

Statistical Bulletin: 01 / 2019 July 2019

# National Heavy Rail Census Report 2018

July 2019

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# Introduction

larnród Éireann commissioned Amárach Research to carry out the annual National Census of Rail patronage on behalf of the National Transport Authority. Boardings and alightings of passengers at every train station in the country are recorded on one day of the year. The 2018 Census is the seventh national Census. Prior to 2012, the census was carried out in the Greater Dublin Area (GDA) comprising the counties of Dublin, Meath, Kildare and Wicklow only.

The annual National Rail Census captures the number of individuals boarding and alighting at each station in the country on one day of the year. It provides a snapshot of usage and patronage across the country at all stations and on all services on this one date. It is not intended to represent an accurate picture of overall demand for rail services, which instead is recorded in larnród Éireann's passenger journeys data. While over time the census can help to illustrate trends, each individual year the census data is subject to variation based on factors such as operating conditions, weather, travel delays etc.

Overall, on census day, there were 178,058 passenger journeys across the network an increase of 6% on 2017. Daily total passenger journey numbers are now up almost 44% in the period 2012 – 2018. Meanwhile larnród Éireann reported 47.9m total passenger journeys in the year 2018 up 5% on 2017 and almost 31% over the longer period 2012 – 2018. Annual passenger volumes returned to peak 2007 levels in 2017 and are now 5% greater than the previous peak.

This report provides an overview of the 2018 National Rail Census and discusses the annual change in rail journeys throughout the country. It also sets out the changes in rail usage in the GDA over the period 2017 to 2018. The report structure is as follows:

- Section 1 provides a background and also sets out the methodology of the Rail Census. An overview of the rail network in Ireland is also provided;
- Section 2 analyses the trends in rail journeys in the GDA from 2003 to 2018 and also assesses how the findings of the Rail Census compare with other measurements of rail usage;
- Section 3 discusses in detail the findings from the 2018 Rail Census;
- Section 4 presents an analysis of journeys on individual lines; and
- Section 5 discusses patterns of passenger movement in and out of Dublin on a radial corridor basis.

## Operating Conditions on the Day of the Census

The 2018 census took place on 15th November 2018. Operating conditions on the day were normal with no service cancellations, delays or disruptions on the network.

## Overview of the Rail Network

The rail network in Ireland consists of approximately 2,400km of railway track and includes 147 open stations. Three distinct categories of service operate on the national rail network; Inter City, Commuter and DART. These service categories share lines at various locations along the network. Table 1 provides a description of the routes within each of the categories as defined by larnród Éireann and Figures 1 to 3 show maps of the network.

### Table 1: Routes and Services in the Iarnród Éireann Network

Route	Services on Each Route
	Dublin – Belfast
	Dublin – Sligo
	Dublin - Westport / Ballina
	Dublin – Galway
	Dublin – Limerick
Inter City	Dublin – Cork / Limerick Junction / Tralee
	Dublin - Waterford
	Dublin – Kilkenny
	Dublin - Rosslare
	Limerick – Galway
	Limerick - Waterford
	Dublin - Dundalk
	Dublin - Portlaoise
Commuter Routes	Dublin – Longford
Commuter Routes	Dublin – Dunboyne / M3 Parkway
	Dublin - Gorey
	Mallow - Cork - Cobh - Middleton
DART	Malahide / Howth - Dublin - Bray / Greystones

### Figure 1: Inter City Network



Figure 2: Dublin Network

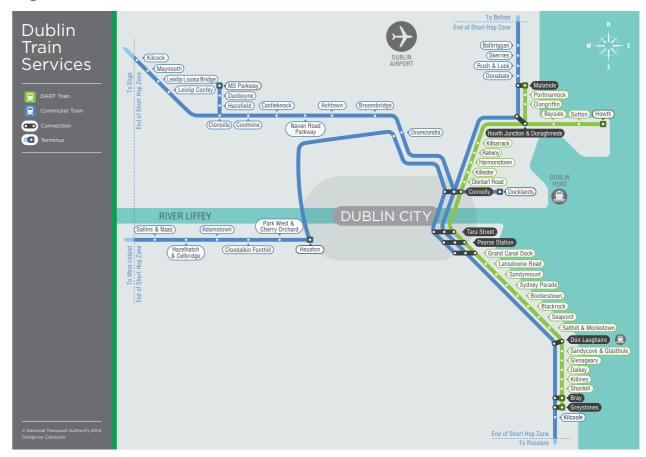
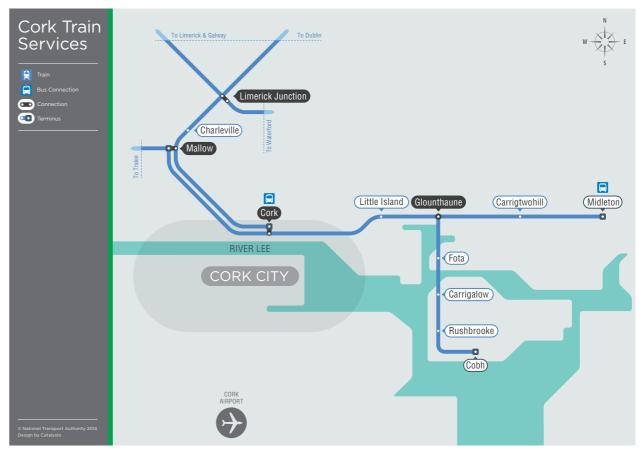


Figure 3: Cork Network



Tables 2 to 4 detail the service provision for a sample weekday for for direct Inter City services and key Commuter and DART services. This includes the fastest journey time and the number of services available per weekday in 2018.

#### Table 2: Inter City Journey Times and Service Frequency<sup>1</sup> 2018

Route	Fastest journey time 2018	Number of services per weekday <sup>1</sup>
Dublin - Cork	2:15	30
Dublin – Belfast Lanyon Place	2:05	16
Dublin – Galway	2:11	19
Dublin - Westport	3:06	8
Dublin – Sligo	2:59	16
Dublin – Tralee	3:42	2
Dublin – Limerick	2:01	7
Dublin - Waterford	1:53	14
Dublin - Rosslare	2:57	8

Table 3: Key Commuter Journey Times

Route	Fastest journey time 2018	Number of services per weekday <sup>2</sup>
Dublin - Portlaoise	0:41	37
Dublin - Newbridge (Grand Canal Dock - Newbridge / Celbridge) <sup>3</sup>	0:13 (0:39)	46 (24)
Dublin - Maynooth	0:30	79
Dublin - Drogheda	0:32	55
Dublin - Dundalk	0:55	13
Cork - Mallow	0:21	15
Cork - Midleton	0:23	44
Cork - Cobh	0:24	46

#### Table 4: DART Journey Times and Service Frequency 2018

Direction			Number of services per weekday <sup>2</sup>
Southbound	Malahide/Howth - Bray/Greystones	1:20	99
Northbound	Greystones/Bray - Howth/Malahide	1:16	96

# Changes to Rail Services in 2018

Services commenced on LUAS Cross City in December 2017 creating a connection between the LUAS Green line and the Western Rail Corridor at Broombridge.

In September 2018 a range of timetable changes were introduced to increase the frequency of DART services between Bray and Howth Junction. A 10 minute weekday frequency was introduced in both directions between 06:50 - 20:00. The number of trains from Portmarnock to the city reduced from 12 to 9 during the morning peak period with most mainline trains no longer stopping at Portmarnock. There were other minor changes to times on the Maynooth Commuter line and changes to off peak services on the northern line. There was also an increase in services at Dromcondra with additional Connolly to Sligo trains serving the station.

# and Service Frequency 2018

# Trends in Daily Rail Patronage, 2003 - 2018

## Key Events since 2003

Rail usage is a derived demand, dependent, amongst other factors, on levels of economic activity. Since 2003 trends in rail patronage have closely followed economic performance. At the start of the period, the demand for rail usage increased steadily. This increase in demand necessitated investment in the rail network and fleet and major rehabilitation works, in addition to service improvements. Between 2000 and 2010, for example, service levels on the Inter City, Commuter and DART networks were approximately doubled. Following an upgrade in 2006, capacity on the DART increased. Station improvements were carried out and platforms were lengthened in order to accommodate longer, higher capacity trains. In more recent times the reopening of the Phoenix Park tunnel to passenger services and increased frequency of DART services have increased the level of rail service in the Greater Dublin Area. The commencement of LUAS Green Line Cross City services has also connected the LUAS network to the Maynooth rail line, increasing the potential for interchange between rail and LUAS services.

- The re-opening of the Phoenix Park Tunnel to scheduled passenger services in November 2016. Investments over the period include the following: This originally consisted of 7 morning peak services from Newbridge or Hazelhatch to Grand Canal Dock and 8 evening peak services from Grand Canal • The Kildare Route Project - this involved the Dock to Newbridge/Hazelhatch whilst maintaining development of a four-track rail line between Cherry the previous commuter service levels to and from Orchard and Hazelhatch on the Heuston to Kildare Heuston. At the time of the Rail Census in 2018 there line. This allowed for the separation of Inter City and were 24 services operating throughout the day Commuter services. The speed and capacity of all between Hazelhatch and Celbridge or Newbridge and services on the line was improved as well as facilitating Grand Canal Dock<sup>4</sup>. the running of more frequent services on Inter City and Commuter routes. On December 1st 2017 the Authority extended the
- 'short hop zone' to include Sallins and Naas station. • The Dunboyne Rail Line - This involved the This had the effect of cutting many single and return development of 7.5km of railway, branching off the fares in half from Sallins and Naas to Heuston. On Maynooth line at Clonsilla and terminating at the M3 June 1st 2017, Kilcock station was brought into the interchange at Pace. Three new stations on the route 'short hop zone' on the Maynooth/Sligo line. were also developed: Hansfield, Dunboyne and Pace. • In December 2017, passenger services commenced The station at Pace (M3 Parkway) has a 1,200 space car park facility. A new station at Docklands was also on the LUAS Green Line between St. Stephens Green built to accommodate some of the services on this and Broombridge (LUAS Cross City). This had the effect of introducing an interchange at Broombridge line between the Rail (Maynooth line) and LUAS Green · Cork Commuter Rail - this involved the reopening of line
- the Cork Midleton line in 2009.
- In September 2018, larnród Éireann introduced an • Limerick to Galway Services - This included the all-day<sup>5</sup>10 minute DART frequency in both directions reinstatement of the line from Ennis to Athenry and between Brav and Howth Junction. This necessitated the construction of five new stations: Sixmilebridge, a reduction in peak hour DART frequency and the Gort, Ardrahan, Craughwell and Oranmore. removal of most stopping mainline services at Portmarnock



# Historic Trends in the Greater Dublin Area (GDA)

Prior to 2012 the rail census was undertaken for the GDA only. As such, historical trends can be examined across the following sections of the network:

- DART Line:
- Longford Dublin Bray (Gorey) line;
- Dundalk Bray and
- Dublin Kildare line.

