

**Report to the Chairman and Members of the  
Transportation and Traffic Strategic Policy Committee**

**HGV Management Strategy Review 2009**

Brendan O'Brien  
**Head of Technical Services (Traffic)**

Niall Bolger  
**Assistant ITS Officer**

**Roads and Traffic Department  
Dublin City Council  
Civic Offices  
Fishamble Street**

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## Section 1: Introduction

The Dublin Port Tunnel (DPT) opened on December 20<sup>th</sup> 2006 providing a direct Motorway standard connection from Dublin Port to the M50 Motorway ring. This tunnel was designed to remove as many trucks from the city centre as possible, to maximise use of the tunnel and to minimise the numbers of trucks on the City Streets. The introduction of a HGV management strategy was a complimentary part of the whole Dublin Port Tunnel Project.

The City Council's HGV management strategy was introduced on the 19<sup>th</sup> of February 2007. The strategy provides for a ban on 5+ axle vehicles during the hours of 07.00-19.00 seven days a week from a designated cordon area and provides a limited permit scheme for 5+ axle vehicles that need to load/unload within the city centre area. In addition, as the HGV cordon is a closed cordon around the port area, Dublin City Council operates an Eastlink toll rebate scheme for affected vehicles.

In operation to date the HGV Management Strategy has resulted in dramatic reductions of 5+ axle vehicles within the city centre area of between 88-96% and this is reflected in the fact that over 3,582 5+ axle vehicles used the tunnel per day in 2009. The number of permits which Dublin City Council now issue, of both load/unload and Transit, is now in the order of 90 per day for the cordon area

By removing 5+ axle vehicles from the city centre the HGV Management Strategy has:

- Improved the daily lives of people who live and work in the city centre by reducing both noise and pollution levels.
- Made city streets safer for pedestrians, cyclists and other vulnerable road users. According to the 2008 canal cordon count (Nov 07- Nov 08) there has been an 8% increase in the number of cyclists crossing the canal cordon in the morning peak and recent figures from College Green show a 30% rise in cycling numbers.

- Made it possible to reallocate valuable road space to Public Transport, an example of this is the Bus Lane along the North Quays at Arran Quay.

The change on roads has been dramatic with the numbers of HGVs now on East Wall Road where the reduction has been 97.5% during the cordon hours and 97% over 24 hours. The numbers now using this road per month in 2009 are now less than the number of trucks that used it per day in 2006.

This review updates previous reports presented and also looks at some key aspects of the strategy :-

1. Cordon Hours and Boundary.
2. Permit Scheme
3. Extension of category of excluded vehicles

## Section 2: 5+ Axle traffic

The number of 5+ axle vehicles using the DPT is now on average 3,013 per day while the number of 4 axle vehicles is now at an average of 569 per day.

The numbers of 5+ axle vehicles have dropped from their peak figures in August 2007 as a direct result of the economic slow down.

The number of 5+ axle vehicles using the tunnel fell by 42% from the peak in August 2007.

	5+ axle vehicles	4 axle vehicles
2006 Tunnel open	3,330	1,216
2007 HGV Ban	4,831	1,442
2007 August	5,246	1,797
2009 August	3,013	569

Dublin City Council installed axle counters at a number of locations in the city prior to the opening of the DPT so that accurate and timely information was available to the City Council regarding HGV volumes in the city. These counters provide information on a daily basis on truck movements, with the key ones located on East Wall Road, North Wall Quay and Sean Moore Road, thus covering the majority of the entry and exit points to Dublin Port.

The following tables show HGV volume data relating to 5+ axle vehicles at a number of milestones during the lifetime of the HGV management strategy:

