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# **Forecasting university enrolment and completion numbers for Victoria**

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**Australian Council for Educational Research**

ACN: 004 398 145; ABN: 19 004 398 145

**October 2009**

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## Introduction

This report is a culmination of the research and projection work previously completed for the Victorian Higher Education Expert Panel by ACER. It is the second of two reports which form this particular research project. The first report, 'Forecasting university level attainment numbers for Victoria', focussed on attainment forecasts and was completed in September 2009 (Edwards, 2009).

The key factor driving the need for these calculations is the recently established Federal Government policy to achieve a national target of 40 per cent attainment of bachelor degree qualifications or above among the Australian population aged 25 to 34 by the year 2025 (Australian Government, 2009). This policy was developed in response to a wide ranging review of Australia's higher education sector in 2008 (Bradley, Noonan, Nugent, & Scales, 2008). The Victorian Government is interested in exploring the implications of this policy target for the State. This research provides some insight from the Victorian situation. The first report calculated the overall attainment figures that were forecast as necessary in order for Victoria to help Australia achieve the federal target.

The current report examines the components that will contribute to these overall attainment numbers. Specifically, it looks at two main components; Victorian university graduates (with sub-components comprising domestic and international students) and university qualified people who obtained their degree outside of Australia. The estimates pertaining to Victorian university graduates have been converted into forecasts of commencement and completion numbers deemed necessary to meet the national attainment target by 2025.

The discussion and data analysis used in this report involves calculations of commencements and completions in Victorian universities based on the Scenario C attainment picture built in the first report. Essentially this scenario explored the role that Victoria would need to play if Australia is to reach the 40 per cent attainment targets by 2025. It estimated that for Victoria to contribute to the national target, Victorian attainment rates for the 25 to 34 year group would need to rise from the 2006 figure of 34 per cent to 46.4 per cent (Edwards, 2009, p. 13). The reason Victoria needs to achieve a higher rate than the national target is that the state has a large share of the nation's 25 to 34 year olds and at present the attainment rates of these people are higher than in many other parts of the country, therefore it is assumed that Victoria should maintain its current share in this regard.

## Methodology

The base methodology for calculating the future attainment rates is detailed in the first report of this project (Edwards, 2009) and specific details in this regard are not revisited here. The methodology section of this report focuses on the calculations and assumptions built into the attainment forecasts in order to examine the components of this attainment and to extrapolate commencement and completion numbers from this data.

Overall, a number of sources were used in this report. The overall attainment numbers were calculated using data and related assumptions from the 2006 ABS Census of Australian Population and Housing and population projections from the Victorian Department of Planning and Community Development (DPCD, 2008), further detail about the use of these sources is provided in the previous report. In order to examine the components of the attainment population, data was used from the ABS Survey of Education and Training (ABS, 2005), the Department of Education Employment and Workplace Relations Higher Education Statistics Collection (DEEWR, 2008), and the Graduate Destinations Survey (GDS) conducted by Graduate Careers Australia (GCA, 2008).

As stated in the first report, caution is advised in the interpretation of these figures due to the substantial number of assumptions built into these projections. It must be noted that population forecasts and the application of attainment rates and university enrolment numbers into such forecasts do not provide 'predictions' or definitive numbers for the future. They are based on a wide range of assumptions and provide an *indication* of the future population and enrolment numbers if such assumptions are correct across the time series. Overall, the process undertaken to arrive at the figures presented here was complex, relying on assumptions relating to population growth, university attendance rates, retention rates, skilled migration numbers and international graduate departure intention. Given the complexities of our population, the ability of Government to substantially (and unpredictably) alter policy, the impact of macroeconomic success or failure on educational attendance and the changeable nature of the main university-age cohort, the findings here should be used with caution.

### **Estimating the components of the attainment population**

The first step following the forecasting of attainment numbers for Victoria was to examine the extent to which those with a bachelor degree or higher within the current population had obtained their degree in Australia. There is an overall scarcity of data which examines the characteristics of the qualifications held by people in Australia. However, one collection, the Survey of Education and Training (ABS, 2005), was able to provide figures at the relevant level of detail needed for calculating the components of the degree attainment population in Victoria.

A specialised dataset of the SET was purchased from the ABS for the purpose of these calculations. This dataset allowed for examination of degree qualified people by age, state of residence and location in which they obtained their degree (either in Australia or outside Australia). Victorian estimates of the proportion of degree holders who gained their qualification outside Australia for five year age groups from 20-24 to 65-69 (this information was not collected for those 70 and above) were calculated and applied to the attainment statistics in order to ascertain estimates of the extent to which Australian degrees will need to contribute to the building of the educational attainment levels in order to reach the designated targets. The outcomes of these calculations are provided in the appendix (Table 2).

In the assessment of components of the attainment population, internal (inter-state) migration was considered as a potentially important influence on the numbers of degree-

qualified people. However, no such calculation or estimate of this possible component was included in the forecasts for two main reasons.

First, the availability of such information appears to be non-existent – the SET is the most likely source of this information at the national level, but this is not part of the SET collection. Given the lack of data, from a practical perspective adding this component to any forecasts becomes impossible.