Table 5 shows daily rail journeys in the GDA since 2003, defined as the number of boardings. The number of rail journeys in the GDA increased year on year up to its peak of approximately 144,000 in 2007. This was followed by a period of decline in patronage from 2008 to 2010. Between 2011 and 2013 the number of daily journeys within the GDA remained relatively static. In the 2 year period 2014 to 2016 there was a 19% increase in patronage within the GDA. This trend continued in 2017 however, the rate of change increased, with 14% growth in patronage from 2016 to 2017. The trend in growth continued in 2018 with an 8% increase in patronage in the GDA between 2017 and 2018. Overall GDA patronage has now exceeded its former peak level of 2007. GDA rail patronage is now 5% greater than 2007 levels and 50% greater than 2010 levels. In the last 5 years alone there has been an increase of almost 50,000 daily boardings within the GDA.

The increase in GDA patronage in the last year represents the sixth consecutive year of passenger growth. 2018 saw the first decline in patronage on the Dundalk - Arklow (Northern) line since 2013 however. This can be explained by timetable changes on the northern line to facilitate a 10 minute DART frequency. This is further evidenced by the 10% increase in DART patronage, some of this increase could be explained by passengers switching from commuter services onto DART. There has been a 6% increase in patronage on the Longford - Dublin - Bray line between 2017 and 2018. Whilst boarding on the Kildare line has grown by 24% in the last year with boardings on services via the Phoenix Park Tunnel increasing by 51%.

There were 7,240 additional boardings on DART services in 2018 relative to 2017. Patronage on the line has returned to 2006 levels and is 98% that of the peak levels of 2007. Passenger numbers on the DART have grown by 50% in the last 4 years, with an additional almost 27,000 boardings since 2014.

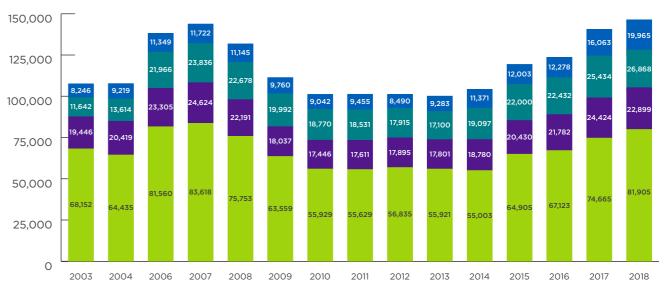
Patronage on the Kildare line has more than doubled since the Census began in 2003 there are now almost as many Kildare line daily boardings as northern line boardings. It should be noted that this growth must be considered in the context of the significant change to services on the Kildare line with the commencement of services to Grand Canal Dock since towards the end of 2016.

Table 5: Daily Passenger Journeys by Network Section 2003 - 2018

Year	DART	Dundalk - Gorey	Longford - Dublin - Bray	Dublin - Kildare	Total
2003	68,152	19,446	11,642	8,246	107,486
2004	64,435	20,419	13,614	9,219	107,687
2006*	81,560	23,305	21,966	11,349	138,180
2007	83,618	24,624	23,836	11,722	143,800
2008	75,753	22,191	22,678	11,145	131,767
2009	63,559	18,037	19,992	9,760	111,348
2010	55,929	17,446	18,770	9,042	101,187
2011	55,629	17,611	18,531	9,455	101,226
2012	56,835	17,895	17,915	8,490	101,135
2013	55,921	17,801	17,100	9,283	102,101
2014	55,003	18,780	19,097	11,371	104,251
2015	64,905	20,430	22,000	12,003	119,338
2016	67,123	21,782	22,432	12,278	123,615
2017	74,665	24,424	25,434	16,063 <sup>6</sup>	140,586
2018	81,905	22,899	26,868	19,965 <sup>7</sup>	151,637

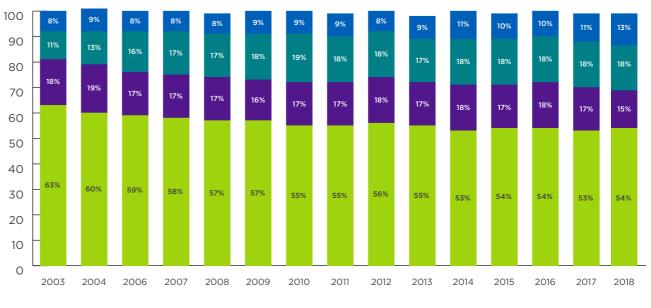
Charts 1 and 2 show the proportional contribution each section of the rail network makes to daily rail patronage within the GDA. There has been a change in the contribution of each line since 2003. DART journeys, despite growth since 2017, have declined by 9% from 63% in 2003 to 54% in 2018. The Kildare line has increased in proportional terms significantly going from 8% in 2003 to 13% in 2018, in part due to year on year growth in patronage from 2012. The proportional contribution of the East Coast (northern) line had remained relatively stable over the full period but in the last year experienced a decrease of 2%. This is in part due to a decrease in boardings on the line coupled with increased boardings on the DART and Kildare lines. The proportional contribution of the Maynooth (Longford - Bray) line has increased from 11% to 18% over the longer term and has now remained stable for the last 11 years.

#### Chart 1: Composition of Daily GDA Rail Patronage, 2003 – 2018



Dublin - Carlow/Athlone/Portlaoise (North and Southbound) Longford - Dublin - Bray (East and Westbound) Dundalk - Gorey (North and Southbound)

#### Chart 2: Percentage Composition of daily GDA rail patronage, 2003 - 2018



Dublin - Carlow/Athlone/Portlaoise (North and Southbound) Longford - Dublin - Bray (East and Westbound) Dundalk - Gorey (North and Southbound)

DART (North and Southbound)

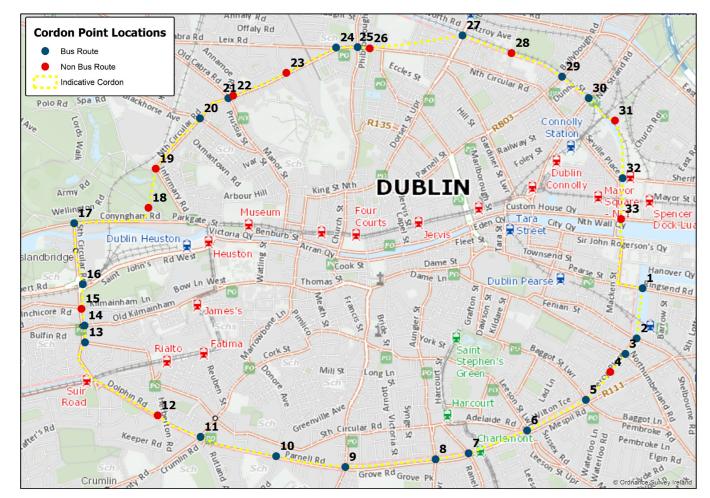
DART (North and Southbound)

# Analysis of Mode Share from the Canal Cordon Count

The 'Canal Cordon Count' is an annual count of people crossing the Canal Cordon (i.e. a perimeter around Dublin City Centre formed by the Royal and Grand Canals) in the morning peak between 7:00 and 10:00 averaged over two days in November each year. Figure 4 shows the location of the Canal Cordon and the 33 points on the Cordon where information on the movement of people is collated.

This count provides data on numbers of people entering Dublin city centre<sup>8</sup> by all modes of transport including rail, bus, taxi, cycling, walking, and car or goods vehicle and allows for an analysis of mode share and shift from 2006 to 2018. Table 6 details the number of people crossing the canal cordon by mode in 2017 and 2018, and Chart 3 shows the mode share of journeys in to the city centre from 2006 to 2018.

#### Figure 4: Canal Cordon and 33 Count Locations



#### <sup>8</sup> The counts refer to movements of people in one direction only (i.e. inbound into the city centre) across the various cordon points.

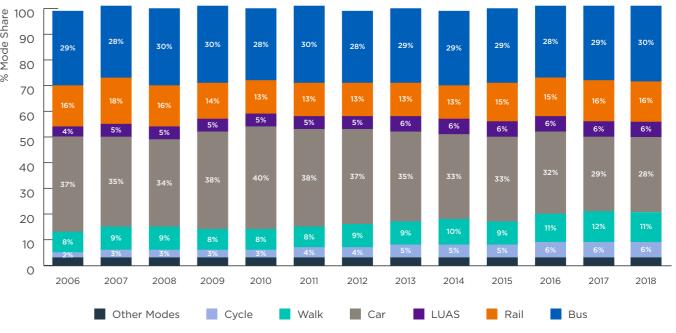
#### Table 6: Number of People Crossing the Ca

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Mode

Mode	2017	2018	Annual % Change
Bus	60,798	64,206	6%
Rail	34,409	34,471	0%
LUAS	11,953	13,835	16%
Car	61,694	60,537	-2%
Taxi	2,623	2,156	-18%
Walk	24,936	23,858	-4%
Cycle	12,447	12,227	-2%
Commercial Vehicle	1,024	1,153	13%
Motor Bike	1,532	1,477	-4%
Total	211,416	213,920	1%

### Chart 3: Mode Share of Journeys into the City Centre, 2006 - 2018



This shows a number of changes in mode share since 2006. The share of rail journeys into the city centre in the morning peak has fallen from a peak of over 18% in 2007 to just over 16% in 2018.

From 2010 to 2014, the rail mode share stabilised at around 13%. 2015 saw the first significant increase in rail mode share since the period of decline and subsequent stability, this trend continued to 2016. However 2017 saw an increase of 1% in rail mode share (only the second increase since 2010), rail mode share is unchanged in 2018.

In 2018 31% of public transport journeys into the City Centre were by rail.

The mode share for bus increased by 1 percentage point in the past year. Bus is still the dominant public transport mode making up 57% of total public transport mode share. The private car mode share continues to decline and is down 12% from a peak of almost 40% in 2010.

In 2018 more than half of all person trips to the City Centre were made on public transport (112,512). At 53%, the mode share for public transport is now 25% greater than that for private car. In 2010 the public transport mode share was only 6% greater than that for private car. In the same period 2010-2018 mode share for rail has increased by over 3%.

There has been an increase in the proportion of journeys travelling into the city centre by bicycle from 2% to 6%. The walk mode share decreased slightly between 2017 and 2018 and is now at 11%.