**East Wall Road 5+ axle Vehicle Counts**

	<b>07-19.00</b>	<b>Diff</b>	<b>19-07.00</b>	<b>Diff</b>	<b>24 hr</b>	<b>Removed from Road</b>
<b>Pre Tunnel</b>	<b>1,277</b>	<b>-----</b>	<b>605</b>	<b>----</b>	<b>1,882</b>	<b>-----</b>
<b>Tunnel Open</b>	172	<b>-1,105 (-86%)</b>	120	<b>- 530 (-81%)</b>	292	<b>-1,590 (-84%)</b>
<b>HGV Ban</b>	69	<b>-103 (-60%)</b>	36	<b>-84 (-70%)</b>	105	<b>-187 (-65%)</b>
<b>25<sup>th</sup> Sept 09</b>	<b><u>31</u></b>	<b><u>-38</u> <b>(-45%)</b></b>	<b><u>28</u></b>	<b><u>-8</u> <b>(-22%)</b></b>	<b><u>59</u></b>	<b><u>-46</u> <b>(-56%)</b></b>
<b>Total Diff</b>	<b>-1,246 (-98%)</b>	<b>-----</b>	<b>-577 (-95%)</b>	<b>-----</b>	<b>-1,823 (-97%)</b>	<b>-----</b>

**North Wall Quay 5+ Axle Vehicle Counts**

	<b>07-19.00 (Cordon Hours)</b>	<b>Diff</b>	<b>19-07.00 (Outside Cordon Hours )</b>	<b>Diff</b>	<b>24 hr</b>	<b>Removed from Quays</b>
<b>Pre Tunnel</b>	<b>1,598</b>	<b>-----</b>	<b>826</b>	<b>----</b>	<b>2,424</b>	<b>-----</b>
<b>Tunnel Open</b>	1,060	<b>-538 (-34%)</b>	559	<b>- 267 (-22%)</b>	1,619	<b><u>-805 (-33%)</u></b>
<b>HGV Ban</b>	180	<b>-880 (-83%)</b>	402	<b>-157 (-29%)</b>	582	<b><u>-1,037 (-64%)</u></b>
<b>25<sup>th</sup> Aug 09</b>	<b>70</b>	<b><u>-110</u> <b>(-39%)</b></b>	<b>98</b>	<b><u>-304</u> <b>(-76%)</b></b>	<b>168</b>	<b><u>-414</u> <b>(-29%)</b></b>
<b>Total</b>	<b>-1,528 (-96%)</b>	<b>-----</b>	<b>-728 (-88%)</b>	<b>----</b>	<b>-2,256 (-93%)</b>	<b>-----</b>

**Sean Moore Road 5+ axle Vehicle Counts**

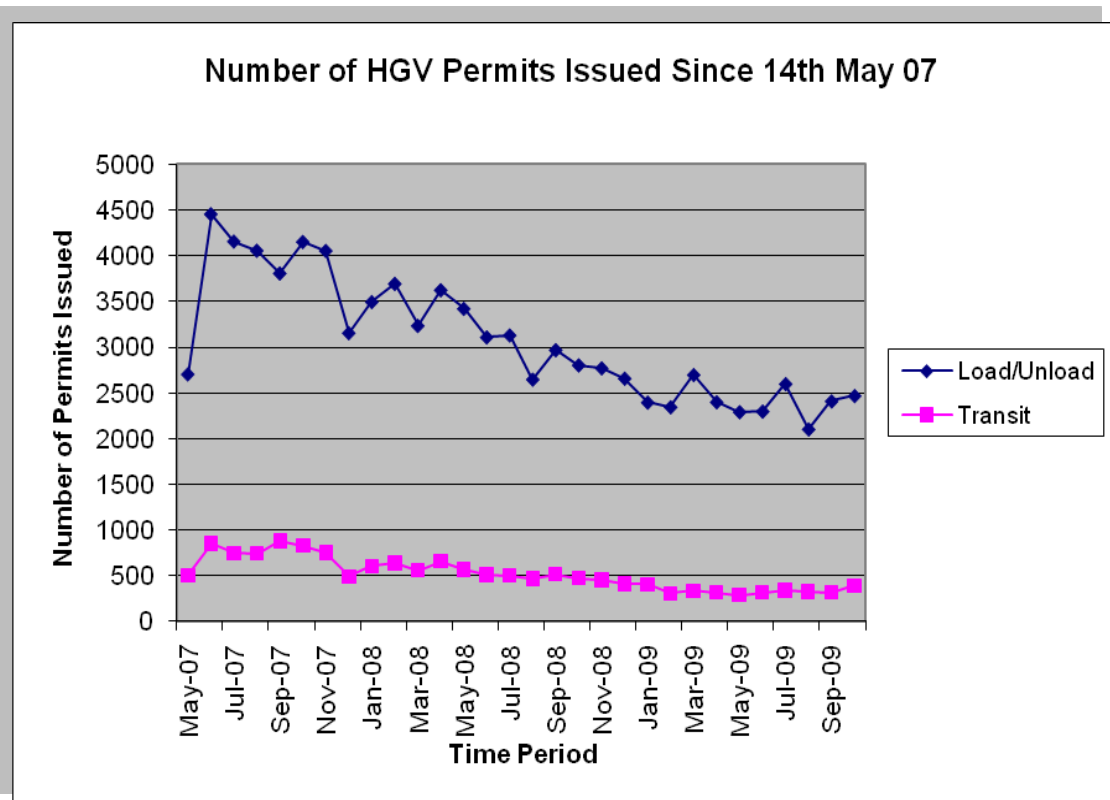
	<b>07-19.00</b>	<b>Diff</b>	<b>19-07.00</b>	<b>Diff</b>	<b>24 hr</b>	<b>Removed from Sean Moore Road</b>
<b>Pre Tunnel</b>	<b>514</b>	<b>-----</b>	<b>136</b>	<b>----</b>	<b>650</b>	<b>-----</b>
<b>Tunnel Open</b>	357	-157 (-30%)	89	- 47 (-35%)	446	-204 (-31%)
<b>HGV Ban</b>	81	-276 (-77%)	102	+ 13 (+14%)	183	-263 (-59%)
<b>25<sup>th</sup> Aug 09</b>	<b>38</b>	<b>-43 (-47%)</b>	<b>57</b>	<b>-45 (-44%)</b>	<b>109</b>	<b>-74 (-60%)</b>
<b>Total Diff</b>	<b>-476 (-93%)</b>	<b>-----</b>	<b>-79 (-58%)</b>	<b>-----</b>	<b>-541 (-83%)</b>	<b>-----</b>

