



An Roinn Oideachais  
agus Scileanna  
Department of  
Education and Skills

# Teacher Demand and Supply in Ireland 2020-2036

## A Technical Report



## Contents

Foreword.....	1
1. Introduction .....	2
(i) Background .....	2
(ii) Key Factors that impact on teacher supply and demand .....	2
(v) Data Working Group Technical Report .....	4
(vi) Aim of data analysis .....	5
2. The teacher demand and supply model .....	6
3. The demographic landscape .....	7
4. Primary Sector.....	7
(i) Projected enrolments .....	7
(ii) Primary teacher numbers .....	8
(iii) Retirements.....	10
(iv) Resignations.....	11
(v) Career breaks .....	12
(vi) Job sharing .....	13
(vii) Secondments.....	13
(viii) Demand for primary teachers.....	14
(ix) Supply of primary teachers .....	14
(x) Projected demand and supply in primary schools.....	15
(xi) Absences and substitution in primary schools .....	17
Leave types .....	19
Maternity leave.....	21
Projections of substitute teacher demand .....	22
Paternity leave and other policy changes.....	22
(xii) The regional dimension at primary level .....	23
5. Post-primary sector.....	26
(i) Projected enrolments .....	26
(ii) Post-primary teacher numbers.....	27
(iii) Retirements.....	28
(iv) Resignations.....	30
(v) Career breaks .....	31
(vi) Job sharing .....	32

(vii) Secondments.....	32
(viii) Demand for post primary teachers.....	32
(ix) Supply of post primary teachers .....	33
(x) Projected demand and supply in post-primary schools .....	34
(xi) Absences and substitution in voluntary secondary and community & comprehensive schools .....	36
Leave types .....	37
Maternity leave.....	39
Projections of substitute teacher demand .....	40
(xii) The regional dimension at post-primary level .....	41
Appendix 1 .....	43
Migration .....	43
Fertility.....	43
Appendix 2 .....	44
NUTS 3 Regions.....	44
Appendix 3 .....	45
Data issues in developing the model .....	45
Appendix 4 .....	46
Teacher Supply Data Working Group - Terms of Reference and Membership .....	46

## Foreword

The challenges faced by schools in recent years in recruiting teachers have been well publicised by various stakeholders in the education sector. In developing formal structures to address the issues and develop appropriate responses, the Department has worked in collaboration with a range of education partners including higher education institutions (HEIs), school management bodies, the Teaching Council and the Higher Education Authority (HEA) and has consulted extensively with the teacher unions as well as with other stakeholders.

This inter-agency and consultative approach is reflected in the composition of the various working groups which have been established to consider the multifaceted elements that impact on teacher supply and has led to the development of the Teacher Supply Action Plan, which includes a range of actions for a variety of stakeholders as well as for the Department.

This Data Report, which is the product of one of the collaborative inter-agency groups, the Data Working Group, is a working document intended to form the basis for further discussion and consultation between the Department and relevant agencies and education partners.

Pupil demographics is a key driver for teacher demand, but it is not the only one. On close examination and taking on board the perspectives of all stakeholders it is important to recognise the challenge associated with projecting teacher supply and demand, which is very complex, and requires in-depth analysis across a range of factors. The level of complexity also illustrates that many of the issues being identified are not amenable to a quick solution but require a more strategic and collaborative approach towards a common goal which is to ensure the adequate supply of appropriately qualified teachers to meet the needs of the school system now and into the future.

While projecting teacher supply and demand is complex in general, it becomes even more complex at post-primary level where subject specialisms and the selection of same by students are factors which further complicate the process. In that regard this report does not include projections of demand for post primary subject teachers but the analysis of data on subject specialisms is ongoing and the outcome of that analysis will be the subject of further consultation.

Continuing the spirit of collaboration adopted to date this report is published as a consultation working document to facilitate further consideration and discussion between stakeholders. We need to ensure that the assumptions and understandings feeding into the analysis are all reflected upon. The considerations and observations of all relevant education partners will be key to informing future direction as this work progresses and we can establish a robust process for the effective projection of teacher demand and supply across the school system.

**Seán Ó Foghlú,**  
Secretary General  
Chair of Teacher Supply Steering Group

# 1. Introduction

## (i) Background

In recent years the education partners, including school management bodies, teacher unions and school leaders, have reported challenges being experienced by schools across Ireland in recruiting teachers. At post primary level, management bodies have reported shortages of teachers of STEM subjects, Irish, modern foreign languages and home economics, as well as the recruitment of substitutes more generally, while at primary level the recruitment of substitute teachers is the most challenging issue.

The lack of availability of appropriately qualified teachers creates very significant challenges for schools and, ultimately, for school students who are impacted directly. Teacher supply is complex and involves a range of underlying constituent parts. Therefore from the outset it was recognised that addressing this multifaceted and complex challenge required a new and collaborative approach involving all key stakeholders.

This report continues the earlier work of the Teaching Council, which has a statutory function to advise the Minister for Education and Skills in a number of areas, including teacher supply.

It was in this context that in 2013 the Department asked the Council to consider the matter of teacher supply. The Council established a Technical Working Group and the Group's final report, 'Striking the Balance' (published June 2017), focusses on the development of a model of primary teacher supply whilst outlining the work which will be required to establish a sustainable long term model of post primary teacher supply. The Report provides a comprehensive overview of the issues involved and sets out an approach to planning the work necessary to develop a model for achieving a better balance between teacher supply and demand in the medium to long term. A key recommendation was that a Standing Group should be established to review the future supply needs of Irish schools.

## (ii) Key Factors that impact on teacher supply and demand

**Pupil demographics** is a key driver for teacher demand and the key factor in developing the medium and long term projections included in this report . Primary enrolments are projected to have peaked in 2018 and to fall by 134,000 to 2036 (under the M2F2 scenario, see appendix 1). At post primary level enrolments will increase by 40,000 approximately to 2024 before decreasing by 75,000 approximately to 2036. It is important to note also that the proportionate change in enrolments will vary across regions<sup>1</sup>.

**Career opportunities for teachers** have increased due to the increasing number of permanent full-time positions created in Ireland in recent years as well as opportunities in other jurisdictions, providing greater scope for graduates to obtain permanent employment and to travel. The consequence of this means that some schools have been experiencing challenges in hiring teachers to fill temporary or substitute roles but also in certain subject specialisms in post-primary. With economic growth there also are increased opportunities for graduates, from STEM and language disciplines, to

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<sup>1</sup> [Regional Projections of full-time enrolments Primary and Second Level, 2019-2036](#) (DES 2019)

work in sectors other than education which impacts on the number of graduates available to enter the teaching profession.

**Policy Development** has also affected the demand for and supply of teachers. This includes new models for the allocation of teachers designed to meet the needs of pupils with special educational needs and allocations under the DEIS programme to support the most disadvantaged learners in the system. Alongside these developments there has been ongoing curriculum reform at all levels, including the introduction of new subject specialisms for Leaving Certificate; new approaches to pedagogy through embedding of digital technologies and increased focus to support leadership in schools. Many of these policies are supported by accompanying professional development to support teachers and school Principals to embed change at school level. Other policy developments include changes in the duration of initial teacher education programmes and an increased demand for job sharing and career breaks and the introduction of new or enhanced statutory leave, all of which can impact on the demand for and supply of teachers.

### **(iii) Role of the Department and other stakeholders on teacher supply**

The supply of teachers depends primarily on the numbers of graduates from programmes of initial teacher education (ITE) provided by state funded higher education institutions (HEIs) and one private provider. Student intake numbers to primary ITE programmes, in the state funded HEIs, is determined by the Department. However, a similar arrangement does not apply to the post primary ITE providers. The HEIs are responsible for the academic accreditation of ITE programmes. At post-primary level, the HEIs also determine the numbers of students undertaking ITE programmes generally, as well as the numbers entering particular subject specialisms in accordance with the funding and governance arrangements in place.

The Teaching Council accredits ITE programmes in accordance with approved criteria. It maintains the State's register of teachers and operates an application process for the registration of Irish ITE graduates. All teachers wishing to teach in recognised schools must meet the professional registration standards and criteria set by the Council. The Council also has responsibility for the recognition of out of State qualifications for teaching.

At local level, it is a matter for school management to determine the required subject specialisms of the teachers in the employment of the school/ETB, having regard to curricular demands and the needs of the student cohort, and to deploy teachers as it sees fit based on its overall allocation of teachers. Local management decisions, such as the granting of career breaks and job-sharing arrangements, also have a bearing on the demand for teachers.

### **(iv) Collaborative Response to Teacher Supply**

Consultation was carried out with all relevant stakeholders and agencies across the education system to help inform this work.

There are many different variables at play in determining the supply of and demand for teachers. These include: pupil demographics, teacher leave/work patterns (e.g. career breaks), the number of new graduate teachers, number of retirees and resignations from the profession, adjustments to the pupil teacher ratio, geographical location, mobility of teachers across jurisdictions and across other professions and the introduction of new subject specialisms. The relative and perceived attractiveness of the teaching profession can also impact supply. The range of variables demonstrate the complexity of managing teacher supply and challenges involved in forecasting demand with acceptable accuracy.

It is in this context that the following themes were identified for priority attention by the Teacher Supply Steering Group established to oversee the work on teacher supply:

- a. Data and research to support teacher supply planning.
- b. Policies and arrangements for schools and teachers that impact on teacher mobility/supply.
- c. Higher Education: policy, provision, funding and support.
- d. Communications and promotion of the teaching profession including possible development of a portal for teacher substitution.

A number of working groups have been established by the Department to consider each of these priority areas and to report and make recommendations to the Teacher Supply Implementation Group. These include the Data Working Group which comprises members from the Department's senior management, with nominees from the Irish Universities Association, the HEA, the Teaching Council, ETBI, and primary and post primary school management bodies.

### **(v) Data Working Group Technical Report**

As part of its role, the Data Working Group was asked to identify the key factors that impact upon the demand for and supply of teachers, the data sets required to analyse each of these factors and the various owners of the data. It became apparent to the Group at an early stage that significant data to support development of a teacher supply planning model existed but that this data had been collected for a variety of purposes other than teacher supply (e.g. to facilitate payment of salaries and pensions, to support the planning of school inspections) or was held in bodies outside the Department (e.g. individual HEIs, the Teaching Council, the HEA). Accordingly gaps in data and access to data were significant issues from the outset.

The Department's Statistics Section, working as part of the Data Working Group, has conducted extensive analysis to produce this technical report, which provides a first opportunity to examine the interlinking elements of teacher supply. This work involved the identification of datasets and accessing, refining and interpreting the available data. The outcome of that analysis is now presented in this technical report.

## (vi) Aim of data analysis

The ultimate aim is to put in place a model to project, as accurately as possible, the demand for suitably qualified teachers to meet the needs of the students in all our schools into the future which will then allow the system to respond to ensure that this demand will be met.

