



# Rail Statistics for Ireland



## Bulletin Topics:

- Total number of passenger journeys
- Total Operated Vehicle Kilometres and Vehicle Seat Kilometres
- Passenger Revenues
- Free Travel Scheme Revenue
- Subsidies
- Network Changes
- Rail Accessibility



# Introduction



This statistical bulletin is a publication of the National Transport Authority of Ireland (“the Authority”). It focuses on rail passenger statistics in respect of heavy rail services provided by Iarnród Éireann (Irish Rail) and Luas light rail services.

On 1st December 2009 the Dublin Transport Authority Act 2008 and the Public Transport Regulation Act 2009 came into effect. Under these Acts the Authority signed a number of Public Service Contracts for bus and rail services, including with Iarnród Éireann. These contracts are subsidised because the operators are required to deliver what are called Public Service Obligations (PSO). PSO services are socially necessary transport services which may not be commercially viable and require a state subsidy to operate. These contracts were also new and much more comprehensive than previous arrangements. Consequently, the annual rail statistics in this bulletin begin in 2010 and cover the period 2010 to 2015 inclusive. Some data from prior to 2010 is included, such as subsidy payments, in order to give a historical perspective to the level of payments in recent years.

The Authority has the statutory obligation to secure the provision of light railway passenger services in the Greater Dublin Area. In September 2014 the Authority co-signed with the Railway Procurement Agency (RPA) a five year contract with Transdev Dublin Light Rail

Limited to operate the Luas services. The Authority has assigned aspects of its statutory function to the RPA, however, Luas fares, marketing, promotions, customer facing website and apps and their alteration are determined by the Authority.

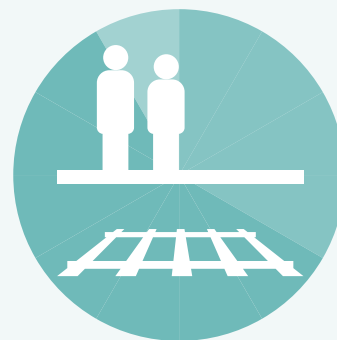
The reader of this bulletin may wish to see data on the contractual performance of Iarnród Éireann and Luas. Quarterly reports on the key performance indicators of these operators can be found on the Authority’s website [www.nationaltransport.ie](http://www.nationaltransport.ie) under the heading Public Transport Services.

**Statistics Qualification** - it is important to note that the figures used in this bulletin are intended to illustrate broad trends and are not meant to be read as exact calculations. Rounding has been used and this could affect overall percentages.

There can also be approximations for a number of reasons. Reporting periods could differ slightly due to calculation methods and this would limit the precise accuracy. Other factors could affect figures e.g. severe weather conditions, amendments to frequency or capacity levels, et cetera.

# 1

## Total Number of Passenger Journeys



Tables 1A and 1B along with Figure 1.1 illustrate the changes in passenger journeys on rail services across the State.

Over the past 2 years growth in passenger journeys on light rail and heavy rail combined has exceeded 10% and between Iarnród Éireann and Luas they have carried an additional 7 million passenger journeys in 2015 compared to 2013. While passenger journey growth on Luas is stronger than on Iarnród Éireann both transport operators are currently experiencing good growth.

Luas has seen annual passenger journeys rise each year from 2010 to 2015 inclusive with the largest increase of around 2 million passenger journeys across the Luas network in both 2014 and 2015 when compared to the previous year. This growth in Luas passenger journeys of about 25% between 2010 and 2015 coincides with the opening of three Luas line extensions between December 2009 and July 2011 and the recent recovery in the economy. There is more information on the network extensions under Section 6.

While Luas has experienced passenger journey growth in excess of 6% in 2014 and 2015 Iarnród Éireann passenger journeys have seen more modest growth of 2.9% in 2014 and 4.9% in 2015. Passenger journeys fell on Iarnród Éireann services each year between 2008 and 2013. While the level of decrease slowed each year 2013 saw the stabilisation of passenger numbers and 2014 saw the first year of growth. Iarnród Éireann also saw three rail extension lines opened during 2009 and 2010 and one lightly used rail line closed.

In 2013 Iarnród Éireann re-stated their 2012 passenger journeys from the previous 36.92 million to the updated 36.74 million due to having enhanced passenger journey data. This re-statement while changing the percentage fall in passenger journeys in 2012 does not affect the overall trend in passenger journey numbers during the period 2010 to 2015.

