# Dún Laoghaire-Rathdown County Council Municipal Services Department



# Cycle Counter Statistics 2016 Comparative Report



Report to the Transportation & County Wide Movement SPC March 2017

## 1. <u>Introduction</u>

Cycling is a key element of transportation policy in Dun Laoghaire-Rathdown County Council with a number of cycling projects advanced in recent years in relation to the development of cycling infrastructure and promotion of cycling. The Council's vision, set out in the Cycling Policy (June 2010), is as follows;

To cultivate a cycling culture, through the implementation of appropriate infrastructure and promotional measures, that positively encourages all members of the community to cycle at all life stages and abilities as a mode of sustainable transport that delivers environmental, health and economic benefits to both the individual and the community.

This vision is being achieved through the implementation of 19 objectives and associated interventions in line with the National Cycle Policy Framework objectives. Among the successes in recent years was the enhancement of a number of cycle routes and greenways, the preparation of a number of cycling leaflets, annual participation in National Bike Week and the training of 1500+ students each year in schools.

#### 2. <u>Cycle Counters</u>

Dún Laoghaire - Rathdown County Council installed a number of automatic permanent cycle counters in recent years along a number of key routes in the County, as shown in Table 2.1.

Table	Table 2.1 Cycle Counter locations in DLR						
	Counter Location	Date of operation					
1	Stillorgan Road Totem (1-way)	January 13, 2011					
	Replaced on December 10, 2015						
2	Montrose (2-way cycle track) January 25, 2012						
3	The Metals, Glenageary Dart Station – (2-way)	November 24, 2010					
4	Rock Road Bus lane (1-way)	January 25, 2012					
5	Rock Road Inside park near the Dart (2-way)	January 24, 2012					
6	Clonskeagh Road Totem – (2-way)	May 3, 2012					
7	Rock Road Totem (1-way)	March 7, 2012					
	Replaced on October 14, 2015						

The cycle counters provide real time information on the number of cyclists passing each location that can be accessed and analysed online. An inductive loop is inserted under the surface of the cycle lane/track and each time a bicycle goes over the loop, a system detects the two wheels' electromagnetic signature and registers a count. In addition, a totem cycle counter display unit provides a visual display of the numbers of cyclists passing over the loop on that day and also displays the cumulative number of cyclists that passed over the loop during that year. Figure 2.1 below shows a typical totem cycle counter as seen on the Rock Road.



Figure 2.1 Totem Cycle Counter Display Unit (Rock Road)

The cycle data from the counters is used mainly for the following reasons:

- To monitor cycle trends at key routes in the County;
- To check if new or upgraded cycle routes result in more cyclists; and
- To justify investment in cycling infrastructure by having robust cycling data available to facilitate before and after monitoring.

This report compares the 2016 cycle counter data by month using cycle count data from previous comparable months and years.

# 2.1 Stillorgan Road Cycle Counters

The first totem cycle counter in the County was installed on the city-bound side of the Stillorgan Road on the approach slip road to UCD. Two additional cycle counters using traffic loops were installed on the cycle track (separated by a grass verge) where the Montrose Hotel slip road joins the Stillorgan Road in 2012, with locations shown in Figure 2.2. The traffic loops count the number of cyclist in both directions.



Figure 2.2 Stillorgan Road at UCD and Montrose Cycle Counter Location

The Stillorgan Road Totem was replaced at the end of 2016 with a newer version due to a fault that took considerable time to repair. Table 2.2 shows the monthly cycle numbers for the Stillorgan Road Totem between 2012 and 2016 where data was available.

Table 2.2 Cycle numbers comparison Stillorgan Road Totem Cycle CounterInbound						
Cyclist numbers	2012	2013	2014	2015	2016	
January	11,120	9,944			11,244	
February	13,255	12,615			14,931	
March	14,141	9,949			14,377	
April	12,056	13,626			16,369	
Мау	13,895	14,356			9,525	
June	10,618	10,291			10,224	
July	11,285	11,545			13,911	
August	11,411	11,197			14,226	
September	15,367				21,808	
October	16,549				23,473	
November	9,685				20,509	
December	6,631				12,140	
Total Annual Cyclists	146,013	n/a	n/a	n/a	182,737	

It was only possible to compare full year cycle Totem data for 2012 and 2016 due to a technical fault in the intervening years and this showed an increase of 25% in total cycle numbers.

