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

Report on Dublin City Council's Canal Cordon Traffic Counts 2007

Gerry Flaherty Senior Executive Engineer

1. 2007 Cordon Counts

Since 1980, Dublin City Council has been conducting traffic counts at 33 locations around the cordon formed by the Royal and Grand Canals. The counts are conducted during the month of November each year. Counts are conducted at each location on two separate days and the average of the two counts is used. Since 1997 the counts have been conducted over the period 07.00 to 10.00hrs. The main results of the Cordon counts for November 2007 together with the data for each year since 1997 is set out in Table 1.

20020 2	Summary Results Canal Cordon Counts 1997 to 2007 Inbound 07.00 to 10.00hrs									
Year (Nov)	Cars* No.	Goods No.	Buses No.	P.Cycles No.	M.Cycles No.	Peds. No				
1997	73,561	3,283	1,459	5,628	1,816	16,679				
1998	71,536	3,090	1,350	4,579	1,845	15,565				
1999	73,147	3,112	1,454	5,384	2,267	18,157				
2000	67,935	3,000	1,521	4,464	2,558	15,808				
2001	68,003	3,004	1,522	5,085	2,845	18,558				
2002	65,657	2,828	1,576	4,714	2,920	16,609				
2003	63,509	2,651	1,563	4,711	2,656	17,305				
2004	62,475	3,057	1,537	3,941	2,249	15,241				
2005	60,600	2,711	1,601	4,404	2,187	16,332				
2006	62,489	2,291	1,680	4,839	2,395	17,114				
2007	63,269	1,445	1,740	5,676	2,429	18,594				

Table 2 outlines the changes in traffic volumes and pedestrians over a 10-year period, 5-year period and the change from 2006 to 2007 for the number of vehicles crossing the canal cordon at 33 locations between 7am and 10am

- Over the 10 year period 1997 to 2007 the volume of vehicular traffic crossing the canal cordon inbound during the morning peak period decreased by 13% with a 5% decrease in the period 2002 to 2007 with a 1% increase in the period 2006 to 2007.
- Over the 10 year period 1997 to 2007 the volume of cars crossing the canal cordon inbound during the morning peak period decreased by 14% with a 4% decrease in the period 2002 to 2007 with a slight 1% increase in the period 2006 to 2007.
- The volume of goods vehicles crossing the cordon has decreased significantly over the 10-year period 1997 to 2007 with a decrease of 56% recorded. Over the 5-year period 2002 to 2007 there has been a decrease of 49% in the volume of Goods Vehicles with a decrease of 37% between 2006 and 2007. The opening of the Dublin Port Tunnel and the 5-axle Heavy Goods vehicles ban, which came into effect in February 2007, will have contributed to this reduction.

	Change in train	c volumes over 10 years, 5	years & 1 year
ars*	1997 to 2007	2002 to 2007	2006 to 2007
No.	-10292	-2388	780
o e	-14%	-3.6%	+1.2%
loods	1997 to 2007	2002 to 2007	2006 to 2007
lo.	-1838	-1383	-846
o e	-56%	-49%	-36.9%
uses**	1997 to 2007	2002 to 2007	2006 to 2007
lo.	281	164	60
ó	+19%	+10.4%	+3.6%
edal C	1997 to 2007	2002 to 2007	2006 to 2007
lo.	48	962	837
o e	0.8%	20.5%	+17.3%
Iotor C	1997 to 2007	2002 to 2007	2006 to 2007
o.	613	-491	34
ó	+33.7%	-16.8%	+1.4%
ll Vehs	1997 to 2007	2002 to 2007	2006 to 2007
lo.	-11,188	-3667	865
o ·	-13%	-4.7%	+1.2%
edestria	n 1997 to 2007	2002 to 2007	2006 to 2007
o.	+1915	+1985	+1480
o	+11.5%	+12%	+8.6%

- Over the 10 year period 1997 to 2007 the volume of pedal cyclists crossing the cordon inbound during the morning peak period increased by about 1% with a 21% increase in the period 2002 to 2007 and a 17% increase in the period 2006 to 2007.
- Over the 10 year period 1997 to 2007 the volume of motor cyclists crossing the cordon inbound during the morning peak period increased by 34% with a 17% decrease in the period 2002 to 2007 and a 1% increase in the period 2006 to 2007.
- Over the 10 year period 1997 to 2007 the volume of pedestrians crossing the cordon inbound during the morning peak period increased by 12% with a 12% increase in the period 2002 to 2007 and a 9% increase in the period 2006 to 2007.