Second, by examining the component calculations of the ABS population projection (ABS, 2008), which the DPDC projections are largely derived, the component of net internal migration for Victoria is very low. In fact, across the whole population, the ABS projections assume a small loss of population from Victoria to other states. Overall, this yearly loss to other states accounts for less than one per cent of the total Victorian population. Therefore, the overall projections expect Victoria to attract about as many people from interstate as it loses. The implication for this work is that any internal migration at the net level might not actually be all that substantial. As a result, the lack of available data on this issue may not vastly inhibit the estimates in this report.

Following the logic applied above, it is assumed that of the Victorian population estimated to have obtained a degree in Australia, the numbers who would have gained their qualification in Victoria and then left the state would be balanced by the numbers who gained their degree elsewhere in Australia and were now living in Victoria.

For the population in Victoria with Australian degrees, an estimate of the number of domestic and the number of international graduates that comprise this population was also calculated. This estimate was based on figures from the DEEWR Higher Education Statistics Collection (DEEWR, 2008) and the GDS survey (GCA, 2008), focussing on graduates from Victorian universities in 2007. The DEEWR data on university completion numbers was used to estimate the proportion of Victorian undergraduate degree completers over the past few years who were international students. The GDS analysis examined the extent to which international student bachelor degree graduates from Victorian universities left Australia in the months following graduation. Overall the figures showed that 75 per cent of international bachelor graduates remained in Australia in the period following graduation. Among the whole completion cohort in Victoria from 2007, international students comprised 24.4 per cent.

The share of international students who would leave the country following graduation (set at a constant 25 per cent over the time period) was factored into calculation of the university component share between domestic and international students. It is possible that this figure could be higher, given that the GDS is conducted within about six months of graduation. However, given the lack of any more specific data, the GDS-derived estimate has been used.

### **Converting attainment to university enrolments**

With the component calculations undertaken as outlined above, the Australian university graduate part of the population was examined by age in order to make estimates relating to the time period in which graduates would have completed their degrees. Once

completion numbers were established on a yearly basis to 2025, these were converted into commencement rates using assumptions about retention and attrition of students from their degree. These processes are outlined in this section. The calculations rely on the assumption that the component share of the Australian degree and the overseas degree populations remains the same over the time period examined. Therefore, among other things, notable changes to migration policy (especially skilled migration) could impact on the forecast numbers of enrolments and completions in this report.

In order to provide estimates of course completion numbers that would be necessary to achieve the 2025 attainment targets for Victoria, calculations were applied to the Australian university graduate component of the attainment population based on the ages of this population. For each age group estimates were made relating to the approximate age in which they would have completed their bachelor degree. These rates were distributed across a range of years in order to ascertain the extent to which new graduates will need to be produced by 2025. The focus of this process was on the key target group of people who will be aged between 25 and 34 in 2025. This group will be aged between 10 and 19 years in 2010, therefore the vast majority will be going through the university system in the coming decade or so. This is important because it indicates that the majority of this key age cohort has not yet approached the typical age for entering the university system, let alone exiting it. Estimates of the entry age for other age cohorts were also imputed into the completions calculation. These estimates were derived from the age completion patterns seen in the DEEWR Higher Education Statistics collection. The estimates and their weightings as they apply to five year time groups are displayed in Table 3 in the Appendix.

The spread of course completion years across the age groups provided an indication of the amount of new graduates that would need to be ‘produced’ in the time period to 2025 if Victoria was to reach the attainment targets for the 25 to 34 year age group. The weightings applied to the figures as described above helped to spread these completions over a time series incorporating individual years. This was calculated originally for each year in the period from 2006 to 2025. However, in this report the first few years of these estimates are not included and have instead been replaced by actual figures, where available. This is discussed further in the findings.

The international student cohort provided an additional layer of complexity to the completion and commencement derivations. Due to the estimation that about 25 per cent of international student graduates do not remain in Australia following graduation (as discussed in the section above), some calculations based on this were required to be added to the overall completion figures for Victorian universities. To do this, the estimated completion numbers of Victorian international graduates were increased factoring the 25 per cent attrition from the country following graduation.

Once the completion number estimates were finalised, a conversion of these figures was undertaken in order to gain a commencements figure for the years leading up to 2025. This process involved putting completion numbers back by three years and applying an attrition adjustment to build on the final commencement figure. An overall course

retention rate of 66 per cent was estimated across the cohort and remained at this level throughout the projection estimates. This rate was applied following consultation within the university sector and the review of a number of prior studies into retention and attrition in Australian universities (Long, Ferrier, & Heagney, 2006; Martin, MacLauchlan, & Karmel, 2001; McMillan, 2005; Shah & Burke, 1996).

## Findings

### Background

The findings provided in this report are based on the attainment target relating to Scenario C from previous reports (Edwards, 2009). Achieving this attainment target would mean that 46.5 per cent of those aged 25 to 34 in the Victorian population in 2025 would have a bachelor degree or higher. Within the parameters of this scenario, across the whole Victorian population the attainment rate for a bachelor degree or higher was estimated to be 28.4 per cent by 2025.

In Table 1 the figures relating to the target attainment rates and numbers (as detailed in the first report in this project) are provided. It is the figure of 422,300 25 to 34 year olds with a degree by 2025 that is the prime focus of the calculations and figures provided in the rest of this report.