Table 1A: Annual passenger journeys (millions)

Year/Operator	Iarnród Éireann	Luas
2010	38.23	27.53
2011	37.38	29.10
2012	36.74	29.32
2013	36.74	30.51
2014	37.80	32.61
2015	39.66	34.60

Table 1B: Percentage change of annual passenger journeys

Year/Operator	Iarnród Éireann	Luas
2010	-	-
2011	-2.2%	5.7%
2012	-1.7%	0.8%
2013	0.0%	4.1%
2014	2.9%	6.9%
2015	4.9%	6.1%

Figure 1.1 shows in bar chart format Iarnród Éireann and Luas passenger journey numbers since 2010. In 2010 Iarnród Éireann carried in excess of 10 million passenger journeys more than Luas but over the past 6 years Luas has seen passenger journeys grow rapidly each year and has narrowed that gap to around 5 million passenger journeys.

Figure 1.1: Public Transport Passenger Volumes, 2010-2015



Table 1C: Iarnród Éireann Total Passenger Journeys by segment

Year	Intercity	Commuter	DART	Total
2013	9.88	11.25	15.62	36.74
2014	10.21	11.64	15.95	37.80
2015	10.44	12.07	17.15	39.66

Table 1D: Percentage split of Iarnród Éireann annual passenger journeys by segment

Year	Intercity	Commuter	DART	Total
2013	27%	31%	42%	100%
2014	27%	31%	42%	100%
2015	26%	31%	43%	100%

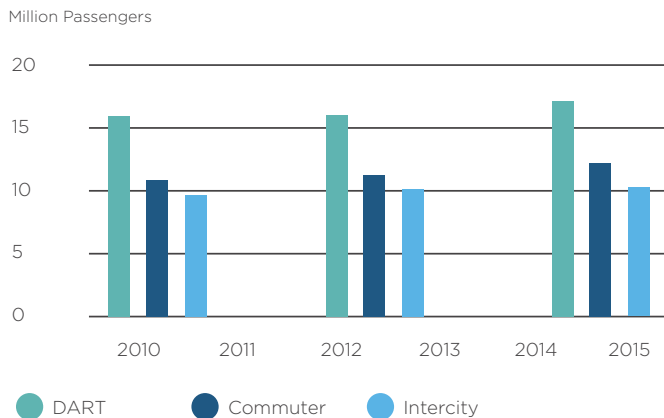
Table 1C. to 1E. and Figure 1.2 gives a breakdown of Iarnród Éireann passenger journeys by segment. The Commuter segment covers the trips to Dublin on the rail lines from Drogheda, Maynooth, Kildare, Wicklow and Navan along with the trips to Cork city along the Cobh and Midleton rail lines. The commuter and DART passenger journeys which are based around Dublin and Cork account for 74% of all Iarnród Éireann passenger journeys. While DART passenger journeys grew by an impressive 7.5% in 2015, commuter passenger journeys have grown by about 3.5% each year for the past two years.

Intercity passenger journeys comprise of the rail lines to Dublin from Cork, Belfast, Tralee, Limerick, Galway, Westport, Sligo, Waterford and Rosslare along with Limerick to Galway, Limerick to Ballybrophy and Limerick Junction to Rosslare rail lines. These rail lines combined carry over 10 million passenger journeys annually or about 26% of the total Iarnród Éireann passenger journeys. Growth in passenger journeys on the intercity rail lines is somewhat less in 2015 than on the commuter rail lines.

Table 1E: Percentage change of Iarnród Éireann annual passenger journeys by segment

Year	Intercity	Commuter	DART	Total
2013	-	-	-	-
2014	3.4%	3.5%	2.1%	2.9%
2015	2.3%	3.6%	7.5%	4.9%

Figure 1.2: Iarnród Éireann Total Passenger Journeys by Segment, 2013 - 2015



## Rail Patronage and General Economic Data

Passenger demand for public transport services is correlated to economic activity. Economic growth generally increases employment, net immigration, disposable income and consumer spend, all of which lead to greater travel. Economic decline produces the opposite effect. Consequently, passenger journeys increased greatly during the economic boom leading up to 2007 but declined radically from 2008 onwards, resulting in a significant reduction in patronage.