Tables 2.3 and 2.4 show the monthly cycle numbers from the cycle counter loops near the Montrose slip between 2012 and 2016 where data was available. It was only possible to compare full year cycle data for the years 2013 and 2016 as battery issues resulted in gaps in the cycle data.

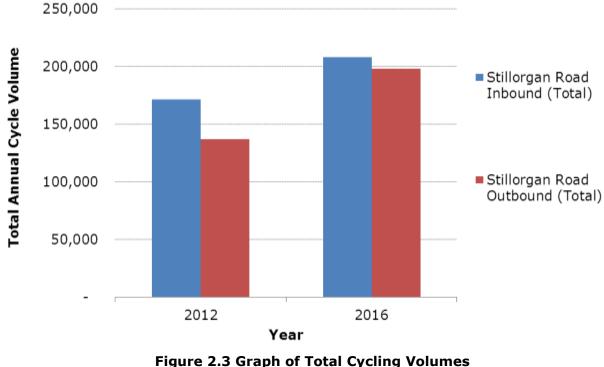
Table 2.3 Cycle numbers comparison Montrose Cycle Counter out of City						
Cyclist numbers outbound	2012	2013	2014	2015	2016	
January	2,579	13,261	11,904		11,680	
February	12,049	12,619	11,309		15,311	
March	13,633	9,917	14,546		14,913	
April	10,973	14,074	16,876	17,405	17,344	
Мау	12,886	14,289	15,405	16,058	18,046	
June	9,852	13,177	14,795	16,726	15,375	
July	10,972	15,455	15,342	15,000	14,757	
August	11,133	13,711	12,628	13,926	15,406	
September	15,064	18,642	23,422	22,132	22,781	
October	16,001	18,666	21,738	21,038	21,957	
November	14,419	17,397		17,241	19,480	
December	7,626	9,818		9,395	11,240	
Total Annual Cyclists	137,187	171,026	n/a	n/a	198,290	

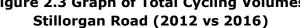
Table 2.4 Cycle numbers comparison Montrose Cycle Counter into the City						
Cyclist numbers inbound	2012	2013	2014	2015	2016	
January	605	2,671	2,173		1,376	
February	2,679	2,568	2,111		2,116	
March	2,892	1,844	2,441		1,957	
April	2,219	2,629	2,554	2,393	2,179	
Мау	2,147	2,335	2,237	1,959	1,974	
June	1,545	2,058	2,078	1,843	1,720	
July	1,720	2,272	2,043	1,573	1,608	
August	1,591	2,096	1,816	1,508	1,771	
September	2,574	3,291	3,721	2,709	2,982	
October	2,773	3,461	3,679	2,895	3,130	
November	3,084	3,234		2,337	2,939	
December	1,532	1,760		1,222	1,706	
Total Annual Cyclists	25,361	30,219	n/a	n/a	25,458	

When comparing the cycle data for 2013 and 2016, we see a 16% increase in the number of cyclists using the Stillorgan Road route outbound and a 16% decrease in cyclists using the inbound route. The cycle data on the inbound side shows cyclists coming from the Fosterbrook and Seafield residential areas only.

Table 2.5 and Figure 2.3 provides a comparison of the full year cycle data for 2012 and 2016 for the total inbound and total outbound cycle volumes annually on the Stillorgan Road.

Table 2.5 Cycle numbers comparison Stillorgan Road (Total)						
	2012	2016	% Increase			
Stillorgan Road Inbound (Total)	171,374	208,195	21%			
Stillorgan Road Outbound (Total)	137,187	198,290	45%			





As we see from the above table and graph when comparing a full years data for 2012 and 2016 a total increase of 45% in the numbers of cyclists using the outbound direction and 21% in the inbound direction on the Stillorgan Road. When examining the 2016 data it should be also noted that some cyclists that previously used the Stillorgan Road inbound may have diverted to the Rock Road or Clonskeagh Road as a result of improved cycle facilities on the routes.

