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**TRUCK PROHIBITION RESULTS
NASHVILLE ROAD
CITY OF VAUGHAN**

The Transportation Services Committee recommends the adoption of the recommendation contained in the following report dated February 22, 2011, from the Commissioner of Transportation Services, with the following amendments:

- 1. Regional Council support the extension of the truck ban on Nashville Road to the end of 2015; and**
- 2. Staff undertake a further review of the truck prohibition results and bring back a report within 18 months.**

1. RECOMMENDATION

It is recommended that this report be received for information.

2. PURPOSE

This report provides an update to Regional Council regarding heavy truck traffic on Nashville Road between Highway 27 and Highway 50 in the City of Vaughan.

3. BACKGROUND

In 2006, alternate truck route signage was installed in the area of Nashville Road to deter heavy trucks from travelling through the area

In order to deter heavy trucks from traveling on Nashville Road, and with the approval of Regional Council on October 19, 2006, staff installed Truck Route guidance signs at key intersection locations on the Regional road network to promote heavy trucks to use Rutherford Road between Highway 27 and Highway 50.

On December 13, 2007 Regional Council adopted a report implementing load restrictions on several Regional roads, including Nashville Road

Section 122(7) of the *Highway Traffic Act*, designates authority to a municipal corporation to determine roadways where reduced loads apply. These load reduced roadways are designated through by-laws approved by Regional Council and

enforcement may be conducted by Ontario Provincial Police, York Regional Police or Ministry of Transportation staff.

Without weight restrictions, heavy truck traffic could cause extensive damage to hard surfaced roads. These load restrictions are implemented as required by the presence of road structures such as bridges or culverts which cannot support the weight of fully-loaded trucks and the inability of the pavement structure to support fully-loaded trucks. In most cases, these restrictions are put into effect in the spring of each year, although some are in effect on a year-round basis. On a recurring basis, Regional staff review all existing hard surfaced roadways in the road system to determine which roadways should be load restricted. A report is then submitted to Regional Council for approval.

At the Regional Council meeting of December 13, 2007, a report was approved implementing load restrictions on several Regional roads. Although Nashville Road was not included in this original report, through a motion approved by Regional Council at this meeting, a year-round load restriction was approved on Nashville Road, between Highway 27 and Highway 50, and the other Regional roads listed in the report.

On June 24, 2010 heavy trucks were restricted from travelling on Nashville Road for a temporary period

At its meeting of May 4, 2010, the City of Vaughan's Council adopted a report entitled "Transfer of Nashville Road from Region to the City of Vaughan". This Vaughan staff report recommended that The Regional Municipality of York transfer Nashville Road, between Highway 27 and Highway 50, to the City of Vaughan.

Vaughan's report was on the agenda of the June 16, 2010 meeting of the Transportation Services Committee. At this meeting, the Transportation Services Committee requested an update be submitted to Regional Council for review and discussion at their next scheduled meeting of June 24, 2010. A memo was presented to Regional Council in which Regional staff recommended transferring this section of Nashville Road to the City of Vaughan following the completion of planned improvements to the Regional transportation network in this area.

At this meeting, Regional Council also implemented a by-law restricting heavy trucks on Nashville Road between Highway 27 and Highway 50. This by-law expired on October 1, 2010.

4. ANALYSIS AND OPTIONS

Nashville Road is designed and built to carry all modes of transportation, including heavy trucks

The Regional road network is designed as an arterial road network capable of accommodating all vehicular traffic, including heavy trucks. This allows truck traffic to be distributed equally across the Regional road network.

Nashville Road is a two-lane roadway between Highway 27 and Highway 50 that carries approximately 10,600 vehicles per day. A location plan of the area is appended to this report as *Attachment 1*. Regional staff performed several traffic studies and observations on this road section and all studies indicate this section of Nashville Road has Regional significance providing important east-west traffic capacity across this part of the Region.

Vehicle classification studies conducted on Nashville Road indicate the truck prohibition resulted in a small reduction in heavy truck traffic using the roadway

Regional staff conducted vehicle classification studies on Nashville Road to determine the amount of truck traffic using the roadway. A classification study uses a series of tubes, laid across the roadway, which records both directions of traffic. This information is categorized based on number of axle strikes on the tube which then determines the class of a vehicle passing over the tube. This data is then analyzed to calculate the percentage of each vehicle type travelling past a specific point.

The vehicle classification studies were conducted for a period of one week for twenty-four hours a day on a monthly basis, before and after implementation of the by-law restricting heavy trucks on Nashville Road. The results indicate heavy trucks account for approximately 3% of the vehicles on Nashville Road. A comparison chart of truck percentages and truck volumes is found in Table 1.

