

Research and Innovation in the Republic of Ireland and Northern Ireland

This document provides an insight into R&D activity in Northern Ireland (NI) and the Republic of Ireland (ROI), and the unique links and collaborations which exist across the island of Ireland.

R&D activity in Northern Ireland and the Republic of Ireland

FIGURE 1

R&D activity in NI (2016)¹



The UK as a whole invested £33.1bn in R&D in 2016 (1.67% of GDP). 2% of this was performed in Northern Ireland.

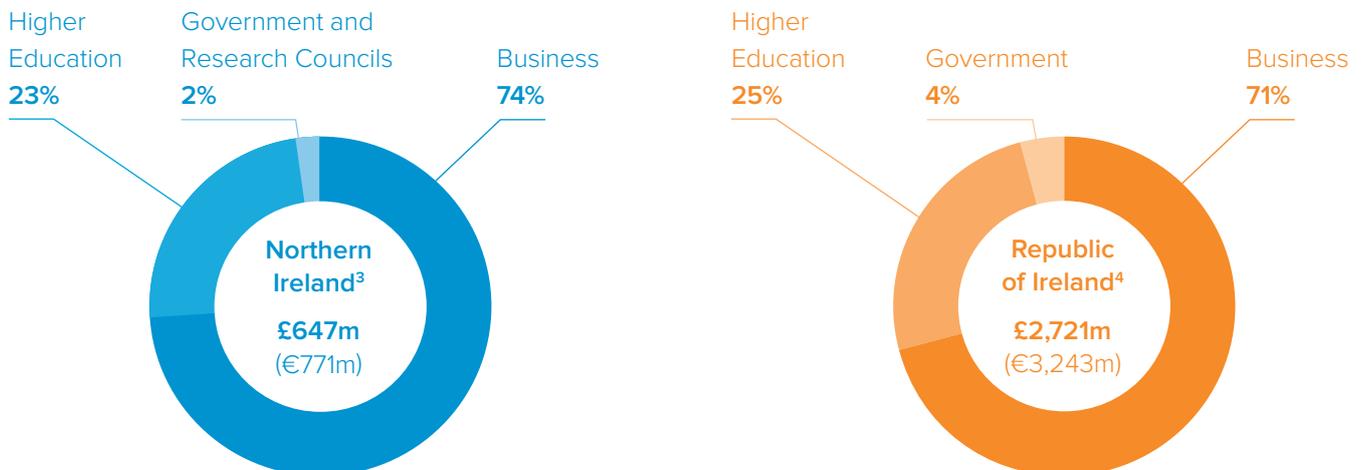
R&D activity in ROI (2016)²



The Republic of Ireland invested 1.18% GDP in R&D in 2016.

FIGURE 2

Who performs R&D?



1. Source: Office for National Statistics. 2018 Gross domestic expenditure on research and development, UK: 2016.
 2. Source: Department for Business, Enterprise and Innovation (ROI), The Research and Development Budget 2016 – 2017.
 3. Source: Office for National Statistics. 2018 Gross domestic expenditure on research and development, UK: 2016.
 4. Source: Department for Business, Enterprise and Innovation (ROI), The Research and Development Budget 2016 – 2017.