With regards to the estimates of retirements it should be noted that the Department, in collaboration with the Department of Public Expenditure and Reform, is undertaking work to further develop a shared understanding of retirements in the education sector generally.

It is important to note that this is not intended to be a final document but rather an initial publication the findings of which can be refined further through consultation. In addition, there may be further reports and analysis of available datasets and new datasets as they emerge. The aim is to improve the quality and range of available data; broaden the understanding of what the data is demonstrating; at post-primary level to develop projections for subject teachers; and consider further the impact of policy development on teacher demand and supply in the context of all relevant impact factors. It is intended that the overarching outcome is to put in place a process that will provide a robust evidence informed model to project teacher supply and demand and ultimately a Teacher Workforce Planning Model that will inform the direction and policy of the DES and all relevant agencies in the context of their role in teacher supply.



## 2. The teacher demand and supply model

The teacher demand and supply model draws on a number of factors which impact the need for teachers. The factors which create a demand for new teachers are: projected changes in pupil numbers at primary and post-primary level (nationally and regionally), with consequent changes in allocated teacher numbers; and teacher retirements and resignations. On the supply-side, there is the number of graduates from under- and post-graduate initial teacher education programmes who register with the Teaching Council. The demand and supply model is summarised below.

**Change in allocated teacher numbers (arising from change in pupil numbers)**

**+ teacher retirements + teacher resignations**

**– Teaching Council registrations**

**= projected teacher gap**

While other factors like secondments, job-sharing and various statutory leave arrangements also have an impact, the demand such movements create is offset to some extent if and when the relevant teachers return to their full-time posts. Factors which are included and excluded are discussed in more detail throughout the report. The regional dimension of the model is also presented for gross demand only, as regional estimates of retirements, resignations and Teaching Council registrations are not available due to data limitations.

The main outputs of the model are provided in Table 11 and Table 33. At primary level, the combination of a reduction in pupils and high levels of supply may create an oversupply of teachers which will peak during the middle of the 2020s, but gradually decline up to 2036 (see Table 11). It is important to note that a certain amount of oversupply may be necessary to account for factors which were harder to estimate but may still have an influence, for example job-sharing.

At post-primary level, there is an increase in pupil numbers projected up to 2024 (see Table 33). This is offset by a projected yearly increase in the number of graduates emerging from the initial teacher education programmes until 2024. The impact of this is that an overall undersupply is only projected for the years 2020 and 2021. After this, oversupply is projected to rise until 2029 and decline slowly up to 2036. Again, a certain amount of oversupply may be necessary to maintain balance in the system.

It is important to reiterate that the findings set out in this Report may be refined further following consultation between stakeholders and further analysis of available and new datasets as they emerge.

Please note that due to rounding the figures in some tables may not total precisely.

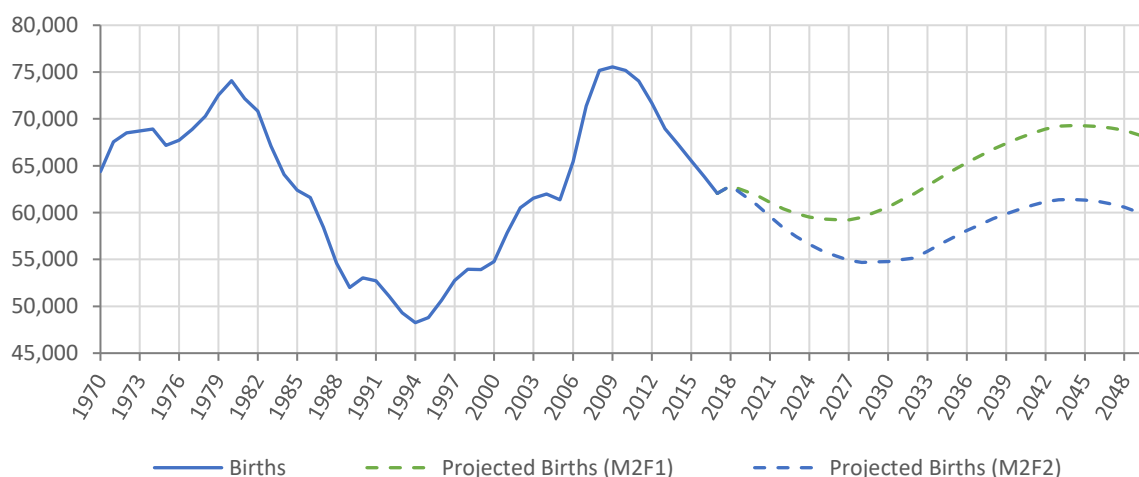
### 3. The demographic landscape

Population change in Ireland varies in line with rises and falls in migration, which is the driving force behind the large peaks and troughs witnessed in the year-on-year change over the past fifty years.

High periods of net inward migration tend to result in a high number of births, partly as a consequence of the higher number of women of child bearing years. Figure 1 shows how births peaked in 1980 with just over 74,000 births, then fell to a low point in 1994 with 48,200 births. Thirty years after the 1980 peak a second peak in births can be seen (when the females born in 1980 reached peak child bearing years) with 75,500 births in 2009, up from just 61,300 in 2005.

Births have been falling since 2009 with 61,016 babies born in 2018. CSO projections show births projected to fall for the next 10 years, reaching a low point in 2028 before slowly rising again.

Figure 1 Actual and Projected Births, 1970 - 2048



### 4. Primary Sector

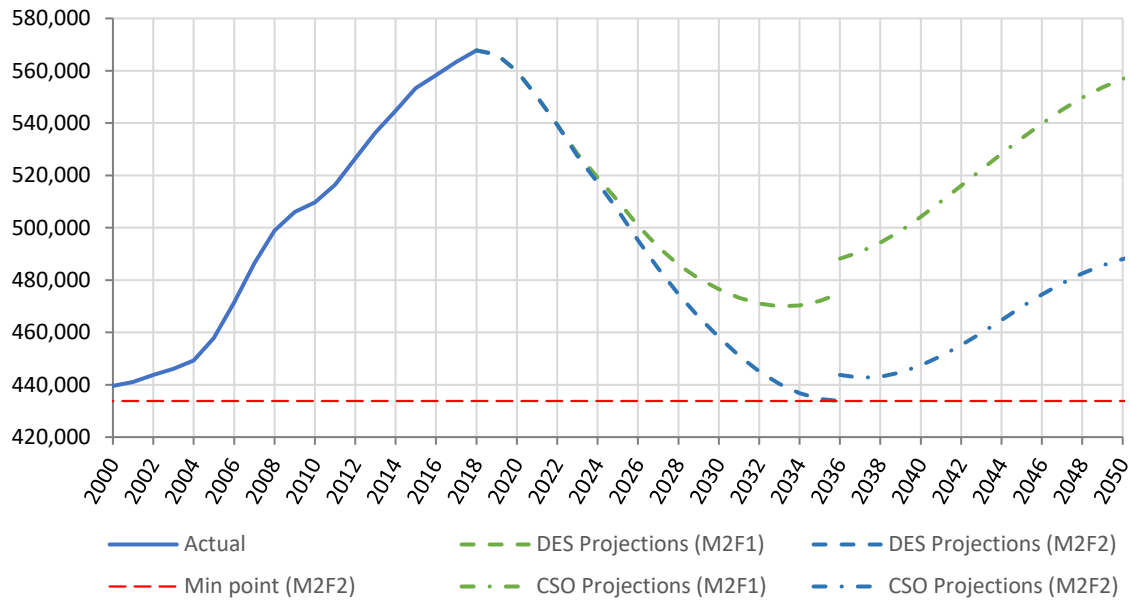
#### (i) Projected enrolments

These demographic peaks and troughs have a direct impact on pupil enrolments. The most recent projections at primary level show enrolments are expected to have peaked in 2018 with 567,772 pupils.

Figure 2 shows enrolments are projected to fall by 134,000 pupils (under the M2F2 scenario – see Appendix 1) over the coming years, reaching a low point of 433,795 by 2036. Annual falls will average 11,000 pupils per year between 2021 and 2028. Looking out further, the number of children aged 5 to 12 (primary school age) is projected to increase rapidly and reach 497,200 by 2051 (CSO).

Should fertility remain at today's level (namely hold constant at 1.8 – the F1 scenario) enrolments will return to today's level of 560,000.

Figure 2 Enrolments in DES aided primary schools, actual and projected (M2F1 and M2F2), 2000-2050



## (ii) Primary teacher numbers

Table 1 below shows enrolments and teachers in mainstream and special primary schools between 1998 and 2018 (every second year only). Note: throughout this report the year refers to the beginning of the academic year i.e. 2018 means September 2018, and ‘teachers’ refers to teaching posts.

Table 1 Change in primary pupils and teaching posts, 1998-2019 (*selected years*)

Academic year	Total enrolments	Mainstream class teachers	Other teachers	Total teaching posts (WTE)	Pupil-Teacher Ratio
1998	452,533	17,042	4,458	21,500	21.0
2000	439,560	17,280	5,570	22,850	19.2
2002	443,720	17,807	6,893	24,700	18.0
2004	449,298	18,133	8,149	26,282	17.1
2006	471,519	18,909	10,625	29,534	16.0
2008	498,914	20,291	11,058	31,349	15.9
2010	509,652	20,604	11,885	32,489	15.7
2012	526,422	20,877	11,298	32,175	16.4
2014	544,696	21,419	12,194	33,613	16.2
2016	558,314	22,152	13,517	35,669	15.7
2018	567,772	22,747	14,594	37,341	15.2
2019*	566,220			37,833	15.0
Change				16,333	-6.0

\*2019 pupil numbers are projected figures only (final numbers will be available in January 2020).

Enrolments increased significantly over the twenty year period starting in 1998, rising by 113,687 pupils to reach 566,220 (projected) in 2019. Over the same period the number of teachers increased

from 21,500 to 37,833, a rise of 16,333. The pupil teacher ratio (PTR), which is calculated as total pupils divided by total teachers, fell over this period from 21:1 to 15:1 in 2019.

*Note on the use of the 15:1 Pupil Teacher Ratio and teacher allocation mechanisms.*

*Both school and class size vary enormously in Ireland. Some 12 per cent of pupils are in classes of 19 or fewer pupils while 20 per cent are in classes of 30 or more; the average class size across all primary schools is 24.3. The difference between average class size and pupil teacher ratio can be explained by the large number of 'Other' teachers which currently account for 1 in 4 teachers in our schools (Table 1).*

*Given the highly complex nature of the school system the allocation of teachers to schools in practice must take account of multiple complex issues such as:*

- *staffing schedules*
- *provision for new/developing schools*
- *the appeals process*
- *allocations take place on a one year lag*

*Accordingly the teacher numbers in this report are not intended to be used for immediate short term planning. This report rather is intended to be used as an aid in understanding how the demographic landscape, and the very large rises and falls in pupil numbers, will impact the demand for teachers over the coming 15 years. Specifically, the projected fall in teachers in 2020 and 2021 shown in Table 2 is particularly problematic given the complex nature of the period in question as we move from a period of continuous growth to one of falling demand. These results are not intended to be used for operational purposes but rather should be seen in the context of the overall model*

Combining projected enrolments with current teacher numbers, and holding the PTR steady at 15:1, a basic estimate of future teacher demand can be derived.