In Figure 1.2, the graph shows changes in Iarnród Éireann and Luas passenger journeys, alongside some general economic data. Three new Luas line extensions were opened between late 2009 and July 2011 and this has had a positive impact on the growth of Luas passenger journeys.

Gross National Product (GNP) is a measure of the value of the goods and services that the country's citizens produced, regardless of their location. Change in GNP is often used as an indicator of the general health of the economy and in broad terms, an increase in real GNP is interpreted as a sign that the economy is doing well.

Employment simply highlights changes in the numbers of people at work. As employment increases there is the potential for a higher number of commuter and business trips, as well as discretionary travel, if those who have gained employment choose to use public transport.

The Retail Sales Index (RSI) is a short-term indicator of changes in the value of retail sales in Ireland. It provides a measure of retail trading, and supplies a valuable guide to consumer spending behaviour in the Irish economy. The

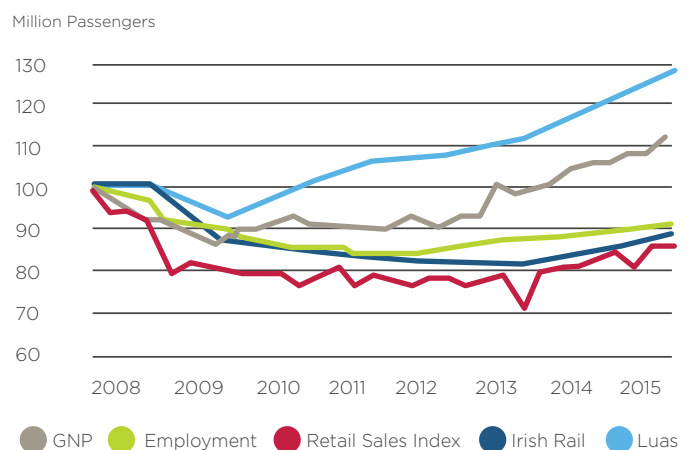
RSI is compiled and published every month by the Central Statistics Office (CSO) and although it is a short-term indicator, it can be a valuable tool for better understanding the general economic climate in Ireland. Further details are available on the CSO website.

Following a number of years when GNP was falling strong growth returned to the Irish economy towards the end of 2013 with growth rates for GNP at 4.6% in 2014, 6.9% in 2014 and 5.7% in 2015. Most economic forecasts for 2016 and 2017 predict further growth in the economy although at rates closer to 4% or 5%. The number of people in employment which had reached 2.1 million in 2008 fell to 1.8 million by the end of 2012. In 2013 the numbers in employment began to recover slowly and by the end of 2015 had risen to just under 2 million. Following the growth in employment the retail sales index began to rise although lagging a number of months behind.

Growth in passenger journeys on Luas recovered in 2013 and is leading all the economic indicators in terms of growth. Growth in Iarnród Éireann passenger journeys stabilized in 2013 and is growing since 2014 but at a slower rate than Luas. While Iarnród Éireann passenger journeys, employment and the retail sales index have grown over the past few years they are still below their 2008 levels while Luas passenger journeys and GNP have both recovered to a level above their 2008 position.

Although the economy is the dominant factor behind people's propensity to travel, there are other factors that influence demand, particularly for public transport and these include fares, service quality, and competition from other modes of transport. The influence of these factors over and above the economic effects of recent years would be difficult to estimate, as would the extent and rate to which public transport patronage may improve.

Figure 1.3: Rail Passenger Journeys alongside General Economic Data, 2008 - 2015



## 2

# Total Operated Vehicle Kilometres and Vehicle Seat Kilometres



The changes in both vehicle kilometres and vehicle seat kilometres operated by Iarnród Éireann and Luas across the State are shown in Tables 2A to 2D along with Figure 2.1.

'Operated vehicle kilometres' refer to the actual amount of in service vehicle kilometres that a rail company has operated in a given period, as opposed to 'scheduled vehicle kilometres' which would indicate the number of vehicle kilometres that they intended to operate as per their cumulative timetables.

'Vehicle seat-kilometres' meanwhile, is a unit of passenger transport capacity measuring the total capacity (both seating and standing) of the train or tram available multiplied by the in service kilometres travelled.

Given that Iarnród Éireann and Luas both operate a variety of trains and trams with a differing numbers of seats, vehicle seat-kilometres can be more instructive in illustrating actual transport capacity.