It can be clearly seen from the above that the Strategy has been successful and that the number of 5+ axle vehicles is still declining in the city. This is in line with the strategy, but is also a reflection of the economic and particularly construction downturn. It is also noteworthy that the numbers of trucks outside the cordon hours have also declined substantially, as initially it had been feared that trucks would wait until outside the cordon hours to enter the city and this has not happened. There have also been no requests received to change the cordon boundary, subsequent to the change made for Bannow Road

*No Change in either the hours of the cordon or the current Boundary is recommended*

**Section 3 Permit Scheme**

At the time of the strategy implementation it was recognised that the use of 5+ axle vehicles could not be entirely phased out in the city centre and that therefore a scheme for permitting entry was brought forward. This took two forms, a load/unload permit for registered premises in the city centre and a transit permit for those vehicles not permitted to use the Port Tunnel.



The permit system has been very successful in operation with very little complaint regarding its operation. Since its introduction the number of permits has steadily declined and this is in line with the Strategy which asked businesses when they registered to put forward a plan for how they would reduce the numbers of 5+ axle vehicles that they would use on a year on year basis. The decline in construction activity has also contributed to the steady reduction in permits issued.

	<b>Top 10 Premises at 6 Month Review (19/08/07)</b>	<b>Top 10 Premises (1/11/09)</b>
1	Diageo, Victoria Quay	Diageo, Victoria Quay
2	Readymix, East Wall Road	Total Produce (Fyffes), Beresford Street
3	Total Produce (Fyffes), Beresford Street	Marks and Spencer, Mary Street
4	P.Elliot and Company, Herberton	Sam Dennigan, Halston Street, Smithfield
5	Diageo, St James Street	Keelings Wholesale, Little Green Street
6	Sam Dennigan, Halston Street, Smithfield	Blenders, Newmarket Indus Estate
7	Ascon Limited, Landsdowne Road redevelopment	Begley Brothers, Arran Street
8	James Street Steel, 34 James Street	Marks and Spencer, Grafton Street
9	J.J Rathigan, Heuston South Quarter	Landsdowne Road Redevelopment
10	Danninger, Cork Street	Sitreas Construction Mgt, North Wall Quay

The Garda are the actual enforcement agency and there is close cooperation between the Garda and DCC, with the Garda having access to the database of permit holders.

Periodic spot checks are undertaken by the City Council to ascertain levels of compliance and for any vehicle which is found to have no valid permit the following action is taken.