**Table 1: Attainment numbers and rates forecast for the Victorian population for Scenario C<sup>^</sup>, 2006 to 2025**

	Year					Change 2006 to 2025	
	2006	2010	2015	2020	2025	Number	Per cent
Attainment numbers ('000 persons)							
<b>25 to 34 year cohort</b>	249.5	272.7	298.8	358.1	422.3	172.8	69.2
<b>Victorian Total*</b>	852.1	928.9	1,024.5	1,222.4	1,471.0	618.9	77.0
Attainment rates (%)							
							(Percentage point)
<b>25 to 34 year cohort</b>	34.0	34.6	34.7	39.8	46.5		12.5
<b>Victorian Total*</b>	21.4	22.6	24.0	26.2	28.4		7.0

<sup>^</sup> Scenario C is based on Victoria continuing its current national contribution to attainment numbers and assuming that Australia reaches the target of 40 per cent attainment for persons aged 25 to 34 by 2025.

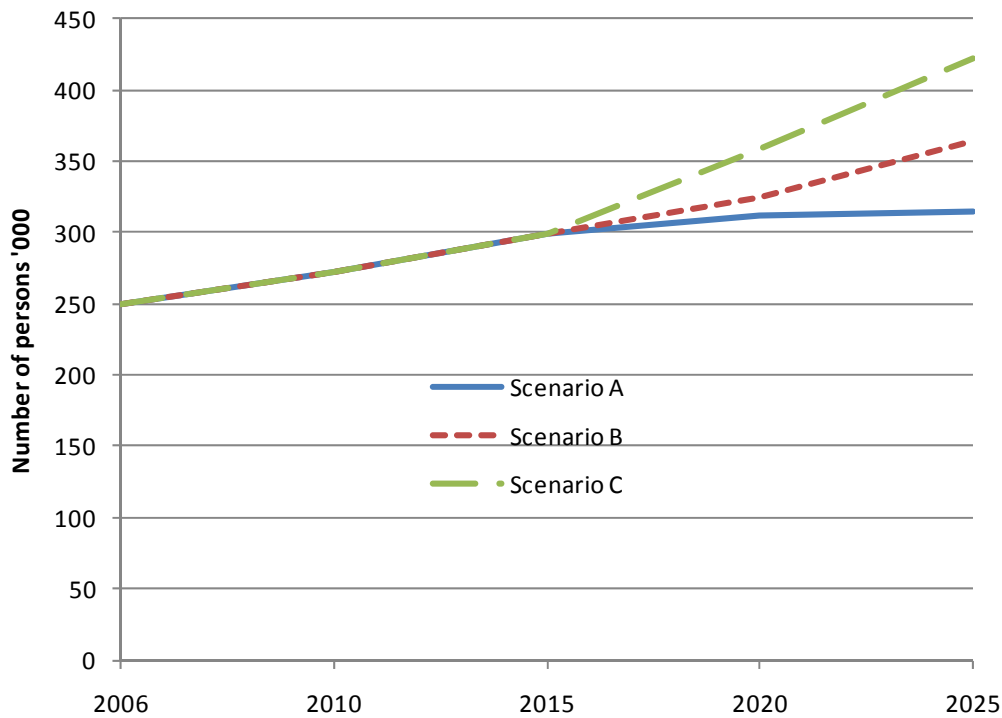
\*Victorian Total comprises population aged 20 years and above

Source: ABS Census, 2006 (N.S. and inadequ. described removed when making calculation) and DPCD Projections

In order to provide additional context to this Scenario C projection, Figure 1 shows the general findings of the first report in this project (Edwards, 2009). In Figure 1 the blue solid line shows the anticipated levels if the attainment levels of 2006 remain constant across the age cohorts (Scenario A in the previous report), the red dotted line is the projected numbers if Victoria was to reach a level of 40 per cent attainment (Scenario B) and the green dash shows the contribution required by Victoria for the national target of 40 per cent to be achieved (Scenario C, and the focus target in this report). Essentially, the gap between the blue solid line and the other lines represents the growth required in

Victoria that will need to come from policy-driven growth rather than demographic change alone.

The Scenario C targets are clearly the most ambitious. However, given that this is the level that needs to be achieved in order to meet the policy target set down by the current federal government, it is the most pertinent to focus on.



Source: ABS Census, 2006 (N.S. and inadequ. described removed when making calculation) and DPCD Projections

**Figure 1: Number of 25 to 34 year olds with a bachelor degree or above in Victoria, by three scenarios, 2006 to 2025**

### Completions in Victoria

The estimate of completion numbers required in order to achieve the Scenario C targets are provided in this section. As noted earlier, these figures are calculated with the express purpose of examining the task required in order for the specific 25 to 34 year cohort of 2025 to reach the 40 per cent attainment target. Within the discussion of the graphs in this section some notes about the indicative levels required if this sort of attainment rate is to be maintained in future cohorts are provided.

Figure 2 shows the estimated forecast completion numbers in Victoria required if the national 40 per cent attainment for Victoria is to be achieved. The early (solid) line in this figure shows the actual completion numbers in Victoria from 2005 to 2007 (the most up to date detailed information available from the DEEWR HE collection). The dotted line in the figure is the estimated completion numbers from 2013 to 2025.