For Iarnród Éireann, there was generally a decreasing or neutral trend in both measures between 2010 and 2015, this reduction can be partly attributable to a better matching of public transport supply with a changed transport demand. In 2014 and to a lesser extent in other years the number of seat kilometres fell more rapidly than the number of kilometres operated. This is because Iarnród Éireann implemented a fleet strategy which allowed them to maintain the number of services provided but reduce costs by matching more closely the number of carriages required to the number of passengers travelling. In 2015 the vehicle seat kilometres

increased by over 7% by increasing the number of carriages employed while maintaining the same number of in service vehicle kilometres.

For Luas services, a major contributory factor to the significant increases in both annual operated vehicle kilometres and annual operated vehicle seat kilometres in 2011 were the new line extensions introduced from late 2010 and 2011 (more details are available in Section 6). There was an approximate 7% reduction in Luas annual operated vehicle kilometres and annual operated vehicle seat kilometres in 2013 as a result of some service frequency changes but this was partially reversed in 2014 to cater for the increasing number of passenger journeys. 2015 saw a marginal decrease in both measures despite carrying additional passenger journeys.

Note, the Iarnród Éireann data refers to passenger services and does not include data in respect of Iarnród Éireann's freight operations.

Table 2A: Annual operated in service vehicle kilometres (millions)

Year/Operator	Iarnród Éireann	Luas
2010	15.95	2.897
2011	15.96	3.687
2012	15.96	3.835
2013	15.967	3.544
2014	15.965	3.667
2015	15.965	3.664

Table 2B: Percentage change of annual operated in service vehicle kilometres

Year/Operator	Iarnród Éireann	Luas
2010	-	-
2011	0.1%	27.3%
2012	0.0%	4.0%
2013	0.0%	-7.6%
2014	0.0%	3.5%
2015	0.0%	-0.1%

Figure 2.1: Annual Vehicle Seat Kilometres Operated

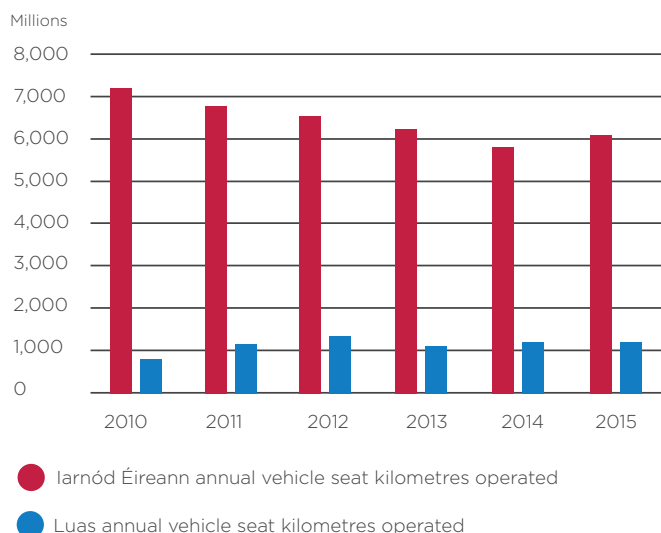


Table 2C: Annual operated vehicle seat kilometres (millions)

Year/Operator	Iarnród Éireann	Luas
2010	7,063.07	898.38
2011	6,677.55	1,143.13
2012	6,623.00	1,188.94
2013	6,398.00	1,098.79
2014	5,707.00	1,136.99
2015	6,123.20	1,135.84

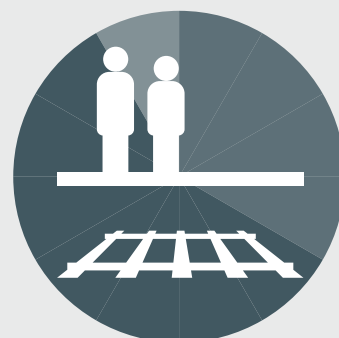
Table 2D: Percentage change of annual operated vehicle seat kilometres

Year/Operator	Iarnród Éireann	Luas
2010	-	-
2011	-5.5%	27.2%
2012	-0.8%	4.0%
2013	-3.4%	-7.6%
2014	-10.8%	3.5%
2015	7.3%	-0.1%



# 3

## Passenger Revenues



In Table 3A passenger revenues for Iarnród Éireann and Luas are made up of cash, Leap revenue, and prepaid ticket sales (including Tax saver tickets), as well as the Free Travel Payment grant from the Department of Social Protection.