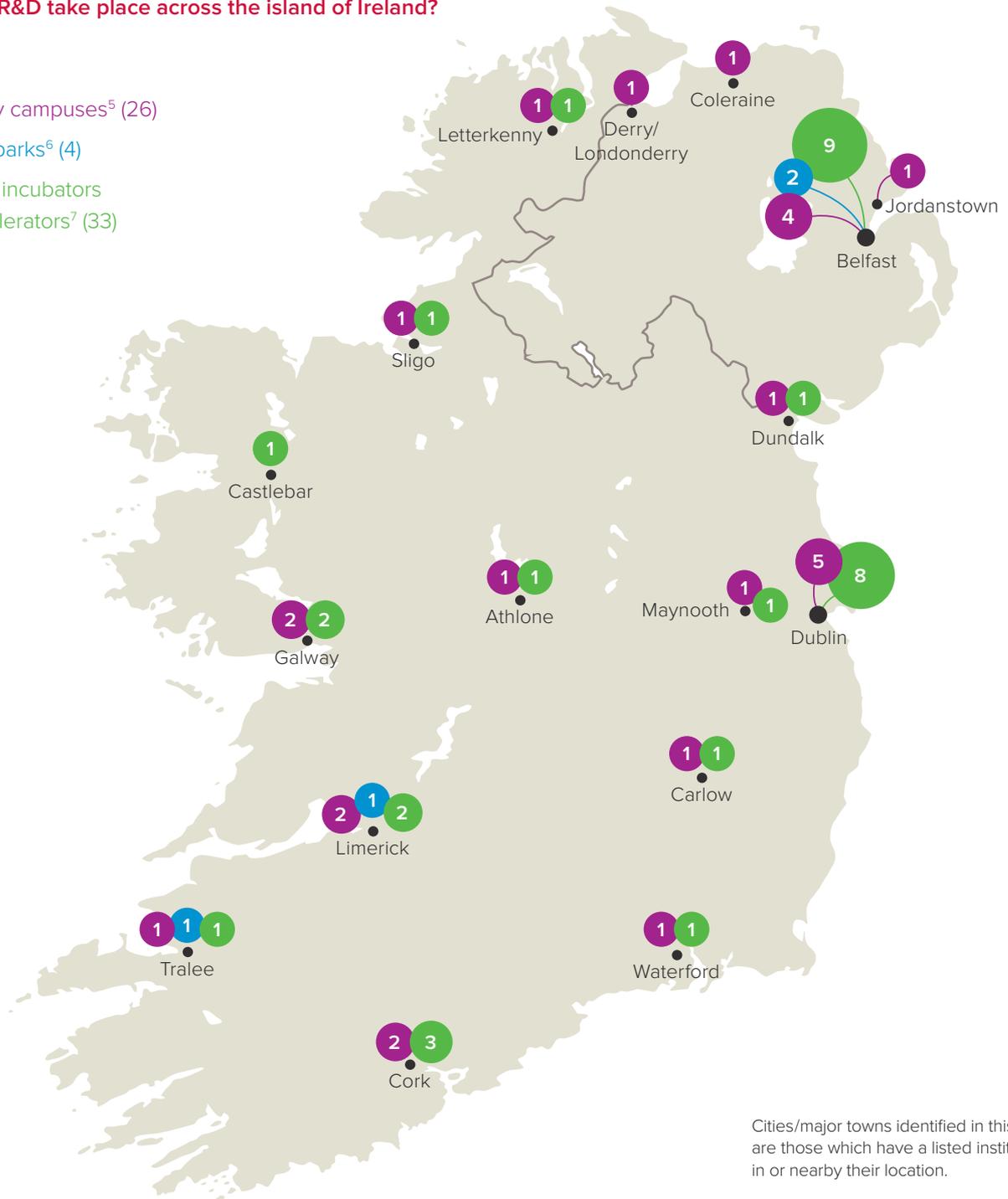
R&D activity in Northern Ireland and the Republic of Ireland

FIGURE 3

Where does R&D take place across the island of Ireland?

KEY

- University campuses⁵ (26)
- Science parks⁶ (4)
- Business incubators and accelerators⁷ (33)



Cities/major towns identified in this map are those which have a listed institution in or nearby their location.

5. Northern Irish Universities are from Higher Education Statistics Agency 2019. Higher education provider's data retrieved on 6 April 2019. The term includes all publicly funded universities and other HE institutions in the UK, as well as the privately funded University of Buckingham. Campus sites located via institution's websites. Postcodes obtained from web searches or UK Learning Providers. See <http://learning-provider.data.ac.uk/> (accessed on 24.10.2017). Republic of Ireland Universities are from Education Ireland. The Dublin Institute for Advanced studies has also been included in this list. Institutes of Technology in ROI have been listed as both business incubators and University campuses.