1. The Garda are informed.
2. If the truck is registered on the Permit system the owners are written to with the date of the cordon breach, the truck number and the location,
3. The truck is added to a list of vehicles not entitled to a rebate from the East Link Toll rebate scheme.

Compliance rates have been recorded of between 80-90% of trucks surveyed.

***No change in the Operation of the Permit  
System is recommended***



#### **Section 4: The Operation of The Eastlink Rebate Scheme**

The HGV strategy as agreed at the City Council meeting in April 2006 put in place a closed cordon around both the North and South Port Areas. This has the impact that hauliers moving between the two parts of the port would have to pay a toll during the hours of operation of the HGV strategy, as there would be no alternative route available to them.

The Eastlink toll rebate scheme was introduced to coincide with the introduction of the HGV management strategy in the cordon area.

The scheme operates as a refund scheme where an affected haulier pays the toll as normal and is then entitled to claim a rebate on this toll provided they produce evidence of the time and date of the bridge crossing and the type of vehicle used.

The scheme requires companies wishing to claim a rebate to register and provide a tax clearance certificate as well as company details. To the end of September 2009, 174 companies had registered on the system, of which 119 have made claims in 2009.

Since the implementation of the scheme a total of €1.660 million has been paid out from City Council funds. The current refund per HGV crossing payable by Dublin City Council to hauliers is €4.24.

The current arrangement to operate the East Link Bridge between National Toll Roads, Dublin Port Company and Dublin City Council expires at the end of 2015. Therefore the East Link rebate scheme will remain in operation until then.

## **5. Extension of the categories of excluded vehicles.**

During the preparation of this strategy a decision had been taken to have 5+ axle vehicles excluded from the cordon area and to put no restrictions on any other commercial vehicles accessing the city centre, except for any of the existing weight and height restrictions already in place.

The 5+ axle vehicle was chosen because of the following reasons:-

1. 65% of all HGV traffic using Dublin Port were in this category
2. The 5 axle vehicle was mostly of the large articulated type; there were some semi-rigid Concrete Trucks, but very few.
3. They were used almost exclusively in the commercial environment and were seldom used to make deliveries to private homes.

At that stage when 4 axle vehicles were examined, they were excluded for a number of reasons :-

1. 4 axle vehicles accounted for only 11% of the total port HGV traffic.
2. 4 axle vehicles were a mixture of 4 axle articulated large vehicles, similar to 5 axle HGVs, and smaller rigid vehicles.
3. The vehicle type could be of the concrete truck type and particularly the spoil trucks used in construction activity
4. These trucks would be used in delivering to private homes.

**It had been decided to monitor and report on the numbers of 4 axle vehicles in the city and the data from the axle counters is set out in the next tables.**

**East Wall Road 4 Axle Vehicle Counts**

	<b>07-19.00</b>	<b>Diff</b>	<b>19-07.00</b>	<b>Diff</b>	<b>24 hr</b>	<b>Diff</b>
<b>Pre Tunnel</b>	<b>684</b>	-----	<b>77</b>	-----	<b>814</b>	-----
<b>Tunnel Open</b>	323	-361 (-53%)	14	-63 (- 82%)	337	-447 (- 54%)
<b>HGV Ban</b>	308	-15 (-5%)	23	+9 (+64%)	331	-6 (- 2%)
<b>25<sup>th</sup> Sept 09</b>	<b>41</b>	-267 (-87%)	<b>1</b>	22 (-96%)	<b>42</b>	-289 (- 87%)
<b>Total Diff</b>	-643 (-94%)	-----	-76 (-99%)	-----	-772 (-95%)	-----

**North Wall Quay 4 Axle Vehicle Counts**

	<b>07-19.00</b>	<b>Diff</b>	<b>19-07.00</b>	<b>Diff</b>	<b>24 hr</b>	<b>Diff</b>
<b>Pre Tunnel</b>	<b>770</b>	-----	<b>169</b>	-----	<b>939</b>	-----
<b>Tunnel Open</b>	613	-157 (-20%)	143	-26 (-15%)	756	-183 (-19%)
<b>HGV Ban</b>	395	-218 (-35%)	133	-10 (-7%)	528	-228 (-30%)
<b>25<sup>th</sup> Aug 09</b>	<b>91</b>	-304 (-78%)	<b>34</b>	-99 (-74%)	<b>125</b>	-403 (-76%)
<b>Total Diff</b>	-679 (-88%)	-----	-135 (-80%)	-----	-814 (-86%)	-----

