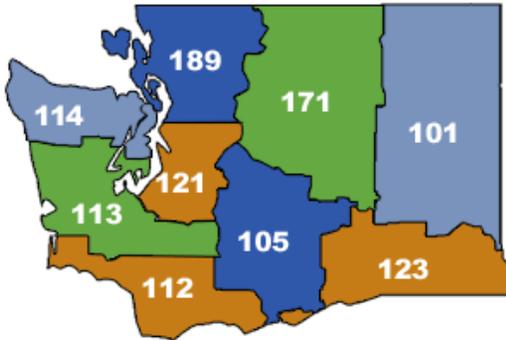


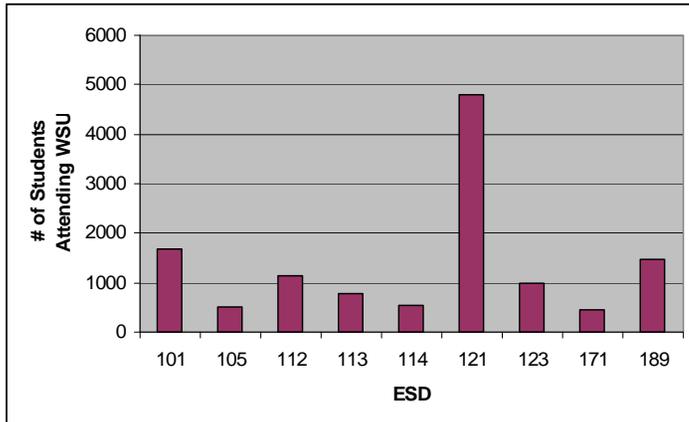
### Abstract

The paper analyzes Washington State University (WSU) first-time post-secondary students entering from the 2003-04 to 2007-08 school years. Two different models are used to examine how background characteristics influence first year cumulative GPA. The two models also identify whether there are consistent differences in performance of comparable students during their first year at WSU between high schools (that the students attended) in Washington. The first model identifies students with large residuals and is used to identify high schools with a large number of students with large residuals. The second model adds intercept and slope shifters (with high school GPA) for high schools having a significant percent of their students attending WSU. Results for the shifters indicate that the impact of high school GPA on first year success depends upon the high school attended. The results of the two models provide some evidence that the high school that a student attended should be considered when using high school GPA (along with other information) in making admission decisions at WSU.

### Washington State's Educational Service Districts



Number of Students from Each ESD (Public and Private HS) from 04-05 to 07-08



## What School Did You Go To? Measuring the Effects of Background & High Schools on Student Success in Washington

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Courtesy of WSU

### Impacts on First Year Cumulative GPA for Students Who Attended Public High Schools

VARIABLES	Coefficient
Male	-0.0978***
Caucasian	-0.0003
Pacific Islander	-0.0680***
Hispanic	0.0088
African American	-0.0332
Native American	0.0521
Athlete	0.0825***
Eligible for Pell Grant First Semester	-0.0466***
Full Time Both of First Year	0.3318***
Enrolled in STEM First Year	-0.2020***
Enrolled in AP Courses	0.1126***
HSGPA	0.9038***
SAT	0.0008***
Total Enrollment of HS	-0.0000
Students per Classroom	0.0074***
Teacher at HS	
% of Stud. Eligible for Free or Reduced Lunch at HS	-0.0026***
Expenditure per Pupil	0.0000**
Y04-05	-0.0554***
Y05-06	-0.1220***
Y06-07	-0.0879***
Y07-08	-0.1201***
Constant	-1.4095***

R-squared 0.355  
 Adjusted R-squared 0.353  
 \*\*\* p<0.05, \*\* p<0.10, \* p<0.20

### WSU New In-State Freshman Enrollment by Cohort

Cohort	Fall Freshman Enrollment
03-04	2437
04-05	2532
05-06	2359
06-07	2279
07-08	2721

### Key Findings

- Including intercept shifters for high schools and slope shifters for the interaction between high school and HSGPA increased the overall fit of the model by 0.02.
- HSGPA and SAT score have a positive influence on first year cumulative GPA for both models.
- Pell Grant eligibility and STEM enrollment have a negative influence on first year cumulative GPA for both models.
- Based on the second model, high schools with positive slope shifters typically have lower high school enrollment rates, a higher percentage of minorities, and higher expenditures spent per pupil than the average high school.
- Results provide some evidence that the high school that a student attended should be considered when using high school GPA (along with other information) in making admission decisions at WSU.



Courtesy of WSU