6. Northern Ireland Science Parks identified are from UK Science Parks Association 2019. Includes full and associate member only. Data supplied with postcodes provided on request by UKSPA in November 2017. Newer members' postcodes obtained from web searches. Republic of Ireland Science Parks are from UNESCO list of science parks in Europe.

7. Northern Ireland business incubators and accelerators are from Department for Business, Energy and Industrial Strategy 2017. Business incubators and accelerators: the national picture. Data released on 20 June 2017. Data does not include virtual programmes with no geographical site. Organisations that are members of UKSPA were removed from the list. Republic of Ireland were sourced from Enterprise Ireland list of Incubation Centre.

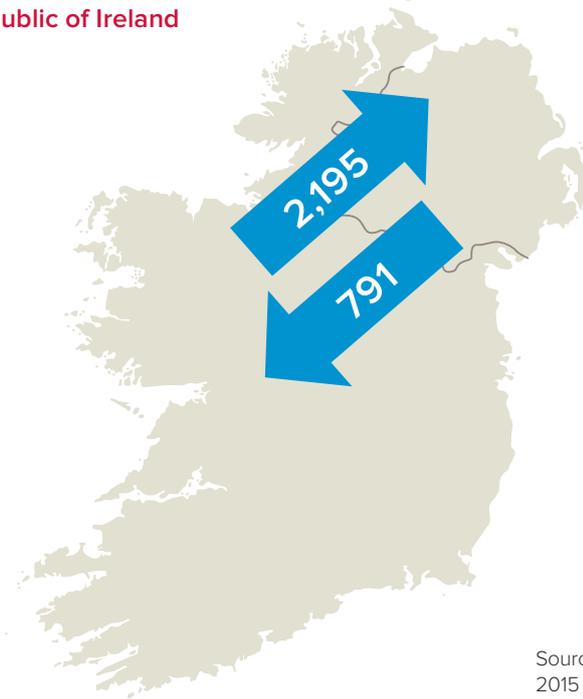
Movement of people

FIGURE 4

Movement of students between the Republic of Ireland and Northern Ireland (2015 – 2016)

2,986

students moved between the Republic of Ireland and Northern Ireland for Higher Education study and training in 2015/16.



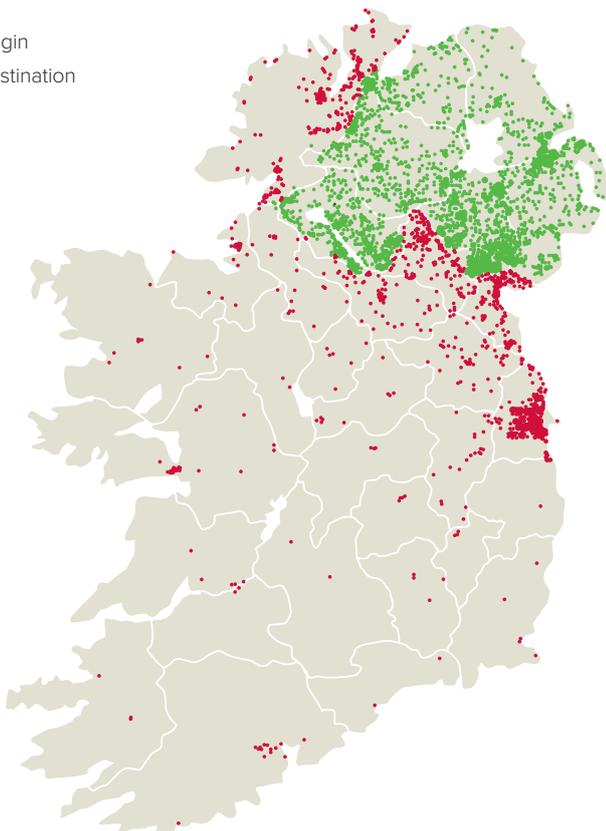
Source: HEA and HESA Statistical Returns, 2015 – 2016. Based on full-time enrolments.

FIGURE 5

These maps provide a visualisation of the cross-border flow of commuters to work and study in higher-education and further-education institutions in Northern Ireland and the Republic of Ireland.