Table 3 shows information that was collected for the first time in 2002 on the number of taxis and on the breakdown between Bus Atha Cliath (BAC) and other buses.

Table 3	Canal Cordon Counts 2007 (Inbound 07.00 to 10.00hrs) Data on Taxis & Buses Crossing the Cordon							
	Cars Taxis Total BAC							
2002								
No	63,097		65,657	1,262		1,576		
%	96.1%	3.9%	100%	80.1%	19.9%	100%		
2003								
No	60,644	2,865	63,509	1,262	301	1,563		
%	95.5%	4.5%	100%	80.7%	19.3%	100%		
2004								
No	59,966	2,509	62,475	1,278	259	1,466		
%	96.0%	4.0%	100%	83.1%	16.9%	100%		
2005								
No	57,537	3,063	60,600	1,337	264	1,601		
%	94.9%	5.1%	100%	83.5%	16.5%	100%		
2006								
No	58,664	3,825	62,489	1,338	342	1,680		
%	93.9%	6.1%	100%	79.6%	20.4%	100%		
2007								
No	58,686	4,583	63,269	1,330	410	1,740		
%	92.8%	7.2%	100%	76.4%	23.6%	100%		

Table 4 outlines the changes in traffic volumes for private cars, taxis and buses between 2002 and 2007 and from 2006 to 2007 for the number of vehicles crossing the canal cordon between 7am and 10am

From tables 3 and 4, we can see that of the cars that crossed the cordon during the morning peak period between 2002 and 2007, taxis accounted for 5% on average per year rising to over 7% in 2007. In the same period, the number of taxis crossing the cordon in the morning peak increased by 79%, with a gradual increase each year apart from 2004

Table 4 Canal Cordon Counts (Inbound 07.00 to 10.00hrs) Change in traffic volumes over 5 years & 1 year							
Cars**	2002 to 2007	2006 to 2007					
No.	-4411	22					
%	-7.0%	+0.0%					
Taxi	2002 to 2007	2006 to 2007					
No.	2023	758					
%	+79.0%	+19.8%					
BAC	2002 to 2007	2006 to 2007					
No.	68	-8					
%	+5.4%	-0.6%					
Other bus	2002 to 2007	2006 to 2007					
No.	96	68					
%	+31%	20%					

Of the buses that crossed the cordon during the morning peak period between 2002 and 2007, Bus Atha Cliath accounted for 80% on average per year reducing to 76% in 2007. In the same period, the number of Bus Atha Cliath buses crossing the cordon in the morning peak increased by 5%. However the number of Bus Atha Cliath buses crossing in 2006 to 2007 decreased by almost by 1%. Conversely the number of privately operated buses crossing the cordon increased in the period 2002 to 2007 by 31% and continues to increase with an increase of 20% during the period 2006 to 2007.

Detailed count results for 2002 and 2007 for all cars, taxis and buses at each of the 33 count locations are presented in **Table 5** with main bus routes separated from non-bus routes. It is worth noting that there was an increase in the number of cars crossing the canal cordon on QBC / Bus routes between 2002 and 2007 between 7am and 10am by over 2% (1180) with the number of Dublin Bus vehicles increasing by less than 2% (22) and other buses by 23% (69). On non-QBC / Bus routes, the amount of cars crossing the cordon between 2002 and 2007 has declined by 1% (116).