# 2.2 Rock Road Cycle Counters

A number of cycle counters were installed on the Rock Road and in Blackrock Park in 2012 with the location of the Rock Road counter locations shown on Figure 2.4. The cycle counters were placed at the following locations:

- Cycle counter loop placed in the bus lane on the outbound side of the Rock Road adjacent to Blackrock Park, south east of the junction with Booterstown Avenue.
- Totem counter with a cycle counter loop placed in the cycle lane in the inbound side of the Rock Road, south east of the junction with Booterstown Avenue.
- 2-way cycle counter loop placed on the cycle way in Blackrock Park near Booterstown Dart Station that counted the number of cyclists in both directions.

Due to a road traffic collision in September 2014, the Rock Road Totem was damaged and unavailable for use for over a year. The totem was replaced at the end of 2015 with a newer version and thus there is a gap in the cycle data.



Figure 2.4 Rock Road Cycle Counter locations

Tables 2.6 and 2.7 provide a comparison of the number of cyclists passing the cycle counters on the Rock Road (bus lane and Totem) between 2012 and 2016 where a direct comparison was possible and Tables 2.7 and 2.8 provide a comparison of the number of cyclists in both directions using Blackrock Park in the same period.

When comparing the cycle data for 2015 and 2016, we see that there was a slight reduction (less than 1%) in the number of cyclists passing the counter on the Rock Road bus lane in the outbound direction with the number of cyclists using Blackrock Park increasing in the outbound direction.

A big increase in the number of cyclists in the inbound direction (56%) can be seen at the location of the new cycle totem when comparing cycle data between the full year cycle data for 2013 and 2016. This is likely due to the Frascati Road cycle improvement scheme which significantly improved cycle facilities along the Blackrock bypass.

Table 2.6 Cycle numbers outbound Rock Road Bus Lane (Traffic loop)							
Cyclist numbers outbound	2012	2013	2014	2015	2016		
January	2,834	10,693	11,407	10,571	10,829		
February	15,001	10,277	9,784	11,037	11,662		
March	18,914	9,122	13,672	13,229	15,478		
April	14,467	14,560	15,854	17,317	17,143		
Мау	19,551	18,376	17,548	16,344	19,407		
June	15,753	18,049	19,385	19,292	17,144		
July	17,619	22,075	19,662	18,005	11,114		
August	17,216	18,145	15,471	17,415	16,987		
September	17,065	18,401	20,586	20,375	19,933		
October	15,879	16,279	17,509	17,531	18,154		
November	13,325	14,409	13,575	14,756	15,937		
December	8,263	9,294	9,657	9,574	10,298		
Total Annual Cyclists	175,887	179,680	184,110	185,446	184,086		

The route through Blackrock Park is well used with steady increases in cycle numbers each year. The introduction of a contra flow cycle track on Newtown Avenue in 2012 that allows cyclists to go from Blackrock to Seapoint Avenue, has contributed to this increase.

Table 2.7 Cycle numbers inbound Rock Road Totem							
Cyclist numbers inbound	2012	2013	2014	2015	2016		
January		10,800	11,415		22,851		
February		11,609	9,878		23,701		
March	12,008	9,811	13,833		24,583		
April	11,485	12,664	14,388		25,631		
Мау	15,767	16,949	16,050		25,165		
June	12,708	15,947	16,926		22,091		
July	14,164	19,581	18,461		21,760		
August	14,384	16,147	14,428		22,205		
September	15,470	16,455			25,694		
October	14,465	14,275			24,389		
November	12,291	13,725		24,852	21,551		
December	8,116	8,628		18,696	15,148		
Total Annual Cyclists	130,858	166,591	n/a	n/a	274,769		