Table 2 Projected number of primary teachers (PTR of 15:1), 2020-2036

Academic year	Projected enrolments	Projected teaching posts (WTE)	Change from previous year	% Change
2020	559,822	37,322	-511	-1.1
2021	550,027	36,669	-653	-1.7
2022	539,256	35,951	-718	-2.0
2023	527,429	35,162	-789	-2.2
2024	517,251	34,484	-678	-1.9
2025	506,773	33,785	-699	-2.0
2026	495,282	33,019	-766	-2.3
2027	484,542	32,303	-716	-2.2
2028	474,619	31,642	-661	-2.0
2029	465,937	31,063	-579	-1.8
2030	458,168	30,545	-518	-1.7
2031	451,138	30,076	-469	-1.5
2032	445,119	29,675	-401	-1.3
2033	440,323	29,355	-320	-1.1
2034	436,833	29,123	-232	-0.8
2035	434,632	28,976	-147	-0.5
2036	433,795	28,920	-56	-0.2
Change			-8,913	-23.9

As can be seen in this simple model, the projected fall in enrolments on its own would result in 8,913 fewer teachers being required by 2036.

### (iii) Retirements

Primary teacher retirements can be estimated by looking at past patterns of the age at which teachers retire and projecting similar patterns forward into the future.

There are large variations in the number of teachers who retire each year, with 811 in 2014 and 556 in 2016 (see Table 3). The average number of retirements between 2014 and 2017 was 666. Looking at the age patterns of retirements we can see that retirements largely occur from 55 years onward, this being the earliest age at which voluntary retirement may begin.

Table 3 Primary retirements by age, 2014-2017

Age	2014	2015	2016	2017
54 or under	33	36	25	26
55	85	77	69	81
56-60	504	354	288	329
61 and over	189	164	174	231
Total	811	631	556	667

The Department’s payroll provides data on the age of all teachers. By rolling this age profile forward the future age profile of all teachers can be estimated. Starting with 2017 as the baseline, factors of retirement were calculated for each single year of age and then applied to the projected number of teachers by single year of age each year to provide future estimates of retirements up to 2036. Table 4 presents the summary results. *Note: projected retirements in 2022 of 685 means 685 teachers retired from the 2021 cohort of teachers and so are unavailable in 2022.*

These estimated retirements will be fed into the teacher demand and supply model.

Table 4 Projected retirements of primary teachers by single year of age, 2018 – 2036 (selected years)

Academic year	Age at retirement												Total retirements
	Under 55	55	56	57	58	59	60	61	62	63	64	65	
2018	25	84	59	62	75	78	104	47	34	29	17	66	682
2020	25	75	65	70	76	79	109	59	36	25	21	52	694
2022	25	66	50	63	83	89	109	61	38	32	22	46	685
2024	25	70	51	56	64	80	120	68	38	32	23	58	686
2026	25	53	46	58	66	71	92	61	42	36	23	59	633
2028	25	68	45	45	59	74	95	54	32	33	26	67	622
2030	25	98	61	57	58	56	85	57	33	29	20	60	639
2032	25	135	87	82	78	72	84	43	29	30	20	53	740
2034	25	172	115	113	112	104	113	55	29	23	18	55	936
2036	25	192	145	144	147	144	162	79	39	30	18	42	1,168

**(iv) Resignations**

A number of teachers leave the profession each year before they are eligible to retire (called resignations in this report), and this is factored into the demand and supply model. Estimates of resignations among primary teachers are made by examining five concurrent years of payroll data and looking at those teachers who were on payroll in one year but were not on payroll in any subsequent year. Teachers on career break are excluded by checking against teacher leave data in the Department’s On Line Claim System. The results are presented in Table 5 and show large variations over the four years. In reality teachers go on and off the Department’s payroll from year to year, and

can move from substitution to contract (payroll) over the course of a single year. The data for 2014 is the most reliable (as there are four subsequent years of payroll to check against), while the 2017 figure is less reliable (as there is only one subsequent year to check against). The average for the three years 2014-2016 is 194. An estimate of 190 each year is used for future years.

Table 5 Estimated primary resignations by year and age, 2014-2017

Age	Last year on Payroll			
	2014	2015	2016	2017
Under 25	41	19	5	1
25-34	115	79	67	260
35-44	40	30	41	250
45+	64	32	49	149
Total	260	160	162	660

#### (v) Career breaks

A career break is a period of special leave without pay for not less than one school year. It may be extended on an annual basis provided the total period of the career break does not exceed five years at any one time. This is subject to a maximum 10 year absence over the course of the teacher's career. The decision to grant a career break is a matter for the employer.

The main objective of the Career Break Scheme is to facilitate applicants, where possible, in relation to areas such as personal development, educational purposes, family reasons and self-employment.

Data on career breaks can be extracted from the On Line Claim System, and is presented in Table 6 below. While the data shows that recent years have seen an increase in the number of teachers on career break, it is thought that these teachers are likely to return to the profession in Ireland. To include teachers on career break in the demand and supply model would therefore inflate the overall projected teacher demand and, accordingly, career breaks are excluded.

Table 6 Primary teachers on career break by age, 2013-2017

Age	2013	2014	2015	2016	2017
Under 25	28	16	15	16	14
25-34	907	903	873	902	950
35-44	312	413	481	549	634
45-54	78	93	100	100	101
55+	15	19	19	27	32
Total	1,340	1,444	1,488	1,594	1,731
Change	-	104	44	106	137

### (vi) Job sharing

The purpose of the Job Sharing Scheme is to assist teachers in combining work commitments and personal responsibilities/choices.

Data on teachers on job-sharing patterns can be extracted from the Department's payroll data. As the data in Table 7 shows there has been an increase in the number of teachers job-sharing. However, as with career breaks, teachers who job share may return to full-time work, effectively negating the demand that they have created. Job-sharing is therefore not included in the teacher supply model as it is thought it might inflate the overall projected teacher needs.

Table 7 Number of primary teachers job-sharing by pattern and academic year 2014 - 2018

Academic year	Total 0.5 whole-time equivalent teachers	Total teaching posts	% Shared posts
2014	639	33,215	1.9
2015	760	34,033	2.2
2016	967	35,166	2.8
2017	1,144	36,569	3.1

### (vii) Secondments

In the region of 500 teachers (primary and post-primary) are seconded to work with educational partners and agencies every year, and so are not available to teach in schools. As with the issue with career breaks and work-sharing this is not factored into the model as it is felt the numbers returning from secondments would off-set those leaving, thus balancing out the model.



### (viii) Demand for primary teachers

The impact of demographic changes, retirements and resignations on the total demand for teachers up to 2036 is outlined in Table 8.

Table 8 Projected change in primary teacher demand, 2020-2036

Academic year	Projected enrolments	Projected teachers	Demand			Projected demand
			Change on previous year	Estimated retirements	Estimated resignations	
2020	559,822	37,322	-511	694	190	373
2021	550,027	36,669	-653	692	190	229
2022	539,256	35,951	-718	685	190	157
2023	527,429	35,162	-789	694	190	95
2024	517,251	34,484	-678	686	190	198
2025	506,773	33,785	-699	663	190	154
2026	495,282	33,019	-766	633	190	57
2027	484,542	32,303	-716	622	190	96
2028	474,619	31,642	-661	622	190	151
2029	465,937	31,063	-579	627	190	238
2030	458,168	30,545	-518	639	190	311
2031	451,138	30,076	-469	670	190	391
2032	445,119	29,675	-401	740	190	529
2033	440,323	29,355	-320	826	190	696
2034	436,833	29,123	-232	936	190	894
2035	434,632	28,976	-147	1,053	190	1,096
2036	433,795	28,920	-56	1,168	190	1,302
Change			-8,913	12,650	3,230	6,967

Table 8 demonstrates that demographic demand in 2020 will result in a need for 511 fewer teachers. However, with a combined loss to the system of 884 teachers through retirements and resignations there will be a need for 373 new teachers. By 2036 the model indicates we can expect 15,880 teachers to either retire or resign and, of these, 6,967 will need to be replaced.

### (ix) Supply of primary teachers

Several sources can be examined to estimate the number of new entrants joining the primary teaching profession each year.

By extracting teachers on payroll who were employed in one year but not the previous years, and removing persons on career break and unpaid maternity leave (using the Department's On Line Claim System [OLCS]<sup>2</sup> data), we can arrive at a crude estimate of new entrants. Table 9 tells us there were 2,591 entrants in 2017, (1,974 in 2016). When looked at by 'point-on-scale' the data shows there were 1,992 new entrants in 2017 on points 1-3 and of these 1,662 were under the age of 30.

<sup>2</sup> The On Line Claim System (OLCS) enables schools to submit online details of teacher absences and to make claims for substitute teachers.

Table 9 Primary payroll new entrants by age and point on scale, 2016-2017

Age	2016		Total	2017		Total
	Point 1-3	Point 4+		Point 1-3	Point 4+	
20-30	1,220	251	1,471	1,662	285	1,947
31-35	132	117	249	184	167	351
36-40	53	79	132	69	67	136
41+	53	69	122	77	81	158
Total	1,458	516	1,974	1,992	600	2,592

Data on graduates from initial teacher education programmes are presented in Table 10. Primary teachers undertake either an undergraduate ITE program or a two-year postgraduate Professional Master of Education (PME) following a degree program in a discipline other than ITE. Other than in limited circumstances, teachers must register with the Teaching Council in order to be paid from State funds.

Registrations with the Teaching Council are also presented in Table 10 and indicate that between 1,750 and 2,000 teachers registered each year between 2016 and 2018.

Combining these different sources provides an estimate of an average number of new entrants to the primary teacher profession. For the purpose of this iteration of the demand and supply model an average of 1,750 teachers each year is used.

Table 10 Data on new entrants to primary teaching 2015-2018

Academic year	New entrants on payroll	Undergraduate	Professional Masters of Education	Total graduates from ITE	Teaching Council registrations
2015	2,050	96	824	920	916
2016	1,974	926	1,002	1,928	2,002
2017	2,591	1,005	894	1,899	1,744
2018		1,000	870	1,870	1,789

### (x) Projected demand and supply in primary schools

Table 11 combines the various components of the model into a single view, showing demographic driven demand, demand as a result of resignations and retirements, and an estimate of supply using a combination of ITE graduates and Teaching Council registrations.

The results show that the combination of a steady PTR, falling enrolments, a consistent pattern of retirements and resignations and consistent rates of ITE graduation will result in an excess of 15,752 primary teachers by 2029, and 22,783 by 2036.

