THE REGIONAL MUNICIPALITY OF YORK

Transportation and Works Committee
March 7, 2007
Report of the
Commissioner of Transportation and Works

HIGH OCCUPANCY VEHICLE LANES ON REGIONAL ROADS

1. RECOMMENDATIONS

It is recommended that:

1. Council approve, in principle, the design and construction of High Occupancy Vehicle (HOV) Lanes for capital projects that involve a road widening from four to six lanes.

2. Staff be directed to include the prospective construction of HOV lanes on Steeles Avenue in ongoing jurisdictional discussions with the City of Toronto.

3. The Regional Clerk forward copies of this report to the Clerks of all the local municipalities.

2. EXECUTIVE SUMMARY

- Previous planning documents in the Region identified the need to provide a more efficient transportation system that focuses on moving more people than cars.

- Building on these documents, the Region's Six-Lane Design Standards included HOV lanes and bicycle lanes in the curb lanes and the draft 2007 Roads Capital Programme prioritized roads that are identified for transit priority in the 2002 Transportation Master Plan (TMP).

- Results from public consultation centres and local municipal Councils indicate that there is a desire to support HOV lanes over general purpose lanes.

- HOV lanes have been operating successfully in many jurisdictions around the world including the surrounding Greater Toronto Area (GTA) municipalities. With appropriate planning and commitment, arterial HOV lanes can be successful and provide a benefit to transit operations.

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- It is recommended that the Region move forward with HOV lane implementation for road projects involving widening from four to six lanes.

- Details related to enforcement/legislation, operations/design and education/communication will be addressed through the development of a Regional HOV Policy which staff will prepare and report back on prior to the opening of any new HOV lanes on Regional roads.

3. PURPOSE

This report seeks Committee and Council direction to implement HOV lanes in York Region for roads capital projects where the Environmental Assessment (EA) studies support a road widening from four to six lanes.

4. BACKGROUND

4.1 Historical Context for High Occupancy Vehicle Lanes

The concept of HOV lanes in the Region is not new. There are several studies that have made reference to HOV lanes as an option to improve the transportation network in York Region.

4.1.1 Regional Official Plan

In 1994, the Minister of Municipal Affairs approved the Region's Official Plan. The Official Plan sets the framework to help guide the economic, environmental and community–building decisions affecting the use of land. The current Official Plan provides a comprehensive document that reflects initiatives aimed at accommodating growth in a sustainable manner. The plan identifies the policies upon which infrastructure should be developed to support ongoing development. In Section 6.1, The Road Network, there are references to HOV lanes and their importance in achieving a road network that is supportive of all modes of transportation. Specifically, policy 6.1.1 refers to the need to identify and implement a network of HOV lanes. Both sections 6.2.9.g and 6.2.11 refer to the importance of providing HOV lanes to improve the efficiency of transit.

4.1.2 1995 - HOV/Rapid Transit Study

The 1995 HOV and Rapid Transit Study was undertaken to complement the Official Plan and identify the transportation infrastructure required to support the long term growth plans for the Region. It was recognized in the HOV and Rapid Transit Study that rapid transit would be needed in York Region to shape and influence future growth. One of the key recommendations highlighted the need for higher order rapid transit facilities along Yonge Street and Highway 7. It was also noted that a shift in travel behaviour would require time. Therefore, a staged implementation of transit priority infrastructure was recommended. A network of HOV lanes was identified to provide a first-stage priority to transit vehicles and support a culture that promoted multi-occupant vehicular travel.

4.1.3 Transportation Master Plan (TMP)

The Transportation Master Plan was completed in 2002. This award winning plan recognized the importance of prioritizing sustainable initiatives as it relates to transportation infrastructure. Building on the 1995 HOV and Rapid Transit Study, the TMP highlights the importance of rapid transit in four corridors in the Region. The TMP set the stage and framework to initiate the Rapid Transit initiatives in the Region and is the basis upon which the EA studies for the rapid transit networks have been completed. In addition to the rapid transit corridors, the TMP makes reference to a Transit Priority Network to complement the rapid transit corridors. For those road segments that are designated as part of the Transit Priority Network, the TMP recommends that all road widening projects considering expansion to six-lanes should be prioritized for either HOV lanes or reserved bus lanes.