Due to the fact that these projections are focussed on the 2025 attainment target for the 25 to 34 year age group, there is a notable gap in the data between the actual levels and the



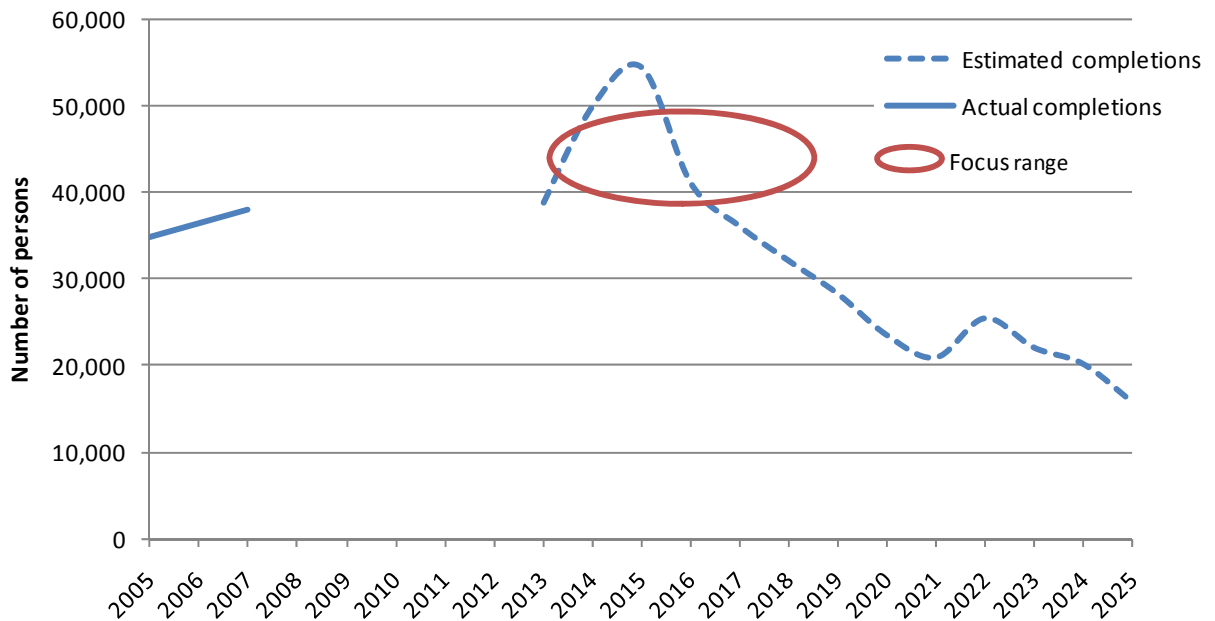
beginning of the projection estimates. The reason for this gap and the lack of earlier projection figures is due fact that the vast majority of the key age cohort of focus in these targets will not be at an age where university completion is a realistic expectation. The projections begin at 2013, when the youngest of this group would be beginning to flow out of the university system.

The estimates show a marked rise in completion numbers required between about 2012 and 2017 followed by a gradual tapering of the completion numbers. The numbers that make up these charts can be found in the Appendix (Table 4).

It is important to note that in this and the other figures discussed in these findings the calculations are focussed on the achievement of the attainment figure for the 25 to 34 year age group in 2025 in Victoria. Therefore, the tapering of the figures is the result of this cohort moving into and out of the university system and therefore the attainment target being reached for this cohort. Most students will go through the higher education system before they are actually aged between 25 and 34 and in some cases this will be well before 2025. If this attainment target was to be maintained for this level of age group beyond 2025, then completions would need to remain high for a substantial period, rather than dropping off as is the case in Figure 2.

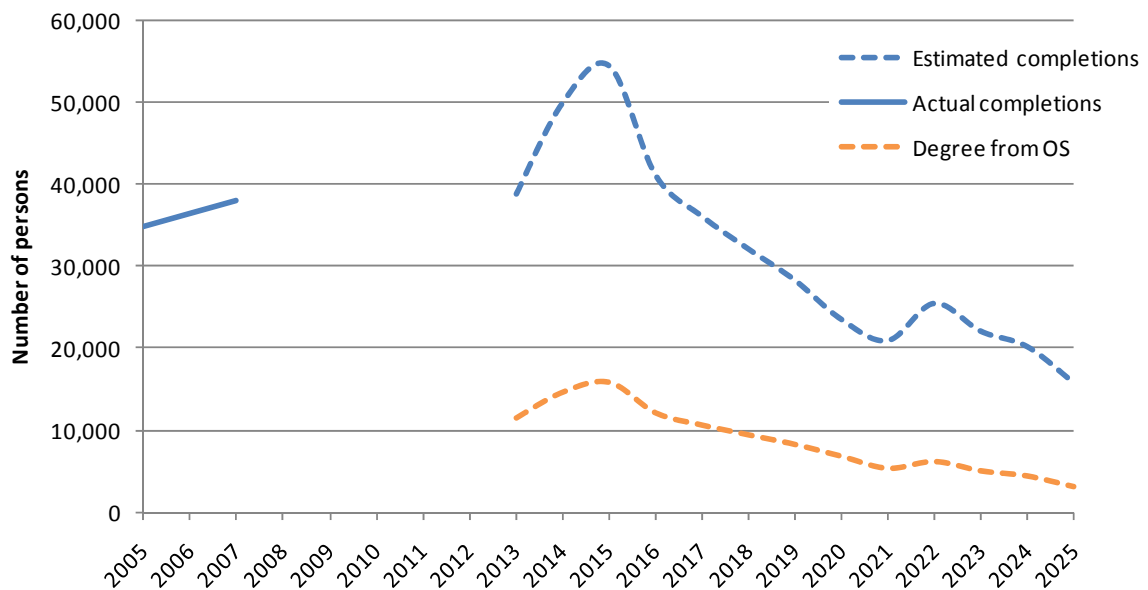
As such, a ‘focus range’ has been applied to this figure in order to hone attention to a certain range of completion figures that might be deemed necessary to maintain if future attainment is to be kept at the 2025 target level. The average completion numbers for Victorian universities predicted from 2013 to 2017 is approximately 44,000 per year and this is the basis for the setting of the range in this figure. Over a long period of time, this range is subject to change in relation to the size of the population. However, for the purpose of identifying approximate completion size levels, this range provides a good overall estimate.

