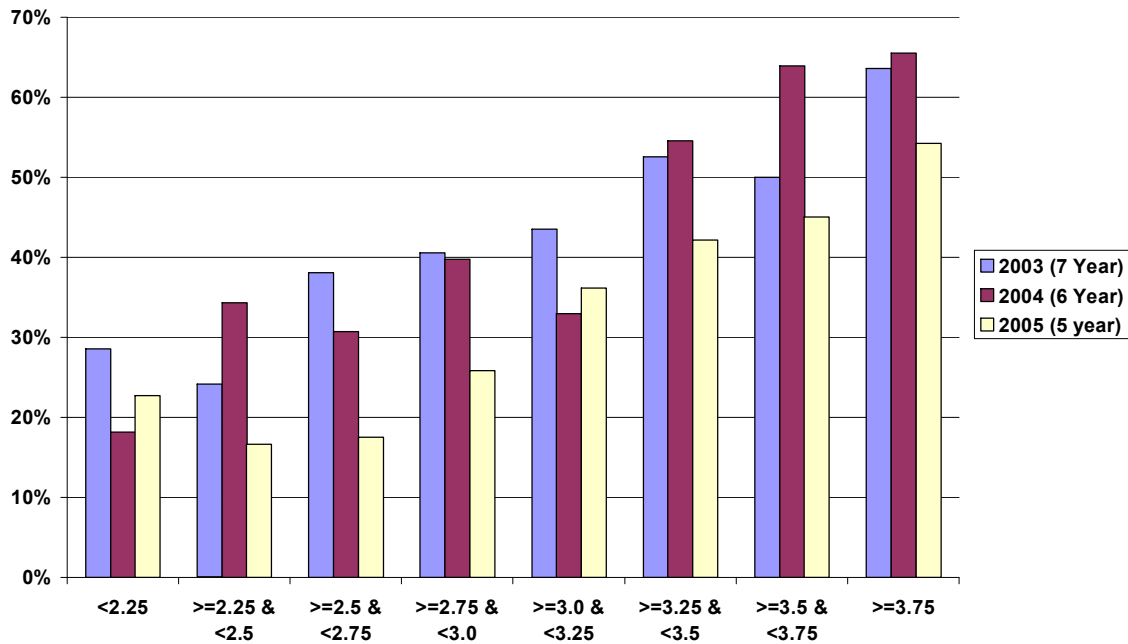


High School GPA and SAT Score Effects on Graduation Rates

In response to a question about the relationship between high school grade point average (H.S. GPA) and graduation rates, OIRP looked at the 2003, 2004 and 2005 cohorts of first-time full-time freshmen, eliminating any CPCS students. The actual graduation rates as of fall 2010 by H.S. GPA range are presented in the Figure 1, below. For 2003 it is a 7-year rate, for 2004 a 6-year rate, and for 2005 it is a 5-year rate.

**Figure 1: Percent of FT/FT Freshmen Graduated by 2010
By Cohort and H.S. GPA Ranges**



The improvement from the 2.5 to 2.75 range to the 2.75 to 3.0 range is not as large as might be expected. Graduation rates do not break 50% until the 3.25 to 3.5 range, and then only for the older cohorts. The details with the numbers of students in each group are presented in Table 1.

Table 1: Graduation Rates by H.S. GPA Range

Fall 2003	Number of Students	Graduated by Fall 2010
<2.25	7	29%
>=2.25 & <2.5	29	24%
>=2.5 & <2.75	155	38%
>=2.75 & <3.0	69	41%
>=3.0 & <3.25	101	44%
>=3.25 & <3.5	59	53%
>=3.5 & <3.75	60	50%
>=3.75	22	64%
continued		

Table 1: Graduation Rates by H.S. GPA Range continued		
Fall 2004	Number of Students	Graduated by Fall 2010
<2.25	11	18%
>=2.25 & <2.5	35	34%
>=2.5 & <2.75	91	31%
>=2.75 & <3.0	83	40%
>=3.0 & <3.25	97	33%
>=3.25 & <3.5	77	55%
>=3.5 & <3.75	61	64%
>=3.75	29	66%
Fall 2005		
<2.25	22	23%
>=2.25 & <2.5	72	17%
>=2.5 & <2.75	131	18%
>=2.75 & <3.0	116	26%
>=3.0 & <3.25	119	36%
>=3.25 & <3.5	102	42%
>=3.5 & <3.75	71	45%
>=3.75	59	54%

Combining H.S. GPA and SAT

We examined the distribution of H.S. GPAs combined with total SAT scores at the 25th and 75th percentile in the same three cohorts. We defined “Low” as the 25th percentile or lower and “High” as above the 75th percentile. The combinations were “Low GPA & High SAT”, “High GPA & Low SAT”, “Both Low” and “Both High”. The cutoffs for each cohort were slightly different.

The worst combination for graduation rates was to have a high SAT score and a low H.S. GPA. In each cohort, the “Both Low” group did better than the “Low GPA & High SAT” group. High GPA is a very important factor, while lower SAT scores do not significantly impact graduation rates.

The biggest difference between groups was for the 2004 cohort where only 21% of the “Low GPA & High SAT” group graduated within six years but 60% of the “High GPA & Low SAT” group graduated in that time frame. For the 2003 and 2004 cohorts, there was no appreciable difference between the “Both Low” and “Both High” groups. There was a difference in the 2005 cohort, but they are only at the five year mark. The data make a confusing figure, so we are presenting it in Table 2, below. The graduation rates for the cohorts as of fall 2010 are 41% for 2003, 41% for 2004, and 31% for 2005.

Table 2: Graduation Rates by Combined H.S. GPA and Total SAT Score

Group	GPA & SAT Combination	2003 (7 Year)	2004 (6 Year)	2005 (5 year)
Low GPA & High SAT	H.S.GPA <=25th & SAT >75th	28%	21%	17%
High GPA & Low SAT	H.S.GPA >75th & SAT <=25th	44%	60%	33%
Both Low	H.S.GPA <=25th & SAT <=25th	44%	37%	24%
Both High	H.S.GPA >75th & SAT > 75th	44%	41%	42%

In Admissions decisions in the past, lower grades could be significantly offset by higher SAT scores. The higher the SAT score the student had, the lower the GPA could be. This system was modified a number of years ago, with the minimum GPA becoming set somewhat higher.

To see if this pattern held for more recent cohorts, we examined the persistence to fall 2010 of the 2008 cohort with the same breakouts, and found similar patterns. Over all, about 60% of the cohort persisted to 2010.

Once again the “Low GPA & High SAT” group had the worst performance. About 45% of those students persisted compared to 72.5% of the students who had a H.S. GPA above the 75th percentile with an SAT score at the 25th percentile or lower. The “Both High” and “Both Low” groups were similar, at about 66% and 62% respectively.

We created simple regression models for graduation by 2010 for the 2003 to 2005 cohorts and persistence to 2010 for the 2008 cohort. H.S. GPA is a statistically significant factor in each model, while SAT score is not significant in any model.

A combination of a high SAT score with a low H.S. GPA should trigger a particularly careful review of any candidate’s application.