



PROJECTIONS OF FULL TIME ENROLMENT

Primary, Second and Higher level, 2011 - 2031

3 June 2011

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Overview

This document provides the latest set of projections of full-time enrolment in schools and colleges aided by the Department of Education and Skills. The document updates the previous set of projections released in February 2010. Unlike the previous set of projections these draw on revised population projections prepared by the Statistics Section of this Department using new and different fertility and migration assumptions to those used by the Central Statistics Office in its 2008 publication.

As in previous projections made by this Department, a 'policy neutral' stance is used. In other words, enrolment is projected on the basis of current or announced policy initiatives.

This document covers all years from 2011 to 2031 for all levels of education from Primary to Higher. As enrolment figures are projected out into the future there is, obviously, greater uncertainty about possible or likely outcomes in terms of enrolment in 10 or 20 years than is the case for the next five years. Most children born four to five years ago are entering primary school this coming school-year while most children born one to three years ago will enter primary level in the coming four years. There is no evidence, to date, that these children have or will emigrate with their families in large numbers. All the evidence available, so far, from various data sources suggests that emigration is heavily concentrated in the 20-30 age-group. Consequently, projections of enrolment for the coming four years may be viewed as being less subject to uncertainty and variation (depending on participation and migration) than is the case for projections over a longer time period (when factors such as fertility and migration impact more significantly on outcomes).

Projections over the coming four years will be of more immediate interest in assessing current expenditure requirements in areas such as staff numbers and capitation payments, whereas, possible trends over the coming 10-20 years will be of relatively greater interest in assessing capital and related provision. A range of possible outcomes are presented depending on how many people leave or enter the country and how many children are born over the coming two decades.

A summary of projections for the immediate four years ahead are provided in Table I, below. These are anchored on a combination of migration and fertility assumptions that fall in the middle of a wide range of possible developments in these areas. The particular scenario used in this Table is referred to as M4F4. This corresponds to a gradual decline in the level of estimated net outwards migration between 2011 and 2014 coupled with a small fall in the rate of fertility.

For reference, a range of possible outcomes are provided, in Table II, for the years 2020 and 2030 showing the highest and lowest projected enrolment under various migration and fertility scenarios.

Table I Overview of likely trends in enrolment 2011-14

<i>Year beginning</i>	First Level	Second Level	PLCs	Higher Education
<i>Using Scenario M4F4 for 2011-2014</i>				
2010 (prov.)	509,652	317,432	38,680	161,089
2011	514,600	322,500	40,000	170,300
2012	523,100	326,900	40,000	176,600
2013	532,900	330,700	40,000	183,200
2014	540,500	334,600	40,000	190,400
Table II				
<i>Using a range of Scenarios from M3F3 to M5F5 for years after 2014</i>				
2020	497,900 - 561,800	351,200 - 360,700	40,000	231,400 - 235,800
2030	301,200 - 534,000	282,400 - 370,800	40,000	282,100 - 295,700

The following are some key points to note from Table I:

Focusing on the immediate period ahead, 2011-2014 (inclusive), enrolment at **primary level** is projected to increase under all scenarios considered in this document. In the Table, above, using scenario M4F4 enrolment at primary is expected to grow by around 30,000 or 6 percent, over its Autumn 2010 level. These projections imply a slower growth in enrolment at primary level compared to what was previously projected in February 2010 (refer to Appendix B of this document).

At **second level**, enrolment is also projected to increase under all scenarios considered in the immediate four year period ahead. This means that it is highly unlikely that enrolment at Second Level will fall before the year 2015 even if large-scale emigration were to occur in combination with a fall in fertility between 2011 and 2015.

The projected increase in enrolment at second level is in the order of 15,000-20,000 between September 2010 and September 2014 depending on which scenario is assumed (an increase of 17,000 or 5% over this period is shown in the Table above).

It is assumed that enrolment based on the number of approved places in Post Leaving Certificate courses remains constant at 40,000 from 2011 onwards (including an additional 1,000 places under the Jobs Initiative - May 2011).

At **higher education level** full-time enrolment is projected to increase by 18% or 30,000 on the 2010 level in the four year period ahead. These projections imply a higher than expected growth in enrolment compared to what was previously projected.

Casting out to 2015 and beyond there is more uncertainty about enrolment levels. All scenarios considered imply continuing enrolment growth at primary level at least up to 2014 and, for some scenarios, up to 2018. However, from 2020 at the latest, all scenarios show falling enrolment at primary level while at second level enrolment begins to fall, at the latest, from 2025 onwards. Enrolment at Third Level continues to grow in line with demand to reach over one quarter of a million full-time students by 2025. Enrolment levels projected beyond 2015 may be viewed as speculative based, as they are, on assumptions that appear plausible or possible at this point in time.

0 Introduction

A projection is not a forecast. Projections are made on the basis of particular assumptions. These assumptions are based on past trends and patterns combined with a view of possible shifts into the future. By contrast, a forecasting model would take account of many important variables including trends in unemployment, migration, patterns of family formation, capacity to accommodate additional students and demand for continuing or second-chance education and would incorporate these into a complex, quantitative, explanatory forecasting model.

Previous experience of working with projections have shown that short-term trends in both migration and fertility remain volatile and difficult to predict – not least because of uncertainties about the direction of future economic and social change as well as their relationship to patterns of social behaviour. Nevertheless, even if future births and migration patterns are at variance from those projected, the high level of actual births recorded in recent years will continue to impact significantly on enrolment at Primary Level for the coming years.

It was judged necessary to undertake a revision of population projections due to the rapidly evolving change in demographic conditions – not least the following:

- Significantly higher numbers of births in 2008, 2009 and in 2010 than had been anticipated or projected in the last set of published CSO population projections (CSO, 2008); and
- Significant net inward migration (not anticipated for the years 2008, 2009 and 2010 in any of the migration scenarios used by the CSO in 2008).

The revised population projections were created using new and different fertility and migration assumptions to those used by the CSO in 2007 in preparation for the 2008 publication. The Department of Education and Skills Statistics Section is grateful to the Central Statistics Office for the provision of estimates of births, population, migration and mortality for 2009 and 2010 which enabled the Section to produce a new set of projections of population based on alternative assumptions in regard to births and migration over the next 20 years. Some results from this work are contained in Appendix A of this document.