The Transportation Master Plan Update is underway now and is reviewing and updating the transit priority network identified in the 2002 study. It is anticipated that the transit priority network will be expanded given new growth projections and greater intensification of the urban areas. Furthermore, it is expected that routes that meet the criteria for HOV lanes and reserved bus lanes will be identified in the update to the TMP.

4.2 Acceptance of High Occupancy Lanes

Recently, there have been several initiatives that have highlighted HOV lanes in the public eye. These initiatives build upon the studies completed to date and are the catalysts to move beyond broad planning studies and towards implementation of the HOV plans.

4.2.1 Smart Commute Initiative

The Smart Commute Initiative is a joint municipal project of the York, Durham, Peel, and Halton Region and the Cities of Toronto, Hamilton and Mississauga to deliver transportation demand management (TDM) programs and services across the GTA and Hamilton region through a two-tier structure consisting of an umbrella group, the Smart Commute Association, and a network of local transportation management associations (TMAs) such as Smart Commute 404-7 (Markham, Richmond Hill), Smart Commute Central York (Newmarket, Aurora) and Smart Commute North Toronto-Vaughan.

TDM are measures that increase the efficiency of our transportation infrastructure whereby travel demand are optimized through measures that reduce vehicular travel, increase vehicle occupancies and promote the use of other alternative modes of travel. TDM provides services and programs that improve public transit use, carpooling, walking and cycling that leads to a reduction in single-occupant-vehicle (SOV) use.

York Region is the lead member of this partnership by being the "host" organization for the Smart Commute Association and provides the necessary corporate services to support the project. York Region provides funding to the Smart Commute Association and the TMAs (404-7, Central York and North Toronto-Vaughan).

Smart Commute 404-7 has focused its efforts on promoting the benefits of carpooling and transit, promotes the benefits of using the HOV lane on Highway 404 and provides a web-based ride-matching service to help encourage carpooling.

4.2.2 HOV lanes on Highway 404

In December, 2005, the Ministry of Transportation of Ontario (MTO) opened the HOV lanes on Highway 404 , south of Beaver Creek to north of Highway 401. The left hand lane (11 km) on the southbound approach to the Highway 404 and Highway 401 interchange along with a new ramp to facilitate southbound to westbound traffic was designed and constructed exclusively for carpoolers. The results of the monitoring show that these lanes are effective and provide a significant travel time savings to carpoolers and users of the general purpose lanes. Results show that travel times have reduced from 26 minutes to nine minutes in the HOV lane and the general purpose lane has reduced travel times to 11 minutes. Furthermore, carpooling has increased from 16 % to 37% in this corridor. The corresponding northbound HOV lane on Highway 404 is set to open shortly and MTO has plans to extend these HOV lanes along Highway 404 and ultimately along Highway 400. The construction of the HOV lanes on Highway 404 has shown the public that HOV lanes are now moving from concept to reality and that these lanes can be effective.

4.3 Regional Context for HOV Lanes

While the above noted initiatives support the implementation of HOV lanes, there are several current issues that are placing a priority on the consideration of HOV lanes in the Region.

4.3.1 Great Regional Streets – Regional Standard for Six-Lane Roads

In October 2006, Regional Council adopted the Regional Standard for Six-Lane Roads as one component of the "Towards Great Regional Streets – A Path to Improvement Study". The study recommended that any future six-lane widening be implemented in accordance with new policy requirements which include HOV lanes, cycling lanes and enhanced streetscape components. At the time, Regional Council adopted the Level 3 implementation which stated that six-lane roads be designed and constructed for HOV lanes and be implemented for HOV lanes when warranted. Based on recent traffic data, warrants for HOV lanes are satisfied on many of the six-lane widening projects. Therefore, there is an expectation that future six-lane widening projects will consider HOV lanes.

4.3.2 Local Council Direction

In 2006, The Town of Richmond Hill updated their TMP. One of the key recommendations identified in their study was that six-lane widening of Regional roads only be considered if they are for HOV lanes. The TMP was adopted by Richmond Hill Council on October 23, 2006. Town of Markham Councillors expressed similar concerns about widening on 16th Avenue at their General Committee meeting of January 23, 2006 when receiving a presentation prior to the first Public Consultation Centre (PCC) for that study. The Towns of Richmond Hill and Markham represent a significant portion of the urbanized area of the Region where a number of six-lane projects are being considered. As a result, on these projects, there is a desire and support for the implementation of HOV lanes on Regional Roads in the Towns of Richmond Hill and Markham.