In relation to the actual completion numbers recorded in Victoria between 2005 and 2007 and the upper estimates produced in this projection model, there is clearly a need for notable growth in university output. The largest estimate in this model is for 2015 whereby it is estimated nearly 54,500 completions will be required. This is substantially higher than the 2007 actual completion figure of 37,870. However, as mentioned above, a slightly longer period of sustained levels of completions around the 44,000 graduates mark, rather than the sudden rise and fall shown in the model is potentially more realistic and equally as likely to be successful. This sort of level is larger than current capacity, but does not appear insurmountable.



**Figure 2: Forecast Victorian university undergraduate completion numbers for achievement of national target for 25 to 34 year old group in 2025**

Figure 3 shows the Victorian completion number projections as well as the estimates of the number of people in Victoria with degrees gained overseas. Again the focus of the estimates is reaching the target for the 25 to 34 year age group of 2025. The figure shows that the overseas degree holders make up a small but important share of the overall numbers needed in order to achieve the attainment targets. At the highest point on the projections, those who obtained their degree overseas make up 22.5 per cent of the overall numbers required to meet the attainment target. It is important restate in this context that any change to migration levels could substantially alter the balance between the Australian-trained and the overseas-trained components of these estimates.



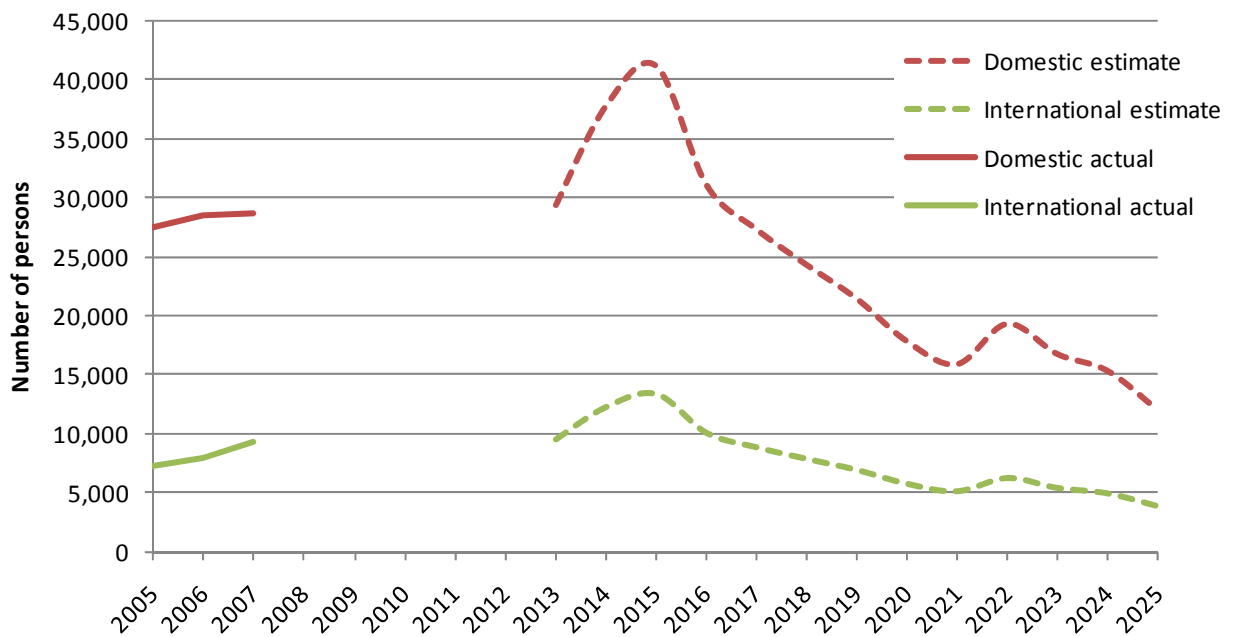
**Figure 3: Forecast Victorian university undergraduate completion numbers and numbers of migrants with degree obtained outside Australia for achievement of national target for 25 to 34 year old group in 2025**

Figure 4 revisits the university completion numbers, dividing the overall total estimate shown in Figure 2 by the contribution to the attainment targets from both the domestic and the international student graduates from Victorian universities. As can be seen, the domestic student contribution to achieving the attainment targets is substantial. However, as noted in the methodology, it is estimated that international students will comprise 24.4 per cent of the graduate cohort that goes towards these attainment figures, so this group is also of importance.