Throughout the report projections of enrolment are based on a number of different population projection scenarios. These are combinations of the following migration and fertility assumptions:

M3: Prolonged stagnation with high outward migration

M4: Slow economic recovery with initial significant outward migration

M5: Quick economic rebound and restoration of growth and inward migration

F3: Total period fertility rate to decline rapidly from an estimated 2.07 in 2009 to the current EU norm of 1.65 by 2016.

F4: Total period fertility rate to decrease from 2.07 in 2009 to reach 1.9 by 2016, and remain constant thereafter.

F5: Total period fertility rate to remain at 2.10 for all years into the future.

For further details on the fertility and migration scenarios used refer to Tables A.1 and A.2 in Appendix A.

1 Primary Level

Throughout this document, ‘Primary level’ refers to enrolment in National Schools, only. Special Schools are treated as National Schools and are included under Primary Level even though some students in Special Schools are following courses at second level.

Historical evidence shows that enrolment at Primary Level is mainly determined by the number of births and, to a much lesser extent, family migration. Indeed, CSO estimates of net migration by age-group over recent decades suggest lower levels of migration among the school-going population compared to older age-groups. Persons aged 20-40 are relatively more mobile and show greater levels of both inward and outward migration. The total number of births, in Ireland, rose for most of the 1960s-1970s before they declined between 1981 and 1994. Births have risen, again, since 1994 and reached an estimated level of 74,000 in 2010 – among the highest number of annual number of births since the late 19th century. The Total Period Fertility Rate (TPFR) was estimated to be 2.07 (source: Eurostat) in 2009 compared to a low of 1.85 in 1994 and a high of 4.06 in 1964.

Enrolment at Primary Level has fluctuated – with a time lag – in response to changes in births. Hence, total enrolment at this level declined from a high of 567,600 in 1986 to a low of 439,600 in 2001 after which it has been increasing to reach an estimated level of 509,700 in September 2010. The increase in births has been the result of a combination of (i) rising fertility, (ii) increasing numbers of women born in Ireland in the 1970s and giving birth in the last decade, and (iii) rising numbers of women who immigrated to Ireland in the last decade. While inward migration of women in the last decade had some impact, the vast majority of the increase in births between the mid-1990s and 2010 was due to (i) a higher TPFR and (ii) more Irish-born women in the 15-49 age-group than before.

Table 1 presents projected enrolment to the year 2031 at primary level. Each year refers to the beginning of a school-year when enrolment is recorded in September of that year. Hence, the year 2011 refers to enrolment in September 2011 of the school-year 2011/12.

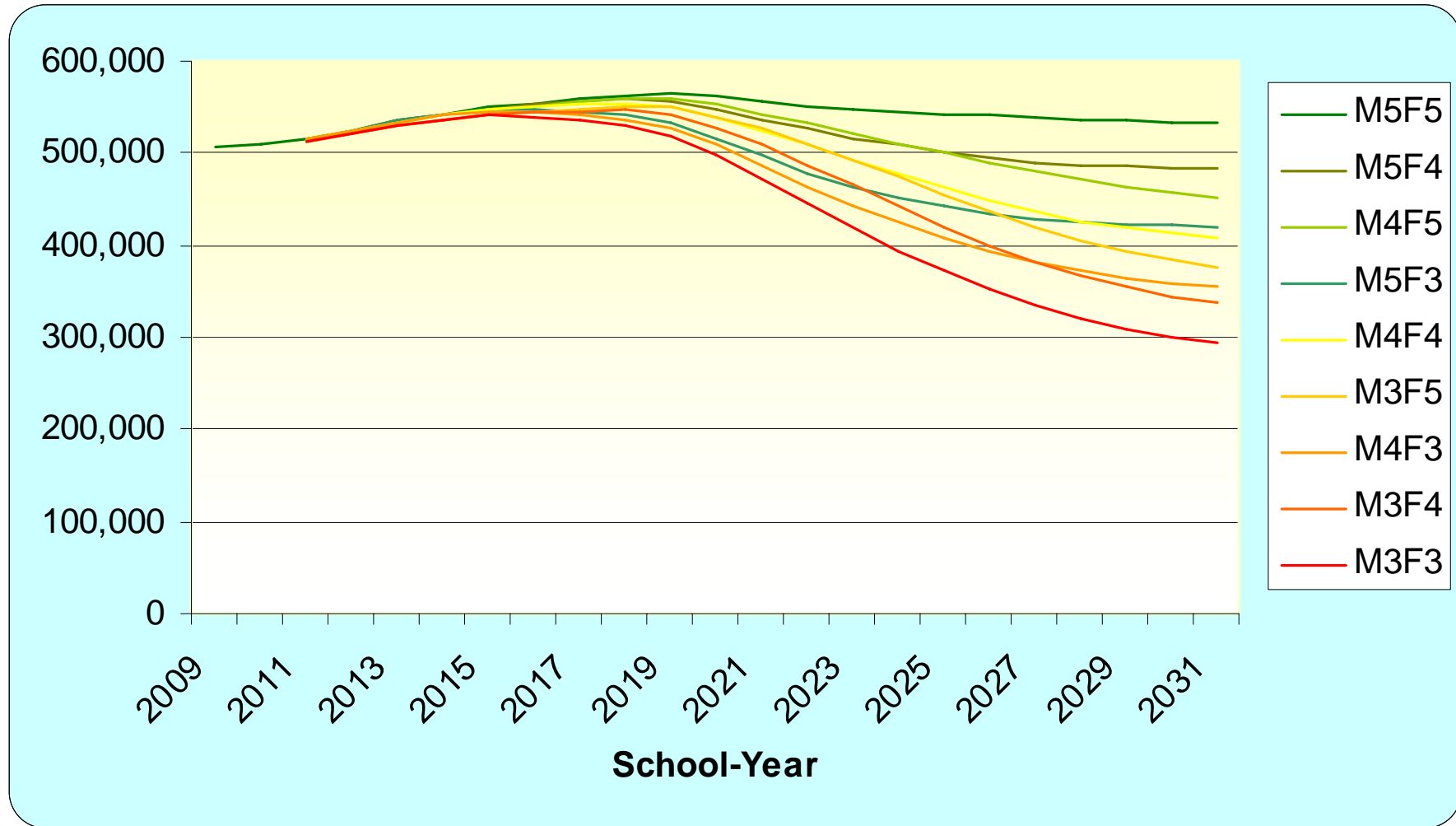
A number of scenarios are presented.

For further details on the fertility and migration scenarios used refer to Tables A.1 and A.2 in Appendix A.