Table 11 Projected demand/supply of primary teachers (PTR of 15:1), 2020 – 2036

Academic year	Projected enrolments	Projected teachers (mainstream)	Projected teachers (other)	Projected teachers (total)	Demand			Projected demand	Estimated supply	Demand less supply
					Change on previous year	Estimated retirements	Estimated resignations			
2020	559,822	22,393	14,929	37,322	-511	694	190	373	1,750	-1,377
2021	550,027	22,001	14,668	36,669	-653	692	190	229	1,750	-1,521
2022	539,256	21,571	14,380	35,951	-718	685	190	157	1,750	-1,593
2023	527,429	21,097	14,065	35,162	-789	694	190	95	1,750	-1,655
2024	517,251	20,690	13,794	34,484	-678	686	190	198	1,750	-1,552
2025	506,773	20,271	13,514	33,785	-699	663	190	154	1,750	-1,596
2026	495,282	19,811	13,208	33,019	-766	633	190	57	1,750	-1,693
2027	484,542	19,382	12,921	32,303	-716	622	190	96	1,750	-1,654
2028	474,619	18,985	12,657	31,642	-661	622	190	151	1,750	-1,599
2029	465,937	18,638	12,425	31,063	-579	627	190	238	1,750	-1,512
2030	458,168	18,327	12,218	30,545	-518	639	190	311	1,750	-1,439
2031	451,138	18,046	12,030	30,076	-469	670	190	391	1,750	-1,359
2032	445,119	17,805	11,870	29,675	-401	740	190	529	1,750	-1,221
2033	440,323	17,613	11,742	29,355	-320	826	190	696	1,750	-1,054
2034	436,833	17,474	11,649	29,123	-232	936	190	894	1,750	-856
2035	434,632	17,386	11,590	28,976	-147	1,053	190	1,096	1,750	-654
2036	433,795	17,352	11,568	28,920	-56	1,168	190	1,302	1,750	-448
Change					-8,913	12,650	3,230	6,967	29,750	-22,783

### (xi) Absences and substitution in primary schools

The issue of teacher absences and substitute cover is an important aspect of teacher demand and supply, particularly at primary level. There are 11 leave schemes for absences by teachers employed in recognised primary schools (such as sick leave, maternity leave and adoptive leave among others). In addition, teachers may avail of a brief or short leave of absence from school for various circumstances and situations which may arise, for example, for reasons of bereavement or force majeure.

Absences can be paid or unpaid / substitutable or non-substitutable, depending on the arrangements applying to the absence type.

All absences by primary school teachers, including those working in ETBs, are recorded by the school on the Department's On Line Claim System (OLCS). Where teacher absences lead to the appointment of temporary substitute teachers the claim is also logged and every absence is recorded against the relevant substitute appointed to cover for this absence. Combined, the leave and substitute data can be analysed by instances and types of leave, length of absence, whether the absence is covered by a substitute or not, and the number of substitutes and pattern of cover they are providing.

The following analysis focuses on substitutable leave, with career breaks and other forms of non-substitutable leave excluded. The analysis was also restricted to staff from mainstream and special schools in the following payroll categories, as these are likely to spend time in the classroom teaching: teachers; mainstream class teachers; assistant and deputy principals; principals (personal basis) and teaching principals.

The total number of teacher absence days in 2017 was 704,335, up from 635,910 in 2016, presented in Table 12.

Dividing the total number of leave days in 2017 by the number of days in the school year indicates a requirement for an additional 3,849 full-time equivalent teachers to cover all instances of leave in a perfectly balanced model (see Table 12).

Table 12 Primary teacher absences, 2014-2017

	2014	2015	2016	2017
Total days leave	542,120	590,954	635,910	704,335
Working days per year	183	183	183	183
Whole-time equivalent teachers	2,962	3,229	3,475	3,849

In reality the total number of individuals providing substitute cover in 2017 was 15,471 (Table 13). Of these, 1,205 did just 1 day, while a further 3,865 did fewer than 10 days in total.

Table 13 Primary substitutes by days worked, 2015-2017

Number of days	Number of primary substitutes		
	2015	2016	2017
1	1,013	997	1,205
2-4	1,875	1,920	2,049
5-9	1,531	1,663	1,816
10-49	3,542	4,117	4,958
50-99	1,320	1,483	1,771
100-139	932	881	941
140-169	1,032	1,050	947
170+	1,478	1,629	1,784
Grand total	12,723	13,740	15,471

Table 14 below shows the typical number of schools covered by substitute teachers; more than half worked in just one school in 2017, while a further 4,769 worked in between 2 and 4 schools. A small number of substitutes worked in more than 10 schools.

Table 14 Primary substitutes by number of schools covered, 2017

Number of schools	Number of substitutes
1	8,156
2-4	4,769
5-9	1,912
10+	634
Total	15,471

Of those substitutes who worked in just one school 2,911 worked fewer than 5 days, with a further working between 5 and 9 days. Just 947 of these substitutes worked the 'full' school year, namely 170+ days.

Table 15 Primary substitutes who worked in one school by number of days worked 2017

Number of days	Substitute teachers
1	1,205
2-4	1,706
5-9	1,111
10-49	2,034
50-169	1,153
170+	947
Total	8,156

There is also a need to understand how substitutes transition to contracted work on the Department's payroll. The term 'contracted' here includes full- or part-time work on contracts which are permanent, fixed-term or of indefinite duration. Table 16 presents substitutes who worked in a primary school for 140 days or more in a single school year, which is 183 days in length, and were on contract the following year (i.e. were on the Department's payroll). Of the 2,731 teachers who did 140 days or more in 2017, 1,047 of them worked on contract the following year, representing a 'conversion rate' of 38.3 per cent. The conversion rate in 2014 was significantly higher at 52.9 per cent. Of those who worked on contract the majority worked full-time (97.5 per cent in 2017), meaning that they had a WTE value of one on the Department's payroll. The mean age of this group of teachers was 27 years.

Table 16 Primary substitutes (140+ days) who converted to contract work, 2014-2017

Year of substitution	Substitutes on 140+ days	Of which were contracted the following year	% who moved to contract	% who worked full-time on contract	Average age
2014	2,318	1,228	52.98	96.42	26.72
2015	2,510	1,122	44.70	95.54	27.44
2016	2,679	1,234	46.06	98.06	27.32
2017	2,731	1,047	38.34	97.52	27.14

### Leave types

An analysis of covered and uncovered absence days by leave type is presented in Table 17. Of the total 704,335 days claimed, maternity leave was the largest category with 334,026 days, followed by certified sick leave with 123,401 days and family related illness with 98,690 days.

Not all teacher absences were covered by substitutes. Of the total 704,335 absence days in 2017, substitutes provided cover for 586,223 days, (Table 17). The amount of substitute cover varies with the type of leave; maternity leave had the highest number of uncovered days with 35,443 days, followed by certified sick leave with 29,395 days. Self-certified sick-leave had 13,136 days uncovered.

In percentage terms self-certified sick leave had the lowest level of cover at 12 per cent. Self-certified is not usually substitutable except in the case of small schools. Professional development leave had 69 per cent cover.

Table 17 Primary covered and uncovered leave by leave type, 2017

Leave Type	Total leave days	Total days covered by substitutes	Uncovered days	% Days covered
Antenatal visits and classes	8,118	6,439	1,679	79
Certified sick leave	123,401	94,006	29,395	76
Family related leave	98,690	80,105	18,585	81
Paternity Leave	3,603	3,161	442	88
Health And Safety Leave	1,134	901	233	79
Maternity Leave	334,026	298,583	35,443	89
NEPS - DEIS In-service	2,520	1,889	631	75
Other	7,569	5,579	1,972	74
Unpaid Sick Leave	3,762	3,335	427	89
Pregnancy related illness	25,028	21,879	3,149	87
Principal release time	26,956	25,892	1,064	96
Professional development	18,120	12,577	5,543	69
Self-certified sick leave	14,850	1,714	13,136	12
SEN - colleges and SESS	10,966	8,764	2,202	80
Teacher induction <sup>3</sup>	4,262	3,175	1,087	74
Temp rehabilitation	15,870	13,356	2,514	84
Unpaid Leave	5,460	4,850	610	89
<b>Total</b>	<b>704,335</b>	<b>586,223</b>	<b>118,112</b>	<b>83</b>

Table 18 presents an analysis of schools by the number of uncovered days and types of leave. For example, 1,016 schools had 10 or more uncovered days as a result of maternity leave while 841 schools had 10 or more uncovered days as a result of certified sick leave.

<sup>3</sup> Teacher induction includes: "Teacher Induction - PST/School Based Induction", "Teacher Induction - Associates/Facilitators" and "Teacher Induction - NIPT Training".

Table 18 Primary schools by number of uncovered days, by type of leave, 2017

Leave type	Schools by days uncovered			
	0	1-4	5-10	>10
Antenatal visits and classes	811	482	87	18
Certified sick leave	623	829	565	841
Family related leave	509	1,068	655	531
Paternity Leave	187	85	39	2
Health And Safety Leave	8	12	12	5
Maternity Leave	30	293	386	1,016
NEPS - DEIS In-service	158	128	33	10
Other	656	400	49	31
Unpaid Sick Leave	1	9	6	18
Pregnancy related illness	470	428	156	77
Principal release time	1,275	312	21	33
Professional development	1,370	1,049	233	111
Self-certified sick leave	245	995	588	402
SEN - colleges and SESS	474	461	107	36
Teacher induction	325	242	64	9
Temp rehabilitation	32	50	37	81
Unpaid Leave	565	223	29	4

### Maternity leave

There were a total of 3,306 primary teachers who availed of maternity leave in the 2018/2019 school year. Table 19 below shows the total number of substitutes required to cover this maternity leave. There were 1,552 teachers on maternity leave whose leave was covered by just one substitute, representing almost 47 per cent of the total. For a further 797 teachers 2 substitute teachers were needed to cover the leave, while 3 substitutes were needed for 436. In the case of 304 teachers, schools needed to find 5 or more substitutes to cover the leave.

Table 19 Primary substitute cover for maternity leave, 2018

No. of substitutes per teacher on maternity leave	No. of teachers on leave
1	1,552
2	797
3	436
4	217
5	120
6	68
7	51
8	22
9	18
10+	25
Total	3,306

*Note: all forms of maternity leave taken by a teacher are counted as one (e.g. paid maternity leave followed by unpaid maternity leave is counted as one instance).*



### Projections of substitute teacher demand

Looking forward one could expect the absolute need for substitute cover to fall in line with demographics, in that as total teacher numbers fall the need for substitutes will fall. Using a figure of 5,000 as a starting point (the minimum number required to serve the system in an almost balanced model is 3,849), and projecting forward in line with demographics, the number of substitutes will decrease out to 2036, as presented in Table 20.