4.3.3 Input from Public Consultation Centres (PCC) for Bayview Avenue Project

The first PCC for the Bayview Avenue project was held in April 2006. The meeting was well attended with over 80 residents participating. Based on input from this meeting, it was evident that the local community had strong opposition to the proposal to widen Bayview Avenue. Given this strong reaction, a second PCC was held in December, 2006. Once again, this meeting was well attended with over 100 residents participating. Given that the Regional Council had adopted the Regional Standard for Six-Lane Roads which included HOV lanes, this option was discussed at the PCC. In general, there was a greater understanding by the public for the need to widen roads to support transit and carpooling. Whereas in the first PCC there were strong objections to widening Bayview Avenue for general purpose lanes, the second PCC showed that the public is more likely to support a road widening to six-lanes only if the additional lanes are dedicated for HOV lanes from day one.

4.3.4 Draft 2007 Roads Capital Plan Focuses on Moving People

The draft 2007 Roads Capital Program reflects the new criteria used to prioritize projects. The new criteria promote transit and supports intensification in the Region. As a result, the draft 2007 Roads Capital Program has been developed to provide more emphasis on moving people in transit priority corridors and improving the person carrying capacity of the road network. The consideration of HOV lanes for the planned six-lane projects is therefore consistent with the long term objectives and emphasis of the most recent Roads Capital Program.

There are several projects in various stages in the Roads Capital Program that need to address the issue of HOV lanes. Dufferin Street is the most advanced of the six-lane widening projects in the capital program. With construction scheduled for 2008, a decision with respect to HOV lanes is needed now to complete the detailed design phase currently underway. Both the Bayview Avenue and 16th Avenue projects have held their first PCC and the public are already engaged in the discussion regarding potential solutions in these corridors. Other projects such as Keele Street, Leslie Street, Kennedy Road and McCowan Road will be starting their EA studies this year. In order to maintain the current schedule for the delivery of these and other future six-lane projects, staff are seeking Council endorsement for HOV lanes to continue the consultation with the public and respond to the strong public opposition to widening for general purpose lanes.

4.4 Experience with Arterial HOV lanes in York Region and other Cities

4.4.1 Yonge Street in York Region

HOV lanes on Yonge Street from Centre Street to Steeles Avenue have been in place since 1999. In 1994, the City of Toronto installed HOV lanes on Yonge Street from Steeles Avenue to north of Finch Avenue primarily to provide a benefit to the significant number of transit vehicles using this section of Yonge Street to access Finch Subway Station including GO Transit, York Region Transit and TTC. Given that a number of these services extended north of Steeles Avenue, and that a short section of six-lane road was already available along Yonge Street north of Steeles Avenue, the Region implemented an HOV lane on Yonge Street from Centre Street to Steeles Avenue. Staff undertook observations of these lanes and the results showed that the HOV lane still

carried more persons than the general purpose lane. While this is primarily related to the number of buses in the curb lane, it demonstrates that HOV lanes do provide a benefit for transit vehicles. The results should be treated with caution given the relatively short section and by no means should this be used as a measure of success for arterial HOV lanes. Other municipalities across North America have implemented arterial HOV lanes for a considerably longer time and they are operating successfully.

4.4.2 Arterial HOV Experience in Other Municipalities

There are published reports and studies undertaken by others that show that arterial HOV lanes have had success in other cities. Based on these reports there are over 80 arterial HOV lanes in operation in over 20 urban centres such as Vancouver, Calgary, Seattle, Houston, Auckland, Brisbane. In Toronto, there are 65 lane km of HOV lanes in operation. In many of these cities, arterial HOV lanes have been operational for over 20 years. Studies show that arterial HOV lanes can work successfully. A review of the available data shows the following general results for arterial HOV facilities in these cities:

- HOV lanes carry fewer vehicles but more persons.
- Increased carpooling with up to 40% increases reported.
- Increases in auto occupancy in corridor.
- Travel time savings in HOV lanes.
- Increased bus ridership.