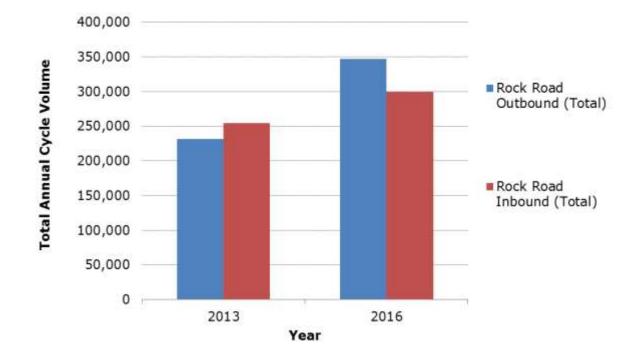
Table 2.8 Cycle numbers comparison Rock Road Park towards Blackrock							
Cyclist numbers outbound	2012	2013	2014	2015	2016		
January		4,086	5,449		6,217		
February	3,480	4,388	4,829		6,472		
March	5,259	2,822	7,127	9,768	8,082		
April	3,487	4,342	9,028	9,419	9,169		
Мау	5,658	5,661	9,686	12,188	11,928		
June	4,292	7,004	11,847	10,229	10,745		
July	4,716	11,126	12,303	10,411	14,327		
August	5,138	8,407	9,032	10,853	11,105		
September	5,064	8,524	12,340	9,583	14,237		
October	4,260	6,959		7,401	9,796		
November	3,495	6,514		5,174	7,846		
December	2,324	4,596		9,768	5,756		
Total Annual Cyclists	47,173	74,429	n/a	n/a	115,680		

Table 2.9 Cycle numbers comparison Rock Road Park towards Booterstown						
Cyclist numbers inbound	2012	2013	2014	2015	2016	
January		3,920	4,124		4,132	
February	3,392	3,860	3,666		4,222	
March	4,743	2,621	5,476		5,208	
April	3,303	4,306	6,866	7,215	5,817	
Мау	5,133	5,370	7,544	6,782	8,066	
June	4,079	6,567	9,539	8,941	7,164	
July	4,506	9,833	9,591	7,288	7,961	
August	5,066	7,168	6,855	7,616	7,305	
September	4,869	7,108	9,603	7,796	7,184	
October	3,981	5,624		6,810	6,420	
November	3,259	5,218		5,086	5,216	
December	2,225	3,568		3,440	3,770	
Total Annual Cyclists	n/a	65,163	n/a	n/a	72,465	

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Table 2.10 and Figure 2.5 provides a comparison of the full year cycle data for 2013 and 2016 for the total inbound and total outbound cycle volumes annually on the Rock Road.

Table 2.10 Cycle numbers comparison Rock Road (Total)						
	2013	2016	% Increase			
Rock Road Inbound (Total)	231,754	347,234	50%			
Rock Road Outbound (Total)	254,109	299,766	18%			



#### Figure 2.5 Graph of Total Cycling Volumes Rock Road (2013 vs 2016)

As we see from the above table and graph when comparing a full years data for 2013 and 2016 a total increase of 50% in the numbers of cyclists using the outbound direction and an 18% in the inbound direction on the Rock Road.

# 2.3 Clonskeagh Road Cycle Counter

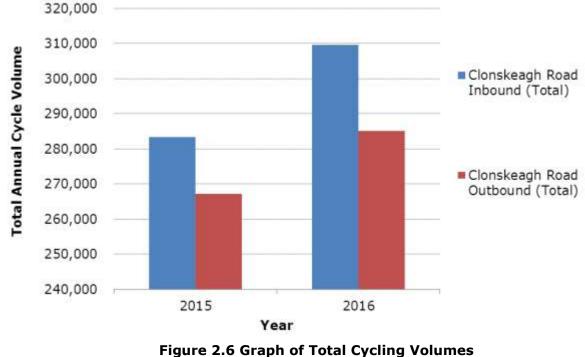
A totem cycle counter was installed on the Clonskeagh Road in May 2012 near the junction with Leinster Lawn that counts the number of cyclists in both directions. Tables 2.11 and 2.12 show the monthly cycle numbers between 2012 and provide a comparison of the number of cyclists passing the cycle counter on Clonskeagh Road between 2015 and 2016:

Table 2.11 Cycle numbers Clonskeagh Road Totem Cycle Counter out of City						
Cyclist numbers outbound	2012	2013	2014	2015	2016	
January		16,981	18,940	19,555	17,977	
February		21,182	9,501	23,381	24,879	
March		16,554		21,855	23,489	
April		20,980		26,693	27,628	
Мау	18,501	22,533		22,908	28,976	
June	15,027	18,640		23,085	23,074	
July	15,947	21,516		20,757	21,670	
August	16,510	19,257		19,631	22,505	
September	23,948	28,099	31,058	31,519	33,287	
October	27,924	30,139	32,279	31,571	34,377	
November	17,193	27,926	27,423	26,893	31,853	
December	3,543	15,659	16,665	15,459	19,927	
Total Annual Cyclists	n/a	259,466	n/a	283,307	309,642	