Table 20 Projected change in primary substitutes driven by demographic changes, 2020-2036

Academic year	Projected substitute teachers
2020	4,944
2022	4,762
2024	4,568
2026	4,374
2028	4,191
2030	4,046
2032	3,931
2034	3,857
2036	3,831

### Paternity leave and other policy changes

The increase in the amount of paternity leave available from September 2019 may have an impact on future demand for substitutes. There were 5,781 male teachers in 2018 comprising 15 per cent of all primary teachers on payroll. An estimate of possible paternity leave in the future can be arrived at by applying a proportionate amount to the number of days maternity leave (15 percent of 2 weeks equivalent) to arrive at a figure of 3,876 days, or 21 additional substitute teachers per year. Rounding up to 25 (as male teachers tend to be slightly younger than females and may therefore avail of paternity leave to a greater degree than might be expected) the new demand arising from paternity leave will be more than off-set by the expected falls due to demographic changes.

Other policy changes, such as in the areas of self-certified sick leave or cover for professional development, may impact on the demand for substitutes in the future. However, given the gap between total substitute teachers (15,471) and the equivalent number required in a perfectly balanced system (3,583), there would appear to be adequate numbers to absorb the impacts of such policy changes over the coming years.

In conclusion, there is clearly unmet demand for substitute teachers, notwithstanding the large amount of teachers working as substitutes within the system. Obtaining cover for maternity leave and certified sick leave appear to be particular issues for schools, although family related leave is also leading to unmet cover with over 500 schools having ten or more days in this category.

## (xii) The regional dimension at primary level

The number of primary schools and enrolments by the 8 NUTS 3 Regions (see Appendix 2 for a description of NUTS Regions) in 2018 is presented in Table 21.

Just over a quarter of all pupils attend schools in the Dublin region with 144,651 pupils attending 496 schools. Between them Dublin, the Mid-East and the Midlands account for almost a half of all enrolments with 276,062 pupils (48.6 percent), but just 35 per cent of schools.

Table 21 Primary schools and enrolments, by NUTS 3 region, 2018

	Dublin	Mid-East	Midlands	Mid-West	South-East	South-West	Border	West	Total
Schools	496	381	250	412	300	492	418	491	3240
Share (%)	15.3	11.8	7.7	12.7	9.3	15.2	12.9	15.2	100.0
Enrolments	144,651	93,122	38,289	56,329	52,768	80,883	48,616	53,114	567,772
Share (%)	25.5	16.4	6.7	9.9	9.3	14.2	8.6	9.4	100.0

Between 2008 and 2018 enrolments in primary schools increased from 498,914 to 567,772, a rise of 68,855 pupils. This increase was not uniformly spread across the regions. During this ten-year period enrolments in Dublin increased by 20.9 per cent, the Mid-East region increased by 19.1 per cent while in the South-East and Mid-West respectively numbers rose by 7.2 per cent and 5.8 per cent respectively.

A recently published report on *Regional Projections of full-time enrolments in Primary and Post-primary schools 2019-2036* provides projected enrolments out to 2036 across the eight regions. The results at primary level, presented in summary form in Table 22, show that the overall projected decline in total enrolments will not be evenly distributed across the regions. The decline is expected to be more limited in the Midlands and Mid-East, while Dublin, the South-West, and the West regions will see a sharper fall in pupil numbers. For example, Dublin enrolments are projected to fall by 28.0 per cent over the coming period while those in the Mid-East will fall by just 12.7 per cent.

Table 22 Projected primary enrolments in 2036 by NUTS 3 region

	Dublin	Mid-East	Midlands	Mid-West	South-East	South-West	Border	West	Total
2018	144,509	93,774	38,597	56,058	51,789	81,045	48,939	53,108	567,819 <sup>4</sup>
2036	104,029	81,825	33,807	42,373	39,198	57,263	37,665	37,634	433,795
Change	-40,479	-11,949	-4,790	-13,685	-12,591	-23,782	-11,274	-15,474	-134,024
% Change	-28.0	-12.7	-12.4	-24.4	-24.3	-29.3	-23.0	-29.1	-23.6

<sup>4</sup> To maintain the integrity of the projections model, the projected 2018 enrolments (published in June 2018) are presented in Table 22 (567,819) and not the actual enrolments (567,772) which are presented in Table 21. The difference is negligible.

The absolute year-on-year change in enrolments is presented in Table 23, which illustrates the varying impact of falling enrolments across the regions.

Table 23 Projected absolute annual change in primary enrolments by region, 2020-2036, (*selected years*)

	Dublin	Mid-East	Midlands	Mid-West	South-East	South-West	Border	West	Total
2020	-811	-1,223	-325	-838	-745	-942	-889	-625	-6,398
2022	-1,486	-2,041	-666	-1,170	-1,332	-1,794	-1,223	-1,059	-10,771
2024	-1,520	-1,873	-611	-1,029	-1,149	-1,868	-1,108	-1,020	-10,178
2026	-2,294	-1,659	-644	-1,070	-1,194	-2,103	-1,197	-1,331	-11,491
2028	-2,381	-1,114	-528	-1,031	-1,036	-1,856	-872	-1,105	-9,923
2030	-3,234	-292	-137	-778	-570	-1,369	-428	-962	-7,769
2032	-3,477	308	41	-529	-321	-1,073	-194	-774	-6,020
2034	-3,153	899	225	-237	-67	-678	55	-535	-3,491
2036	-2,627	1,407	391	39	178	-280	309	-254	-837

In order to apply this regional dimension to projected teacher demand the changing share of total enrolments for each region was then applied to the projected *national* gross teacher demand (see Table 11) to arrive at projected gross demand by region.

The results, presented in Table 24, show that Dublin and the South-West will see the biggest fall in gross demand, with the Midlands seeing a smaller fall.

Note: the figures are presented for gross demand only, as there is insufficient data at present to estimate retirements and resignations or supply on a regional basis.

Table 24 Projected change in primary teaching posts by NUTS 3 region, 2020 – 2036

	Dublin	Mid-East	Midlands	Mid-West	South-East	South-West	Border	West	Total
2020	-76	-95	-27	-64	-57	-75	-66	-50	-511
2021	-109	-124	-48	-66	-75	-97	-64	-69	-653
2022	-99	-136	-44	-78	-89	-120	-82	-71	-718
2023	-130	-146	-52	-82	-80	-137	-88	-74	-789
2024	-101	-125	-41	-69	-77	-124	-74	-68	-678
2025	-125	-109	-39	-75	-75	-127	-74	-75	-699
2026	-153	-111	-43	-71	-80	-140	-80	-89	-766
2027	-160	-92	-41	-67	-78	-125	-69	-84	-716
2028	-159	-74	-35	-69	-69	-124	-58	-74	-661
2029	-180	-42	-15	-62	-52	-109	-49	-69	-579
2030	-216	-19	-9	-52	-38	-91	-29	-64	-518
2031	-228	0	-3	-45	-30	-83	-21	-58	-469
2032	-232	21	3	-35	-21	-71	-13	-52	-401
2033	-224	41	9	-26	-13	-59	-5	-44	-320
2034	-210	60	15	-16	-4	-45	4	-36	-232
2035	-196	77	21	-7	4	-32	12	-26	-147
2036	-175	94	26	3	12	-19	21	-17	-56
Change	-2,773	-782	-325	-880	-821	-1,577	-735	-1,019	-8,913

## 5. Post-primary sector

### (i) Projected enrolments

While a falling birth rate since 2010 will lead to falling enrolments in the primary system from 2019 onwards, the demographic bulge will continue in the post-primary system for another 5 to 6 years, depending on the projection assumption used (Appendix 1).

The most recent projections of post-primary pupil enrolments under the M2F2 scenario indicate that pupil enrolments will continue to rise for the next five years out to 2024, with a projected increase of 32,503 pupils (see Figure 3).

Figure 3 Enrolments in DES-aided post-primary schools, actual and projected (M2F1 and M2F2), 2000-2050

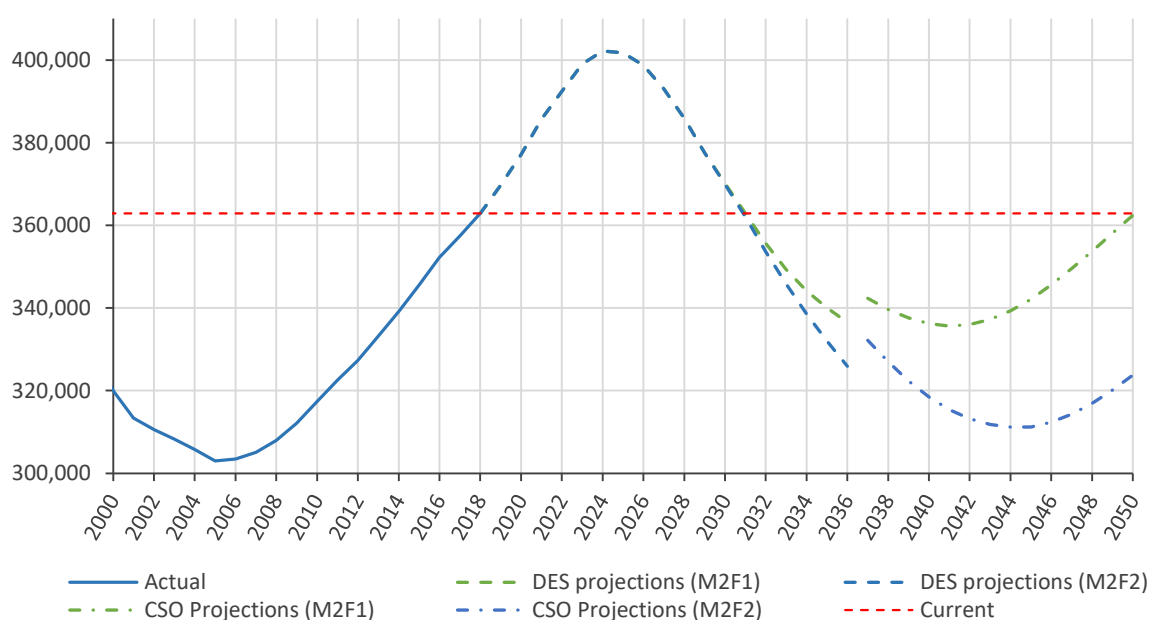


Table 25 shows projected post-primary enrolments up to 2036. Enrolments in Junior Cycle year 1 are projected to peak in 2021 with 72,213 pupils, while total enrolments will peak in 2024 with 402,176 pupils.

Enrolments will fall steadily thereafter out to 2036, when they are projected to be 325,911, some 43,762 lower than today's level.