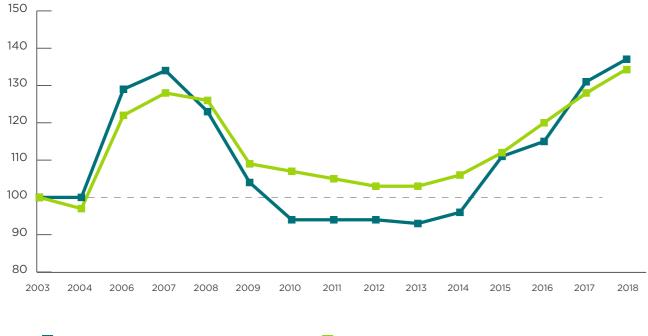
In spite of a 13% increase in commercial vehicles crossing the cordon in 2018, the remaining modes - commercial vehicle, motor bike and taxi - remain largely unchanged since 2006.

anal Cordon	by Mode	e in 2017	and 2018
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# Comparison of Census Data and Annual Rail Statistics

larnród Éireann produces statistics on the number of journeys taken nationally on the rail network on an annual basis. Chart 4 compares the daily rail journeys taken in the GDA (from the Rail Census) with the number of annual journeys nationally, using 2003 as a baseline.

Chart 4: Daily Rail Journeys in the GDA compared to Annual Rail Journeys 2003 - 2018 (Index: 2003 = 100)



Daily Rail Journeys in the GDA (Census Data) Annual Rail Journeys Nationally (Annual Route Statistics)

The trends in both annual and daily rail journeys have followed similar trajectories over the past 15 years. This suggests that the Rail Census could be considered representative of annual rail patronage and therefore could be considered a reasonable proxy for annual trends.

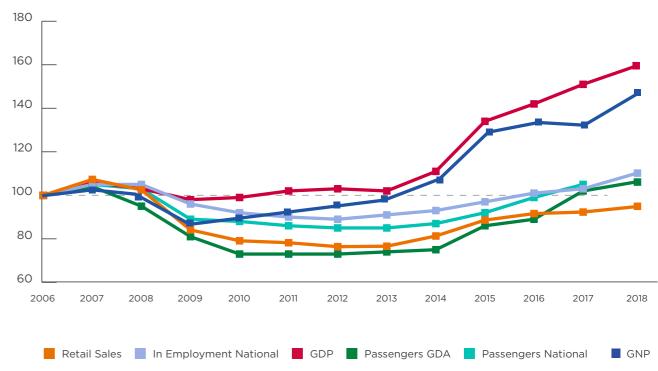
The sharper decline in GDA patronage between 2008 and 2010 can be explained by differences in rail coverage in the GDA region relative to the rest of Ireland. Daily rail journeys in the GDA were also heavily influenced by the decline in DART patronage. The reverse of these effects can be seen in the period 2014 - 2018 where the increase in patronage within the GDA is noticeably sharper than nationally.

Between 2010 and 2013 patronage trends both in the GDA region and nationally remained relatively flat. In the period 2013-2014, both national and GDA patronage showed moderate growth. However the period 2014-2018 has shown significant growth both at national and at the GDA level, with 10.16 million additional rail journeys made in 2018 relative to 2014. Both National and GDA annual rail patronage in 2018 have now exceeded 2007 levels (the previous peak) by 5%.

# Rail Usage in the GDA and Economic Trends

Given that rail usage is a derived demand, it is useful to understand the relationship between rail patronage and other indicators of economic activity. In doing so, it may assist in anticipating future trends in rail demand, and aid service planning. Chart 5 compares the evolution of rail patronage in the GDA and nationally with key national economic indicators and the numbers In-Employment. A relationship is clearly evident, as increases and decreases in economic activity are reflected in rail passenger numbers.

#### Chart 5: Rail Journeys in the GDA and Key Economic Indicators<sup>9</sup> Indexed to 2006







# Rail Patronage

## National and Greater Dublin Area

The total patronage on the rail network on Census day was just over 178,000. Total patronage has increased by 6%, over 10,000 passenger journeys since 2017 and 40% (over 51,000 passenger journeys) since 2012 (the first national rail census). Table 7 shows the total rail patronage both within and outside the GDA, along with the relative change since 2017. The GDA comprises the counties of Dublin, Kildare, Meath and Wicklow.

Of the total number of rail journeys undertaken in 2018, 85% were within the GDA. This represents an increase since 2017 when 81% of rail journeys were undertaken within the GDA but a return to 2016 proportions where 84% of journeys were within the GDA. In each of the years 2012 - 2014, between 83-84% of journeys were made within the GDA. There was a 3% decrease in passenger journeys from outside the GDA in the last year. This accounts for some 860 passenger journeys. Although there were modest decreases in patronage on some Cork commuter services and the sections of the east coast line outside of the GDA, this would not account for the 3% decrease. It is therefore likely that there has been some decrease in boardings on Intercity and commuter services outside the GDA which is counteracted by increased boardings inside the GDA. With the exception of the east coast line and outbound Cork commuter services, there have been increases in patronage on all lines in the last year.

#### Table 7: Rail Patronage - GDA and National

	GDA	% Change on Previous Year		% Change on Previous Year
Patronage	151,637	8%	26,421	-3%

# Rail Usage According to Service Categories

Table 8 shows the total number of journeys taken on the National Irish Rail network on the day of the Census, according to service category.

Table 8: Journeys Taken by Service Category

	Passenger Journeys	% Change on Previous Year
DART	81,905	10%
Commuter	47,047	2%
Inter City	39,939	4%
Cork Commuter	5,975	1%
Regional services	3,192	13%
Total	178,058	6%

## Rail Usage on Individual Lines

Table 9 shows the number of journeys on each of the lines on Census day 2018.

### Table 9: Journeys by direction and by line, 2018

Line	Route	Journeys	Annual % Change
DART Northbound	Greystones/Bray - Howth/Malahide	40,704	11%
DART Southbound	Malahide/Howth - Greystones/Bray	41,201	8%
Connolly Northbound	Rosslare - Dundalk	11,998	-8%
Connolly Southbound	Dundalk - Rosslare	12,431	-5%
Connolly Eastbound	Sligo - Longford - Bray	14,172	2%
Connolly Westbound	Bray - Longford - Sligo	13,685	10%
Heuston North & Eastbound	Kildare/Newbridge/Athlone/Carlow/ Portlaoise/Cork/Limerick/Galway/ Westport/Waterford/Tralee - Heuston	17,553	7%
Heuston South & Westbound	Heuston - Kildare/Newbridge/Athlone/ Carlow/Portlaoise/Cork/Limerick/ Galway/Westport/Waterford/Tralee	17,147	11%
Cork Commuter Inbound	Cobh/Midleton - Cork /Mallow - Cork	3,111	5%
Cork Commuter Outbound	Cork - Cobh/Midleton / Cork - Mallow	2,864	-2%
Regional Northbound	Limerick – Galway/Ballybrophy/ Limerick Junction & Waterford – Limerick Junction	1,655	21%
Regional Southbound	Galway/Ballybrophy/Limerick Junction - Limerick & Limerick Junction to Waterford	1,537	5%

# **Busiest Stations**

Table 10 below illustrates the Top 10 busiest stations in 2018 in terms of all day boardings and alightings. A comparison with the station ranking in 2017 is also provided.

Stations in Dublin dominate the list of busiest stations for boardings and alightings throughout the rail network. This is reflected in overall trends of rail usage. Outside of Dublin, Kent station in Cork City and Bray in Wicklow also feature in the top ten busiest stations in terms of passenger traffic however Cork is the only 'non-DART' station in the list. For the fourth consecutive year, there has been no change in the ranking of the top 4 stations in terms of all day boardings and alightings in the past year.

In 2018 and in 2017 the top ten stations for boarding represent 45% of total boardings in the country on census day. The share of total alightings accounted for by the top ten stations in 2018 was 47% as in 2017. As in previous years, significantly more people (29%) alight services in Grand Canal Dock than board services.

Daily throughput at Broombridge station has almost doubled (up 90%) since 2017 possibly reflecting the introduction of a connection to the LUAS Green Line at Broombridge. Meanwhile daily throughput at Portmarnock has decreased by 27% possibly as a result of timetable changes on the Northern line in September 2018.

As in previous years on census day a third of station footfall over the entire network was recorded at Dublin Connolly, Pearse, Tara Street and Heuston Stations combined.

# Table 10: Top 10 stations by number of boardings and alightings, 2018 (and rank in 2017)

Rank	Boardings	
1	Connolly (-)	19,42
2	Pearse (-)	16,0
3	Heuston (-)	11,42
4	Tara Street (-)	9,8
5	Dún Laoghaire (-)	4,1
6	Malahide (10)	3,9
7	Cork (6)	3,83
8	Bray (7)	3,8
9	Grand Canal Dock (8)	3,78
10	Lansdowne Road (9)	3,70

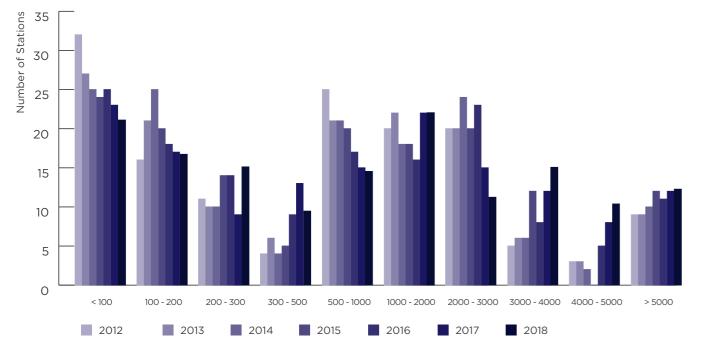
#### Alightings 25 Connolly (-) 19,379 074 Pearse (-) 16,525 Heuston (-) 11,660 392 Tara Street (-) 11,042 4,874 135 Grand Canal Dock (-) 952 Dún Laoghaire (-) 4,490 339 Cork (-) 4,108 338 Lansdowne Road (9) 3,896 785 Malahide (11) 3,629 00 Bray (8) 3,540

# Variation in Station Usage

Chart 6 shows the number of daily journeys to and from each station from 2012 to 2018. The number of daily journeys has been derived by adding the number of boardings and alightings at each station.

The number of stations in the country experiencing less than 100 journeys per day has decreased in 2018 relative to 2017 and is now down 34% on 2012. There has been an increase in the number of stations with a daily throughput of 300 or less in the last year of 6, or 67%. Meanwhile the number of stations experiencing between 300 and 500 journeys per day has decreased by 31% in the past year. At the opposite end of the scale 12 stations generated in excess of 5,000 journeys on a typical day in 2018 as in 2017. Although there has been some variation in the bands in 2018, 71 stations on the network experience more than 1,000 journeys per day compared to 69 in 2017. The number of stations generating in excess of 3,000 journeys increased by 5 (16%) since 2017 and there was a 25% increase in stations with a daily throughput between 4,000 – 5,000 passengers in the same period.