5. ANALYSIS AND OPTIONS

5.1 Six-Lane Road Design Standard – Recap of Issues related to HOV

The Six-Lane Road Design Standard was presented at the Transportation and Works Committee on October 4, 2006. Committee approved the design standard and policy for six-lane roads including the provision of HOV lanes and bike lanes. The following comments with respect to HOV lanes were noted by staff:

- Concerns related to the "white elephant" syndrome of HOV lanes not being fully utilized.
- The number of occupants for vehicles using the lanes.
- Minimum warrants for HOV lane designation.
- Hours of operation for HOV lanes.
- Impact to goods movement.
- Effective enforcement of HOV lanes.

These comments are addressed in the following sections of this report.

5.2 Benefits of HOV lanes

HOV lanes can provide a benefit to the overall transportation network. HOV lanes carry fewer vehicles, and with less congestion there is an immediate benefit to transit riders. As shown earlier, HOV lanes encourage carpooling and this in turn, increases the auto occupancy, thereby moving more people on the road system. Encouraging carpools to use the HOV lane will also reduce the demands on general purpose lanes, thereby providing

benefits to all other motorists and users of the road. Unlike a general purpose lane, the HOV lane can provide benefits over a longer period of time. In the event that the HOV lanes prove too popular, the minimum number of occupants can be increased. If transit service increases substantially, the HOV lane could also be designated as a reserved bus lane if required.

5.3 Key Issues to Address

Arterial HOV lanes by nature have more operational issues compared to freeway HOV lanes. Given the urban nature of some arterial roads, the need to provide access and egress to properties and intersections requires a coordinated effort in the key areas of enforcement, public education and safety.

5.3.1 Enforcement

Compared to freeway operations, arterial HOV lanes generally will have a higher number of non-HOV users due to the number of occasions when motorists must use the curb lane to enter and exit from driveways and intersections. To accommodate this activity, many jurisdictions have adopted a by-law that allows non-HOV users to use the HOV lane for a specified distance from the point of entry or exit from the HOV lane. Enforcement efforts can be streamlined by selecting enforcement areas away from intersections and driveways where there should be fewer non-compliant vehicles. Even in areas where there are a greater concentration of driveways and intersections, if a vehicle is observed to pass several driveways or intersections without turning, then this should provide sufficient evidence to charge the violator.

A complementary program to help increase awareness regarding appropriate use of the HOV lane is peer-reporting of violators by other motorists. In Seattle, Washington, the HERO Program was introduced to improve compliance on their HOV lanes. Similar to the Road Watch Program currently in operation in York Region, violators are reported to the police. While tickets cannot be issued, warning letters and a graduated response can help to reduce repeat offenders. It is recognized however, that this may increase the administrative efforts for York Region Police and further discussions will be held with them to determine the most effective approach to improve awareness and compliance.

5.3.2 Education

Successful HOV projects across North America are often complemented with good public education campaigns to promote the projects and ensure the public is well informed regarding the purpose, need and use of the HOV lanes. Providing a high profile to the project and ensuring that users are informed of the rules for HOV lane use is an important aspect of the education plan. Given the operational issues associated with the HOV lane, it is important to communicate the rules for use to the public on a regular basis. Therefore, education should continue beyond the initial launch and a regular communication program should be established utilizing current methods such as websites, newspaper advertisements and media releases.

5.3.3 Safety

Education and monitoring are important elements related to safety. When a new concept is introduced, motorists need to adjust to the new regulations and operational needs.

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Regular monitoring should be undertaken to determine if there are any observed trends over time and whether the rate of collisions is any different on a roadway with HOV lanes compared to any other arterial road. Protected left turn phases at intersections and potential signs and markings at driveways should be considered to mitigate conflicts as they are investigated on a site-specific basis.

5.3.4 Other Operating and Design Issues

As noted earlier, there are several other detailed operating and design issues that will need to be addressed. The following table outlines some of these frequently asked questions and an initial response to them.

Table 2
HOV Frequently Asked Questions

With fewer vehicles, won't the HOV lane remain empty for long periods of time?	Based on current data, HOV lanes are recommended on roads that meet minimum warrants which ensure sufficient use of the lane.
How many occupants will be required to use the HOV lane?	Initial studies show that a two-plus occupancy for the HOV lane can be supported and will be compatible with the Provincial freeway two-plus requirement.
What hours will the HOV lane operate?	The majority of HOV lane operations are restricted to the peak periods of congestion during the morning and afternoon times.
How will bicycles be accommodated in the HOV lane?	According the Highway Traffic Act, bicycles must travel as close to the curb as practicable; therefore they must be included in the HOV lane. The Six-Lane Design Standards envisions dedicated bike lanes beside the HOV lane.
How will HOV lanes affect parking on the road?	Parking will not be permitted during the hours of operation of the HOV lane and an appropriate by-law will be required to support each project.