Table 25 Projected enrolments (M2F2) in DES post-primary schools, by programme year, 2019-2036  
(selected years)

Academic Year	Junior Cycle 1	Junior Cycle 2	Junior Cycle 3	Transition Year	Senior Cycle 1	Senior Cycle 2	Total	Change
2019	67,818	65,664	65,581	45,922	63,619	61,068	369,673*	6,774
2021	72,213	71,583	68,344	45,936	65,026	62,583	385,684	8,566
2023	71,759	72,605	72,826	49,948	68,555	63,366	399,059	6,645
2025	68,122	69,872	72,417	50,803	72,068	68,472	401,754	-422
2027	66,214	68,767	68,779	48,985	71,066	69,214	393,026	-5,668
2029	62,606	65,313	66,880	48,113	68,210	66,467	377,589	-8,277
2031	60,130	61,913	63,228	45,751	65,904	65,077	362,005	-7,898
2033	57,825	59,712	60,717	43,371	62,375	61,798	345,798	-7,875
2035	55,670	57,375	58,396	41,818	59,942	58,795	331,995	-6,536
2036	54,789	56,337	57,252	40,986	58,803	57,743	325,911	-6,084

\*2019 pupil numbers are projected figures only (final numbers will be available in January 2020).

## (ii) Post-primary teacher numbers

Total teachers in post-primary schools stood at 28,474 (WTE) posts in 2018, split between secondary, community & comprehensive and ETB schools. The number of pupils in post-primary schools increased by 9.2 per cent between 1998 and 2018, while the number of teaching posts rose by 28.4 per cent. This accounts for the fall in the pupil teacher ratio from 15.0 to 12.7 in this period.

Table 26 Change in post-primary pupils and teaching posts, 1998-2019 (selected years)

Academic Year	Total enrolments	% Change	Total teaching posts (WTE)	% Change	Pupil-Teacher Ratio
1998	332,228		22,181		15.0
2000	319,984	-3.7	23,274	4.9	13.7
2002	310,561	-2.9	24,184	3.9	12.8
2004	305,767	-1.5	23,445	-3.1	13.0
2006	303,495	-0.7	23,881	1.9	12.7
2008	307,917	1.5	24,573	2.9	12.5
2010	317,423	3.1	24,149	-1.7	13.1
2012	327,314	3.1	23,470	-2.8	13.9
2014	339,197	3.6	24,456	4.2	13.9
2016	352,252	1.9	26,273	4.6	13.4
2018	362,899	1.5	28,474	2.0	12.7
2019	369,673	1.9	29,088	2.1	12.7
Change		7.8		18.9	-1.8

Using projected enrolments as a starting point, Table 27 presents the projected change in teachers by holding the PTR constant at 12.7. This simple model demonstrates teacher numbers peaking in 2024 with 31,668. After this point they fall by between 500 and 650 each year, and by 2036 there are 2,902 fewer teachers than in 2018.

Table 27 Projected number of post-primary teachers (PTR of 12.7:1), 2020 – 2036

Academic year	Projected enrolments	Projected teaching posts (WTE)	Change from previous year	% Change
2020	377,118	29,695	607	2.1
2021	385,684	30,369	674	2.3
2022	392,414	30,899	530	1.7
2023	399,059	31,422	523	1.7
2024	402,176	31,668	246	0.8
2025	401,754	31,635	-33	-0.1
2026	398,694	31,394	-241	-0.8
2027	393,026	30,947	-447	-1.4
2028	385,866	30,384	-563	-1.8
2029	377,589	29,732	-652	-2.1
2030	369,902	29,127	-605	-2.0
2031	362,005	28,505	-622	-2.1
2032	353,674	27,849	-656	-2.3
2033	345,798	27,229	-620	-2.2
2034	338,531	26,656	-573	-2.1
2035	331,995	26,142	-514	-1.9
2036	325,911	25,663	-479	-1.8
Change			-3,425	

### (iii) Retirements

The Department's payroll and pension data covers those teachers employed in secondary and community & comprehensive schools only. As ETB teachers are not covered by these data files, adjustments need to be made to include estimates for ETB schools.

Between 2014 and 2017, retirements among teachers in secondary and community & comprehensive schools varied from 619 in 2014 to 403 in 2017. When these numbers are grossed up to include estimates for ETBs, retirements range from 877 in 2014 to 581 in 2017 (Table 28).

Table 28 Post-primary retirements by age, 2014 – 2017

Age	2014	2015	2016	2017
54 or under	25	23	21	21
55	39	24	15	16
56-60	365	210	200	212
61 and over	190	113	141	154
Total retirements (secondary and C&C)	619	370	377	403
Total teachers (secondary and C&C)	17,270	17,256	18,301	19,366
Total teachers (all schools)	24,456	25,123	26,273	27,919
Estimated total retirements	877	539	541	581

The age profile of teachers in secondary and community & comprehensive schools can be extracted from the payroll files. This age profile is then ‘rolled’ forward to derive a future age profile of all secondary and community & comprehensive teachers to which factors of retirement can be applied.

ETB schools tend to be newer and their teacher cohort is thought to be younger. Data on ETB teachers by single year of age was provided by 10 ETBs. Analysis of the data shows that while just 10.4 per cent of this group of teachers were over 55 in 2018, the equivalent figure for those in secondary and community & comprehensive schools was 14.4 per cent. To allow for this younger age profile the projected age of all secondary and community & comprehensive teachers was adjusted to arrive at an estimated age distribution for all teachers. Factors of retirement were then calculated on this age-adjusted group of teachers to estimate projected annual retirements. Total projected retirements were then grossed up to include estimates for ETB teachers. The results are presented in Table 29. Note: the projected retirements in 2022 of 620 teachers means that 620 are projected to retire from the 2021 cohort of teachers and so are unavailable in 2022.



Table 29 Projected retirements of post-primary teachers by single year of age, 2018 – 2036

Academic year	Age at retirement												Non ETB retirements	Total retirements
	Under 55	55	56	57	58	59	60	61	62	63	64	65		
2018	24	18	29	37	38	43	72	38	29	32	18	42	420	600
2020	24	21	34	37	34	44	86	40	21	26	25	51	442	632
2022	24	19	35	43	41	44	77	40	25	28	18	41	434	620
2024	24	21	37	39	41	50	91	41	23	28	22	44	460	658
2026	24	22	39	44	44	46	93	47	27	28	20	44	476	681
2028	24	24	41	46	46	52	100	42	27	32	23	44	501	716
2030	24	28	44	49	49	54	103	48	29	29	23	51	531	759
2032	24	32	51	57	52	57	110	50	30	33	25	46	568	812
2034	24	36	55	67	60	67	117	53	32	35	26	52	624	892
2036	24	31	58	75	65	78	135	62	34	37	28	55	681	974

#### (iv) Resignations

Estimates of resignations among teachers in secondary and community & comprehensive schools can be derived by examining payroll data over a number of years, and identifying teachers who were present one year but not in subsequent years. Teachers who reappeared on the payroll were not included in the analysis, and teachers on career break were excluded by checking against teacher leave data in the On Line Claim System (OLCS). The results, which must be grossed up to cover ETB teachers, are presented in Table 30 and show large variations over the four years. In reality, teachers may go on and off payroll from year to year, and can move from substitution to contract over the course of a single year. The data from 2014 is probably the most reliable (as there are three subsequent years of payroll to check against), while the 2017 figure is somewhat unreliable (as there is only one subsequent year to check against). The mean number of estimated total resignations over the three years (2014-2016) is 407, and this is used as the projected estimate in Table 32.

Note: The extent to which teachers who ‘resign’ (disappear off the payroll file) and take up positions with ETB schools is unknown, nor can it be analysed without detailed ETB payroll data. The high number of resignations may therefore be over-estimated and, accordingly, caution should be used with the estimate of resignations as it may inflate the teacher demand estimates.

Table 30 Estimated post-primary resignations by year and age, 2014 – 2017

Age	Last year on payroll			
	2014	2015	2016	2017
Under 25	55	37	54	102
25-34	136	127	137	252
35-44	35	53	81	113
45+	39	44	53	118
Total (secondary and C&C)	265	261	325	585
Total teachers (secondary and C&C)	17,270	17,256	18,301	19,366
Total teachers (all schools)	24,456	25,123	26,273	27,919
Estimated total resignations	375	380	467	843
3 year average		407		...

### (v) Career breaks

A career break is a period of special leave without pay for not less than one school year. It may be extended on an annual basis provided the total period of the career break does not exceed five years at any one time. This is subject to a maximum 10 year absence over the course of the teacher's career. The decision to grant a career break is a matter for the employer.

The main objective of the Career Break Scheme is to facilitate applicants, where possible, in relation to areas such as personal development, educational purposes, family reasons and self-employment.

Data on career breaks can be extracted from the On Line Claim System, and is presented in Table 31 below. While the data shows that recent years have seen an increase in the number of teachers on career break, it is thought that these teachers are likely to return to the profession in Ireland. To include teachers on career break in the demand and supply model would therefore inflate the overall projected teacher demand and, accordingly, career breaks are excluded.

Table 31 Post-primary teachers on career break by age, 2013-2017

Age	2013	2014	2015	2016	2017
Under 25	0	0	0	1	1
25-34	117	124	130	163	189
35-44	152	196	236	239	261
45-54	67	64	75	84	92
55+	12	12	13	11	16
Total	348	396	454	498	559
Change	-	48	58	44	61

#### **(vi) Job sharing**

The purpose of the Job Sharing Scheme is to assist teachers in combining work commitments and personal responsibilities/choices.

Data on teachers on job-sharing patterns can be extracted from the Department's payroll data. An analysis of job-sharing in the primary sector showed some increases in recent years but the impact on overall teacher demand is thought to be negated by those who return to full-time teaching, and so no allowance is made for this aspect in the model for the primary sector. A similar approach is taken at post-primary level and no allowance for job-sharing is included in the model.

#### **(vii) Secondments**

In the region of 500 teachers (primary and post-primary) are seconded to work with educational partners and agencies every year, and so are not available to teach in schools. As with career breaks and job-sharing, this is not factored into the model as it is felt the numbers returning from secondments would off-set those leaving, thus balancing out the model.

#### **(viii) Demand for post primary teachers**

Combining the demand generated by demographic changes, resignations and retirements provides initial estimates of future demand as shown in Table 32.

The table illustrates that there will be a demand for around 1,500 teachers each year up to 2025, after which demand will begin to fall up to 2032 before rising again.

Table 32 Projected change in post-primary teacher demand, 2020 - 2036

Academic year	Projected enrolments	Projected teachers	Demand			Projected demand
			Change on previous year	Estimated retirements	Estimated resignations	
2020	377,118	29,695	607	632	407	1,646
2021	385,684	30,369	674	633	407	1,714
2022	392,414	30,899	530	620	407	1,557
2023	399,059	31,422	523	634	407	1,564
2024	402,176	31,668	246	658	407	1,311
2025	401,754	31,635	-33	675	407	1,049
2026	398,694	31,394	-241	681	407	847
2027	393,026	30,947	-447	689	407	649
2028	385,866	30,384	-563	716	407	560
2029	377,589	29,732	-652	738	407	493
2030	369,902	29,127	-605	759	407	561
2031	362,005	28,505	-622	783	407	568
2032	353,674	27,849	-656	812	407	563
2033	345,798	27,229	-620	852	407	639
2034	338,531	26,656	-573	892	407	726
2035	331,995	26,142	-514	939	407	832
2036	325,911	25,663	-479	974	407	902
Change			-3,425	12,687	6,919	16,181

### (ix) Supply of post primary teachers

There are currently a number of entry routes for post primary teachers who, depending on their subject, can either:

- Undertake a 4-year undergraduate ITE programme.
- A two-year postgraduate Professional Master of Education (PME), following a degree programme in a discipline other than ITE, or
- A 4-year undergraduate programme followed by a one year Master's

Post primary teachers undertaking the PME should have at least one subject from the post-primary schools' curriculum for the Leaving Certificate programme as part of their undergraduate degree.