### Chart 6: Variations in Station Usage





# Patronage by Line

DART

## Services Included:

Malahide / Howth - Bray / Greystones

The number of total daily journeys on the DART line in 2018 was just under 82,000 up over 7,000 journeys or 10% on 2017 levels. This growth in patronage accounts for over 65% of the overall increase in patronage for the entire GDA between 2017 and 2018. Patronage on the DART has been growing steadily since 2014, 2018 patronage levels are now 98% of the peak patronage level of 2007. In 2018, 46% of all rail journeys nationally were on DART services and over half (54%) of all boardings in the GDA were on DART services.

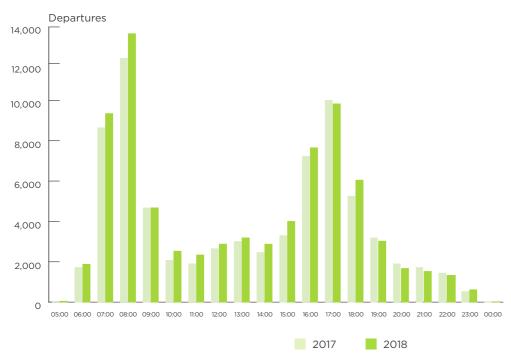
#### Table 11: Total daily patronage on DART lines, 2018

Line	2017	2018	Annual % Change
DART Northbound	36,691	40,704	11%
DART Southbound	37,974	41,201	8%
Total	74,665	81,905	10%

## Hourly Profile of Demand

Chart 7 shows variations in demand throughout the day on the DART line in 2017 and 2018. This is based on passenger numbers boarding services.

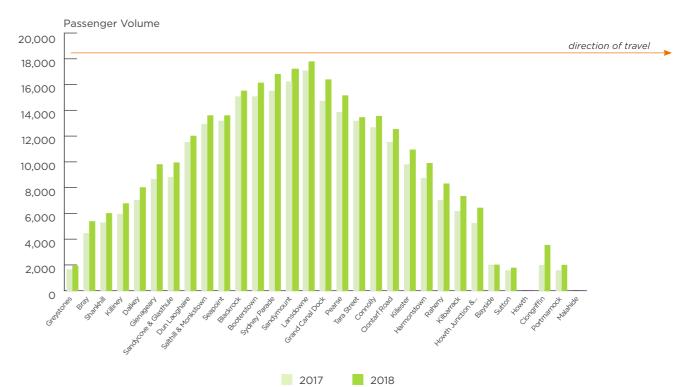
#### Chart 7: Hourly profile of demand on DART 2017 and 2018



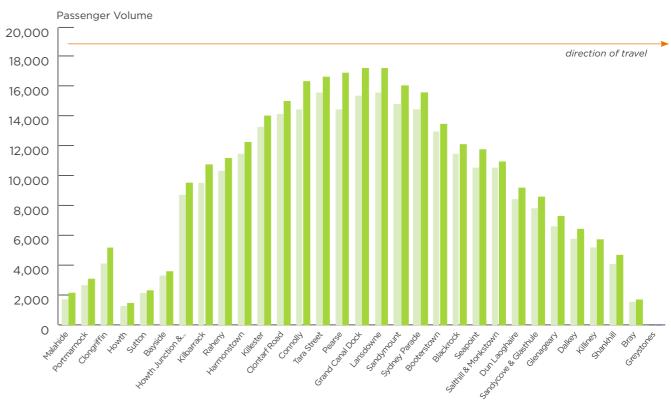
### Profile of Demand by Station

Chart 8 shows the daily build-up of passengers along the route of the DART Northbound line from Greystones to Howth Junction, where the train then splits into the Howth and Malahide branches. The change in the cumulative number of passengers on board at each station is the net impact of the number of passengers alighting and boarding trains. Chart 9 shows the profile of demand in the southbound direction which, as would be expected, mirrored the northbound profile.

### Chart 8: Profile of Demand by Station, DART Northbound, 2017 and 2018



#### Chart 9: Profile of Demand by Station, DART Southbound, 2017 and 2018



2017

2018

## Dundalk - Rosslare

### Services Included:

Intercity: Dublin - Rosslare / Wexford Commuter: Dublin - Gorey

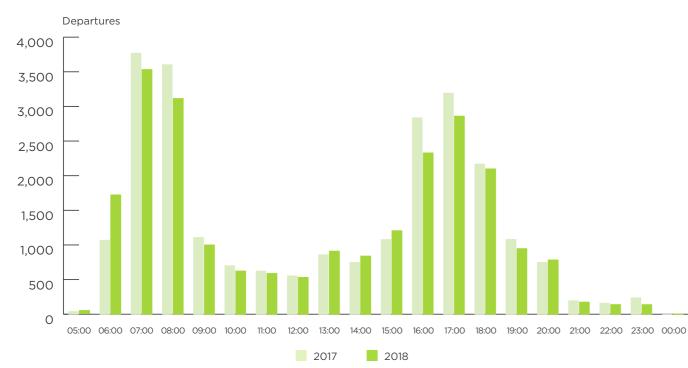
Commuter: Dublin - Dundalk / Drogheda Intercity: Dublin - Belfast

#### Table 12: Total daily patronage on Dundalk - Rosslare lines, 2018

Line	2017	2018	Annual % Change
Northbound	13,056	11,998	-8%
Southbound	13,049	12,431	-5%
Total	26,105	24,429	-6%

## Hourly Profile of Demand

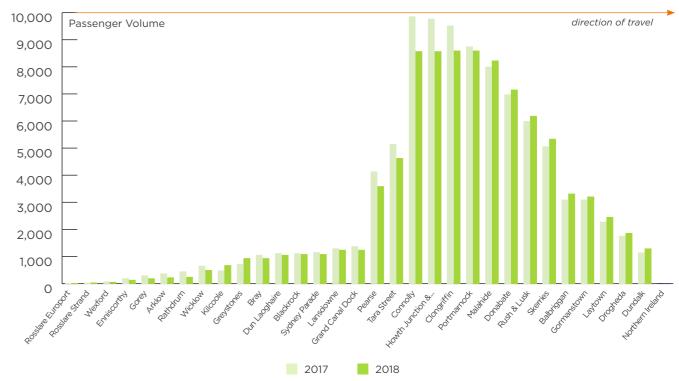
### Chart 10: Hourly profile of demand, Dundalk – Rosslare, 2017 and 2018



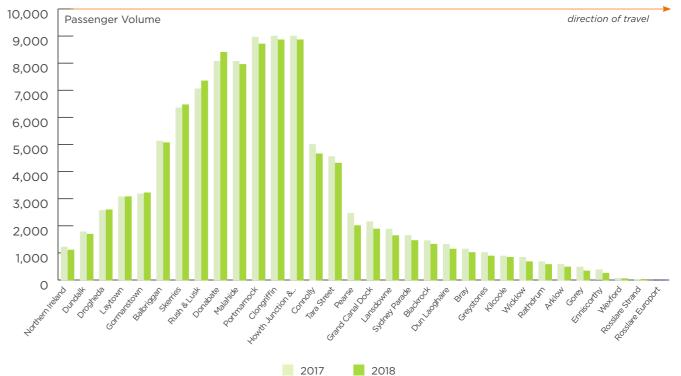
# Profile of Demand by Station

Charts 11 and 12 show the demand profile of patronage on the Dundalk - Rosslare section of the network.

#### Chart 11: Profile of Demand by Station, Rosslare - Dundalk (Northbound), 2017 and 2018



#### Chart 12: Profile of Demand by Station, Dundalk - Rosslare line (Southbound), 2017 and 2018



2017



# Dublin - Belfast (Enterprise)

## Services Included:

Intercity: Dublin - Belfast

The Rail Census captures the total number of passengers on 'Enterprise' services operating between Ireland and Northern Ireland. There was a decrease in Enterprise service patronage between 2017 and 2018 of approximately 2%, or 58 daily journeys. There was a 3% increase in northbound patronage but a 7% decrease in southbound patronage. Table 13 shows the total boardings on Enterprise services on Census day in 2017 and 2018.

Although the Enterprise service operates between Dublin and Belfast, on census day 2018 74% of Enterprise trips crossed the border into Northern Ireland (75% in 2017)<sup>10</sup>. There has been an 11% decrease in trips crossing the border southbound from the North of Ireland, this equates to 139 daily journeys. Meanwhile there has been a 4% increase in journeys to the North (55 daily journeys). There were almost 30% more daily journeys to Northern Ireland than from Northern Ireland in 2018 compared to 12% in 2017. Overall there was a 3% decrease in cross border trips between 2017 and 2018. Table 14 shows the total cross border trips on Census day 2017 and 2018.

#### Table 13: Total Patronage on the Enterprise Service

Line	2017	2018	Annual % Change
Northbound	1,993	2,053	3%
Southbound	1,728	1,610	-7%
Total	3,721	3,663	-2%

Table 14: Total Cross Border Patronage on the Enterprise Service

Line	2017	2018	Annual % Change
Northbound	1,477	1,532	4%
Southbound	1,322	1,183	-11%
Total	2,799	2,715	-3%

# Sligo - Longford - Bray Services Included:

Intercity: Dublin - Sligo

Commuter: Dublin - Maynooth/Longford

Commuter: Dublin - M3 Parkway

Commuter: Bray - Dublin (excluding DART)

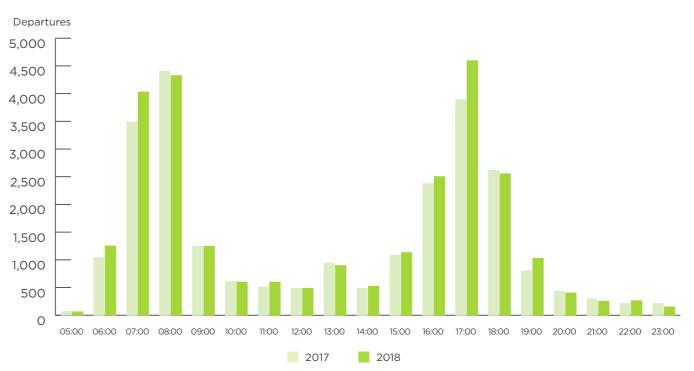
Commuter: Bray - Maynooth

Table 15: Total daily patronage on Sligo - Bray lines, 2018

Line	2017	2018	Annual % Change
Eastbound	13,890	14,172	2%
Westbound	12,493	13,685	10%
Total	26,383	27,857	6%

### Hourly Profile of Demand

Chart 13: Hourly Profile of Demand, Sligo - Longford - Bray, 2017 and 2018



# Profile of Demand by Station

Charts 14 and 15 show the daily patronage build-up on the Bray to Sligo line in 2017 and 2018.<sup>11</sup>

