

### Enrollment of Students Admitted to the U-M College of Engineering Amy S. Fisher, Thomas P. McGuinness asfisher@umich.edu, mcguinnt@umich.edu



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### Abstract

This poster presents an early analysis of enrollment by the Fall 2005 cohort into the College of Engineering. Findings suggest that both race and test scores help to predict the decision whether or not to enroll.

O Data provided by the Office of Undergraduate

Admission and the Office of Budget and Planning.

### **Research Question**

- What are factors that influence the probability of enrolling in the College of Engineering if admitted?
  - > Purpose: Identify admissions criteria needing change
  - Purpose: Identify students eligible for support services and programs such as the new M-STEM Academy

# **Data and Sample**

 Population: All students admitted to the College of Engineering for either Summer 2005 or Fall 2005.  Variables used: Gender, Ethnicity, Composite ACT score, High School GPA, Admitted to Engineering and another U-M school

Cross-tabulation to compare independent variables on

the outcome of enrolled or not enrolled

Logistic regression presented with odds ratios

#### O Gender:

Controlling for all variables, gender does not influence decision to enroll.



#### Ethnicity:

Compared to White students, Asians and students with no ethnicity are less likely to enroll

**Results** 

Compare to White students, Black students are less likely to enroll after controlling for academic preparation.



#### • Test Scores:

**Method** 

Descriptive Statistics

Multivariate Analysis

- Students who score in the low range on the ACT have nearly twice the odds of enrolling that students who score in the middle range.
- Students who score in the high range on the ACT are less than half as likely to enroll as students who score in the middle range.



## Limitation

#### Incomplete Data

- > Too much missing data on residency or income precludes use of these variables.
- Missing data on income increases difficulty of interpreting offered financial aid data
  - Financial aid data removed from model

## **Next Steps**

- Obtain complete data on residency and income of admitted students and incorporate into analysis
- $\succ$  This will permit inclusion of offered financial aid data.
- Add data on participation in engineering summer enrichment program participation pre-college
- Increase sample by adding more cohorts

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