5.4 Summary of Issues and Responses

HOV lanes can provide many benefits to the overall transportation network. They will provide priority for transit vehicles and carpoolers and improve the efficiency of the road network by moving more people. The HOV lanes can also reduce congestion in the general purpose lanes and provide some relief to other road users. Over time, HOV lanes will continue to provide more benefits compared to general purpose lanes. As the HOV lanes become more utilized, the minimum number of occupants can be increased and in some cases, if there is sufficient demand, the HOV lanes could be converted to reserved bus lanes. HOV lanes have different operating characteristics when compared to freeway HOV lanes due to the number of driveways and intersections in an urban environment. Provided that there is a commitment to making these lanes work, these operational issues can be minimized. Overall, the long term benefits, and sustainable nature for these facilities outweigh the operational issues.

5.5 Moving Forward – What is needed to make HOV lanes work

Based on the experience of other municipalities where arterial HOV lanes have been implemented, there are certain elements that are common in successful HOV operations.

5.5.1 Build HOV lanes where warranted

As confirmed in the 2002 TMP, an HOV lane is warranted when it can be shown that the lane can move at least 900 persons per hour which matches the vehicle capacity of a general purpose lane. Adhering to these warrants ensures that there will be sufficient utilization of the HOV lane. The 2002 TMP identified roads where transit priority measures should be considered. Building on this plan, the Infrastructure Planning Branch in Planning and Development Services undertook a more detailed review of HOV and Reserved Bus Lane warrants on these routes based on the latest traffic count data. *Attachment 1* shows the routes where HOV lanes are warranted now. The following roads sections identified for widening from four to six lanes in the latest 10 Year Capital Program meet the warrants for HOV lanes:

- Jane Street (Highway 7 to Steeles Avenue).
- Keele Street (Highway 407 to Steeles Avenue).
- Dufferin Street (Glen Shields Avenue North to Steele Avenue).
- Bathurst Street (Major Mackenzie Drive to Centre Street).
- Bayview Avenue (Major Mackenzie Drive to Steeles Avenue).
- Leslie Street (Highway 407 to Steeles Avenue).
- Kennedy Road (Highway 7 to Highway 407).
- McCowan Road (Highway 7 to 14th Avenue).
- Rutherford Road/Carrville Road (Jane Street to Yonge Street).
- 16th Avenue (Yonge Street to McCowan Road).

Attachment 2 identifies the amount of transit service on various routes in the Region. The thickness of the lines represents the transit route density which is the number of buses on a given road section. The road sections that have the highest transit route density are similar to the road sections that meet the warrants for HOV lanes. Therefore, there is

150 technical support to implement HOV lanes on a number of projects in the 2007 Roads 10 Year Construction Program.

5.5.2 Establish a Regular Enforcement and Evaluation Program

Given the urban nature of arterial HOV lanes, a certain percentage of non-HOV users can be expected to use the curb lane to make right turns at intersections and driveways. While there may be a perception of non-compliance, most of these users are actually utilizing the lane properly. Therefore, legitimate violations of the HOV lane use must be addressed regularly and quickly to ensure that the perceived problem does not grow. In this regard, a regular monitoring and enforcement program should be established to evaluate how well the HOV lanes are functioning. Based on the results, adjustments should be made to enforcement to improve compliance where needed.

5.5.3 Build on Existing Partnerships

There is already significant synergy amongst key stakeholders with respect to HOV lanes. There are a number of initiatives already underway with key stakeholders including local municipalities, the MTO and local Smart Commutes such as 404-7. As part of the approvals for developments, the Region can work with local municipalities to encourage and request preferred parking spaces for carpooling to encourage carpooling on routes where HOV lanes are provided. The MTO has implemented freeway HOV lanes in York Region on Highway 404 and is planning to expand this program to other 400 series highways across the province. The freeway HOV network will provide an important destination for many commuters on arterial roads and therefore coordination of the arterial network with the freeway network is important. In addition, other support measures such as carpool lots, carpool ramps to freeways, education and enforcement could also be enhanced by leveraging and combining resources with MTO. Smart Commute was established to work with the business community to promote alternatives to single-occupant travel. The Region already partners with Smart Commute and will continue to work with them to promote and encourage carpooling in the business community.