The Iarnród Éireann figures include ticket sales from all their services - Dart, Commuter and Intercity. The passenger revenues reported in this section for Iarnród Éireann do not include the annual subsidy payment from the Authority.

Luas 'Tram Revenue' means all revenue from fares and as noted in the qualification, there can be slight differences in figures due to the variances between the combined reporting periods and the calendar year. Luas revenue does not include any subsidy payments from the RPA accumulated funds that may have been paid.

Passenger revenue is presented at current prices, that is, figures are not adjusted for inflation and this is the same for other financial data in the bulletin unless otherwise stated.

Passenger revenue growth is as a result of increased fares and increased passenger journeys. Significant Iarnród Éireann fares increases were approved by the Authority for 2013 and 2014 and these fare increases facilitated the growth in passenger revenues at a time when passenger journeys were beginning to recover. In 2015 Iarnród Éireann average fare increases have been moderate and it is the growth in passenger journeys which has been the main contributor to passenger revenue growth. The Free Travel grant which has not increased since 2010 has a moderating effect on the growth in passenger revenues.

Luas passenger revenues are growing on the back of increased passenger journeys and while they did receive a significant fares increase in 2012 since then fares increases have on average been less than 2% per year.

Table 3A: Annual passenger revenue (€ millions)

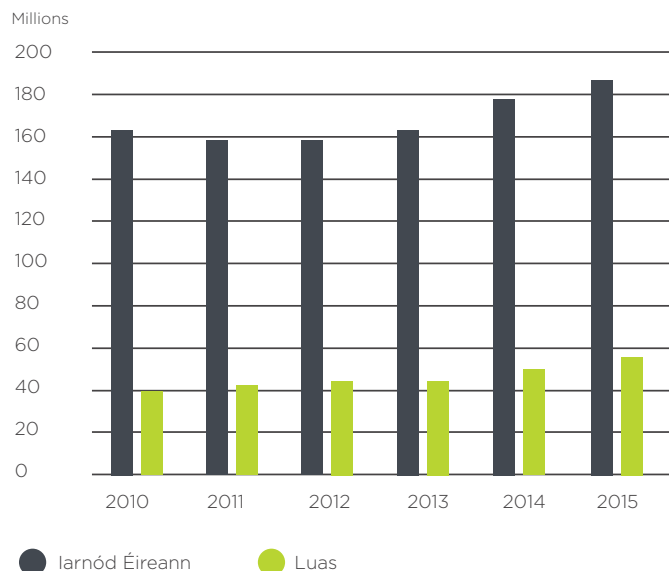
Year / Operator	Iarnród Éireann	Luas
2010	162.59	40.43
2011	156.65	43.66
2012	157.91	46.44
2013	166.89	47.89
2014	174.52	50.67
2015	184.18	54.37

Table 3B: Percentage change in annual passenger revenue

Year / Operator	Iarnród Éireann	Luas
2010	-	-
2011	-3.7%	8.0%
2012	0.8%	6.4%
2013	5.7%	3.1%
2014	4.6%	5.8%
2015	5.5%	7.3%

In Figure 1.1 we saw passenger journeys for both Iarnród Éireann and Luas in bar chart format where it showed that while Iarnród Éireann carried more passengers than Luas the difference was not that large. In Figure 3, we see that the Iarnród Éireann passenger revenues is more than three times the Luas passenger revenue despite the passenger journeys being relatively close. The difference in revenues is due to the fact that Luas journeys are short relative to most Iarnród Éireann journeys and hence the fare per passenger tends to be much lower for Luas journeys resulting in much lower total passenger revenues for Luas.

Figure 3.1: Annual Passenger Revenues 2010 - 2015



Tables 3C to 3E show the breakdown of Iarnród Éireann passenger revenue by segment. In table 1D earlier we saw that intercity passenger journeys accounted for about 26% of Iarnród Éireann passenger journeys while we can see that intercity accounts for almost 60% of Iarnród Éireann passenger revenues. This is because the average fare on intercity journeys is generally much bigger than on commuter or DART journeys.