Table 2.12 Cycle numbers Clonskeagh Road Totem Cycle Counter into City							
Cyclist numbers outbound	2012	2013	2014	2015	2016		
January		17,956	20,568	18,702	17,473		
February		22,086	21,306	22,965	23,572		
March		17,383		21,818	22,439		
April		21,964		25,117	26,503		
Мау	19,192	23,942		21,725	27,566		
June	15,466	19,532		21,137	21,381		
July	16,560	22,051		19,016	18,575		
August	17,070	20,107		18,265	20,246		
September	25,204	29,548	28,851	29,558	30,126		
October	28,688	31,375	30,853	29,688	30,304		
November	18,356	27,931	26,002	24,378	28,605		
December	3,416	17,027	16,169	14,877	18,337		
Total Annual Cyclists	n/a	270,902	n/a	267,246	285,127		

Table 2.13 and Figure 2.6 provides a comparison of the full year cycle data for 2015 and 2016 for the total inbound and total outbound cycle volumes annually on the Clonskeagh Road.

Table 2.13 Cycle numbers comparison Clonskeagh Road (Total)				
	2015	2016	% Increase	
Clonskeagh Road Inbound (Total)	283,307	309,642	9.3%	
Clonskeagh Road Outbound (Total)	267,246	285,127	6.7%	



Clonskeagh Road (2015 vs 2016)

As we see from the above table and graph a total increase when comparing the cycle data for 2015 and 2016, there was a 6.7% increase in the number of cyclists in the inbound direction and a 9.3% increase in cyclists in the outbound direction.

### 2.4 The Metals Cycle Counter

Cycle and pedestrian counters were installed along the Metals route (Dún Laoghaire to Dalkey) in Glenageary in November 2010. The location of these counters is shown in Figure 2.7.



Figure 2.7 The Metals Counter Location

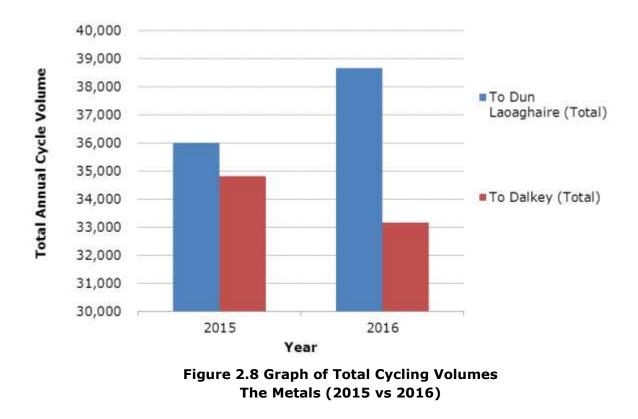
Tables 2.14 and 2.15 show the monthly cycle numbers between 2012 and 2016 provide a comparison of cycle numbers for the period between 2015 and 2016 for both directions:

Table 2.14 Cycle numbers comparison Metals Cycle Counter – To Dún Laoghaire					
Cyclist numbers inbound	2012	2013	2014	2015	2016
January	1,900	1,710	1,857	1,893	2,136
February	2,245	1,652	2,145	2,060	2,114
March	3,041	1,758	3,562	2,770	2,930
April	2,354	2,698	4,008	3,485	2,948
Мау	2,923	3,284	3,416	3,409	4,089
June	2,654	3,996	4,176	4,366	4,138
July	3,110	4,581	4,137	3,579	4,144
August	3,703	4,378	3,587	3,841	4,472
September	3,395	3,731	4,029	3,649	3,550
October	2,658	2,811	2,964	3,177	3,385
November	2,094	2,280	2,122	2,122	2,645
December	1,545	1,776	1,734	1,632	2,118
Total Annual Cyclists	31,622	34,655	37,737	35,983	38,669