As with the earlier discussion, there is notable fluctuation in the figures for the domestic and international graduate numbers forecast to achieve the target attainment rate. In general, the sort of completion sizes Victoria should be aiming for over the period between 2013 and 2017 is estimated to be approximately 35,000 domestic and 10,000 international student completions per year. This estimate over the specified time period is anticipated to result in the national 40 per cent attainment target to be met for the group who will be 25 to 34 in 2025. For these sort of attainment rates to continue at this level over time, such levels of completions will need to be maintained, rather than drop off as is the case in Figure 4.

Overall, given the levels of commencements recorded between 2005 and 2007, it seems that a concerted upward trend over the coming decade or so for these groups would certainly make achieving the broad figures possible. Given the notable growth in international student completions between 2005 to 2007 (and in previous years), the achievement of this part of the completion target appears to be almost a given. The domestic growth required is slightly larger and will not only involve attracting previously unrepresented groups of young people into the university sector, but also will require

additional support and nurturing to ensure that they are successful in completing their degree.



**Figure 4: Forecast Victorian university undergraduate completion numbers for achievement of national target for 25 to 34 year old group in 2025, by international and domestic students**

### Commencements in Victoria

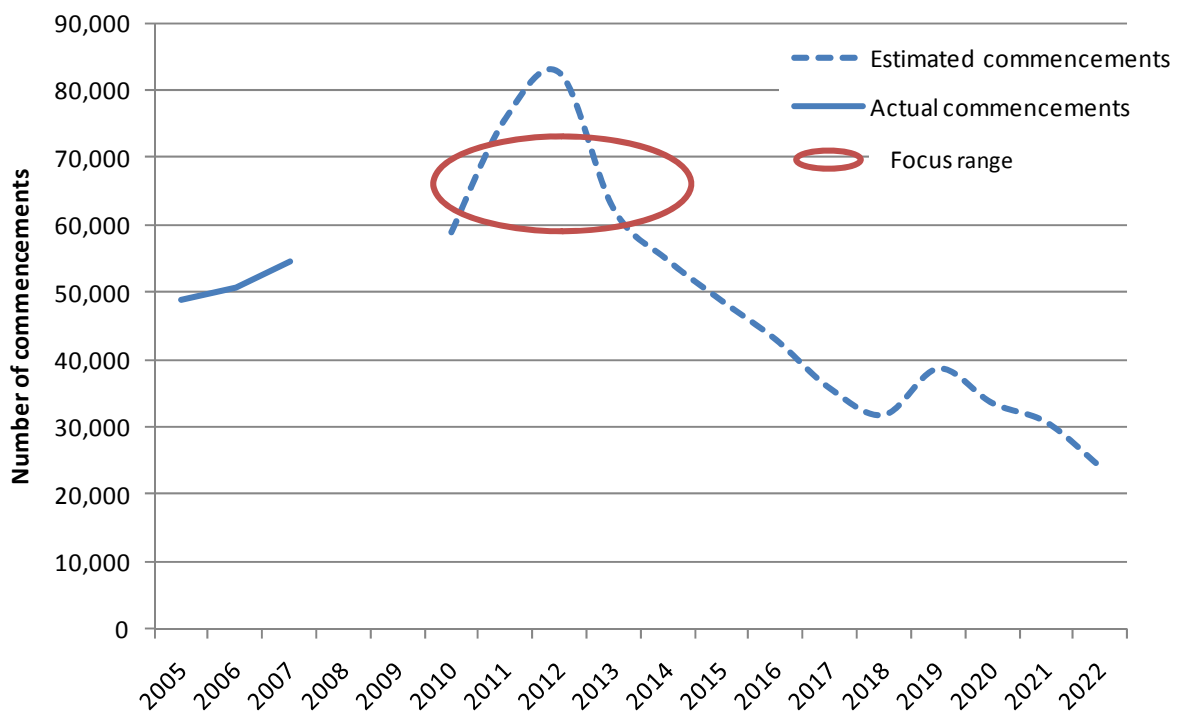
As outlined in the methodology, the completion estimates have been converted into commencement targets based on an assumed level of student retention and a three year degree completion period. The retention estimates used here are that 66 per cent of the commencement cohort will complete their degree in three years. This estimate is based on figures from prior research (Long et al., 2006; Martin et al., 2001; McMillan, 2005; Shah & Burke, 1996). It is possible that they are slightly conservative, although due to the overall lack of recent research into this area, it is not possible to make a definitive assertion either way. Adjustments to increase the retention rate up or down by five per cent alters the target figures by about 5,000 students in the peak years in this particular model.

As with the completion graphs, there is a slight gap in the years between the actual and the projected figures for the commencement estimates. Again the reason for this is that the key age cohort of focus for the 2025 attainment target would not have reached the age of university entry until the beginning of the estimates in 2010.

