



Planning and Budgeting Brief

Date Prepared: **March 16, 2009**

Subject: **High Demand Enrollment and Degrees at the University of Washington**

Context

In 2007-08, the UW awarded over 12,000 degrees, representing more than a 20 percent increase from ten years ago. These degrees included 8,200 baccalaureate degrees (roughly 40 percent of all such degrees awarded by public institutions in the state of WA,) and about 4,000 advanced degrees (nearly two thirds of all such degrees awarded in the state).

For more than a decade there has been sharp interest in increasing the production of degrees in areas of critical state need (“High Demand” degrees), particularly in the fields of science, technology, engineering and math. The UW currently produces 4,900 degrees in areas of critical state need, which comprises over half of the public sector total for the state, and constitutes a 20 percent increase compared to what the UW was producing 10 years ago.

Recent Trends in Degree Production

The recent Higher Education Coordinating Board (HECB) Accountability Report noted a slight decrease in the number of degrees awarded at the UW, including degrees in high demand fields of study. The reason for this small decline in awarded degrees—both overall and in areas of critical state need—is that the senior classes of the past two years have declined somewhat. This is due to an expected lag between funding for new enrollments and resulting baccalaureate degree awards. The HECB report asserts, “It is important to note that the enrollment increases funded through the 2007-09 budget have not been in place long enough to generate degrees. Those enrollment increases should begin to become evident in degree production data in the next biennium.”

As the graph on page 2 demonstrates, the number of degrees the UW awards in a year is directly proportional to the size of the senior class. In the last four years the UW experienced a slight dip in the number of seniors, so the number of degrees awarded declined slightly. However, after peaking in 2001-02, the number of entering undergraduates remained relatively constant over the next two years and has risen consistently since 2004-05. As a result, the UW expects to see the number of degree awards increasing over the next several years.

There are two major factors that influence the size of senior classes at UW Seattle:

1. The size of entering freshman classes has varied from year to year. The number of entering freshmen at UW Seattle since Fall 2000 is as follows:

Fall of:	# Entering Freshmen
2000	4,818
2001	5,178
2002	4,746
2003	4,819
2004	4,796
2005	4,599
2006	5,021
2007	4,820
2008	5,031

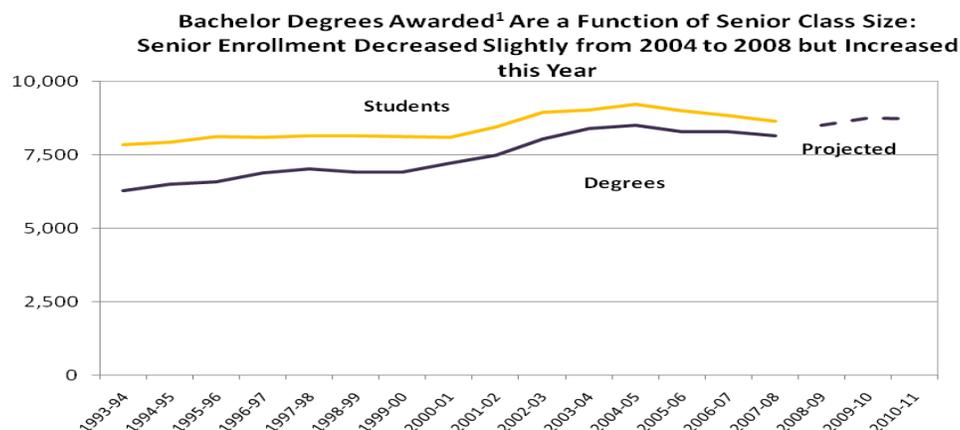


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The peak in bachelor degrees awarded that occurred in 2004-05 (and the peak in the number of seniors in the same year) followed a peak in the size of the entering freshman class in Fall 2001. The subsequent decline in bachelor's degrees in part reflects the smaller entering freshman classes through Fall 2005.