Table 1
Average Daily Truck Comparison on Regional Roads

Roadway	Trucks (Before Prohibition)		Trucks (After Prohibition)	
	Percentage	# of Trucks	Percentage	# of Trucks
King Road	1.9%	220	2.0%	240
Nashville Road	2.6%	200	2.1%	150
Rutherford Road	5.6%	1100	6.1%	1220
		1520		1610

The percentage of truck traffic on Nashville Road is not high when compared to other Regional roads parallel to Nashville Road. Truck volumes on Nashville Road, King Road and Rutherford Road have remained relatively constant both before and during the heavy truck prohibition on Nashville Road between Highway 27 and Highway 50. Based on the results of this classification study, it can be concluded that heavy truck traffic on Nashville Road can be deemed as local traffic that is destined to or from the immediate area.

Three out of four heavy trucks that use Nashville Road are destined to or from the immediate area

Several origin-destination studies of heavy trucks were also conducted on Nashville Road between Highway 27 and Highway 50 to determine the predominant truck movements on Nashville Road and the percentage of heavy truck traffic destined to and from the immediate area or travelling through the area. Truck restrictions are not enforceable for trucks originating or destined to the local area and therefore, it is important to differentiate “pass-by” truck trips from “delivery” truck trips.

The heavy truck origin-destination studies were conducted during the hours of 7:00 a.m. to 9:00 a.m., 11:00 a.m. to 2:00 p.m., and 3:00 p.m. to 6:00 p.m. inclusive, for a total of 8 hours on a week-day. For this report, the origin-destination studies were conducted for several days, prior to, during and after the by-law restricting heavy trucks on Nashville Road implementation date of June 24, 2010.

Based on the heavy truck origin-destination studies, the predominant truck movements on Nashville Road are found to be the northbound left turn and eastbound right turn movements at the intersection of Nashville Road and Highway 27, or the southbound left turn and westbound right turn movements at the intersection of Nashville Road and Highway 50 (see *Attachment 2*). The comparison between the number of pass-by trips and delivery trips using the roadway prior to, during, and after the truck prohibition is shown in Table 2.

Table 2
Heavy Truck Destination Purpose on Nashville Road

Destination	% of Trucks (Before Prohibition)	% of Truck (During Prohibition)	% of Truck (After Prohibition)	
			Oct 28, 2010	Nov 25, 2010
Pass-by	28%	27%	26%	28%
Delivery	72%	73%	74%	72%

The results of this heavy truck origin-destination study indicate the percentage of the truck pass-by and delivery remains relatively unchanged, with or without the truck prohibition. The truck prohibition does not eliminate through truck traffic travelling on Nashville Road.

Local residents support the truck restriction; however, long time business owners are impacted

Regional staff attended a public meeting in response to a request from the Kleinburg and Area Ratepayers Association on October 21, 2010 to provide information on traffic concerns in the community of Nashville and Kleinburg. At this meeting, local residents indicated that they support the temporary truck restriction on Nashville Road and feel that it has made a difference in their community.

Shortly after the temporary truck restriction was implemented on Nashville Road, Regional staff received e-mail correspondence and phone calls from business owners and residents of the Nashville community. Based on this information, a large number of residents are in support of the restriction; however, there were local business owners who are not in favour of the restriction and indicated their trucks delivering material to their business were affected due to routine police enforcement which delay their heavy truck operators.

York Regional Police issued a limited number of infractions to heavy truck operators for violating the temporary truck restriction

Heavy trucks that are engaged in the delivery or collection of material to or from a destination that is accessed using a road which prohibits truck traffic are exempt from these prohibitions. For example, a truck delivering gravel to a property within a truck prohibited neighbourhood is permitted as long as the operator of the truck has a specific destination within the neighbourhood. A company which operates heavy trucks as part of their business is also exempt from these prohibitions. Truck prohibitions can eliminate truck traffic passing through an area, however; they do not entirely restrict truck traffic in that area.

York Regional Police conducted enforcement on 48 occasions along Nashville Road between Highway 27 and Highway 50 between July 16, 2010 and December 31, 2010. York Regional Police officers issued approximately 90 traffic tickets and 90 cautions for various truck and vehicle related offences specific to the *Highway Traffic Act*. A very limited number of infractions were issued to heavy truck operators for violating the temporary truck restriction on Nashville Road.

5. FINANCIAL IMPLICATIONS

The cost to conduct the studies aforementioned in this report is part of day-to-day operations for Transportation Services.

6. LOCAL MUNICIPAL IMPACT

Regional staff conducted vehicle classification studies on Nashville Road to determine the amount of truck traffic using the roadway. Nashville Road is a Regional road providing a critical link between Highway 27 and Highway 50 for residents of the City of Vaughan, commuters and those travelling to and from businesses in this area.

7. CONCLUSION

This report is for information purposes and provides an update to Council on the heavy truck traffic on Nashville Road between Highway 27 and Highway 50, in the City of Vaughan. Regional staff conducted truck classification studies on Nashville Road and other Regional roads in the area. When compared to historical data, truck volumes on Nashville Road and other Regional roads have remained relatively constant.