Figure 5 shows the commencement estimates for Victoria if the 25 to 34 year age group is to reach a bachelor degree attainment level of 40 per cent by 2025 (the numbers on which this graph is based are provided in the Appendix, see Table 5). As with the completion figures above, it is important to note that this graph highlights the overall

figures that would be required for this particular age cohort moving through the system. The focus range oval in Figure 5 provides an indication of the general levels that are expected to be required during the peak university enrolment period for this group. If such attainment levels were to be maintained in later years then these are the kind of levels that should be aimed for consistently.

The actual commencement numbers in the figure show a growth between 2005 and 2007, with nearly 55,000 undergraduate commencements in Victoria in 2007. If this trend were to continue, it is likely that the focus range target of about 67,000 commencements per year could be achieved. However, an important issue in this regard is that the projections targets for commencements begin here at 2010 with a level of 59,000, jumping to 80,000 over the coming few years. Therefore, these figures illustrate the importance of beginning to increase capacity in the Higher Education system immediately if the 2025 targets are to be achieved.



**Figure 5: Forecast Victorian university undergraduate commencement numbers for achievement of national target for 25 to 34 year old group in 2025**

In Figure 6, these commencement estimates are divided into domestic and international student estimates. As the international figures show, the commencement figures achieved in 2007 were almost at the level projected as required for 2010, although as the graph shows, further growth on this number will be required in the following years.

For domestic commencements, the gap between the actual and projected is slightly larger and the growth for the few years following 2010 is notably large, suggesting that there will be an increased need for attracting more domestic students within Victoria to

university – particularly in the key school leaving age groups, of which the 25 to 34 year old cohort of 2025 are now moving into.



**Figure 6: Forecast Victorian university undergraduate commencement numbers for achievement of national target for 25 to 34 year old group in 2025, by international and domestic students**

## Conclusion

This report has produced estimates for Victoria based on the state achieving a bachelor degree attainment level of 46.5 per cent among the 25 to 34 year age group by 2025. This target is set based on previous calculations (Edwards, 2009) aimed towards ensuring that Australia reaches a national goal of 40 per cent attainment among this group of people. The calculations undertaken here are based on a number of assumptions built around population growth, university attendance rates, retention rates, skilled migration numbers and international student departure intentions. Therefore, they should be considered as a guide (at best) as to the possible university training requirements for Victoria if it is to achieve the specific 2025 attainment targets.

The figures here focus on the sort of commencement and completion sizes that will be required over the coming decade or so in order to ensure that this particular cohort reaches the attainment target. While the estimates focus on the 2025 target, they do provide focus ranges for overall levels of attainment that would need to be maintained in order for the objective of higher educational achievement to continue across subsequent age cohorts.

Overall the research suggests that Victoria should be aiming to reach an average level of approximately 67,000 commencements per year over the coming decade, with about 51,000 of these commencements being from domestic students. To reach the specific 2025 target Victoria will need to increase commencement capacity on 2007 levels by about 12,000 to 17,000 per year from around 2010 to 2015. This level would need to be maintained over a longer period of time in order for the attainment levels to continue to filter across subsequent age groups (although they will fluctuate depending on changes in population size and migration policy).

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## Appendix

**Table 2: Location in which bachelor degree was obtained by age, Victorians with a bachelor degree or higher, 2005**

Age	Number		Percent	
	In Australia	Outside Australia	In Australia	Outside Australia
<b>20 to 24</b>	55,700	11,000	83.5	16.5
<b>25 to 29</b>	99,400	31,100	76.2	23.8
<b>30 to 34</b>	102,300	31,100	76.7	23.3
<b>35 to 39</b>	76,200	27,100	73.8	26.2
<b>40 to 44</b>	67,100	19,200	77.8	22.2
<b>45 to 49</b>	70,600	21,200	76.9	23.1
<b>50 to 54</b>	57,100	7,400	88.5	11.5
<b>55 to 59</b>	32,000	9,700	76.7	23.3
<b>60 to 64</b>	22,200	8,000	73.5	26.5
<b>65 to 69</b>	15,100	4,500	77.0	23.0

Source: ABS Survey of Education and Training, 2005. Customised data

**Table 3: Weightings applied to age cohorts in relation to the years in which university completion is estimated to have occurred**