Table1: Projections of Enrolment at Primary Level									
	M5F5	M5F4	M4F5	M5F3	M4F4	M3F5	M4F3	M3F4	M3F3
2009	505,998 (actual figure)								
2010	509,652 (provisional)								
2011	515,200	515,200	514,600	515,200	514,600	512,400	514,600	512,400	512,400
2012	524,600	524,600	523,100	524,600	523,100	520,000	523,100	520,000	520,000
2013	534,700	534,700	532,900	534,700	532,900	529,300	532,900	529,300	529,300
2014	542,600	542,600	540,500	542,600	540,500	536,500	540,500	536,500	536,500
2015	549,300	549,000	547,100	547,400	546,800	542,600	545,100	542,300	540,700
2016	553,700	552,500	551,300	546,400	550,000	546,000	544,000	544,700	538,700
2017	558,400	555,700	555,500	544,400	552,800	548,700	541,500	546,000	534,900
2018	563,400	558,600	559,400	540,900	554,700	551,900	537,100	547,300	530,100
2019	564,800	556,500	558,800	531,800	550,800	549,300	526,500	541,600	518,000
2020	561,800	548,500	552,700	516,500	539,800	540,100	508,600	527,900	497,900
2021	556,600	537,200	542,900	497,500	524,500	526,200	486,100	508,900	472,400
2022	551,600	526,200	532,600	478,900	508,600	509,900	463,300	487,700	444,900
2023	547,600	516,400	521,700	462,800	492,600	492,100	441,900	465,200	418,000
2024	544,900	508,300	510,900	451,100	477,100	473,600	423,900	442,900	394,100
2025	542,600	501,200	500,100	441,500	462,200	454,800	407,400	420,700	371,400
2026	540,600	495,100	489,400	433,900	448,000	436,500	392,900	399,700	351,000
2027	538,700	490,300	479,400	428,400	435,700	419,600	381,000	381,200	333,700
2028	537,100	487,500	470,600	425,200	426,100	405,000	371,900	366,200	320,000
2029	535,600	485,700	463,000	423,500	418,600	392,700	365,100	354,300	309,400
2030	534,000	483,900	456,900	421,800	412,400	383,200	359,600	345,000	301,200
2031	532,500	482,400	452,400	420,400	408,000	376,700	355,600	338,500	295,400

Note: (1) peak enrolment figures are highlighted in the green cells, above; (2) green-coloured scenarios (**M5** and **F5**) denote high-population growth while red-coloured scenarios (**M3** and **F3**) denote low-population growth. **M4** and **F4** denote growth between high and low.

Figure 1: Projections of Enrolment at Primary Level



KEY POINTS TO NOTE

Primary Level:

- **Focussing on the immediate four year period ahead – 2011-2014** (inclusive), enrolment is projected to increase under all 9 scenarios. This means that it is highly unlikely that enrolment at primary level will fall before the year 2015 even if large-scale emigration occurs along with a fall in fertility before then.
- The projected increase in enrolment is in the order of 26,000-33,000 between September 2010 and September 2014 depending on which scenario is assumed.
- These projections imply a slower growth in enrolment compared to what was previously projected in February 2010 (e.g. using scenario M0F1 in the latter, enrolment was projected to increase by 42,400 between 2010 and 2014).
- There is greater uncertainty about trends beyond 2014 as the cumulative effect of using different migration or fertility assumptions is estimated. Under a low-growth scenario (**M3 F3** – high net outward migration in the immediate future combined with a significant fall in fertility), enrolment could fall to below 300,000 by 2031. Under a high-growth scenario (**M5 F5** – low net outward migration in the immediate future combined with a constant 2010 rate of fertility), enrolment could rise to over 530,000 by 2031.
- All scenarios considered, above, imply continuing enrolment growth up to 2014 and, for some scenarios, up to 2018. However, from 2020 at the latest, all scenarios show falling enrolment numbers for the remainder of the period shown. The turning point – from growth to decline – is the year 2015 in the case of 3 of the scenarios and 2018 in the case of 5 scenarios.
- The margin between the highest (**M5 F5**) and lowest population-growth scenarios (**M3 F3**) is as much as 237,000 pupils in the year 2031 compared to a margin of only 6,000 in the year 2014.
- A combination of factors is likely to lead to a reduction in the number of births in the coming period – the impact of fewer females born in the 1990s, constant or falling fertility rates in the immediate decade ahead and the cumulative impact of net outwards migration over 2010-2015 among females aged 20-40. Under M3F3, births could fall to as low as 36,000 in 2026 or, under M5F5, births could fall only very modestly to 67,100 by 2026 (compared to a level of 74,000 in 2010). Whichever scenario is assumed, births reach a low point in 2026 due to the combination of factors mentioned here. If this outcome is realised there will be a significant fall in demand for places at primary level throughout the decade beginning in 2020.

2A Second Level

Second Level comprises all Junior and Leaving Certificate course students in DES-aided schools and colleges. Post-Leaving Certificate programme students in Further Education are shown separately in section 2B of this document. Excluded from this analysis is: enrolment in part-time courses in aided schools, enrolment in ‘Core’¹ Vocational Training Opportunities Scheme (VTOS) and enrolment in ‘private’ (non-aided) institutions.

Enrolment has been increasing at Second Level (excluding PLCs) since 2006 in line with increasing births coupled with the impact of immigration over the last 15 years. The main drivers of increasing enrolment into the future will be:

- Rising births since the mid-1990s
- Increased participation and retention to Leaving Certificate

Net inward migration, to date, has had relatively little impact on enrolment at second level. There has been a noticeable increase in retention in recent years reflecting reduced job opportunities for early school leavers.

Analysis of retention at second level shows that approximately 85% of entrants to first year of Junior Cycle are likely to complete Leaving Certificate². It is assumed that, on the basis of increases in retention, the rate will increase slightly over time to reach 88% by the year 2020.

A rate of completion of 88% is compatible with a rate of early school leaving (applicable to persons aged 18-24) of no more than 8%. The difference of 4 percentage points as between 92% completion (=100-8) and 88% is accounted for by alternative training as well as wider age coverage in the case of early school leavers. A level of 88% retention as calculated in this exercise is therefore approximately equivalent to the EU2020 national target of no more than 8% early school leaving.

Table 2 presents projected enrolment to the year 2031 at Second Level.

