacity on busy corridors, benefit transit operations and support planned growth to better serve residents in York Region.

Revisions to the bylaw are required before transit/HOV lanes can be implemented. Once the transit/HOV lanes are approved, staff will prepare the amendments to the Bylaw and forward a copy to the cities of Markham and Vaughan.

For more information on this report, please contact Joseph Petrungaro, Director Roads and Traffic Operations, at 1-877-464-9675 ext. 75220.

The Senior Management Group has reviewed this report.
March 27, 2017
Attachments (3)
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Accessible formats or communication supports are available upon request