Age in 2025								
	20-24		25-34		35-39		40-44	
Year	Age in target year	Weighting w/in year bracket	Age in target year	Weighting w/in year bracket	Age in target year	Weighting w/in year bracket	Age in target year	Weighting w/in year bracket
2006	1-5	0	6-15	0	16-20	0.16	21-25	0.3
2007	2-6	0	7-16	0	17-21	0.21	22-26	0.25
2008	3-7	0	8-17	0	18-22	0.21	23-27	0.2
2009	4-8	0	9-18	0.3	19-23	0.21	24-28	0.15
2010	5-9	0	10-19	0.7	20-24	0.21	25-29	0.1
2011	6-10	0	11-20	0.06	21-25	0.3	26-30	0.35
2012	7-11	0	12-21	0.09	22-26	0.25	27-31	0.3
2013	8-12	0	13-22	0.2	23-27	0.2	28-32	0.2
2014	9-13	0	14-23	0.3	24-28	0.15	29-33	0.1
2015	10-14	0	15-24	0.35	25-29	0.1	30-34	0.05
2016	11-15	0	16-25	0.25	26-30	0.35	31-35	0.35
2017	12-16	0	17-26	0.22	27-31	0.3	32-36	0.3
2018	13-17	0	18-27	0.2	28-32	0.2	33-37	0.2
2019	14-18	0.3	19-28	0.18	29-33	0.1	34-38	0.1
2020	15-19	0.7	20-29	0.15	30-34	0.05	35-39	0.05
2021	16-20	0.12	21-30	0.3	31-35	0.35	36-40	0.35
2022	17-21	0.2	22-31	0.3	32-36	0.3	37-41	0.3
2023	18-22	0.22	23-32	0.2	33-37	0.2	38-42	0.2
2024	19-23	0.23	24-33	0.15	34-38	0.1	39-43	0.1
2025	20-24	0.23	25-34	0.05	35-39	0.05	40-44	0.05
	45-49		50-54		55-59		60-64	
Year	Age in target year	Weighting w/in year bracket	Age in target year	Weighting w/in year bracket	Age in target year	Weighting w/in year bracket	Age in target year	Weighting w/in year bracket
2006	26-30	0.35	31-35	0.35	36-40	0.35	41-45	0.35
2007	27-31	0.3	32-36	0.3	37-41	0.3	42-46	0.3
2008	28-32	0.2	33-37	0.2	38-42	0.2	43-47	0.2
2009	29-33	0.1	34-38	0.1	39-43	0.1	44-48	0.1
2010	30-34	0.05	35-39	0.05	40-44	0.05	45-49	0.05
2011	31-35	0.35	36-40	0.35	41-45	0.35	46-50	0.35
2012	32-36	0.3	37-41	0.3	42-46	0.3	47-51	0.3
2013	33-37	0.2	38-42	0.2	43-47	0.2	48-52	0.2
2014	34-38	0.1	39-43	0.1	44-48	0.1	49-53	0.1

<b>2015</b>	35-39	0.05	40-44	0.05	45-49	0.05	50-54	0.05
<b>2016</b>	36-40	0.35	41-45	0.35	46-50	0.35	51-55	0.35
<b>2017</b>	37-41	0.3	42-46	0.3	47-51	0.3	52-56	0.3
<b>2018</b>	38-42	0.2	43-47	0.2	48-52	0.2	53-57	0.2
<b>2019</b>	39-43	0.1	44-48	0.1	49-53	0.1	54-58	0.1
<b>2020</b>	40-44	0.05	45-49	0.05	50-54	0.05	55-59	0.05
<b>2021</b>	41-45	0.35	46-50	0.35	51-55	0.35	56-60	0.35
<b>2022</b>	42-46	0.3	47-51	0.3	52-56	0.3	57-61	0.3
<b>2023</b>	43-47	0.2	48-52	0.2	53-57	0.2	58-62	0.2
<b>2024</b>	44-48	0.1	49-53	0.1	54-58	0.1	59-63	0.1
<b>2025</b>	45-49	0.05	50-54	0.05	55-59	0.05	60-64	0.05

**Table 4: Attainment forecast numbers estimated to reach Scenario C targets, by Victorian student type and degrees obtained outside Australia (numbers in red are actuals)**

Year	Victorian university completions			Degree from OS	Total for attainment target
	Domestic	International	Total completions		
2005	27,410	7,338	34,748		
2006	28,492	8,004	36,496		
2007	28,647	9,223	37,870		
2008	Figures not projected due to lack of persons in the key age cohort (25-34 in 2025) being at an age where university completion is a realistic expectation				
2009					
2010					
2011					
2012					
2013	29,379	9,489	38,868	11,485	50,353
2014	37,805	12,210	50,015	14,594	64,609
2015	41,179	13,300	54,479	15,777	70,256
2016	31,094	10,043	41,137	12,091	53,228
2017	27,305	8,819	36,123	10,616	46,739
2018	24,291	7,845	32,136	9,431	41,567
2019	21,412	6,916	28,327	8,280	36,607
2020	17,802	5,750	23,552	6,849	30,401
2021	15,858	5,122	20,980	5,399	26,379
2022	19,285	6,229	25,513	6,216	31,729
2023	16,719	5,400	22,119	5,092	27,211
2024	15,297	4,941	20,238	4,472	24,710
2025	11,980	3,869	15,849	3,186	19,036

Source: DEEWR HE Statistics Collection used for actual numbers noted in the table in red text

**Table 5: Forecast Victorian university commencement numbers estimated to reach Scenario C targets, by student type (numbers in red are actuals)**

Year	Domestic estimate	International estimate	Estimated commencements
2005	39,390	9,472	48,862
2006	40,270	10,437	50,707
2007	41,510	13,174	54,684
2008	Actual figures not yet available in the detail required for this table		
2009			
2010	44,514	14,377	58,891
2011	57,280	18,500	75,781
2012	62,392	20,151	82,543
2013	47,113	15,217	62,329
2014	41,371	13,362	54,732
2015	36,804	11,887	48,691
2016	32,442	10,478	42,920
2017	26,973	8,712	35,684
2018	24,027	7,760	31,788
2019	29,219	9,437	38,656
2020	25,332	8,182	33,514
2021	23,178	7,486	30,664
2022	18,151	5,863	24,014