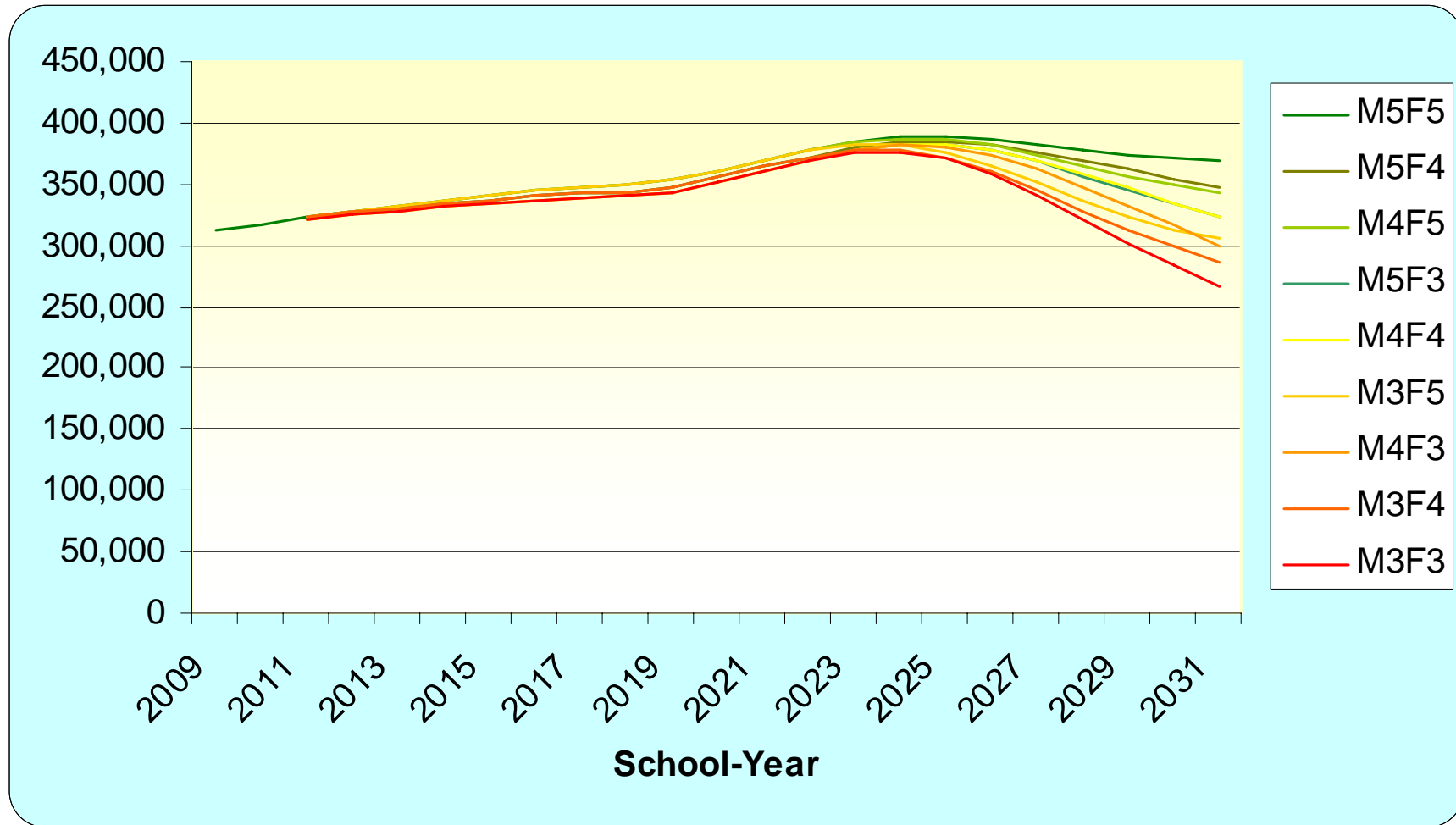
¹ Core VTOS students are enrolled in centres outside mainstream second level schools. On the other hand, ‘Dispersed’ VTOS students are included in mainstream Junior and Senior Cycle enrolment reported in this document.

² This estimate of the Rate of Retention is not comparable to that used in the ‘Retention rates of pupils in second level schools’ (May 2011)

Table 2 Projections of Enrolment at Second Level									
	M5F5	M4F5	M5F4	M4F4	M3F5	M5F3	M3F4	M4F3	M3F3
2009	312,159 (actual figure)								
2010	317,432 (provisional)								
2011	322,600	322,500	322,600	322,500	322,000	322,600	322,000	322,500	322,000
2012	327,500	326,900	327,500	326,900	325,700	327,500	325,700	326,900	325,700
2013	332,200	330,700	332,200	330,700	328,700	332,200	328,700	330,700	328,700
2014	337,000	334,600	337,000	334,600	331,900	337,000	331,900	334,600	331,900
2015	340,400	337,200	340,400	337,200	334,300	340,400	334,300	337,200	334,300
2016	344,100	340,200	344,100	340,200	336,900	344,100	336,900	340,200	336,900
2017	346,900	342,300	346,900	342,300	338,700	346,900	338,700	342,300	338,700
2018	348,900	343,900	348,900	343,900	339,900	348,900	339,800	343,800	339,800
2019	353,400	347,900	353,300	347,900	344,000	353,300	344,000	347,900	343,900
2020	360,700	355,100	360,700	355,000	351,300	360,600	351,200	355,000	351,200
2021	369,500	363,800	369,500	363,800	360,300	369,400	360,300	363,700	360,200
2022	376,800	371,700	377,100	371,700	369,100	377,000	369,100	371,500	368,600
2023	383,600	379,300	383,900	378,900	377,600	382,300	377,300	377,300	374,900
2024	388,000	384,300	387,700	383,100	383,100	382,000	381,800	377,400	375,400
2025	388,700	385,100	386,900	382,500	383,200	376,300	380,700	371,900	369,400
2026	385,800	381,700	382,000	377,200	378,200	365,400	373,800	360,700	356,900
2027	381,300	375,800	374,300	368,300	369,600	351,200	362,400	345,600	339,700
2028	376,800	368,900	365,200	357,000	359,000	336,100	347,700	328,700	319,800
2029	373,200	361,500	356,500	345,000	347,300	322,700	331,800	312,400	300,100
2030	370,800	354,200	349,500	333,600	335,000	312,600	315,800	298,500	282,400
2031	369,400	347,000	344,000	322,700	322,400	305,100	300,200	286,400	266,200

Note: (1) peak enrolment figures are highlighted in the green cells, above; (2) green-coloured scenarios (M5 and F5) denote high-population growth while red-coloured scenarios (M3 and F3) denote low-population growth. M4 and F4 denote growth between high and low.