DART and Commuter passenger revenues which grew by 7% each in 2015 could have grown by a larger amount except that passengers are switching from cash fares to Leap single fares. The Leap single fares are at least 20% cheaper than the cash equivalent. As passengers switch to the cheaper travel option growth in passenger revenue is moderated. However revenue growth of 7% in 2015 is a very good result especially in the commuter sector which had almost 10% growth in 2014.

Table 3C: Iarnród Éireann Total Passenger Revenues by Segment (millions)

Year / Segment	Intercity	Commuter	DART	Total
2013	100.55	32.25	34.09	166.89
2014	103.18	35.34	36.01	174.53
2015	107.83	37.81	38.54	184.18

Table 3D: Percentage split of Iarnród Éireann annual passenger revenues by Segment

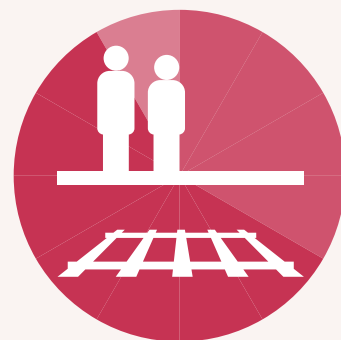
Year / Segment	Intercity	Commuter	DART	Total
2013	60%	19%	20%	100%
2014	59%	20%	21%	100%
2015	59%	21%	21%	100%

Table 3E: Percentage change of Iarnród Éireann annual passenger revenues by Segment

Year / Segment	Intercity	Commuter	DART	Total
2013	-	-	-	-
2014	2.6%	9.6%	5.6%	4.6%
2015	4.5%	7.0%	7.0%	5.5%

## 4

# Free Travel Scheme Revenue



The Department of Social Protection's Free Travel Scheme is available to all persons aged 66 and over living permanently in the State. Some people under 66 may also qualify such as carers in receipt of a Carer's Allowance and certain other persons in receipt of a Disability Allowance or Invalidity Pension.

Free travel is available on all regular, scheduled Iarnród Éireann and Luas rail services. Table 4 shows annual Department of Social Protection (DSP) payments for the Free Travel Scheme for these services.

In general revenue from DSP for the free travel scheme has not changed since 2010. The differences in table 4A from one year to the next reflect timing differences in most cases. Also DSP impose penalties on the rail operators if no services are operated such as a result of industrial action as occurred in Iarnród Éireann in 2014 and 2015.

Table 4A: DSP Revenue for Free Travel Scheme (€ millions)

Year / Operator	Iarnród Éireann PSO services	Luas PSO services
2010	14.59	2.96
2011	14.60	4.13
2012	14.61	3.79
2013	14.60	3.40
2014	14.50	3.91
2015	14.63	3.91

Table 4B: Percentage change in DSP Revenue

Year / Operator	Iarnród Éireann	Luas
2010	-	-
2011	0.0%	39.5%
2012	0.1%	-8.2%
2013	-0.1%	-10.4%
2014	-0.7%	15.1%
2015	0.9%	0.0%

# Subsidies



Each year funding is provided for socially necessary but commercially unviable Iarnród Éireann rail services. The PSO payments in respect of the rail transport contract with Iarnród Éireann since 2001 are set out in Table 5A.

Iarnród Éireann provides these Public Service Obligation (PSO) services under a contract to the Authority. Each quarter, 10% of the subsidy payment is dependent on the operator meeting certain performance criteria.

There is a reduction in the Iarnród Éireann PSO subsidy figure in 2015 of 19.26 million or 16.4%. However Iarnród Éireann received additional exchequer funds for their Infrastructure Management business in 2015 which partly compensated them for a reduction in PSO subsidy payments which is paid to their Railway Undertaking business. The Iarnród Éireann 2012 figure included an additional subsidy payment of 30.67m to address an operations deficit in the company at the time. Excluding the payment of 30.67m, there was a reduction of 6.4% in the Iarnród Éireann PSO subsidy figure between 2012 and 2013. Iarnród Éireann PSO payments have dropped by almost 50% since their maximum in 2007.

Luas experienced deficits between Luas revenue and operating costs between 2011 and 2013. In 2014 Luas operations returned a surplus of 1.94m and this increased to 4.28m in 2015. Although, Luas does not receive PSO funding from the Authority, the Authority has agreed to the balancing of these shortfalls from the RPA's accumulated cash reserve (this reserve is the source of funding for the maintenance of the Luas network along with the Authority's capital grant funds.) While Luas returned a surplus in 2015 on its operating activities it should be remembered that all capital works such as the rail lines and the trams are funded by the exchequer. Iarnród Éireann capital works are also funded by the exchequer.