Steeles Avenue will continue to be an important road for both York Region and the City of Toronto. Although it is a boundary road, it is important to facilitate transit services in a seamless manner. As a result, it is likely that some form of transit priority will be required along this route. Therefore, consideration of HOV lanes and other transit priority measures on Steeles Avenue should be included in the ongoing jurisdictional discussions with the City of Toronto.

5.6 Next Steps

Subject to endorsement by Committee and Council, staff will incorporate HOV lanes for the detailed design of Dufferin Street. HOV lanes will also be presented to the public as an option as part of the ongoing EA studies for both Bayview Avenue and 16th Avenue. Imminent EA studies on Keele Street, Leslie Street, Kennedy Road and McCowan Road will also identify HOV lanes as an option to be considered. Staff will continue to address the operational issues in conjunction with the appropriate stakeholders. Design guidelines and operating policies will be finalized prior to the implementation of the first HOV lanes anticipated on Dufferin Street.

5.7 Relationship to Vision 2026

This report conforms to the following goals of Vision 2026:

1. Infrastructure for a Growing Region.
   - Exploring and implementing innovations and technologies to reduce congestion.
   - Planning our road system to work efficiently with provincial and interregional infrastructure.

2. Managed and Balanced Growth.
   - Co-ordinating the timing of infrastructure and service development (such as schools, community facilities, all utilities and roads) with the development of new growth areas.

3. Enhanced Environment, Heritage and Culture
   - Promoting alternative transportation methods that improve air quality, such as public transit and cycling.

6. FINANCIAL IMPACT

There are no immediate financial implications with this report since HOV lanes are proposed on road widening projects already identified in the approved 2006 and Draft 2007 Roads Capital Budget. The funds for HOV lanes were approved as part of Council's endorsement of the Six-Lane Design Guidelines and is included in the Draft 2007 Capital 10 Year Program.

The roadways identified for widening from four to six lanes that meet the HOV warrants represent approximately 95 lane km of highway with an estimated cost of $ 200 M to be constructed in ten years. This represents approximately 15% of the 10 Year Roads Capital budget.

7. LOCAL MUNICIPAL IMPACT

The Town of Richmond Hill completed a TMP which was adopted by Richmond Hill Council on October 23, 2006. The plan states that six-lane road widening on Regional roads should only be considered if they are implemented with HOV lanes. As part of the 16th Avenue project, a presentation was made to the Town of Markham General Committee on January 23, 2006. The Committee requested the Region to consider HOV lanes for this project. HOV lanes will improve transit operations and increase the person carrying capacity on Regional roads. This will provide commuters in all municipalities with another option to reduce congestion.

8. CONCLUSION

There is a need to ensure that road infrastructure continues to support the planned growth in York Region. Transit continues to play an increasingly important role in shaping and managing the demands on the road system.

The implementation of HOV lanes will support efforts to increase the efficiency of transit. It is recognized that the transition from the current single-occupant car culture will take time and in many cases carpooling can provide a good first step towards more transit oriented travel. HOV lanes provide a more efficient use of road infrastructure by moving more people compared to a general purpose lane and over time, can provide a more sustainable option as the number of occupants required to travel in this lane can be increased as needed.

HOV lanes have been planned and identified in several supporting documents in the Region including the Official Plan, Transportation Master Plan (TMP) and most recently, the Six-Lane Road Design Standards. The introduction of HOV lanes on Highway 404 has demonstrated to the public that these lanes are now transitioning from the planning stages to the implementation stage. Recent public input from EA studies also show that there is a greater interest in supporting road widening projects if they are for HOV lanes.

Based on these developments, the Region can show leadership by implementing arterial HOV lanes on the Regional road network. The upcoming six-lane widening projects noted in this report are examples by which the Region can and should take the lead in promoting HOV lanes and demonstrate commitment to providing sustainable infrastructure to support ongoing growth. Future EA studies for other six-lane widening projects will incorporate similar logic to further develop the transit priority network.

