Údarás Náisiúnta Iompair
National Transport Authority

Statistical Bulletin Number: 04
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Summary of

Heavy Rail Census

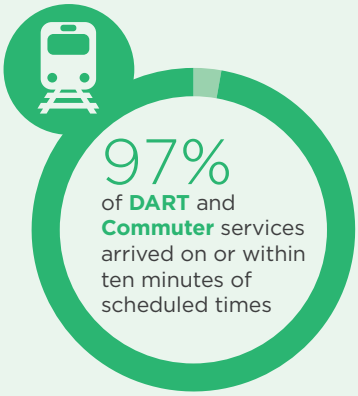
Carried out in November 2012

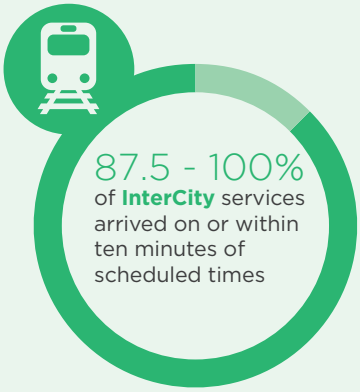
Contents:

The Rail Census

- In 2012, the National Transport Authority funded a National Census of Rail patronage. This was the first time information on train usage was recorded at every station across the national rail network. Prior to 2012, the report was carried out in the Greater Dublin Area (GDA) only.
- The rail network in Ireland is made up of approximately 2,400 km of track and includes 147 open stations with a total of 372 platforms.
- The 2012 Census examined rail traffic across Commuter, DART and InterCity services.
- The Census was conducted by surveyors counting the number of individuals boarding and alighting each service at each station for an entire day (15th November 2012).
- Over 97% of services on Commuter and DART routes arrived on or within ten minutes of scheduled times, with this figure varying between 87.5 and 100% for InterCity services. Services largely operated according to schedule, therefore providing a representative day for rail journeys.
- In excess of 124,000 journeys were taken on almost 670 rail services on Census day.

All 147
stations across the rail network were monitored





124,000
rail journeys made on the day of the Census

Changes in rail usage in the Greater Dublin Area (GDA) since 2003

Rail traffic in the GDA is strongly influenced by economic conditions

- After 2003, as the economy grew the number of passenger journeys increased substantially.
- The number of journeys peaked in 2007 with nearly 144,000 daily journeys. This coincided with the peak in economic activity defined by high levels of GDP, consumer spending and employment.
- From 2007 to 2010, the number of daily journeys declined by 30%. Since 2010, ridership figures in the GDA have shown signs of stabilisation at approximately 102,000 daily journeys.

Rail patronage in the GDA is more sensitive to economic changes compared with rail patronage across the country as a whole

- From 2003 to 2007, daily journeys by train in the GDA increased at a faster pace than national annual journeys.
- When the number of annual rail journeys decreased after 2007, daily rail journeys in the GDA experienced a more marked decline.
- In 2011 and 2012, daily rail journeys in the GDA began to recover at a faster pace than national annual journeys.

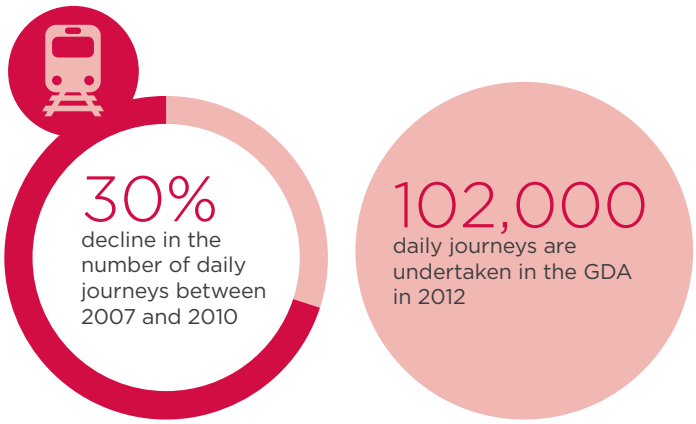
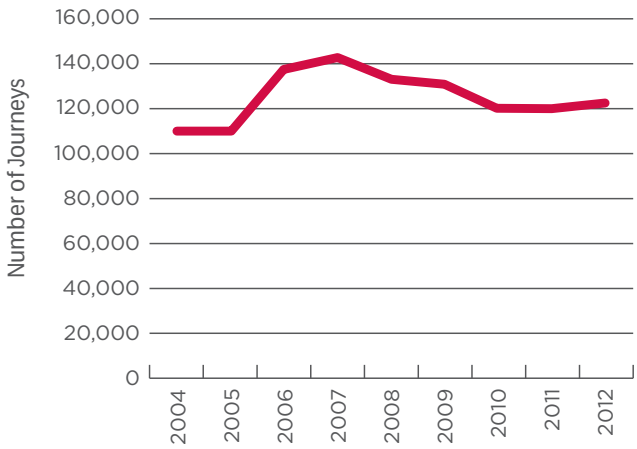


Figure 1
Number of daily journeys taken in the GDA, 2003 -2012



The DART is the most popular section of rail across the network with nearly 57,000 daily journeys

In terms of stations within the GDA, historically the Rail Census provides a breakdown of patronage across the following lines:

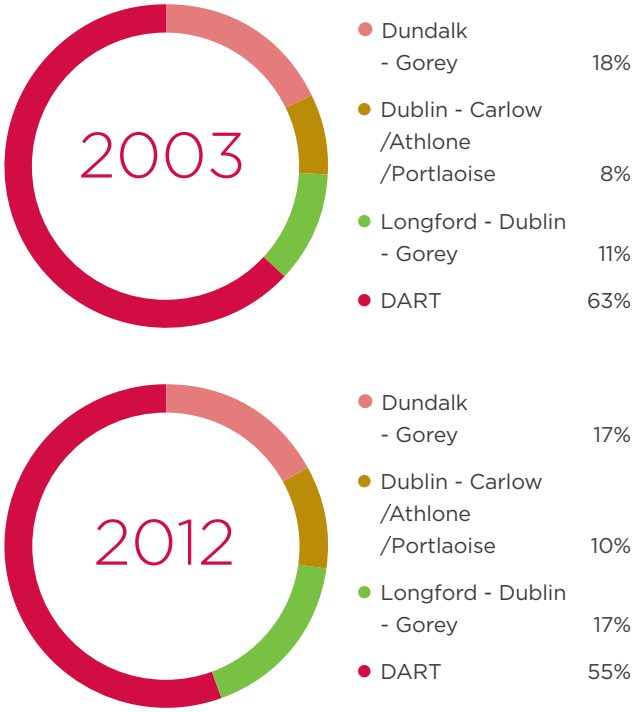
- DART
- Longford-Dublin-Gorey
- Dundalk-Dublin-Gorey
- Dublin-Carlow/Athlone/Portlaoise

The Rail Census does not uniquely report where individual passengers board or alight, so journeys cannot be attributed to a discrete route e.g. Longford to Dublin. It merely measures the total number of individuals boarding and alighting at each station by service. Therefore, in order to obtain an accurate picture of journeys taken along particular lines it is necessary to look at specific sections of the network. This point is best illustrated through an example. The Longford - Dublin - Gorey line mostly facilitates services and passengers travelling between Dublin and Longford. However, the Bray - Maynooth service also runs along this line. Therefore in order to quantify the number of complete journeys it is necessary to look entirely at the Longford - Dublin - Gorey section of the network rather than just the Longford - Dublin section. This explains the rail line classification used in the Rail Census.

There has been a change over time in the distribution of journeys across the various sections of the rail network in the GDA. When travel in both directions is considered it is noted that:

- DART journeys as a proportion of total journeys in the GDA declined from 63% in 2003 to 55% in 2012.
- The number of journeys on the Longford-Dublin-Gorey line grew by 54% between 2003 and 2012, thereby increasing its share of total journeys in the GDA from 11% to 17%.
- Daily patronage on the Dublin- Carlow/Athlone/ Portlaoise lines now accounts for just under 10,000 daily journeys or 10% of all journeys in the GDA.
- The number of daily journeys taken on Dundalk-Dublin-Gorey line has declined by 8% and now accounts for 18,000 daily journeys. However, it is still the busiest Commuter line, accounting for nearly half of Commuter traffic.

Figure 2
Daily journeys by line, 2003 and 2012



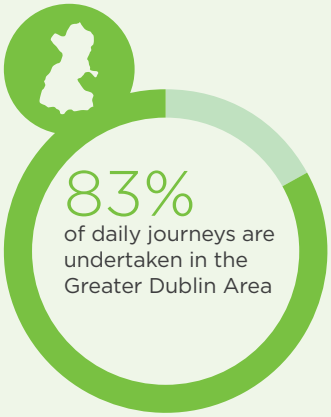
57,000
daily journeys taken on the DART, making it the most popular line in the country

Highlights from the 2012 Rail Census

- The GDA accounts for approximately 83% of daily journeys undertaken.
- 9 stations had in excess of 5,000 passenger boardings and alightings. Connolly station is the busiest station in the country with 28,000 daily boardings and alightings.
- 9 of the 10 busiest stations in Ireland were located in Dublin, with the exception of Kent station in Cork City which was the 6th busiest station in the State.

Nearly
1 in 2
passenger journeys in the State is taken on the DART.

Over
1 in 2
services operating is a Commuter service.



- Many stations had low levels of use, with 31 stations (21%) experiencing less than 100 daily journeys and another 17 (12%) having less than 200.
- The busiest train in the country on Census day was the 08.00 DART service from Greystones to Malahide. In total this services carried 1,427 passengers - the most passengers carried by any one service on Census day.
- The busiest section on this service occurred between Blackrock and Booterstown stations when 906 passengers were on board.
- Rail usage on individual lines in one direction (e.g. southbound) tends to equal the number of passengers traveling in the opposite direction, suggesting that the majority of people using the train use it for round trips.
- The Sligo to Dublin Line including intermedate services (i.e. Longford-Dublin) and services extending through to/from Bray is the most heavily peaked line, with 37% of all boardings on this line occurring in the peak hours (08.00 - 09.00 and 17.00 - 18.00). This compares to 32% on the DART and 30% on the Dundalk - Rosslare line.
- Only 20% of all boardings on services originating or destined for Dublin Heuston occurred in the peak hours (08.00-09.00 and 17.00-18.00). This is due to the peak in Heuston rail traffic occuring earlier. Outbound demand at Heuston peaks at 07:00-08:00, mostly due to early morning services bound for other parts of the country.
- The largest number of passengers per hour occurred on the Northern line (Dublin Connolly to Dundalk) between 08.00 and 09.00 when there was a total of 7,440 passengers on DART, Commuter and InterCity services, travelling towards the City Centre.
- The hourly profile of demand at stations outside the GDA is more spread out, with a greater variety of trip purposes (other than commuting) contributing to higher ridership figures outside peak times, as is the case on the Dundalk - Rosslare line.
- InterCity services accounted for 22% of passenger journeys.
- Although DART services were only 23% of all operated services , DART accounted for 46% of all passenger journeys.
- Commuter services (i.e. those excluding DART and InterCity Services) amounted to 55% of all services. Commuter services carried 33% of all passengers.