#### Chart 14 Profile of Demand by Station, Sligo - Dublin - Bray (eastbound), 2017 and 2018

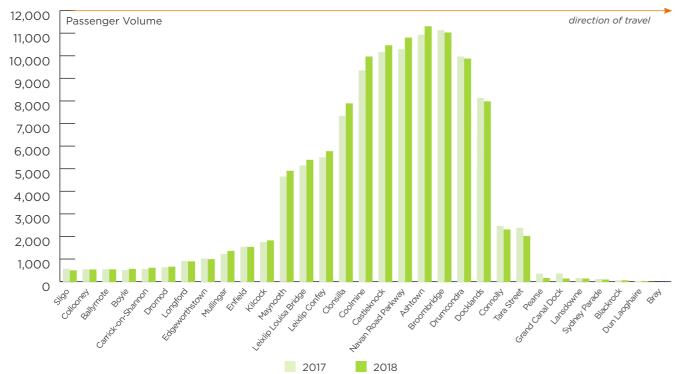
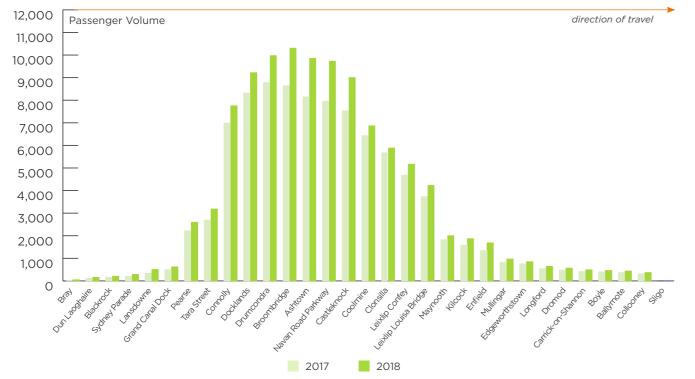


Chart 15 Profile of Demand by Station, Bray - Dublin - Sligo (westbound), 2017 and 2018



# Heuston Commuter Services

# Services Included:

Commuter: Dublin Grand Canal Dock/Heuston - Hazelhatch & Celbridge, Kildare, Newbridge, Portlaoise & Portarlington

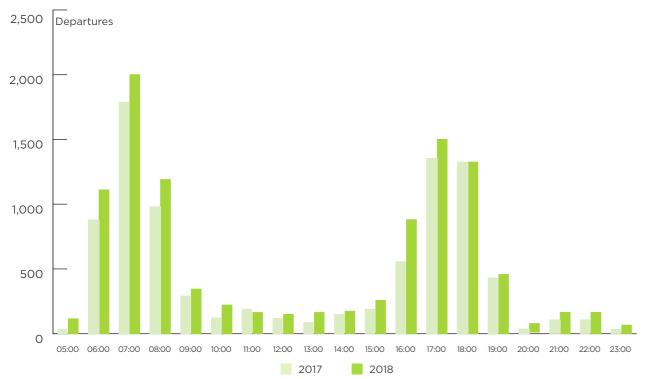
Table 16: Total daily patronage on Commuter Services to & from Heuston, 2017 and 2018

Line	2017	2018	Annual % Change
From Heuston/Grand Canal Dock	4,430	5,397	22%
To Heuston/Grand Canal Dock	5,038	5,739	14%
Total	9,468	11,136	18%

In December 2016 larnród Éireann reintroduced passenger services via Dublin's Phoenix Park Tunnel. Table 16a below presents a comparison of patronage on these particular services in 2017 and 2018.

Table 16a: Total daily patronage on Commuter Services to & from Grand Canal Dock via Phoenix Park Tunnel in 2017 and 2018

Line	2017	2018	Annual % Change
From Grand Canal Dock	1,540	1,847	20%
To Grand Canal Dock	1,621	2,040	26%
Total	3,161	3,887	23%



### Chart 16: Hourly Profile of Demand, Heuston Commuter, 2017 and 2018

# Profile of Demand by Station

Charts 17 and 18 show the daily patronage build-up on the Heuston commuter line in 2017 and 2018.

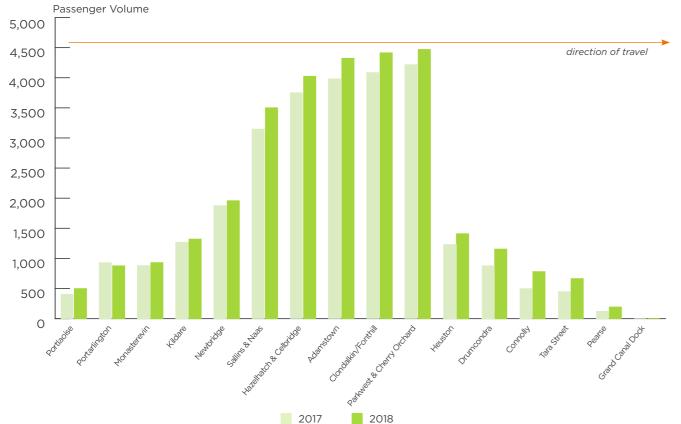
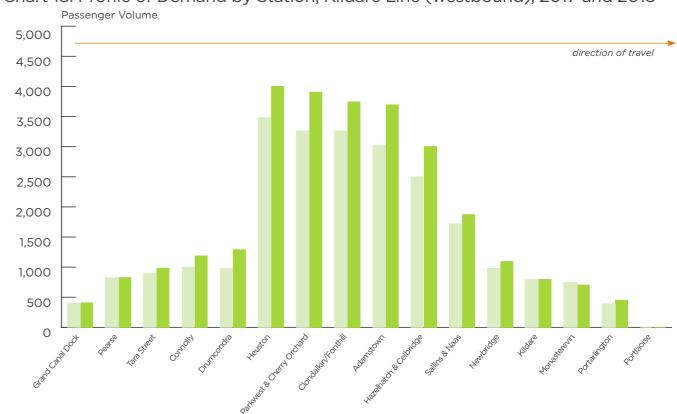


Chart 17: Profile of Demand by Station, Kildare Line (eastbound), 2017 and 2018<sup>12</sup>



2017

<sup>12</sup> Patronage at Athlone, Clara and Tullamore represented at Portarlington, from Athy and Carlow at Kildare

### Chart 18: Profile of Demand by Station, Kildare Line (westbound), 2017 and 2018

2018

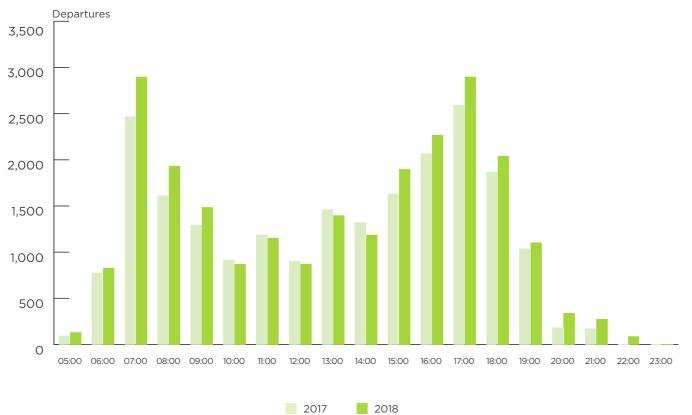
# Heuston Inter City Services

A number of rail lines operate out of Heuston. This network of lines serves the majority of the country, with services to and from Kildare, Waterford, Newbridge, Athlone, Carlow, Portlaoise, Cork, Tralee, Limerick, Galway and Westport. Chart 19 shows the build-up of demand on all Inter City Heuston services over the course of the census day. The build-up captures the total boardings per hour based on time of arrival or departure from Heuston station.

Table 17: Total daily patronage on Inter City Services to & from Heuston, 2018

Line	2017	2018	Annual % Change
From Heuston	10,458	11,092	6%
To Heuston	11,158	11,506	3%
Total	21,616	22,598	5%

### Chart 19: Profile of Demand by Station, Heuston Inter City services, 2017 and 2018



# Cork Commuter and Regional Services Included:

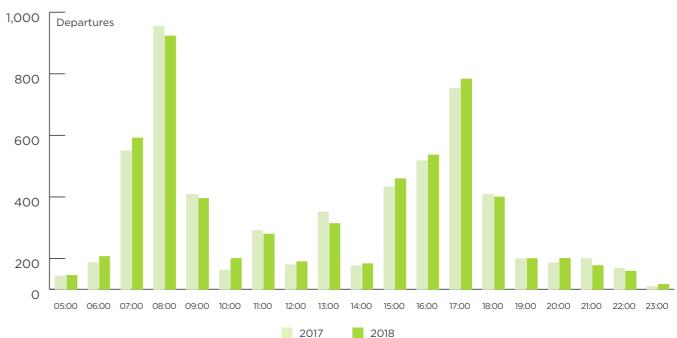
Midleton/Cobh - Cork - Mallow - Tralee

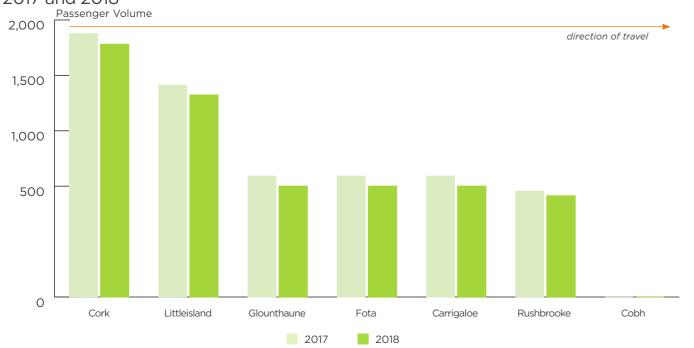
Table 18: Total daily patronage on Cork Commuter Lines, 2018

Line	2017	2018	Annual % Change
To Cork (inbound)	2,974	3,111	5%
From Cork (outbound)	2,920	2,864	-2%
Total	5,894	5,975	1%

# Hourly Profile of Demand

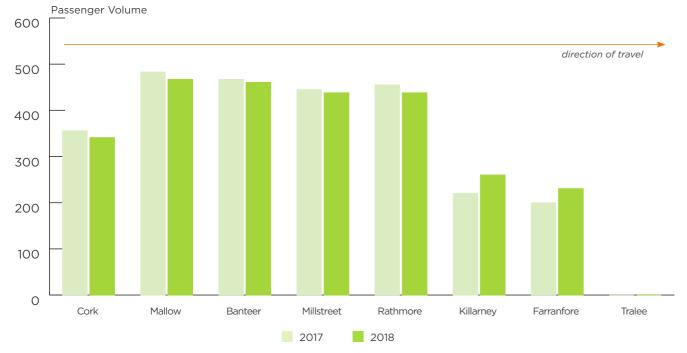
Chart 20: Hourly Profile of Demand, Cork Commuter and Regional Lines, 2017 and 2018