The evidence collected during the temporary truck ban is inconclusive; truck volumes and destinations on Nashville Road did not change significantly during the ban and neither did truck volumes on adjacent Regional roads. Resident opinion, however, is that their community was improved with the ban, while local businesses reported a negative effect.

For more information on this report, please contact Steven Kemp, Director, Traffic Management and Intelligent Transportation Systems at extension 5226.

The Senior Management Group has reviewed this report.

(The two attachments referred to in this clause are attached to this report.)



Study Area

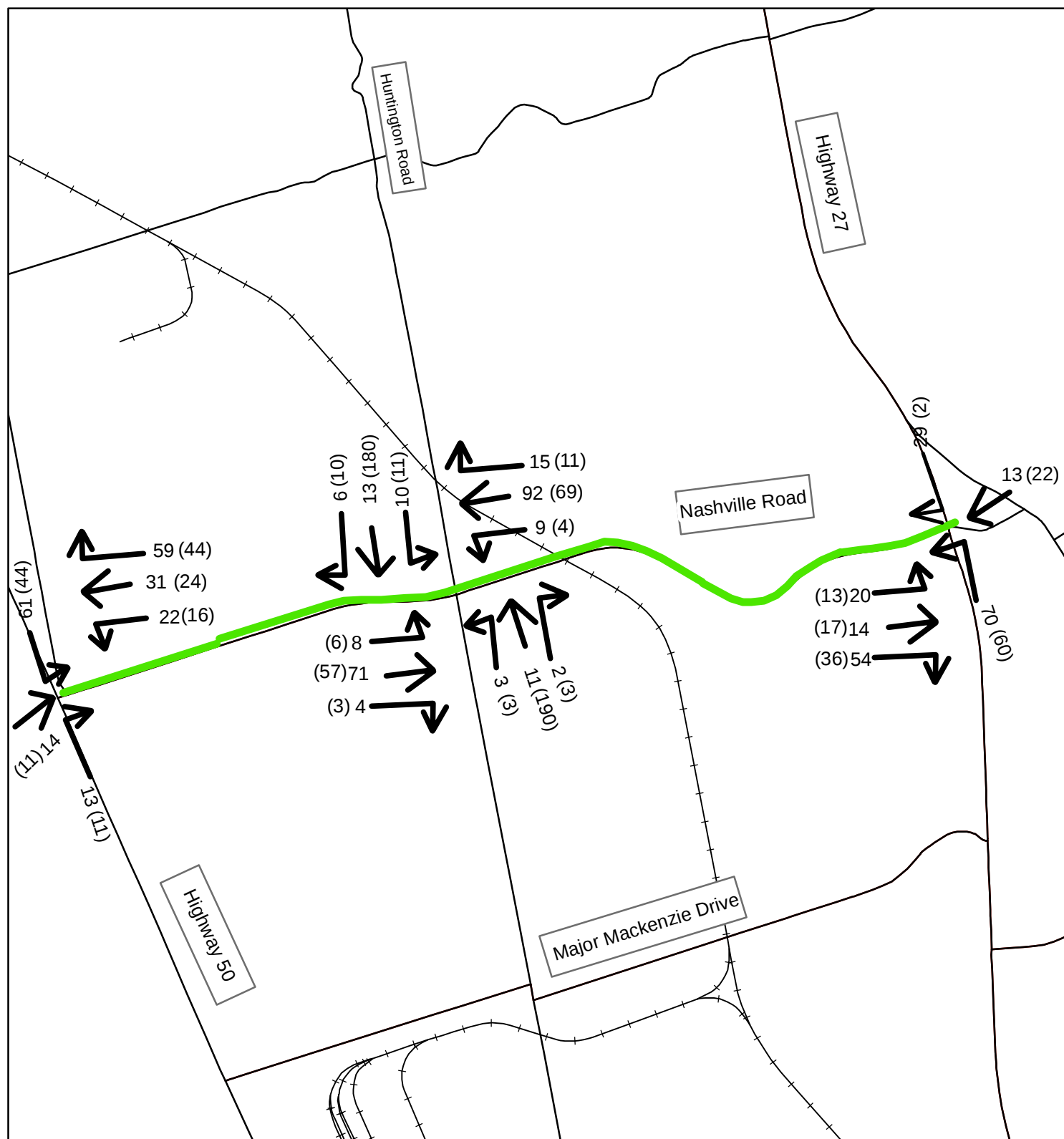
City of Toronto



Truck Prohibition Results Nashville Road City of Vaughan

Study Area





LOCATION PLAN

Truck Prohibition Results
Nashville Road
City of Vaughan

Study Area ——
Truck Volumes Before (After)