2. In recent years the University has worked with programs like "GEAR UP" to recruit freshmen students based upon first-generation college graduate status, socioeconomic status, etc., causing the proportion of undergraduate students who have entered as freshmen to increase. As the number of students who enter as transfers (and so might be expected to complete a degree in two years) are disproportionately replaced by students admitted as freshmen (who might be expected to take four years to complete a degree), the total number of seniors is likely to decrease for a time until a new steady state is reached.

Retention at the UW also plays a part in our senior class size. The UW's retention rate is the highest among all public Washington higher education institutions at 93% and continues to climb. It has not contributed in a negative way to senior class size. In fact, it can be posited that it is one reason why entering freshman have such an impact on senior class size four years later.



¹The number of seniors enrolled in Autumn quarter and the number of degrees awarded throughout the academic year are shown.

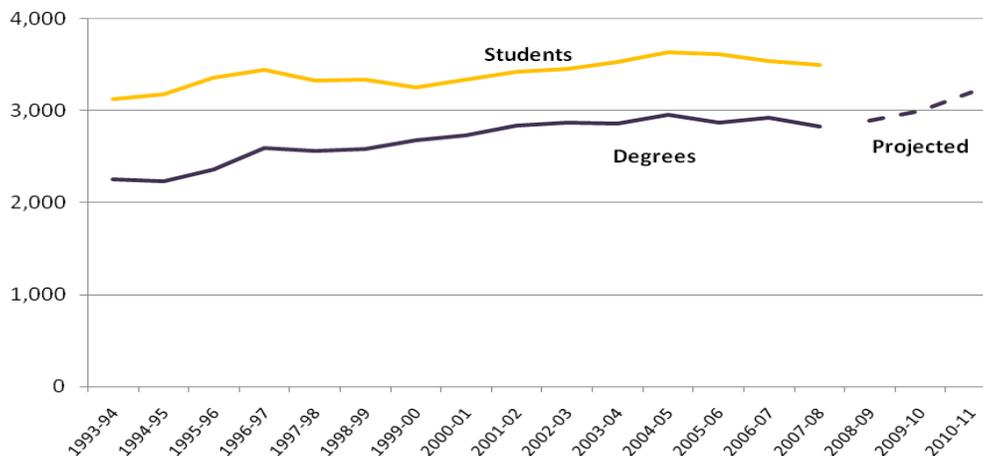
As the HECB Accountability Report also recognized, the same trend holds for students studying in areas of critical state need: "UW [high demand] production peaked in 2004-05, which follows the same pattern for all bachelor's degree awards at UW." The graph below displays degrees awarded in areas of critical state need as well as projects significant increases expected in the next several years. As with the general student population, there were slightly fewer students graduating with undergraduate degrees in areas of critical state need because there were fewer seniors enrolled (overall and in these fields). As the senior class is expected to grow over the next several years, so will the number of degrees awarded. The increasing number of seniors is fueled by additional state funding that recognizes the higher cost of these



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programs, as well as a focus on freshman and sophomore courses that feed the “pipeline” of basic course requirements for individuals graduating in highly technical or math/science-focused fields.

**Bachelor Degrees Awarded¹ are a Function of Senior Class Size in Areas of Critical State Need:
Senior Enrollment Decreased Slightly from 2004 to 2008 but Increased this Year**



¹The number of seniors enrolled in Autumn quarter and the number of degrees awarded throughout the academic year are shown.

Between fall 2006 and fall 2007, there was a 7 percent increase in students majoring in high demand disciplines, and overall, close to 75 percent of the student body took courses in these fields.

The UW expects that high demand degree production will begin to ramp up in 2009 when the enrollment investments made in the 2005-07 and 2007-09 biennia manifest in larger senior classes and more high demand majors. As the graph above illustrates, due to increased state investment, the anticipated increase in degrees in areas of critical state need is expected to outpace the trends for degree awards overall.

In the summer of 2008, the UW proposed to further expand high demand degree production with a 10-year plan for increased enrollments in these majors. If funded, the UW would expect to award 2,000 additional high demand degrees by 2016-17, three quarters at the undergraduate level and one quarter at the graduate level; thus poising the UW and its graduates to be vital players in reviving and growing the state’s knowledge-based economy.

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