# Chart 21a: Profile of Demand by Station, Commuter Services from Cork 2017 and 2018<sup>13</sup>

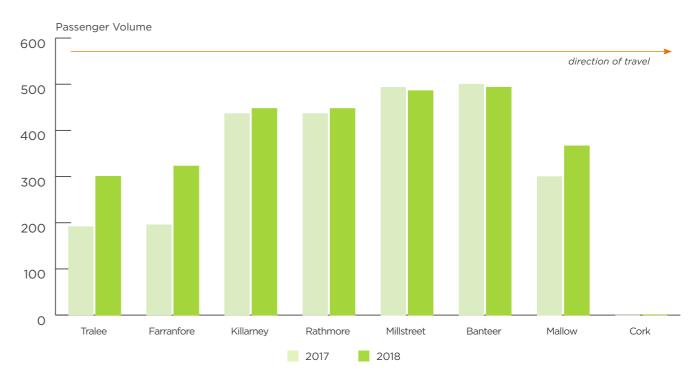
# Chart 21b: Profile of Demand by Station, Services from Cork to Tralee 2017 and 2018



### Chart 22a: Profile of Demand by Station, Commuter Services to Cork 2017 and 2018<sup>14</sup>



# Chart 22b: Profile of Demand by Station, Services from Tralee to Cork 2017 and 2018



# **Regional Lines**

Table 19: Daily Patronage on remaining Lines outside Cork and the GDA

Line	2017	2018	Annual % Change
Waterford, Ballybrophy, Thurles, Nenagh, Athenry, Limerick, Limerick Junction – Limerick, Galway, Ennis, Limerick Junction	1,462	1,655	13%
Limerick, Ennis, Galway – Limerick Junction, Ballybrophy, Athenry, Ennis, Waterford, Limerick	1,368	1,537	12%
Total	2,830	3,192	13%



# Radial Rail Usage in Dublin

Daily boardings by radial corridor

Table 20: Daily Passenger Flow by corridor Inbound to the City Centre

Radial Corridor			Total L	ine Flow I	Entering tl	he City	
Line	Service	2013	2014	2015	2016	2017	2018
	DART	10,397	10,077	12,848	14,097	14,956	16,514
Northern Line	Commuter	6,434	6,103	6,982	6,754	7,581	7,297
	InterCity	1,047	1,102	1,073	1,189	1,536	1,457
Total		17,878	17,282	20,903	22,040	24,073	25,268
	DART	13,081	12,916	14,898	14,721	16,372	17,248
South Eastern Line	Commuter	865	1,135	1,076	1,228	1,229	1,038
	InterCity <sup>15</sup>	-	-	82	61	132	165
Total		13,946	14,051	16,056	16,010	17,733	18,451
Kildare (Heuston)	Commuter	2,585	2,677	2,377	2,645	4,051	4,524
Lines	InterCity	6,703	7,001	7,303	7,362	8,730	8,639
Total		9,288	9,678	9,680	7,362	12,781	13,163
Sligo (Maynooth)	Commuter	7,518	8,027	7,957	8,779	9,778	9,602
Lines	InterCity <sup>16</sup>	-	-	1,508	1,452	1,631	1,792
Grand Total		7,518	8,027	9,465	10,231	11,409	11,394

Chart 23: Total Daily Passenger Flow into City Centre by Line

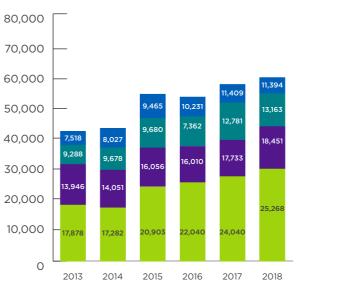
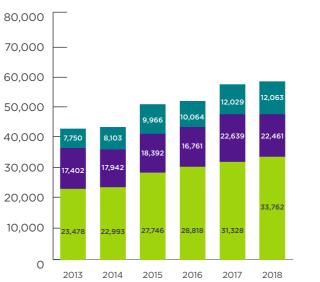


Chart 24: Total Daily Passenger Flow into City Centre by Service Type





Sligo (Maynooth) Sligo Line Kildare (Heuston) Line South Eastern Line Northern Line



# Peak Hour Flows by Radial Corridor

Tables 21 & 22: Maximum Flows per Line in the Morning & Evening Peak Hours (8:00-9:00 & 17:00-18:00)

Radial Corridor	Service	Max. Hourly Passenger Flow	Location of Maximum Flow
	DART	5,225	Killester – Clontarf Road
Northern Lines	Commuter	2,239	Malahide - Connolly
Lines	InterCity	405	Drogheda - Connolly
Total		7,869	
South-	DART	4,337	Blackrock - Booterstown
Eastern	Commuter		No Commuter services 08:00-09:00
Lines	InterCity <sup>17</sup>	316	Blackrock - Lansdowne Rd.
Total		4,653	
Heuston	Commuter	976	Parkwest and Cherry Orchard - Heuston
Lines	InterCity	1,836	Park West and Cherry Orchard - Heuston
Total		2,812	
Sligo	Commuter	4,166	Ashtown - Broombridge
Lines	InterCity	516	Drumcondra - Connolly
Total		4,682	
Radial Corridor	Service	Max. Hourly Passenger Flow	Location of Maximum Flow
	DART	3,671	Connolly - Clontarf Road
Northern Lines	Commuter	2,251	Connolly - Malahide
LINES	InterCity	398	Connolly - Dundalk
Total		6,320	
South-	DART	2,715	Lansdowne Road - Sandymount
Eastern	Commuter	349	Bray - Greystones
Lines	InterCity	-	No Inter City services 17:00-18:00
Total		3,064	
Heuston	Commuter	722	Parkwest and Cherry Orchard - Clondalkin/ Fonthill
Heuston Lines	Commuter InterCity	722 2,197	-
			Fonthill
Lines Total		2,197	Fonthill
Lines	InterCity	2,197 <b>2,919</b>	Fonthill Heuston - Kildare

# Train Loadings by Radial Corridor

Table 23 & 24: Most Heavily Loaded Trains in the Morning and Evening Peaks

Radial Corridor	Service	Maximum Load	Service	Location
	DART	1,153	08:10 Malahide - Bray	Clontarf Road - Connolly
Northern Lines	Commuter	912	07:10 Dundalk - Pearse	Malahide - Connolly
	InterCity	405	06:45 Belfast - Connolly	Drogeda - Connolly
	DART	887	07.55 Bray - Howth	Seapoint - Blackrock
South- Eastern Lines	Commuter	316	05:35 Rosslare Europort - Dundalk	Blackrock - Lansdowne Road
	InterCity	-	No Inter City Services	
Heuston	Commuter	395	07:19 Newbridge - Grand Canal Dock	Drumcondra - Connolly
Lines	InterCity	620	05:30 Galway - Heuston	Sallins & Naas - Heuston
Sligo	Commuter	917	08:02 Maynooth - Bray	Ashtown - Broombridge
Lines	InterCity	569	05:45 Sligo - Connolly	Maynooth - Dromcondra

#### Table 24

Radial Corridor	Service	Maximum Load	Train	Location of Busiest Service
	DART	876	17.05 Bray - Malahide	Connolly - Clontarf Road
Northern Lines	Commuter	759	16.50 Bray - Drogheda	Connolly - Malahide
	InterCity	398	16:50 Connolly - Belfast	Connolly - Dundalk
South-	DART	661	17:10 Malahide - Greystones	Lansdowne Road - Sandymount
Eastern Lines	Commuter	339	17:33 Connolly - Wexford	Pearse - Dun Laoghaire
	InterCity	-	No Inter City Services	
Heuston	Commuter	396	17.32 Grand Canal Dock - Newbridge	Connolly - Drumcondra
Lines	InterCity	515	17:30 Heuston - Galway	Heuston - Sallins & Naas
Sligo	Commuter	747	17.00 Bray - Maynooth	Broombridge - Ashtown
Lines	InterCity	587	17.10 Connolly - Sligo	Connolly - Maynooth

# Appendix A: Daily Boardings at each Station, by Service Type

Route	DA	RT	Ross Belfas			iooth ) Line				TOTAL			
Station	North Bound	South Bound	North Bound	South Bound	North Bound	South Bound	2018	2017	2016	2015	2014	2013	2012
Rosslare Euro Port			12	0			12	7	11	21	13	20	20
Rosslare Strand			27	1			28	19	16	24	14	21	25
Wexford			106	27			133	147	76	115	78	68	81
Enniscorthy			26	10			36	65	54	57	38	43	61
Gorey			71	27			98	76	73	86	78	86	105
Arklow			61	22			83	121	85	88	91	109	119
Rathdrum			45	14			59	69	68	111	75	98	94
Wicklow			311	17			328	269	168	155	152	166	180
Kilcoole			40	7			47	99	39	24	33	31	23
Greystones	1981	0	301	44			2326	2568	1927	1951	1561	1783	1858
Bray	3261	201	221	129	26	0	3838	3946	3144	2974	2573	2909	3029
Shankill	1374	122					1496	1342	1367	1456	1085	1149	1301
Killiney	871	117					988	989	853	792	731	882	859
Dalkey	1520	401					1921	1748	1621	1634	1301	1531	1544
Glenageary	1659	181					1840	1839	1666	1661	1388	1568	1494
Sandycove & Glasthule	1113	309					1422	1289	1208	1157	1004	1022	995
Dun Laoghaire	2889	779	224	137	99	7	4135	4129	3574	3315	2610	3168	3359
Salthill & Monkstown	1279	216					1495	1323	1387	1379	1065	1168	1041
Seapoint	673	190					863	808	836	869	682	785	699
Blackrock	2668	681	120	28	72	2	3571	3155	2974	2862	2699	2091	2399
Booterstown	1146	678					1824	1612	1644	1320	1274	1334	1164
Sydney Prde	1262	528	41	27	19	7	1884	2193	1883	1847	1552	1327	1308