Figure 2: Projections of Enrolment at Second Level



KEY POINTS TO NOTE

Second Level:

- **Focussing on the immediate four year period ahead – 2011-2014** (inclusive), enrolment is projected to increase under all 9 scenarios. This means that it is highly unlikely that enrolment at Second Level will fall before the year 2015 even if large-scale emigration occurs along with a fall in fertility before then.
- The projected increase in enrolment is in the order of 15,000-20,000 between September 2010 and September 2014 depending on which scenario is assumed.
- These projections imply a faster growth in enrolment compared to what was previously projected in February 2010 (i.e. enrolment was projected to increase by 8,200 between 2010 and 2014).
- There is greater uncertainty about trends beyond 2014 as the cumulative effect of using different migration or fertility assumptions is estimated. Under a low-growth scenario (**M3 F3** – high net outward migration in the immediate future combined with a significant fall in fertility), enrolment could fall to below 270,000 by 2031. Under a high-growth scenario (**M5 F5** – low net outward migration in the immediate future combined with a constant 2010 rate of fertility), enrolment could rise to over 370,000 by 2031.
- All scenarios considered, above, imply continuing enrolment growth up to 2023 or 2025.
- The margin between the highest (**M5 F5**) and lowest population-growth scenarios (**M3 F3**) is as much as 103,000 pupils in the year 2031 compared to a margin of only 5,000 in the year 2014.
- An interesting feature of **M3 F3** is that enrolment in second level would actually overtake that in Primary Level for just two years – 2026 and 2027.

2B Further Education (Post-Leaving Certificate courses)

Given the age profile, level and educational composition of Post-Leaving Certificate (PLC) learners as well as the separate administrative arrangements for PLC provision, it is appropriate to classify enrolment separately to that of second level education. PLC learners undertake courses in approved PLC centres (which may be stand-alone "further education colleges" as well as mixed provision VEC schools, voluntary secondary and community and comprehensive schools). PLC courses are generally one year full time courses leading to major awards at Levels 5 or 6 (Advanced) on the National Qualifications Framework while courses leading to awards at Levels 6 (Higher) - 10 are offered in institutions of higher education.

Over the period 2007 - 2009, the number of approved PLC places increased from 30,188 to 31,688 while over the same period, enrolments increased from approximately 30,000 to 38,600, in response to increased demand. This level of enrolment was maintained for the 2010/2011 academic year at 38,700. Under the 2011 Jobs Initiative (May 2011) it has been decided to allocate 1,000 additional Post-Leaving Certificate places. It is assumed that enrolment will stay at a level of around 40,000 from 2011 onwards under all migration and fertility scenarios.

3 Higher Education

It should also be borne in mind that demographic factors such as fertility and, to a lesser extent, migration impact on enrolment at primary level and junior cycle of second level. By contrast, patterns of participation and demand for places in education and training tend to feature more as driving factors in the case of enrolment in further and higher education.

Even though births declined throughout the 1980s and early 1990s, intake to, and enrolment in, higher education has continued to increase very significantly in every year up to the present. This was achieved through a number of channels including additional 'mature students' (those aged 23 or more on 1 January prior to entering a full-time undergraduate course) and rising proportions of Leaving Certificate cohorts entering higher education.

A number of new or continuing pressures on Higher Education places will arise from:

- Increasing births since the mid-1990s
- The impact of recession and demand for further and higher education
- The competition for skills and higher education graduates internationally as economies trade up the value chain.

In projecting numbers of full-time students at Higher Education, the following factors are taken into account:

- The proportions of 'mature', 'direct' (from school), 'late' (typically 19-22 year olds) and 'out-of-State' entrants in any year.
- The estimated numbers sitting the Leaving Certificate as School candidates for the *last* time (total School candidates excluding Leaving Certificate Applied and net of projected Leaving Certificate repeats in the following year)
- The proportion of such Leaving Certificate candidates entering full time undergraduate courses at Higher Education. This is referred to as the *Leaving Certificate Entry Rate* (LCER) = 'Direct' and 'Late' entrants divided by last-time Leaving Certificate sits (see above).
- The *First-Time Admissions Rate* (defined as the estimated proportion of today's 18 year olds who will enter full-time undergraduate programmes whether as mature students or transfers from Leaving Certificate in higher education in the State at current rates of intake)
- The proportion of postgraduate students in total full time enrolment.
- The proportion of total enrolment at Higher Level 'turned over' into the following year. This is referred to as the *Rate of Undergraduate Turnover* (ROUT).

ROUT is calculated as:

$$\text{Rate of Undergraduate Turnover} = \text{ROUT} = (\text{Stock}^{t+1} - \text{Entrants}^{t+1}) / \text{Stock}^t$$

Where

Stock ^t = total enrolment in full-time undergraduate courses at Higher Education in year T

Stock ^{t+1} = total enrolment in full-time undergraduate courses at Higher Education in year T+1

And Entrants ^{t+1} = total intake to full-time undergraduate courses at Higher Education in year T+1

ROUT is estimated as 74.5 and 73.2 in the Universities³ and IOT/DIT sectors, respectively, with reference to turnover of enrolment stock in 2009 into enrolment stock in 2010.

The number of new entrants to full time undergraduate courses in aided institutions of Higher Education was estimated at 46,700 in 2010/11. This corresponds to a Leaving Certificate Entry Rate of just under 70% in 2010/11, which compares to an estimated rate of slightly less than 60% in 2000/01.

The following assumptions have been made:

- a constant LCER (at the estimated 2010/11 level)
- an increasing First-Time Admissions Rate to full-time Undergraduate programmes in DES-Aided institutions of Higher Education from a level of 65% in 2010 to 71% in 2015 and 75% in 2020.
- no changes in the ROUT
- further increases in the proportion of mature students from its estimated 2010/11 level of 14% (to reach, respectively, 18% by 2015 and 23% by 2020) in keeping with recent trends.
- a slight increase in the proportion of postgraduate students over time (rising from 14 to 15 percent between 2010 and 2020)
- continuing increases in full-time under-graduate intake from outside the State (rising from 8 to 12% of CAO net acceptances between 2010 and 2020).