Table 5A: PSO subsidy payments

Year	Iarnród Éireann (€ millions)
2001	146.02
2002	155.48
2003	168.26
2004	171.42
2005	179.99
2006	188.72
2007	189.91
2008	181.15
2009	170.62
2010	155.14
2011	148.69
2012	166.42*
2013	127.03
2014	117.37
2015	98.11**

Note: Figures are in millions. Source: CIÉ Annual Reports and Authority statistics from 2010.

\* The Iarnród Éireann 2012 figure includes an additional subsidy payment of 30.67m to address the operational deficit of the company.

\*\* Iarnród Éireann received additional exchequer funds for their Infrastructure Management business which partly compensated them for a reduction in PSO subsidy payments to their Railway Undertaking business which receives the PSO subsidy payments.

Table 5B: Percentage change in PSO subsidy payments

Year	Iarnród Éireann
2001	-
2002	6.5%
2003	8.2%
2004	1.9%
2005	5.0%
2006	4.8%
2007	0.6%
2008	-4.6%
2009	-5.8%
2010	-9.1%
2011	-4.2%
2012	11.9%
2013	-23.7%
2014	-7.6%
2015	-16.4%

Table 5C: (Deficit) / surplus on Luas infrastructure activities before interest, tax and depreciation

Year	Luas ( millions)
2009	2.744
2010	1.13
2011	(3.30)
2012	(3.44)
2013	(2.21)
2014	1.94
2015	4.28

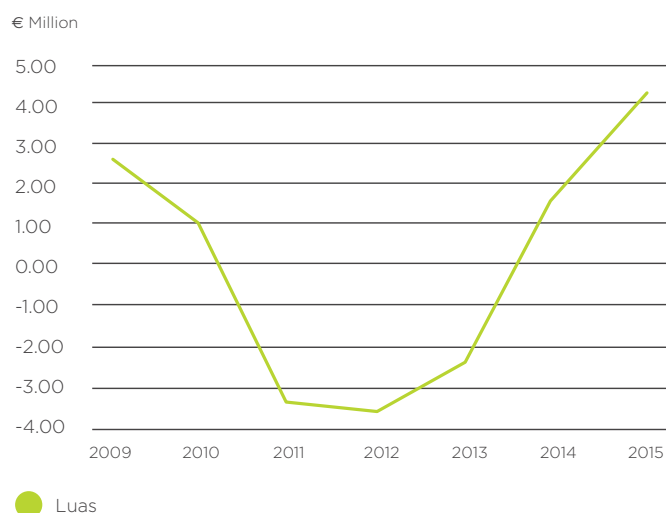
Source: RPA Annual Reports

Figure 5.1: Iarnród Éireann PSO Payments 2001 - 2015



Note: The Iarnród Éireann 2012 figure includes an additional subsidy payment of €30.67m to address the operational deficit of the company.

Figure 5.2: (Deficit)/Surplus on Luas Infrastructure Activities, 2009 - 2015



## 6

# Network Changes



The major changes that have occurred to both the Iarnród Éireann and Luas network over the last number of years are outlined in Tables 6A and 6B.

Table 6A: Iarnród Éireann Network changes

Line extensions / re-openings/closures	Date
Cork Suburban Rail: Cork - Midleton	July 2009
Western Railway Corridor: Ennis - Athenry	March 2010
Rosslare - Waterford passenger line closure	September 2010
Dublin Suburban Rail (Western Commuter): Clonsilla - M3 Parkway	September 2010

Table 6B: Luas Network changes

Line extensions	Date
Red Line: Connolly - Docklands	December 2009
Green Line: Sandyford - Brides Glen	October 2010
Red Line: Belgard - Saggart	July 2011

# 7

## Rail Accessibility



The Iarnród Éireann and Luas rail fleets are wheelchair accessible, as outlined in Table 7.

However for wheelchair users, Iarnród Éireann trains require a ramp to enable boarding from the platform to the train carriages. A special portable ramp is used for this purpose and these are currently available at staffed stations and on board some trains.

Table 7A: Rail fleet internally wheelchair accessible

Year/Operator	Iarnród Éireann	Luas
2015	100%	100%

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