Route	DA	RT	Ross Belfas	lare - st Line		nooth )) Line				TOTAL			
Station	North Bound	South Bound	North Bound	South Bound	North Bound	South Bound	2018	2017	2016	2015	2014	2013	2012
Sandymount	915	428					1343	1080	1044	1243	828	889	975
Lansdowne	2137	1152	139	33	237	2	3700	3429	3500	3459	2868	2529	2490
Grand Canal Dock	1434	1756	78	17	103	2	3390	3252	2896	2671	2712	2579	2825
Pearse	4485	6150	2851	475	1626	18	15605	15010	14827	13292	13560	12168	11312
Tara Street	3597	3912	1078	302	684	66	9639	9302	7952	7730	6746	6344	6556
Connolly	3604	4316	4704	723	5416	104	18867	17540	14857	14679	12029	12512	13477
Clontarf Rd	579	1536					2115	2052	1946	1694	1272	1377	1431
Killester	260	2087					2347	2197	2225	1786	1595	1575	1592
Harmonstwn	185	1424					1609	1314	1396	1071	998	1011	994
Raheny	245	2172					2417	2150	2024	1883	1758	1641	1672
Kilbarrack	340	1354					1694	1516	1373	1368	1106	1043	1138
Howth Junc Donaghmede	577	1280	7	22			1886	2163	1818	1715	1613	1667	1730
Bayside	386	1413					1799	1502	1400	1403	1222	1156	1024
Sutton	111	893					1004	974	963	741	669	689	657
Howth	0	1805					1805	1439	1240	1259	875	1073	1285
Clongriffin	102	1371	0	103			1576	1296	1256	1013	830	767	674
Portmarnock	51	1198	2	150			1401	1981	1450	1191	1182	1186	1236
Malahide	0	2551	586	815			3952	3324	2626	2604	2086	2177	2318
Donabate			204	1442			1646	1371	1392	1386	1105	1149	1213
Rush & Lusk			171	901			1072	947	972	905	808	920	800
Skerries			163	1553			1716	1585	1424	1446	1314	1365	1279
Balbriggan			118	2091			2209	2238	1782	1872	1757	1753	1778
Gormanston			5	75			80	84	101	72	87	113	92
Laytown			18	458			476	432	397	392	305	371	375
Drogheda			155	1048			1203	1119	1086	1264	957	962	1094
Dundalk			113	510			623	516	579	465	394	492	567
Belfast			0	1183			1183	1322	1011	853	1094	1047	1040
Docklands					1587	0	1587	1466	1326	1064	874	850	811

Route	DA	RT		lare - st Line	Mayn (Sligo	iooth ) Line				TOTAL			
Station	North Bound	South Bound	North Bound	South Bound	North Bound	South Bound	2018	2017	2016	2015	2014	2013	2012
Drumcondra					948	244	1192	1112	1183	1258	1291	1065	1150
Broombridge					622	335	957	504	418	370	221	249	229
Ashtown					196	899	1095	1110	995	928	930	743	743
Navan Road Parkway					36	275	311	285	323	270	245	232	197
Castleknock					156	801	957	888	792	781	716	841	840
Coolmine					285	1840	2125	2916	1502	1544	1332	1554	1550
Clonsilla					603	1550	2153	1599	1767	1698	1480	1161	1262
Hansfield					7	248	255	211	210	143	87	58	-
Dunboyne					5	303	308	294	279	184	220	171	177
M3 Parkway					0	559	559	422	400	298	174	206	226
Leixlip Conf.					164	463	627	616	529	520	416	497	511
Leixlip Louisa Bridge					122	1212	1334	1059	1112	1067	1054	834	969
Maynooth					297	3062	3359	3136	2695	2831	2006	2232	2202
Kilcock					27	310	337	342	237	258	225	233	247
Enfield					12	197	209	213	137	127	100	110	131
Mullingar					87	450	537	533	473	509	492	370	451
Edge'stown					26	113	139	133	116	130	104	122	167
Longford					58	279	337	372	254	322	266	181	221
Dromod					18	68	86	90	112	79	124	88	81
Carrick-on- Shannon					48	95	143	142	105	141	103	95	114
Boyle					27	91	118	89	67	77	58	54	76
Ballymote					58	60	118	87	91	131	74	93	69
Collooney					14	50	64	59	56	56	50	46	41
Sligo					0	460	460	482	426	401	307	379	436

Route	Heu	ston	Cork Co	mmuter	Reg	ional				TOTAL			
Station	North Bound	South Bound	West Bound	East Bound	North Bound	South Bound	2018	2017	2016	2015	2014	2013	2012
Grand Canal Dock	0	395					395	441					
Pearse	20	449					469	455					
Tara Street	91	162					253	140					
Connolly	80	478					558	522					
Drumcondra	220	239					459	293					
Heuston	0	11505					11505	10700	9537	9997	9394	8497	8650
Parkwest & C'yOrchard	303	192					495	410	255	202	184	155	126
Clondalkin / Fonthill	166	46					212	164	54	40	54	56	37
Adamstown	301	33					334	270	134	108	87	71	85
Hazelhatch & Celbridge	581	188					769	497	299	271	270	260	323
Sallins Naas	1920	168					2088	1783	1026	964	1123	814	916
Newbridge	1336	194					1530	1283	1224	1067	1081	1058	989
Kildare	638	260					898	888	775	683	612	806	754
Athy	420	106					526	464	464	442	314	360	446
Carlow	710	143					853	768	745	593	575	657	565
M'asterevin	132	17					149	110	101	87	91	72	37
P'tarlington	503	192					695	728	565	705	806	677	504
Portlaoise	944	153					1097	1036	825	804	727	721	488
Ballybrophy	116	1			12	0	129	153	161	121	99	146	84
Templemore	67	23					90	96	77	106	70	62	67
Thurles	505	288			24		817	601	563	557	559	483	504
Limerick Junc	942	274			807	33	2056	1836	1501	1562	1409	1109	1334
Limerick	261	0			308	939	1508	1287	1112	1157	1073	963	1221
Charleville	68	9					77	102	73	84	65	119	78
Mallow	535	252	296	405			1488	1430	1454	1451	1368	1569	1246
Cork	1687	0	0	2152			3839	4071	3752	3462	2896	3188	3112
Muine Bheag	139	12					151	140	145	127	146	129	108

Route	Heu	ston	Cork Co	mmuter	Regi	onal				TOTAL			
Station	North Bound	South Bound	West Bound	East Bound	North Bound	South Bound	2018	2017	2016	2015	2014	2013	2012
Kilkenny	383	109					492	473	400	355	350	362	328
T'mastown	60	6					66	53	52	39	39	53	36
Waterford	501	0			48	0	549	622	494	447	518	68	500
Tullamore	466	127					593	654	470	618	475	452	371
Clara	106	19					125	132	137	109	83	61	55
Athlone	403	425					828	830	713	705	560	560	468
Ballinasloe	108	123					231	228	195	204	68	121	109
Woodlawn	12	46					58	68	35	38	22	24	10
Attymon	0	7					7	14	8	7	3	1	1
Athenry	170	250			181	14	615	466	376	393	266	141	363
Galway	1705	0			0	293	1998	1727	1260	1402	1218	1053	1011
Roscommon	85	23					108	121	88	75	72	80	63
Castlerea	85	6					91	96	70	58	60	49	53
Ballyhaunis	56	13					69	106	80	67	64	45	45
Claremorris	72	8					80	88	113	86	87	66	54
Castlebar	136	2					138	163	145	120	114	82	93
Westport	139	0					139	106	153	135	104	85	90
Manulla Junc	101	122					223	223	146	119	78	101	138
Foxford	9	8					17	19	19	5	-	15	12
Ballina	101	0					101	96	62	50	-	51	65
Banteer	5	0	14	13			32	35	32	39	19	38	37
Millstreet	14	1	34	12			61	98	55	91	111	380	43
Rathmore	15	2	23	21			61	44	30	59	18	42	41
Killarney	39	7	171	33			250	356	213	224	228	357	240
Farranfore	21	0	25	7			53	25	21	21	14	32	29
Tralee	49	0	298	0			347	226	240	236	208	411	281
Littleisland			463	124			587	495	432	347	218	316	250
Gl'thaune			236	54			290	287	229	186	139	203	162
C'twohill			153	21			174	157	148	95	98	91	83

Route	Heu	ston	Cork Co	mmuter	Regi	ional				TOTAL			
Station	North Bound	South Bound	West Bound	East Bound	North Bound	South Bound	2018	2017	2016	2015	2014	2013	2012
Midleton			759	0			759	608	638	461	458	495	422
Fota			9	10			19	26	14	10	9	82	23
Carrigaloe			27	6			33	36	40	37	19	31	36
Rushbrooke			153	6			159	169	194	195	87	156	201
Cobh			450	0			450	517	555	481	369	517	504
Sixmilebrdg					21	45	66	53	57	53	55	46	60
Ennis					62	156	218	190	153	261	173	236	276
Gort					18	3	21	16	31	19	20	13	18
Ardrahan					3	0	3	3	5	3	7	8	14
Craughwell					15	5	20	33	18	13	13	10	27
Oranmore	27	64			79	10	180	262	70	63	19	23	
Roscrea					2	4	6	30	6	7	4	19	15
Cl'jordan					4	4	8	6	9	6	8	15	5
Nenagh					13	6	19	24	13	17	9	14	18
Birdhill					2	1	3	7	6	11	6	10	8
C'leconnell					21	2	23	13	12	15	10	15	9
Carrick-on- Suir					3	10	13	4	3	1	-	6	15
Clonmel					23	4	27	29	27	23	20	29	29
Cahir					4	1	5	9	10	9	5	11	9
Tipperary					5	7	12	3	13	11	7	9	31

# Appendix B: Daily Alightings at each Station by Service Type

Route	DA	\RT	Ross Belfas	lare - it Line		ooth ) Line				TOTAL			
Station	North Bound	South Bound	North Bound	South Bound	North Bound	South Bound	2018	2017	2016	2015	2014	2013	2012
Rosslare Euro Port			0	39			39	19	25	27	16	21	18
Rosslare Strand			0	28			28	25	35	42	24	25	30
Wexford			15	172			187	240	82	137	82	31	64
Enniscorthy			5	42			47	101	51	53	65	49	55
Gorey			19	109			128	150	116	85	77	89	107
Arklow			20	100			120	151	126	93	95	122	117
Rathdrum			2	69			71	74	52	106	93	88	92
Wicklow			26	210			236	234	181	187	162	160	145
Kilcoole			3	51			54	93	9	96	25	26	34
Greystones	0	1847	23	326			2196	2201	1743	1711	1460	1551	1571
Bray	152	2992	110	270	0	16	3540	3758	3220	2870	2997	2818	2867
Shankill	98	1314					1412	1315	1278	1147	1049	1012	1088
Killiney	150	730					880	932	772	741	734	750	774
Dalkey	474	1339					1813	1776	1742	1650	1258	1594	1586
Glenageary	197	1502					1699	1590	1454	1468	1324	1311	1299
Sandycove & Glasthule	307	964					1271	1092	1084	1067	968	957	999
Dun													
Laoghaire	944	2980	137	305	12	31	4409	4096	3492	3430	2633	3178	3278
Salthill &													
Monkstown	236	1119					1355	1260	1182	1084	949	981	990
Seapoint	172	599					771	663	554	629	514	551	550
Blackrock	939	2131	67	116	2	22	3277	3006	2985	2866	2764	2265	2353
Booterstown	746	1028					1774	1669	1445	1429	1098	1144	1131