For more information on this report contact Dino Basso, Director, Capital Delivery at extension 5902 in the Transportation and Works Department.

Senior Management Group has reviewed this report.

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February 23, 2007

Attachments 2

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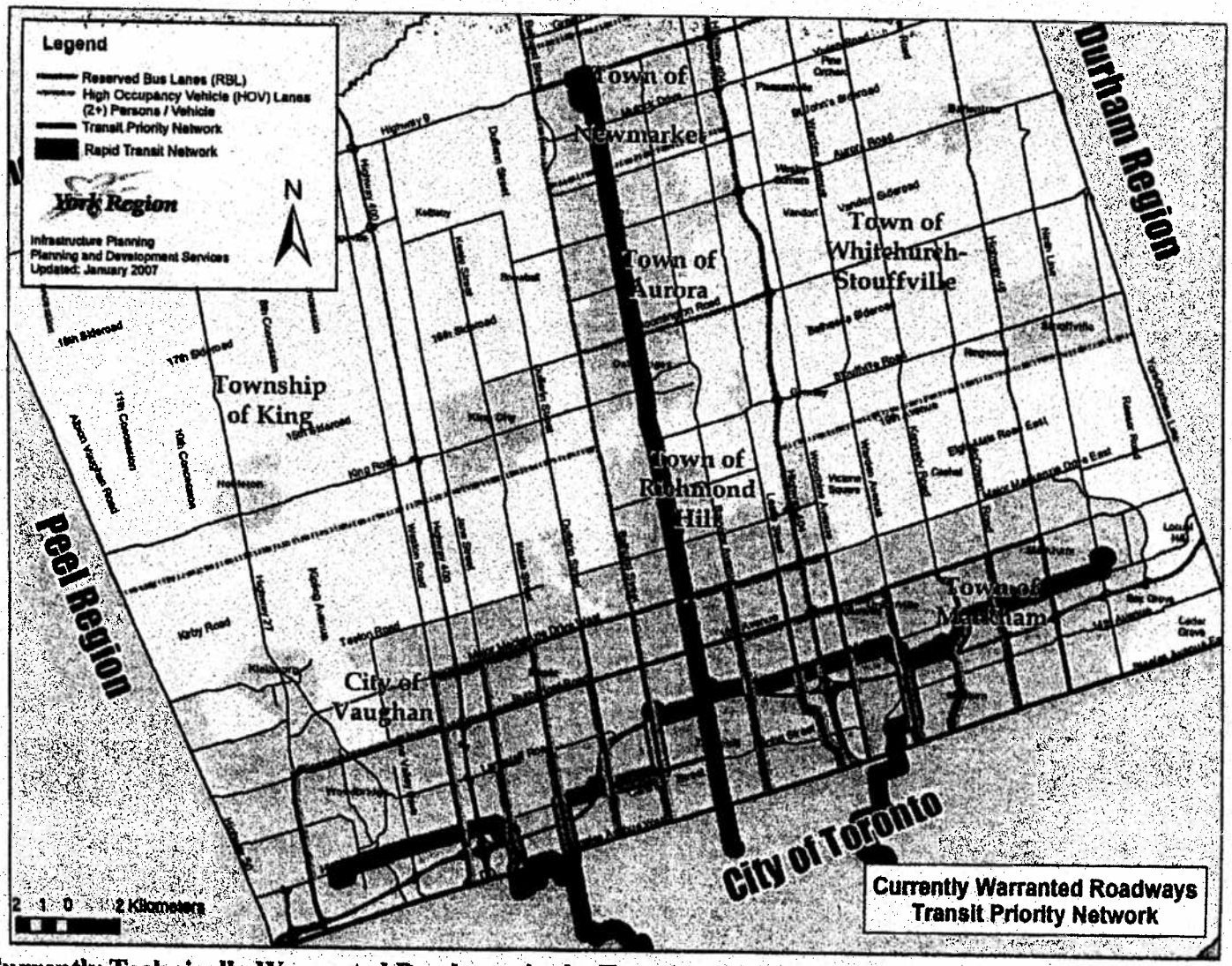
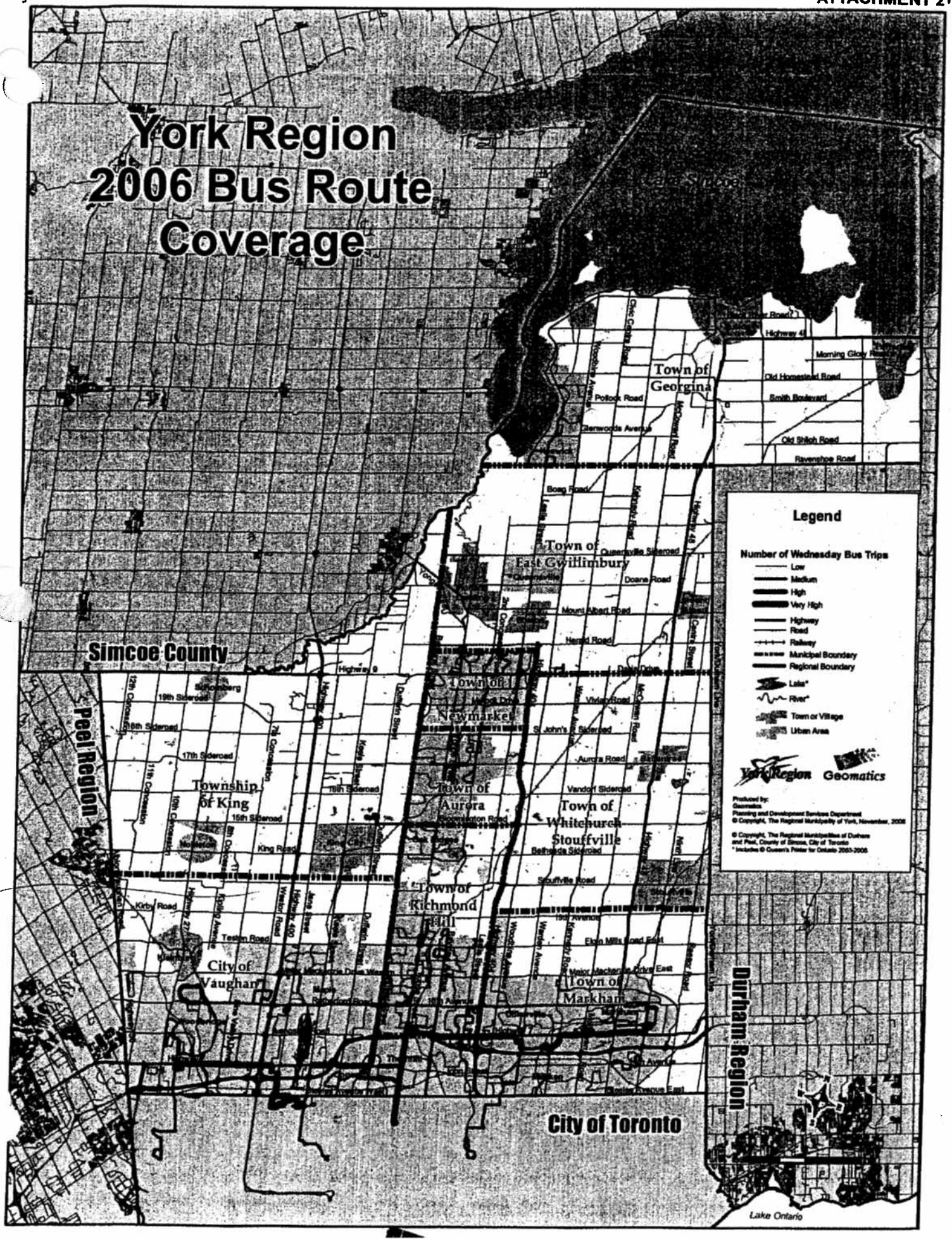


Figure 4: Currently Technically Warranted Roadways in the Transit Priority Network


York Region
2006 Bus Route
Coverage
Simcoe County
Peel Region
Durham Region
City of Toronto
Lake Ontario
Town of Georgina
Town of East Gwillimbury
Town of Newmarket
Township of King
Town of Aurora
Town of Whitchurch-Stouffville
Town of Richmond Hill
City of Vaughan
Town of Markham
Legend
Number of Wednesday Bus Trips
Low
Medium
High
Very High
Highway
Road
Railway
Municipal Boundary
Regional Boundary
Lake*
River*
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