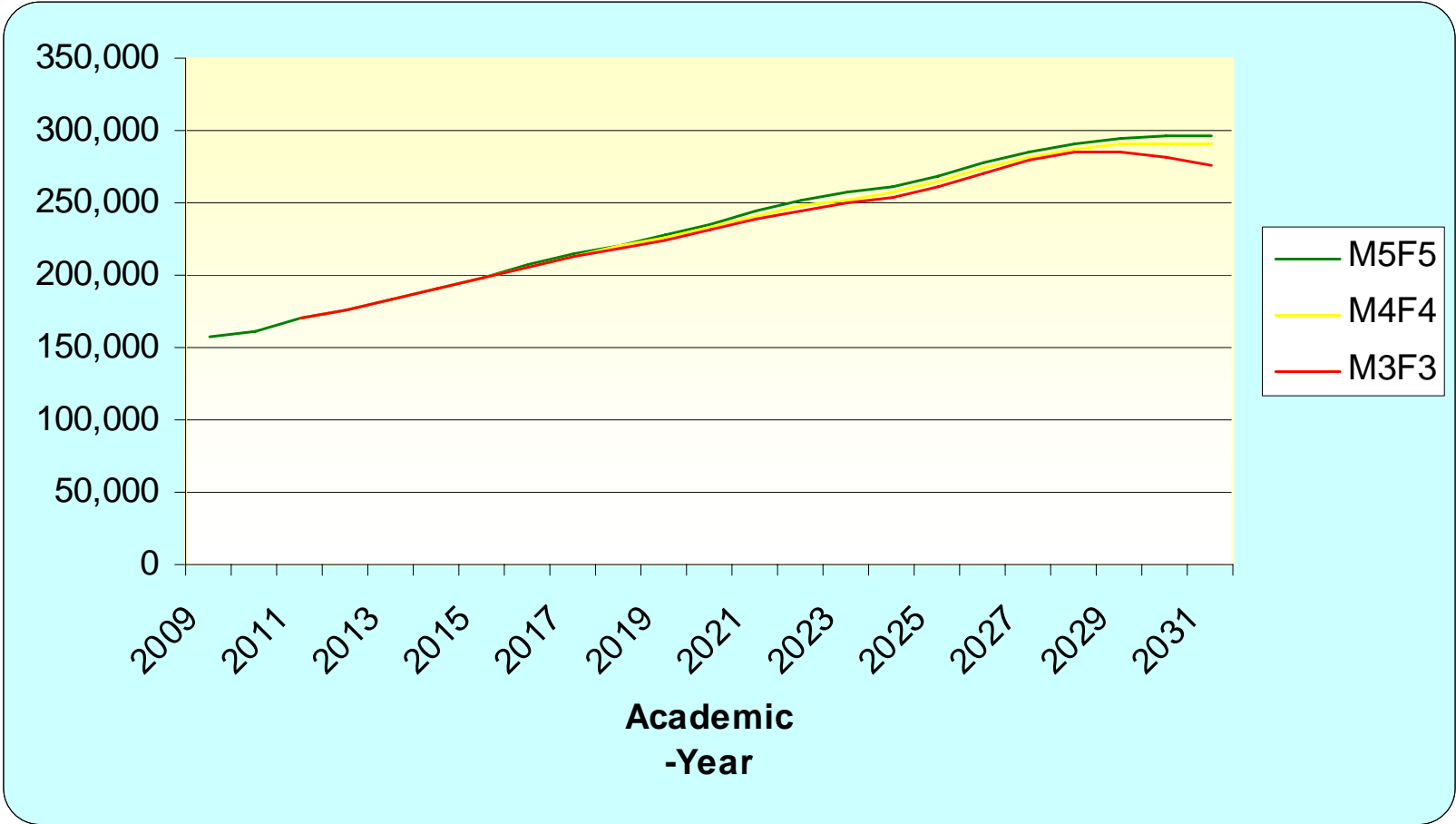
A key consideration in regard to projection of future enrolment at Higher Education level is the compatibility of both supply and demand for places in higher education with agreed targets in regard to attainment of the population in the year 2020. A national target of 60% has been set for tertiary attainment in the population aged 30-34 in 2020 as part of the EU2020 agenda. It is, therefore, expected that tertiary attainment for this age-group will increase from a level of 49% in 2009 to at least 60% in 2020.

Table 3 presents projected enrolment to the year 2031 at Higher Education Level using three of the nine scenarios. These three scenarios correspond to the lowest and highest population growth scenarios presented in Appendix A together with the middle scenario of M4F4 (Slow economic recovery with initial significant outward migration combined with total period fertility rate to decrease from 2.07 in 2009 to reach 1.9 by 2016, and remain constant thereafter).

³ Including institutions aided by the HEA but excluding the Royal College of Surgeons in Ireland.

Table 3: Projections of Enrolment Higher Education Level			
	M5F5	M4F4	M3F3
2009	156,973		
2010	161,089 (estimated)		
2011	170,300	170,300	170,300
2012	176,600	176,600	176,600
2013	183,200	183,200	183,100
2014	190,500	190,400	190,200
2015	198,700	198,300	197,800
2016	207,000	206,300	205,600
2017	214,700	213,500	212,600
2018	221,300	219,600	218,300
2019	228,300	226,100	224,500
2020	235,800	233,100	231,400
2021	243,600	240,400	238,400
2022	251,300	247,600	245,300
2023	256,500	252,400	249,800
2024	261,400	257,100	254,300
2025	268,600	264,400	261,700
2026	277,400	273,400	270,900
2027	285,300	281,600	279,400
2028	290,900	287,400	284,900
2029	294,300	290,500	285,600
2030	295,700	291,100	282,100
2031	296,100	289,900	276,100

Figure 3: Projections of Enrolment at Higher Education Level



KEY POINTS TO NOTE

Higher Education:

- **Focussing on the immediate four year period ahead** – 2011-2014 (inclusive), full-time enrolment is projected to increase by 18% or 30,000 on the 2010 level under any of the three scenarios shown.
- These projections imply a higher than expected growth in enrolment compared to what was previously projected in February 2010 (i.e. enrolment was projected to increase by 21,000 between 2010 and 2014).
- While there is greater uncertainty about trends beyond 2014 the impact of using different migration or fertility assumptions is much less than is the case at Primary and Second Level. Under a low-growth scenario (**M3 F3**), full-time enrolment could increase to just over 275,000 by the year 2031. Under a high-growth scenario (**M5 F5**), enrolment could rise to just under 300,000 by 2031.
- In 2010 there were an estimated 275,000 persons aged between 20-24. Ten years on from 2010, under scenario M4, it is projected that there will be approximately 235,000 persons age 30-34 implying a net loss mostly due to (net) outward migration for this age-cohort of 40,000.