Route	DA	RT		lare - st Line		nooth ) Line				TOTAL			
Station	North Bound	South Bound	North Bound	South Bound	North Bound	South Bound	2018	2017	2016	2015	2014	2013	2012
Sydney Prde	648	1475	3	169	12	24	2331	2365	2175	1898	1716	1542	1525
Sandymount	459	807					1266	1107	981	1355	846	836	972
Lansdowne	1272	2258	96	191	8	71	3896	3657	3888	4089	2722	3328	2906
Grand Canal Dock	2140	2070	94	161	26	107	4598	4410	3958	3759	3355	3051	2833
Pearse	5491	5612	387	2562	34	1760	15846	15128	14221	14127	12021	11238	11271
Tara Street	5089	3796	230	1144	63	480	10802	9614	8461	9645	7513	7473	7971
Connolly	3476	4068	443	4770	118	5932	18807	18322	16109	15220	12931	13311	14128
Clontarf Rd	1535	640					2175	2091	2206	1713	1405	1337	1346
Killester	1772	289					2061	2024	2170	1547	1511	1386	1363
Harmonstwn	1281	159					1440	1284	1312	990	897	823	916
Raheny	1998	256					2254	2089	2161	1789	1698	1493	1489
Kilbarrack	1361	302					1663	1552	1331	955	1112	1072	994
Howth Junc Donaghmede	1571	528	21	31			2151	2169	2044	2179	1708	1836	1764
Bayside	1036	175					1211	1281	1250	1113	1091	1048	958
Sutton	836	76					912	919	662	536	640	616	646
Howth	1625	0					1625	1560	1138	1286	898	1255	1178
Clongriffin	1326	81	24	0			1431	1219	985	875	726	567	640
Portmarnock	1196	64	25	4			1289	1729	974	899	940	978	1057
Malahide	2177	0	871	581			3629	3030	2158	2508	1992	2178	2302
Donabate			1297	345			1642	1347	1598	1161	1057	1051	1029
Rush & Lusk			783	111			894	872	894	775	795	828	876
Skerries			1410	213			1623	1588	1320	1466	1227	1308	1460
Balbriggan			2230	131			2361	2262	1868	1422	1564	1711	1543
Gormanston			101	4			105	112	55	82	71	99	85
Laytown			451	17			468	430	354	367	349	345	367
Drogheda			1074	110			1184	1138	917	1121	1041	979	1040
Dundalk			486	50			536	535	516	475	453	532	515
Belfast			1532	0			1532	1477	1313	936	1126	1100	1074

Route	DA	RT	Ross Belfas	lare - st Line		iooth ) Line				TOTAL			
Station	North Bound	South Bound	North Bound	South Bound	North Bound	South Bound	2018	2017	2016	2015	2014	2013	2012
Docklands					0	1960	1960	2035	1515	1244	1141	966	1048
Drumcondra					328	1262	1590	1372	1413	1249	1154	1135	1176
Broombridge					267	721	988	518	440	318	257	215	207
Ashtown					834	238	1072	956	750	787	773	665	660
Navan Road Parkway					220	26	246	256	303	253	222	202	204
Castleknock					774	156	930	1001	727	784	694	817	793
Coolmine					1793	194	1987	1634	1527	1682	1406	1317	1392
Clonsilla					1405	418	1823	1519	1477	1470	1126	1202	1173
Hansfield					230	3	233	215	184	148	101	82	
Dunboyne					247	2	249	326	228	202	211	138	185
M3 Parkway					473	0	473	427	344	283	215	231	231
Leixlip Conf.					423	111	534	611	556	473	436	428	480
Leixlip Louisa Bridge					955	114	1069	880	1097	933	1039	870	932
Maynooth					3193	173	3366	3092	2567	2906	2276	2148	2242
Kilcock					244	29	273	305	213	258	236	232	225
Enfield					224	9	233	223	141	144	142	148	145
Mullingar					559	99	658	583	516	558	564	407	507
Edge'stown					87	20	107	156	101	149	122	145	169
Longford					342	68	410	341	292	374	269	212	194
Dromod					68	29	97	118	96	138	120	86	94
Carrick-on- Shannon					109	34	143	170	118	140	94	135	122
Boyle					70	19	89	97	68	70	57	69	100
Ballymote					57	40	97	105	110	126	64	108	90
Collooney					72	4	76	90	75	92	74	84	58
Sligo					436	0	436	367	311	443	304	292	467

Route	Heu	ston	Cork Co	mmuter	Regi	onal				TOTAL			
Station	North Bound	South Bound	West Bound	East Bound	North Bound	South Bound	2018	2017	2016	2015	2014	2013	2012
Grand Canal Dock	276	0					276	227					
Pearse	671	8					679	508					
Tara Street	223	17					240	187					
Connolly	475	100					575	605					
Drumcondra	265	162					427	359					
Heuston	11660	0					11660	11596	10007	9753	9273	8686	8515
Parkwest & C'yOrchard	233	338					571	471	247	265	171	114	140
Clondalkin /Fonthill	68	181					249	165	64	48	51	48	46
Adamstown	25	302					327	291	122	114	97	98	107
Hazelhatch & Celbridge	115	684					799	547	290	276	260	258	325
Sallins Naas	143	1941					2084	1394	1128	1018	1006	908	943
Newbridge	259	1308					1567	1378	1169	1105	1034	999	973
Kildare	331	715					1046	874	739	662	731	733	616
Athy	88	361					449	477	466	510	408	371	461
Carlow	114	606					720	688	735	637	582	617	524
M'asterevin	15	150					165	84	70	71	82	64	56
P'tarlington	67	479					546	686	615	705	754	587	528
Portlaoise	179	937					1116	906	793	745	737	583	418
Ballybrophy	1	122			0	12	135	163	131	139	108	129	129
Templemore	24	78					102	87	84	80	90	89	81
Thurles	302	485			0		787	611	574	456	578	463	458
Limerick Junc	215	781			50	905	1951	1792	1488	1552	1435	1263	1571
Limerick	0	286			834	262	1382	1092	1203	1167	1000	849	1192
Charleville	19	84					103	83	67	82	91	185	79
Mallow	318	435	419	282			1454	1544	1270	1251	1276	1460	1404

Route	DART		Rosslare - Belfast Line		Maynooth (Sligo) Line		TOTAL						
Station	North Bound	South Bound	North Bound	South Bound	North Bound	South Bound	2018	2017	2016	2015	2014	2013	2012
Cork	0	1788	2320	0			4108	4022	3811	3354	2764	3322	3239
Muine Bheag	17	129					146	155	166	162	153	174	121
Kilkenny	92	409					501	499	348	285	404	346	263
T'mastown	2	68					70	61	65	48	41	55	36
Waterford	0	470			0	32	502	460	373	421	472	414	437
Tullamore	154	500					654	546	446	678	447	327	412
Clara	22	95					117	125	119	117	82	75	41
Athlone	437	501					938	759	589	637	604	575	427
Ballinasloe	131	108					239	200	151	182	148	69	119
Woodlawn	58	18					76	60	38	43	25	18	26
Attymon	12	0					12	20	9	7	8	45	11
Athenry	260	163			34	99	556	523	368	422	297	133	241
Galway	0	1338			402	0	1740	1820	1199	1162	778	1125	884
Roscommon	23	86					109	133	75	74	83	84	69
Castlerea	10	68					78	69	67	63	66	57	61
Ballyhaunis	19	60					79	68	59	70	48	45	52
Claremorris	11	69					80	94	95	89	63	128	82
Castlebar	7	141					148	178	150	79	103	110	128
Westport	0	147					147	137	101	133	123	124	118
Manulla Junc	119	108					227	214	151	123	69	15	90
Foxford	3	13					16	21	23	7	-	21	18
Ballina	0	113					113	93	62	59	-	72	80
Banteer	0	7	9	16			32	45	30	22	17	34	26
Millstreet	3	13	9	34			59	70	38	60	52	34	48
Rathmore	3	8	16	31			58	45	40	45	33	53	34
Killarney	0	57	39	193			289	349	308	238	254	328	266
Farranfore	0	12	3	36			51	36	29	36	24	33	25
Tralee	0	60	0	242			302	258	223	268	288	405	216
Littleisland			167	551			718	568	423	378	215	315	288

Route	Heuston		Cork Commuter		Regional		TOTAL						
Station	North Bound	South Bound	West Bound	East Bound	North Bound	South Bound	2018	2017	2016	2015	2014	2013	2012
Gl'thaune			66	220			286	259	239	246	136	207	196
C'twohill			38	83			121	131	137	92	93	100	81
Midleton			0	613			613	536	583	465	488	495	456
Fota			8	16			24	26	18	9	11	81	30
Carrigaloe			7	8			15	26	37	13	24	32	41
Rushbrooke			10	112			122	166	194	180	124	146	204
Cobh			0	427			427	500	623	455	396	517	492
Sixmilebrdg					40	14	54	46	55	30	54	28	41
Ennis					202	72	274	240	211	151	273	199	229
Gort					8	8	16	17	25	12	17	9	11
Ardrahan					3	2	5	8	2	8	12	6	3
Craughwell					11	10	21	30	17	14	28	10	15
Oranmore	84	38			19	74	215	160	89	73	54	22	-
Roscrea					3	5	8	10	5	3	5	7	1
Cl'jordan					5	2	7	5	9	9	5	5	4
Nenagh					9	9	18	45	15	17	11	5	2
Birdhill					0	1	1	8	4	10	8	2	2
C'leconnell					0	7	7	7	5	5	3	2	6
Carrick-on- Suir					7	4	11	8	6	-	13	4	7
Clonmel					8	16	24	28	18	17	29	25	46
Cahir					6	1	7	8	11	2	11	11	10
Tipperary					14	2	16	7	11	10	17	7	13

# Appendix C: Train Capacity by Type

Train Type		Capacity	
4-DART	(4 Car DART Set)	700	Seats + Standing Accommodation
6-DART	(6 Car DART Set)	1050	Seats + Standing Accommodation
8-DART	(8 Car DART Set)	1400	Seats + Standing Accommodation
2 x 2600	(2 Car Commuter Rail Car)	206	Seats + Standing Accommodation
2 x 2800	(2 Car Commuter Rail Car)	221	Seats + Standing Accommodation
4 x 29000	(4 Car Commuter Rail Car)	640	Seats + Standing Accommodation
8 x 29000	(8 Car Commuter Rail Car)	1280	Seats + Standing Accommodation
1 x 3ICR	(3 Car InterCity Rail Car)	190	Seats
1 x 6ICR	(6 Car Premier Class InterCity Rail Car)	376	Seats
1 x 6HCR	(6 Car High Capacity InterCity Rail Car)	406	Seats
7 x MkIV	(7 Car Mk IV Set)	348	Seats
7 x DD	(7 Car De Dietrich Set)	358	Seats



### For Further Information:

Media enquiries: Dermot O'Gara T: +353 0 1 8798346 National Transport Authority Dún Scéine Iveagh Court Harcourt Lane Dublin 2 D02 WT20