**Sean Moore Road 4 Axle Vehicle Counts**

	<b>07-19.00</b>	<b>Diff</b>	<b>19-07.00</b>	<b>Diff</b>	<b>24 hr</b>	<b>Diff</b>
<b>Pre Tunnel</b>	<b>613</b>	-----	<b>143</b>	-----	<b>756</b>	-----
<b>Tunnel Open</b>	607	-6 (-1%)	129	-14 (-10%)	736	-20 (-3%)
<b>HGV Ban</b>	377	-230 (-38%)	89	-40 (-31%)	466	-270 (-37%)
<b>25<sup>th</sup> Aug 09</b>	<b>218</b>	-159 (-42%)	<b>57</b>	-32 (-36%)	<b>256</b>	-210 (-45%)
<b>Total Diff</b>	-395 (-64%)	-----	-86 (-60%)	-----	-500 (-66%)	-----

The situation within the City has changed dramatically since 2006 in relation to numbers of 4 axle vehicles recorded.

In 2006 there was 2,067 4 axle HGVs recorded from 07.00-19.00  
 In 2009 this has fallen to 350 4 axle HGVs 07.00-19.00

There has been an 83% reduction already without any restrictions and without any cost to Dublin City Council.

**Projected Cost to include 4 Axle HGV**

In order to evaluate what difference the inclusion of 4 axle HGVs would have on the East Link Rebate Scheme it is necessary to first calculate the number of 4 axle vehicles currently crossing the East Link and then calculate the rebates necessary until 2015.

National Toll Roads have provided the following data on the number of 4 and 5+ HGVs crossing the East Link Bridge for one week during the hours of operation of the HGV management Strategy:

<b>Daily 4/5+ Axle Vehicles Using Eastlink Monday to Sunday from 7am to 7pm</b>	
Monday 7 <sup>th</sup> Sept 09	1,133
Tuesday 8 <sup>th</sup> Sept 09	1,114
Wednesday 9 <sup>th</sup> Sept 09	1,027
Thursday 10 <sup>th</sup> Sept 09	981
Friday 11 <sup>th</sup> Sept 09	985
Saturday 12 <sup>th</sup> Sept 09	141
Sunday 13 <sup>th</sup> Sept 09	20
<b>Total HGV Traffic</b>	<b>5,401</b>

Please note that there is a high proportion of truck movements between the South Port and North port areas for 4 axle vehicles.

The operators estimate the breakdown between 4 and 5+ axle vehicles to be 60% 5+ axle and 40% 4 axles.

From the counts above and NTR’s estimation it is possible to calculate the breakdown of HGVs using the East Link for the week above as follows:

5+ axle vehicles: 3,241

4 axle vehicles: 2,160

During the same period of this HGV count, €15,523.29 was paid out by the City Council in refunds to haulage companies using East Link.

If 4 axle HGVs were added to the type of vehicle restricted under the HGV management strategy, a certain amount of the HGVs currently using Sean Moore Road between 7am – 7pm would be forced to use the East Link Bridge because of the closed cordon. According to the axle

counting equipment located on Sean Moore Road this change could add a further 200 HGVs using the East Link Bridge.

The inclusion of 4 axle HGVs in the management strategy would see a further 2,360 HGVs seeking a refund as part of the Rebate Scheme over the week in September. This would have added a further €10,006.40 in rebates to the period in question, an increase of 64% over the existing arrangement.

***The inclusion of 4 axle vehicles would cost the City Council an additional €500,000 per year.***

If the Strategy was extended to 4 axle vehicles in 2010 then the City Council would be liable for payments to 4 axle vehicles of in excess of € 3 million until the end of the current toll scheme at the start of 2016.

### **Conclusion**

The numbers of 4 axle vehicles in the City have decreased so substantially that extending the strategy to this class of vehicle would only have marginal impact on the numbers of these vehicles within the city. The cost of removing these vehicles could be as high as € 500,000 per year and no provision has been made in 2010 budgets for this figure.

***It is recommended that the Scheme should not be extended to 4 axle vehicles at present. However monitoring and annual reporting on these vehicles should continue.***