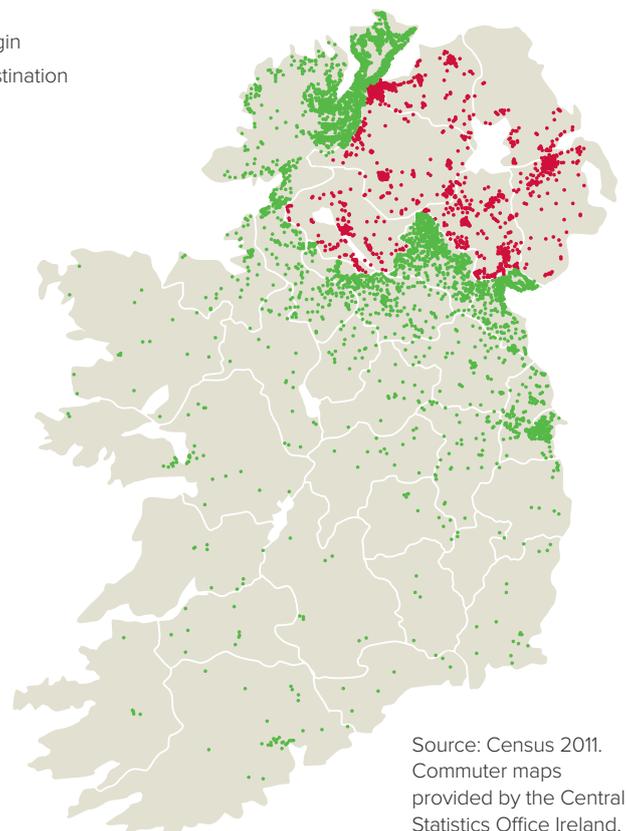
Origin and destination of NI workers and students in the ROI

- Origin
- Destination



Origin and destination of ROI workers and students in NI

- Origin
- Destination



Source: Census 2011. Commuter maps provided by the Central Statistics Office Ireland.

Existing collaborations between the ROI and UK

#1

The UK is the ROI's top international collaborator with 15,158 co-authored publications between 2014 – 2018⁸.

63%

of successful Horizon 2020 applications in NI involved a partner from ROI (2014 – 2017)⁹.

79%

of academics surveyed by the Royal Irish Academy agreed that research and HE collaborations between Ireland and the UK are very important in their field of study¹⁰.

24%

EU nationals (excluding UK nationals) make up 24 per cent of the combined staff and 33 per cent of the academic staff of Queen's University Belfast (QUB) and Ulster University (UU)¹¹.

FIGURE 6

ROI collaborative links in Horizon 2020*

Country	Number of collaborations	% total
Germany	1947	16
Spain	1839	15
United Kingdom	1778	14
France	1762	14
Italy	1607	13
Netherlands	988	8
Belgium	946	8
Greece	651	5
Portugal	497	4
Sweden	495	4

*as of 2 September 2019

Source: Europa Country dashboard. This data-set does not enable the extraction of ROI & NI specific collaborations, as it is categorised by member state.

EU funding for research and innovation

Funding from EU Framework Programmes (2016)¹²



Funding from European Regional Development Fund¹³

Between 2014 – 2020, Northern Ireland will have received €60 per capita for research and innovation projects from European Regional Development Funds. More than double the amount Scotland receives (€29), and four times the amount England receives (€15).

Value in £GBP calculated using exchange rate of €1.192 to £1 (exchange rate on 01/07/2016). Numbers rounded up.

8. Source: Scopus, Data Extraction: 28 June 2019 (Source: Figures based on data supplied by Queen's University Belfast and Ulster University).

9. Source: Royal Irish Academy: Higher Education and Research in Northern Ireland Post-Brexit.

10. Ibid.

11. Source: Figures based on data supplied by Queen's University Belfast and Ulster University.

12. Source: <https://webgate.ec.europa.eu/dashboard>.

13. Source: Technopolis, The Role of EU Funding in UK Research and Innovation.