Data on graduates from initial teacher education programmes show that graduate numbers have fallen substantially in recent years, down from 2,183 in 2014 to 1,620 in 2017. Registrations with the Teaching Council stood at around 1,500 new teachers each year between 2016 and 2018. The Teaching Council project that 1,497 new teachers will register in 2019/20.

In order to estimate future Teaching Council registrations, first-year enrolment data on initial teacher education programmes was projected forward (four years at undergraduate level and two years at post-graduate level) to provide initial estimates of graduates up to 2024/25. These estimates were

then adjusted to allow for those entrants who do not complete the programme. Using historical data, the likelihood of entrants to the relevant undergraduate programmes graduating four years later was estimated at 88 per cent, while the equivalent number at post-primary level was 94 per cent. An estimate of 150 Hibernia graduates per year was also added to the model. Finally, using past patterns of actual rates of registration with the Teaching Council, estimates were derived for the future supply of post-primary teachers up to 2024. Beyond this point, the estimation of supply is held constant at 1,900.

Table 33 Historic and projected graduates and Teaching Council registrations, 2014 - 2024

Academic year	UG new entrants	UG projected	UG projected 88% A	PG new entrant	PG projected	PG projected 94% B	Hibernia graduates C	ALL graduates A+B+C	Actual and projected Teaching Council registrations = supply	
actual	2014	700	-	629	863	-	1,300	254	2,183	-
	2015	690	-	622	854	-	95	203	920	847
	2016	794	-	634	796	863	806	165	1,605	1,469
	2017	820	-	628	796	854	812	180	1,620	1,497
projected	2018	880	700	620	895	796	711	160	1,491	1,430
	2019	1,048	690	611	942	796	748	150	1,509	1,497
	2020	1,192	794	703	967	895	841	150	1,694	1,561
	2021	-	820	726	950	942	885	150	1,761	1,623
	2022	-	880	779	950	967	909	150	1,838	1,694
	2023	-	1,048	928	-	950	893	150	1,971	1,817
	2024	-	1,192	1,056	-	950	893	150	2,099	1,935

UG – undergraduate, PG – post-graduate

### (x) Projected demand and supply in post-primary schools

Table 34 presents the results of the combined demographic projections, retirements, resignations and supply. There is a projected shortfall of 85 teachers in 2020, and a further shortfall of 91 teachers is projected for 2021. Thereafter the model predicts an oversupply of teachers each year out to 2036. Total oversupply by 2036 is estimated to be 15,249.

Table 34 Projected demand/supply of post-primary teachers (PTR of 12.7:1), 2020 – 2036

Academic year	Projected enrolments	Projected teachers	Demand			Projected demand	Estimated supply	Demand less supply
			Change on previous year	Estimated retirements	Estimated resignations			
2020	377,118	29,695	607	632	407	1,646	1,561	85
2021	385,684	30,369	674	633	407	1,714	1,623	91
2022	392,414	30,899	530	620	407	1,557	1,694	-137
2023	399,059	31,422	523	634	407	1,564	1,817	-253
2024	402,176	31,668	246	658	407	1,311	1,935	-624
2025	401,754	31,635	-33	675	407	1,049	1,900	-851
2026	398,694	31,394	-241	681	407	847	1,900	-1,053
2027	393,026	30,947	-447	689	407	649	1,900	-1,251
2028	385,866	30,384	-563	716	407	560	1,900	-1,340
2029	377,589	29,732	-652	738	407	493	1,900	-1,407
2030	369,902	29,127	-605	759	407	561	1,900	-1,339
2031	362,005	28,505	-622	783	407	568	1,900	-1,332
2032	353,674	27,849	-656	812	407	563	1,900	-1,337
2033	345,798	27,229	-620	852	407	639	1,900	-1,261
2034	338,531	26,656	-573	892	407	726	1,900	-1,174
2035	331,995	26,142	-514	939	407	832	1,900	-1,068
2036	325,911	25,663	-479	974	407	902	1,900	-998
Change			-3,425	12,687	6,919	16,181	31,430	-15,249

**(xi) Absences and substitution in voluntary secondary and community & comprehensive schools**

There were 247,860 days of leave taken by post-primary teachers in 2017, and in a balanced model an estimated 1,484 substitutes would be required to cover this (Table 35).

Table 35 Post-primary teacher absences, 2014 -2017

	2014	2015	2016	2017
Total days leave	198,033	207,543	228,153	247,860
Working days per year	167	167	167	167
Whole-time equivalent teachers	1,186	1,243	1,366	1,484

In practice, there was a total of 7,489 substitutes covering this leave, the majority of whom worked fewer than 50 days a year, and in one school only, as shown in tables 36 and 37.

Table 36 Post-primary substitutes by days worked, 2015 – 2017

Number of days	Number of post-primary substitutes		
	2015	2016	2017
1	381	449	371
2-4	768	811	756
5-9	1,002	989	993
10-49	2,437	2,414	2,652
50-99	997	1,085	1,112
100-139	523	520	565
140-169	383	408	398
170+	583	597	642
Grand total	7,074	7,273	7,489

Table 37 Post-primary substitutes by number of schools covered, 2017

Number of schools	Number of substitutes
1	6,380
2-4	1,100
5-7	9
Total	7,489

**Note:** tables 35-42 exclude estimates for ETBs, due to the unavailability of leave data for this sector combined with the added complication of estimating both the leave and cover for these schools. Caution should also be taken in interpreting the amount of substitute cover in particular; absence data is provided in days, whereas substitute data is provided in hours. This can lead to complications in the interpretation of the data and may have inflated the amount of substitute cover estimated in tables 36, 38, and 39.

Table 38 presents an analysis of substitutes who worked in a post-primary school for 140 days or more in a single school year, and were on contract the following year. Of the 1,040 substitutes who did 140 days or more, 294 of them worked on contract the following year, representing a ‘conversion rate’ of 28.3 per cent.

Table 38 Post-primary substitutes (140+ days) who converted to contract work, 2014-2017

Year of substitution	Substitutes on 140+ days	Of which were contracted the following year	% who moved to contract	% who worked full-time on contract	Average age
2014	993	356	35.8	28.0	29
2015	966	299	30.9	36.4	29
2016	1,005	379	37.7	49.6	29
2017	1,040	294	28.2	47.6	29

### Leave types

When examined by leave type the data shows a similar pattern to the primary sector, with maternity and certified sick leave accounting for the largest share of teacher leave.



The number of covered and uncovered days by leave type are presented in Table 39 below.

Table 39 Post-primary covered and uncovered leave by leave type, 2017

Leave type	Total leave days	Total days covered by substitutes	Uncovered days	% Days covered
Antenatal visits and classes	1,621	1,414	207	87
Certified sick leave	59,527	50,867	8,660	85
Examiner State Examinations	6,661	6,210	451	93
Family related leave	35,659	31,182	4,477	87
Paternity leave	3,347	2,945	402	88
CPD and professional time	8,757	7,108	1,649	81
Maternity leave	94,253	87,369	6,884	93
Other	2,190	1,752	438	80
Unpaid sick leave	1,749	1,564	185	89
Pregnancy related illness	7,026	6,344	682	90
Professional development	5,733	4,718	1,015	82
Self-certified sick leave	10,907	0	10,907	0
SEN - colleges and SESS	2,560	2,304	256	90
Teacher induction <sup>5</sup>	1,802	1,507	295	84
Temporary rehabilitation remuneration leave	6,068	5,410	658	89
<b>Total</b>	<b>247,860</b>	<b>210,694</b>	<b>37,166</b>	<b>85</b>

<sup>5</sup> Teacher induction includes: "Teacher Induction - PST/School Based Induction", "Teacher Induction - Associates/Facilitators" and "Teacher Induction - NIPT Training".

Table 40 shows schools with uncovered days by type of leave and demonstrates how more than half of all schools (363) had more than ten days of uncovered leave as a result of self-certified sick-leave.

Table 40 Post-primary schools by number of uncovered days, by type of leave, 2017

Leave type	Schools by days uncovered			
	0	1-4	5-10	>10
Antenatal visits and classes	171	91	8	1
Certified sick leave	16	81	111	260
Examiner State Examinations	232	142	20	6
Family related leave	19	150	158	130
Paternity leave	98	73	23	6
CPD and professional time	116	165	43	31
Maternity leave	12	33	144	184
Other	132	119	13	5
Unpaid sick leave	2	13	7	4
Pregnancy related illness	145	100	31	12
Professional development	176	186	54	17
Self-certified sick leave	0	16	73	363
SEN - colleges and SESS	86	59	13	4
Teacher induction	107	85	15	2
Temporary rehabilitation remuneration leave	25	37	29	11

### Maternity leave

Just 310 of the 894 post-primary teachers who took maternity leave had that leave completely covered by one substitute, representing almost 35 per cent of all teachers in this group. Given that post-primary teachers will often teach more than one subject it may be expected that more than one substitute will be required to cover the absence.

Table 41 Post-primary substitute cover for maternity leave, 2018

No. of substitutes per teacher on maternity leave	No. of teachers on leave
1	310
2	113
3	99
4	77
5	57
6+	238
Total	894

*Note: all forms of maternity leave taken by a teacher are counted as one (e.g. paid maternity leave followed by unpaid maternity leave is counted as one instance).*

### Projections of substitute teacher demand

Looking forward one could expect the absolute need for substitute cover to rise and fall in line with demographics, in that as total teacher numbers rise or fall the need for substitutes will change accordingly. Using a figure of 2,000 as a starting point (the minimum number required to serve the system in an almost balanced model is 1,484), and projecting forward in line with demographics, the number of substitutes would rise up to 2024. The numbers would then fall from 2026 onwards, as presented in Table 42.

Table 42 Projected change in post-primary substitutes driven by demographic changes, 2020-2036

Academic year	Projected substitute teachers
2020	2,041
2022	2,125
2024	2,178
2026	2,160
2028	2,092
2030	2,007
2032	1,920
2034	1,839
2036	1,771

### (xii) The regional dimension at post-primary level

The number of post-primary schools and pupil enrolments by NUTS 3 regions in 2018 is presented in Table 43. Dublin accounted for approximately a quarter of enrolments (24.9 percent) and schools (25.8 percent).