Table 2.15 Cycle numbers comparison Metals Cycle Counter-To Dalkey					
Cyclist numbers inbound	2012	2013	2014	2015	2016
January	1,780	1,733	1,907	1,820	1,871
February	2,023	1,558	1,526	1,885	1,872
March	2,643	1,623	2,031	2,328	2,666
April	2,088	2,245	2,928	3,370	2,740
Мау	2,533	2,788	3,225	3,316	3,743
June	2,419	3,194	4,053	4,153	2,617
July	2,719	3,681	3,873	3,512	3,623
August	3,061	3,758	3,365	3,813	3,688
September	2,908	3,161	3,996	3,684	3,229
October	2,480	2,458	2,916	3,197	2,884
November	2,107	2,326	2,176	2,170	2,199
December	1,593	1,883	1,698	1,573	2,028
Total Annual Cyclists	28,354	30,408	33,694	34,821	33,160

Table 2.16 and Figure 2.8 provides a comparison of the full year cycle data for 2013 and 2016 for the total inbound and total outbound cycle volumes annually at the Metals cycle counter.

Table 2.16 Cycle numbers comparison the Metals (Total)				
	2015	2016	% Increase	
To Dun Laoghaire (Total)	35,983	38,669	7.5%	
To Dalkey (Total)	34,821	33,160	-4.8%	



As we see from the above table and graph a total increase when comparing the cycle data for 2015 and 2016, we see that there was a 7.5% increase in the number of cyclists going towards Dun Laoghaire and a 4.8% decrease in cyclists going away from Dún Laoghaire. However alternative low traffic routes also exist for those cycling from Dún Laoghaire to Dalkey and the decrease in cycle volumes travelling towards Dalkey is likely related to cyclists using these alternative routes. During the same period, it should be noted that there was a 12% increase in pedestrian numbers between 2015 and 2016 going towards Dun Laoghaire and 6% going out of Dun Laoghaire.

# 3.0 Average Daily Cycling numbers

Table 3.1 provide details of the average number of daily cyclists on key routes in the County for the years 2013 to 2016 with a ranking by cycle numbers using 2016 cycle data. This table is compiled based on daily cycling data for when the counter was in operation and shows that the Rock Road is the busiest cycle corridor in the County.

Table 3	Table 3.1 Average daily cyclist numbers in DLR 2013 to 2016				
	Counter Location	2013	2014	2015	2016
1	Clonskeagh Road Totem – From city	717	711	776	846
2	Clonskeagh Road Totem – To city	748	796	732	779
3	Rock Road Totem	460	486	746	751
4	N11 Montrose (southbound)	469	446	408	542
5	Rock Road Bus lane (1-way)	492	504	508	503
6	N11 Stillorgan Road Totem (1- way)	391	no data	no data	499
7	Blackrock Park towards Blackrock	178	248	233	316
8	Blackrock Park Toward Booterstown	203	192	167	198
9	The Metals – To Dun Laoghaire	94	103	99	106
10	The Metals – To Dalkey	83	92	95	91
11	N11 Montrose (city bound)	83	70	51	70

# 4.0 Cycling Projects 2017

During 2017, it is intended to progress and deliver number of cycling related projects with the main schemes as shown in Table 4.1. This is subject to the availability of National Transport Authority or Transport Infrastructure Ireland funding.

Table 4.1 DLR Cycling Projects 2017			
Cycle Infrastructure	Wyattville Road Improvement Scheme;		
	Sandyford Cycle Route;		
	Blackglen Road Improvements;		
	Cruach Wood to Ballyogan Greenway; and		
	Improved cycle access to UCD.		
Road Safety	Speed Limit Review, 30km/hr streets and zones		
Cycle Training	1000+pupilstobetrainedinCycleRight		
Cycle Promotion	Bike Week events, school promotion		
Cycle Studies	County Wide Public Bike Scheme		

#### 5.0 Summary

Seven cycle counters have been installed in the County on three main traffic routes (the N11, The Rock Road and Clonskeagh Road) and on The Metals Pedestrian and Cycle route (Dún Laoghaire to Dalkey) during 2010 and 2012. These cycle counters provide real time information on the number of cyclists passing the counter at each location. Overall, cycling numbers are increasing on the main routes throughout the County year on year basis.