Appendix A

Supplementary Tables

Table A.1: Total Period Fertility Rate scenarios used in this document			
	F3	F4	F5
	Fast decline to EU norms	Slow decline & above EU average	No change on 2010 Rate
2010	2.10	2.10	2.10
2011	1.95	2.08	2.10
2012	1.90	2.06	2.10
2013	1.84	2.04	2.10
2014	1.78	2.01	2.10
2015	1.72	1.94	2.10
2016	1.65	1.90	2.10
2017	1.65	1.90	2.10
2018	1.65	1.90	2.10
2019	1.65	1.90	2.10
2020	1.65	1.90	2.10

The *Total Period Fertility Rate* is a synthetic indicator of fertility at one point in time (a year) across all cohorts of women giving birth in that year. It shows the average expected number of children a woman would have by the age of 49 based on the current year's information on births and age of mothers.

Table A.2: Net (outward) migration scenarios used in this document

	M3	M4	M5
year	Prolonged Stagnation - high outward migration	Slow economic recovery - significant outward migration initially	Quick economic rebound and restoration of growth and inward migration
2010	-35,000	-35,000	-35,000
2011	-50,000	-40,000	-40,000
2012	-50,000	-30,000	-20,000
2013	-50,000	-20,000	-10,000
2014	-40,000	-20,000	0
2015	-40,000	-15,000	10,000
2016	-30,000	-10,000	15,000
2017	-30,000	0	30,000
2018	-25,000	0	30,000
2019	-25,000	0	30,000
2020	-25,000	0	20,000
Summary			
2011-2014	-190,000	-110,000	-70,000
2011-2020	-365,000	-135,000	65,000

Table A.3: Summary Total Changes in Births, Net Migration, Deaths, Population – various scenarios			
SCENARIO M3 F5			
CHANGES	2011-2020	2021-2034	2011-2016
Births	609,417	705,238	395,229
Net Migration	-365,000	-20,000	-260,000
Deaths	263,532	425,602	158,254
Total Population	-19,115	259,636	-23,024
SCENARIO M3 F4			
CHANGES	2011-2020	2021-2034	2011-2016
Births	573,353	630,577	379,552
Net Migration	-365,000	-20,000	-260,000
Deaths	263,436	425,372	158,221
Total Population	-55,083	185,205	-38,669
SCENARIO M3 F3			
CHANGES	2011-2020	2021-2034	2011-2016
Births	513,091	544,714	344,409
Net Migration	-365,000	-20,000	-260,000
Deaths	263,257	425,071	158,128
Total Population	-115,165	99,644	-73,719
SCENARIO M4 F3			
CHANGES	2011-2020	2021-2034	2011-2016
Births	549,402	641,484	356,821
Net Migration	-135,000	0	-135,000
Deaths	264,086	428,217	158,401
Total Population	150,315	213,267	63,420
SCENARIO M5 F3			
CHANGES	2011-2020	2021-2034	2011-2016
Births	581,499	753,510	364,653
Net Migration	65,000	150,000	-45,000
Deaths	264,567	431,320	158,499
Total Population	381,932	472,190	161,154
SCENARIO M5 F5			
CHANGES	2011-2020	2021-2034	2011-2016
Births	694,772	964,457	419,751
Net Migration	65,000	150,000	-45,000
Deaths	264,881	432,003	158,632
Total Population	494,892	682,454	216,119
SCENARIO M5 F4			
CHANGES	2011-2020	2021-2034	2011-2016
Births	651,802	870,608	402,423
Net Migration	65,000	150,000	-45,000
Deaths	264,769	431,715	158,597
Total Population	452,033	588,893	198,826

SCENARIO M4 F4			
CHANGES	2011-2020	2021-2034	2011-2016
Births	614,948	741,942	393,553
Net Migration	-135,000	0	-135,000
Deaths	264,278	428,564	158,497
Total Population	215,670	313,378	100,055
SCENARIO M4 F5			
CHANGES	2011-2020	2021-2034	2011-2016
Births	654,672	825,821	410,136
Net Migration	-135,000	0	-135,000
Deaths	264,382	428,823	158,531
Total Population	255,290	396,998	116,604

M3	M4	M5
2,700		
0	0	0
-3,100	-1,300	0
-3,100	-1,300	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0

Table A.5: Total Population under various scenarios

	M0F1 (CSO 2008)	M3F3	M3F4	M3F5	M4F3	M4F4	M4F5	M5F3	M5F4	M5F5
2006	4,232,929	4,232,929								
2007	4,270,724	4,339,026 (estimate)								
2008	4,308,029	4,422,077 (estimate)								
2009	4,345,759	4,459,305 (estimate)								
2010	4,383,782	4,470,667 (estimate)								
2011	4,421,886	4,459,427	4,463,514	4,464,319	4,469,730	4,473,838	4,474,647	4,469,730	4,473,838	4,474,647
2012	4,459,963	4,445,930	4,454,875	4,456,850	4,477,117	4,486,158	4,488,154	4,487,469	4,496,539	4,498,542
2013	4,497,789	4,428,691	4,443,428	4,447,184	4,491,677	4,506,701	4,510,541	4,512,727	4,527,848	4,531,721
2014	4,535,068	4,417,593	4,439,134	4,445,296	4,502,960	4,525,103	4,531,468	4,545,375	4,567,790	4,574,275
2015	4,571,520	4,402,507	4,430,519	4,440,863	4,515,977	4,544,997	4,555,823	4,585,642	4,615,212	4,626,400
2016	4,606,906	4,393,354	4,428,373	4,444,009	4,530,486	4,567,089	4,583,628	4,628,216	4,665,856	4,683,140
2017	4,641,119	4,382,034	4,423,737	4,444,564	4,553,757	4,597,769	4,620,038	4,685,786	4,731,509	4,755,017
2018	4,674,055	4,373,584	4,421,682	4,447,624	4,575,716	4,626,977	4,655,002	4,743,242	4,797,069	4,826,925
2019	4,705,555	4,362,792	4,416,994	4,447,979	4,596,165	4,654,516	4,688,322	4,800,347	4,862,297	4,898,615
2020	4,735,460	4,349,592	4,409,610	4,445,543	4,615,044	4,680,329	4,719,912	4,846,637	4,916,666	4,959,485
2021	4,763,700	4,344,390	4,409,998	4,450,814	4,632,509	4,704,596	4,749,943	4,892,216	4,970,294	5,019,641
2022	4,790,287	4,347,531	4,418,570	4,464,227	4,648,660	4,727,440	4,778,528	4,926,742	5,012,797	5,068,642
2023	4,815,412	4,354,687	4,431,107	4,481,627	4,663,855	4,749,276	4,806,078	4,960,501	5,054,501	5,116,812
2024	4,839,162	4,361,191	4,442,992	4,498,415	4,678,335	4,770,382	4,832,882	4,993,650	5,095,588	5,164,340
2025	4,861,661	4,367,221	4,454,432	4,514,799	4,692,207	4,790,881	4,859,067	5,026,212	5,136,087	5,211,258
2026	4,882,976	4,373,097	4,465,822	4,531,192	4,705,722	4,811,088	4,884,971	5,058,346	5,176,209	5,257,798
2027	4,903,124	4,379,058	4,477,447	4,547,903	4,719,045	4,831,206	4,910,822	5,090,122	5,216,045	5,304,083
2028	4,922,375	4,385,370	4,489,628	4,565,294	4,732,398	4,851,503	4,936,934	5,121,646	5,255,739	5,350,299
2029	4,940,906	4,392,149	4,502,526	4,583,550	4,745,810	4,872,044	4,963,404	5,152,891	5,295,292	5,396,479
2030	4,958,884	4,399,421	4,516,171	4,602,715	4,759,254	4,892,799	4,990,219	5,183,781	5,334,620	5,442,557
2031	4,976,282	4,407,167	4,530,609	4,622,853	4,772,654	4,913,756	5,017,386	5,214,223	5,373,694	5,488,518