Table 43 Post-primary schools and enrolments, by NUTS 3 region, 2018

	Dublin	Mid-East	Midlands	Mid-West	South-East	South-West	Border	West	Total
Schools	186	88	45	74	67	111	70	81	722
Share (%)	25.8	12.2	6.2	10.2	9.3	15.4	9.7	11.2	100
Enrolments	90,218	57,654	24,361	37,422	35,490	52,510	31,445	33,799	362,899
Share (%)	24.9	15.9	6.7	10.3	9.8	15.4	8.7	9.3	100

A recently published report on *Regional Projections of full-time enrolments in Primary and Post-primary schools 2019-2036* provides projected enrolments out to 2036 across the 8 NUTS 3 Regions. The results at post-primary level are presented in summary form in Table 44. As can be seen total enrolments are expected to fall by 10.3 per cent between 2018 and 2036 but, within that, Dublin will experience marginal falls of just 2.6 per cent (-2,327 pupils) while numbers in the south-west are projected to fall by 7,736.

Table 44 Projected post-primary enrolments in 2036 by NUTS 3 region

	Dublin	Mid-East	Midlands	Mid-West	South-East	South-West	Border	West	Total
2018	90,418	57,718	24,920	36,830	35,227	52,502	31,771	34,108	363,495 <sup>6</sup>
2036	88,091	53,611	24,481	31,021	29,161	44,766	26,676	28,104	325,911
Change	-2,327	-4,107	-439	-5,809	-6,067	-7,736	-5,095	-6,005	-37,584
% Change	-2.6	-7.1	-1.8	-15.8	-17.2	-14.7	-16.0	-17.6	-10.3

To understand the impact of these changes on projected teacher numbers by region, the varying share of enrolments in each region was applied to total projected teachers each year. The results are presented in Table 45, and show that the South-West and the South-East will see the biggest fall in gross demand, but with a more limited decline in the Midlands. Note: the figures are presented for gross demand only as there is insufficient data at present to estimate retirements and resignations on a regional basis.

<sup>6</sup> In order to maintain the integrity of the projections model the projected 2018 enrolments (published in June 2018) are presented in Table 44 (363,495) and not the actual enrolments (362,899) which are presented in Table 43.

Table 45 Projected change in post-primary teaching posts by NUTS 3 region, 2020 – 2036

	Dublin	Mid-East	Midlands	Mid-West	South-East	South-West	Border	West	Total
2020	178	114	47	44	43	91	50	40	607
2021	215	126	45	54	47	100	47	40	674
2022	204	98	44	30	18	83	30	23	530
2023	204	94	44	21	29	80	26	25	523
2024	137	33	18	3	2	39	3	12	246
2025	45	-20	-2	-26	-17	1	-14	0	-33
2026	-16	-55	-5	-40	-31	-41	-28	-24	-241
2027	-97	-84	-15	-49	-45	-65	-48	-43	-447
2028	-111	-111	-36	-53	-55	-92	-56	-49	-563
2029	-100	-119	-38	-65	-75	-119	-74	-61	-652
2030	-89	-100	-34	-60	-70	-116	-72	-64	-605
2031	-92	-98	-38	-56	-75	-120	-73	-71	-622
2032	-115	-98	-40	-64	-80	-121	-67	-71	-656
2033	-125	-80	-30	-67	-70	-119	-61	-67	-620
2034	-160	-58	-17	-62	-55	-106	-49	-66	-573
2035	-192	-36	-9	-53	-42	-90	-33	-60	-514
2036	-208	-19	-4	-47	-35	-83	-27	-56	-479
Change	-321	-412	-72	-491	-512	-681	-444	-491	-3,425

## Appendix 1

### Migration

For migration at Primary level the following set of assumptions were used:

M1 = 1,800. This assumption shows a return to net inward migration. The net inward migration will be at levels similar to those seen in the early 2000s.

M2 = 1,200. Net migration reflects current positive inward migration from 2018 onwards.

M3 = 600. Net migration will remain slightly positive for the whole period of the projections.

At Post-primary level, it is difficult to determine the true number of emigrants from the education system from the data available, given the higher numbers of departures from the second-level system compared to those from first level, particularly after the ending of compulsory school age. A flow-based approach, which includes migration flows, is therefore taken at second level using overall numbers of entrants to and leavers from the system at each programme level, retention rates and the “cohort survival” rates from one year to another.

### Fertility

The most recent evidence shows the Total Period Fertility Rate (the total number of children a woman can expect to have over her lifetime) in Ireland fell sharply from the 2010 level of 2.09 to 1.8 in 2017, and has now been below replacement rate for a number of years. Two TPFRR assumptions were applied:

F1: TPFRR to remain at the 2017 level of 1.8 for the lifetime of the projections.

F2: TPFRR will decline to 1.61 by 2030 and remain at that rate thereafter.

The state projections used three migration assumptions and two fertility assumptions giving rise to six scenarios in total for which projected enrolments data was compiled.

For the purposes of this report, the Department has chosen M2F2 as the most likely scenario regarding migration and fertility, which encompasses the assumption of medium migration and fertility falling from 1.8 to 1.6 over the course of next 12 years.

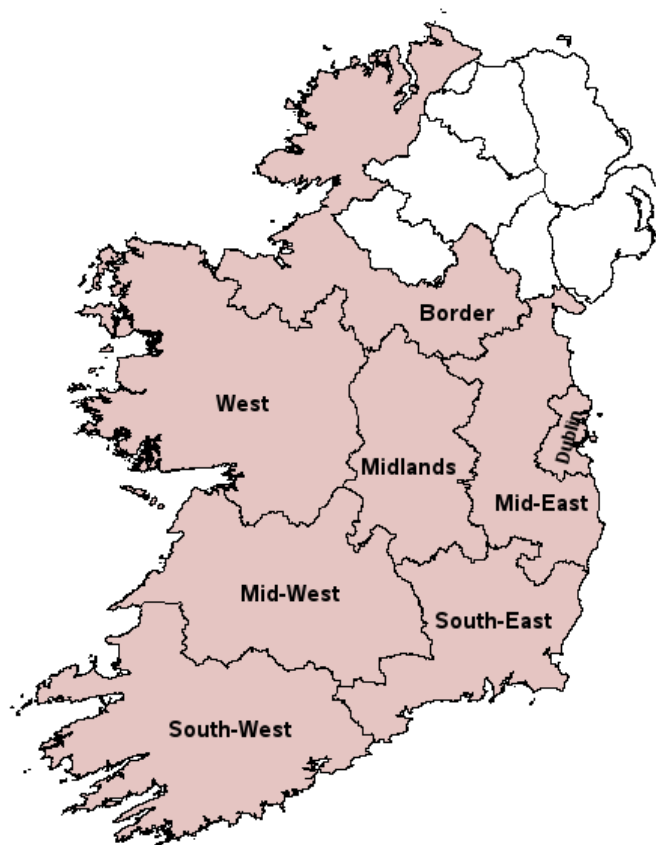
## Appendix 2

### NUTS 3 Regions

The Nomenclature of Territorial Units for Statistics (NUTS) were created by Eurostat in order to define territorial units for the production of regional statistics across the European Union.

The eight NUTS 3 regions are comprised of the following counties

NUTS 2	Eastern and Midlands			Southern			Northern and Western	
NUTS 3	Dublin	Mid-East	Midlands	Mid-West	South-East	South-West	Border	West
County	Dublin	Wicklow Kildare Meath Louth	Longford Westmeath Offaly Laois	Clare Tipperary Limerick	Waterford Kilkenny Carlow Wexford	Cork Kerry	Donegal Sligo Leitrim Cavan Monaghan	Galway Mayo Roscommon



## Appendix 3

### Data issues in developing the model

#### 1. ETB teachers

The teacher demand and supply model makes extensive use of the Department's payroll and pension files. These files cover teachers in secondary and community & comprehensive schools only, and the equivalent data had not been acquired for the 245 ETB schools. The payrolls for the ETB teachers are managed by 16 separate ETBs with different payroll systems. An early decision was made to conduct the analysis on secondary and community & comprehensive schools only, with the results extrapolated in order to provide estimates for teachers across the whole post-primary sector. This situation will evolve as and when the shared services for the 16 ETBs are developed. For now, the age profiles of teachers used in the post-primary retirement estimates are adjusted based on aggregate single year of age data received from 10 ETBs.

#### 2. Resignations

Estimates of resignations were derived by identifying teachers on the payroll file in 2014 but not in subsequent years, etc. While this methodology is robust for primary teachers in the post-primary sector it was not possible to cross-check these 'resignations' against ETB payroll data. Accordingly estimates of resignations for the post-primary sector are most likely overstated by the number of teachers who move from a secondary or community / comprehensive school to an ETB school.

#### 3. Regional retirements and resignations

Extensive modelling and additional data is required to estimate retirements on a regional level; the benefit to the model would need to be determined before this additional analysis is conducted.

#### 4. The On Line Claim System

The On Line Claim System provides data on teachers on leave. The beginning and end date only are entered so extensive data cleaning was carried out in order to remove non-school days such as weekends, mid-term breaks, Christmas and Easter holidays. Assumptions were made regarding these school closures at a general level, at not at an individual school level.



## Appendix 4

### Teacher Supply Data Working Group - Terms of Reference and Membership

#### 1. Role

The Working Group will:

##### (a) Identify:

- the key factors that impact upon the demand for and supply of teachers
- the data sets required to analyse each of these factors
- the various owners of the data

(b) Develop and recommend proposals for the collection and analysis of relevant data

(c) Identify the steps for the development and implementation of models of teacher supply at primary and post primary level, having regard to advice from the Teaching Council.

(d) Identify the organisational arrangements and resources necessary to develop, implement and maintain models of teacher supply at primary and post primary levels.

(e) Oversee, and review on an ongoing basis, actions implemented under this heading.

#### 2. Frequency of meetings

The frequency of meetings will be determined by the Group's work programme.

#### 3. Reporting

The Working Group will report and make recommendations to the Implementation Group.

Recommendations will include a sequenced programme of actions, with an estimated timeline for implementation and, where relevant, estimated costs/ resource requirements. The lead agent for each action will also be identified.

### Teacher Supply Data Working Group Membership

Chairperson: Ruth Carmody, Department of Education and Skills

- Chris Kelly, Department of Education and Skills
- Deirdre Cullen, Department of Education and Skills
- Steven Lucas, Department of Education and Skills
- Jason Kelly, Department of Education and Skills
- Paul McCarthy, Department of Education and Skills
- Jill Fannin, Department of Education and Skills
- Sinead Middleton, Department of Education and Skills
- Louise Callinan, Higher Education Authority
- Maria Fitzgerald, Teaching Council
- Karen Eastwood Lovett, Teaching Council
- Shelagh Graham, Education and Training Boards Ireland
- Merrilyn Goos, Irish Universities Association
- Dr. Manuela Heinz, Irish Universities Association
- Lewis Purser, Irish Universities Association

- Dr. Michael Redmond, nominee of post primary management bodies
- Deirdre O' Donoghue, nominee of primary management bodies