	Table 5 Canal Cordo	n Cour	ts 2007	7 (Inbou	nd 07.0	0 to 10.	. <mark>00hrs) –</mark>	33 loca	ations	
	Main bus Routes	Cars and taxis		BAC (Dublin Bus)			Other Bus			
	Location on Canal Cordon	2002	2007	02 - 07	2002	2007	02 - 07	2002	2007	02 - 07
1	Ringsend Rd (McMahon Bridge	1981	1715	-13.4%	49	68	38.8%	6	0	-100.0%
3	Mount Street Bridge	1992	1913	-4.0%	45	56	24.4%	7	11	57.1%
5	Baggot Street Bridge	2304	2179	-5.4%	25	27	8.0%	4	3	-25.0%
6	Lesson Street Bridge	3674	3627	-1.3%	142	172	21.1%	49	48	-2.0%
7	Charlemont Street Bridge	1544	1294	-16.2%	22	12	-45.5%	2	2	0.0%
8	Rathmines Road (Portobello Br.)	2175	2127	-2.2%	81	99	22.2%	3	3	0.0%
9	Harold's Cross Bridge	2674	2972	11.1%	50	57	14.0%	3	8	166.7%
<mark>10</mark>	Sally's Bridge	2318	2176	-6.1%	13	11	-15.4%	4	8	100.0%
<mark>11</mark>	Dolphins Barn Bridge	1948	2731	40.2%	85	95	11.8%	7	23	228.6%
13	SCR at St Patrick's Home	2081	1751	-15.9%	32	30	-6.3%	7	6	-14.3%
14	Old Kilmainham	1270	2060	62.2%	49	33	-32.7%	6	8	33.3%
<mark>16</mark>	St. John's Road West	4171	2699	-35.3%	58	84	44.8%	47	66	40.4%
<mark>17</mark>	Conyngham Road	2391	2702	13.0%	62	62	0.0%	5	12	140.0%
20	Blackhorse Avenue	2464	2292	-7.0%	19	14	-26.3%	6	2	-66.7%
<mark>21</mark>	Old Cabra Road	1367	1505	10.1%	43	31	-27.9%	10	10	0.0%
24	New Cabra Road	1558	1268	-18.6%	68	65	-4.4%	44	42	-4.5%
25	Phibsborough Road	2981	2911	-2.3%	49	49	0.0%	11	16	45.5%
27	Drumcondra Road (Binn's Br.)	4632	5466	18.0%	166	129	-22.3%	53	67	26.4%
29	Clarke's Bridge	4088	4419	8.1%	30	20	-33.3%	4	5	25.0%
30	Newcomen Bridge	2232	3251	45.7%	173	170	-1.7%	18	27	50.0%
2	Grand Canal Street Bridge	1760	1727	-1.9%	1	0	-100.0%	3	1	-66.7%
	Total 5		52785	2.3%	1262	1284	1.7%	299	368	23.1%
	Difference		1180			22			69	
	Non bus Routes									
4	Huband Bridge	322	450	39.8%				_	_	
12	Herbeton Bridge	2456	2259	-8.0%				5	6	20.0%
15	Kilmainham Lane	173	294	69.9%						
	Phoenix Park (Main Road)	1784	964	-46.0%				2	2	0.0%
	Phoenix Park (Back Road)	1265	1350	6.7%				1	1	0.0%
	Annamoe Road	596	656	10.1%				2	1	-50.0%
23	Charleville Road	708	721	1.8%					1	
	Royal Canal Bank	161	35	-78.3%					-	
	Russell Street Bridge	1201	1310	9.1%					2	
31	Ossory Road	186	217	16.7%		0.5		4	1	105.000
32	Sheriff Street Lower	1392	1341	-3.7%		35		4	9	125.0%
33	North Wall Quay	356	887	149.2%		11		1	19	1800.0%
		10600	10484	-1.1%		46		15	42	180.0%
	Difference		116			46			27	

Table 6 outlines the occupancy rates and percentage differences between the 2003 and 2007 data. As can be seen, the number of persons coming into the city during morning peak by car has decreased slightly in the period, with a slight decrease in occupancy. The number of persons coming into the city during morning peak by taxi has increased by 35% over the 5-year period, with the occupancy not changing considerably in recent years. The number of pedestrians crossing the cordon during morning peak has continued to increase in recent years with a 7% increase between 2003 and 2007

7	Cable 6 Occupancy	Rates cross	ing the Ca	<mark>nal Cordor</mark>	<mark>ı (Inbound</mark>	07.00 to 1	0.00hrs)
	Year	2003	2004	2005	2006	2007	% 03-07
er	Cars	60,644	59,966	57,537	58,664	58,686	-3%
Number	Taxi's	2,865	2,509	3,063	3,825	4,583	60%
Ž	Pedestrians	17,305	15,241	16,332	17,114	18,594	7%
Su	Cars	72,156	78,148	75,912	76,778	71,596	-1%
Persons	Taxi's	4,985	3,613	4,104	5,278	6,737	35%
Pe	Pedestrians	17,305	15,241	16,332	17,114	18,594	7%
ncy	Cars	1.19	1.30	1.32	1.31	1.22	3%
Occupancy	Taxi's	1.74	1.44	1.34	1.38	1.47	-16%
000							