Table A.6: Total Births under various scenarios

	M0F1 (CSO 2008)	M3F3	M3F4	M4F3	M4F4	M5F4	M3F5	M4F5	M5F5	M5F3
2006						61,666				
2007	64,348					65,752				
2008	64,627					72,301				
2009	64,764					74,698				
2010*	64,840					74,026				
2011	64,777	66,865	70,953	67,169	71,276	71,276	71,758	72,085	72,085	67,169
2012	64,661	63,557	68,428	64,453	69,399	69,780	69,599	70,588	70,976	64,805
2013	64,399	59,626	65,440	61,456	67,462	68,236	67,227	69,312	70,112	62,162
2014	63,886	55,565	62,396	58,007	65,152	66,708	64,810	67,685	69,327	59,386
2015	63,142	51,458	57,959	54,639	61,548	64,106	62,151	66,019	68,820	56,919
2016	62,212	47,337	54,375	51,099	58,715	62,316	59,684	64,446	68,430	54,213
2017	61,238	45,221	51,937	49,929	57,371	62,412	57,150	63,124	68,661	54,294
2018	60,196	43,223	49,648	48,769	56,052	62,496	54,786	61,833	68,870	54,354
2019	59,048	41,171	47,305	47,565	54,689	62,493	52,369	60,494	68,983	54,334
2020	57,776	39,068	44,911	46,318	53,283	61,978	49,882	59,085	68,507	53,864
2021	56,483	37,358	42,974	45,213	52,044	61,561	47,878	57,833	68,116	53,477
2022	55,236	36,083	41,538	44,290	51,013	60,843	46,400	56,777	67,368	52,832
2023	54,238	35,570	40,975	43,807	50,477	60,526	45,858	56,215	67,018	52,546
2024	53,361	35,416	40,819	43,594	50,247	60,418	45,742	55,968	66,885	52,447
2025	52,665	35,530	40,963	43,579	50,234	60,434	45,927	55,943	66,878	52,464
2026	52,073	35,977	41,514	43,829	50,549	60,673	46,536	56,268	67,117	52,653
2027	51,540	36,714	42,401	44,295	51,118	61,058	47,507	56,873	67,531	52,964
2028	51,337	37,773	43,666	45,041	52,013	61,643	48,896	57,852	68,192	53,440
2029	51,354	39,095	45,240	45,964	53,123	62,382	50,618	59,075	69,034	54,039
2030	51,587	40,446	46,847	46,863	54,208	63,042	52,389	60,291	69,818	54,566
2031	51,826	41,782	48,506	47,694	55,286	63,679	54,228	61,521	70,596	55,009

* Births total for all years, including 2010, refer to the 12 months ending April in any year.

Appendix B

Comparisons with previous projections

Table B.1: Comparisons of projections with previous release									
	<i>Projections released February 2010</i>					<i>Projections released May 2011</i>			
	M0 F1 S2			M0 F1 S2					
				T2	T3	M4 F4			
	First Level	Second Level	PLCs*	Higher Education		First Level	Second Level	PLCs	Higher Education
2009/10	505,611	312,148	38,528	156,785	156,785	505,611	312,148	38,528	156,785
2010/11	510,300	314,300	38,600	161,800	164,575	509,652	317,432	38,680	161,089
2011/12	517,200	316,400	38,600	167,300	172,776	514,600	322,500	40,000	170,300
2012/13	529,800	317,800	38,500	172,400	180,777	523,100	326,900	40,000	176,600
2013/14	543,100	319,700	38,600	177,400	186,517	532,900	330,700	40,000	183,200
2014/15	552,700	322,500	38,500	182,700	192,761	540,500	334,600	40,000	190,400
2015/16	559,100	325,100	38,500	188,200	199,269	546,800	337,200	40,000	198,300
2016/17	563,300	328,700	38,500	193,900	206,774	550,000	340,200	40,000	206,300
2017/18	567,300	331,500	38,500	199,100	213,379	552,800	342,300	40,000	213,500
2018/19	569,600	334,500	38,500	203,800	219,244	554,700	343,900	40,000	219,600
2019/20	567,100	340,100	38,500	209,500	225,905	550,800	347,900	40,000	226,100
2020/21	559,000	349,000	38,500	215,900	233,289	539,800	355,000	40,000	233,100
2021/22	548,500	358,500	38,500	222,900	241,137	524,500	363,800	40,000	240,400
2022/23	539,000	365,800	38,500	229,300	248,350	508,600	371,700	40,000	247,600
2023/24	530,500	371,100	38,500	233,800	253,369	492,600	378,900	40,000	252,400
2024/25	521,700	373,400	38,500	239,200	259,431	477,100	383,100	40,000	257,100
2025/26	512,700	371,000	38,500	247,600	268,678	462,200	382,500	40,000	264,400
2026/27	503,700	365,100	38,500	257,100	279,104	448,000	377,200	40,000	273,400

* data in respect of PLC students were not shown beyond 2013.