Engineering & Computer Science Enrollment Models and Management

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ECS Scholars Day, January 26, 2007

Baylor Vision 2012

Adopted in 2001

Imperative IV:

Attract and Support a Top-Tier Student Body

- Attracting- Admission Services, ECS…
- Supporting- ECS, Student Life, Success Center…

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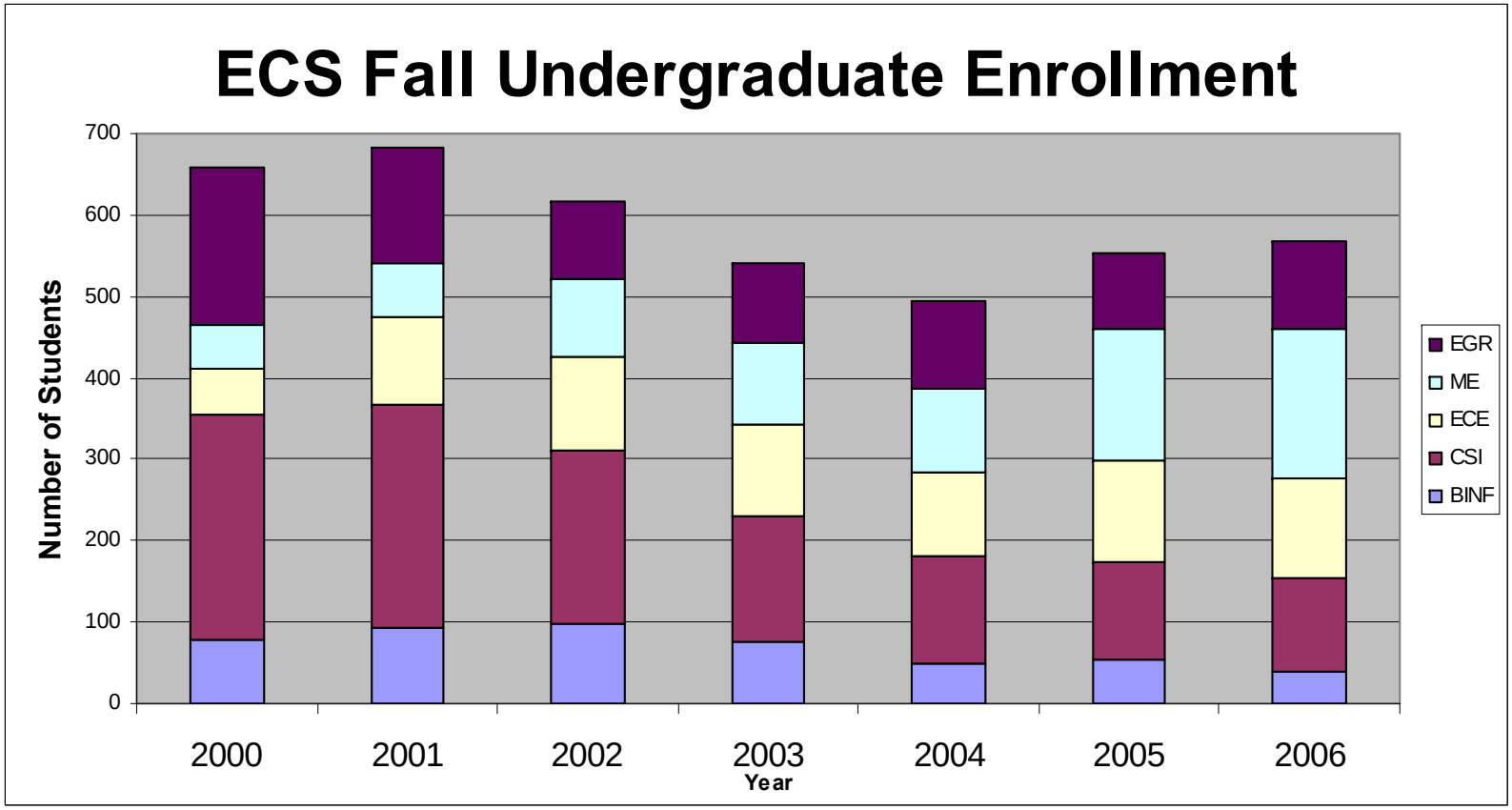
Actual ECS Enrollment



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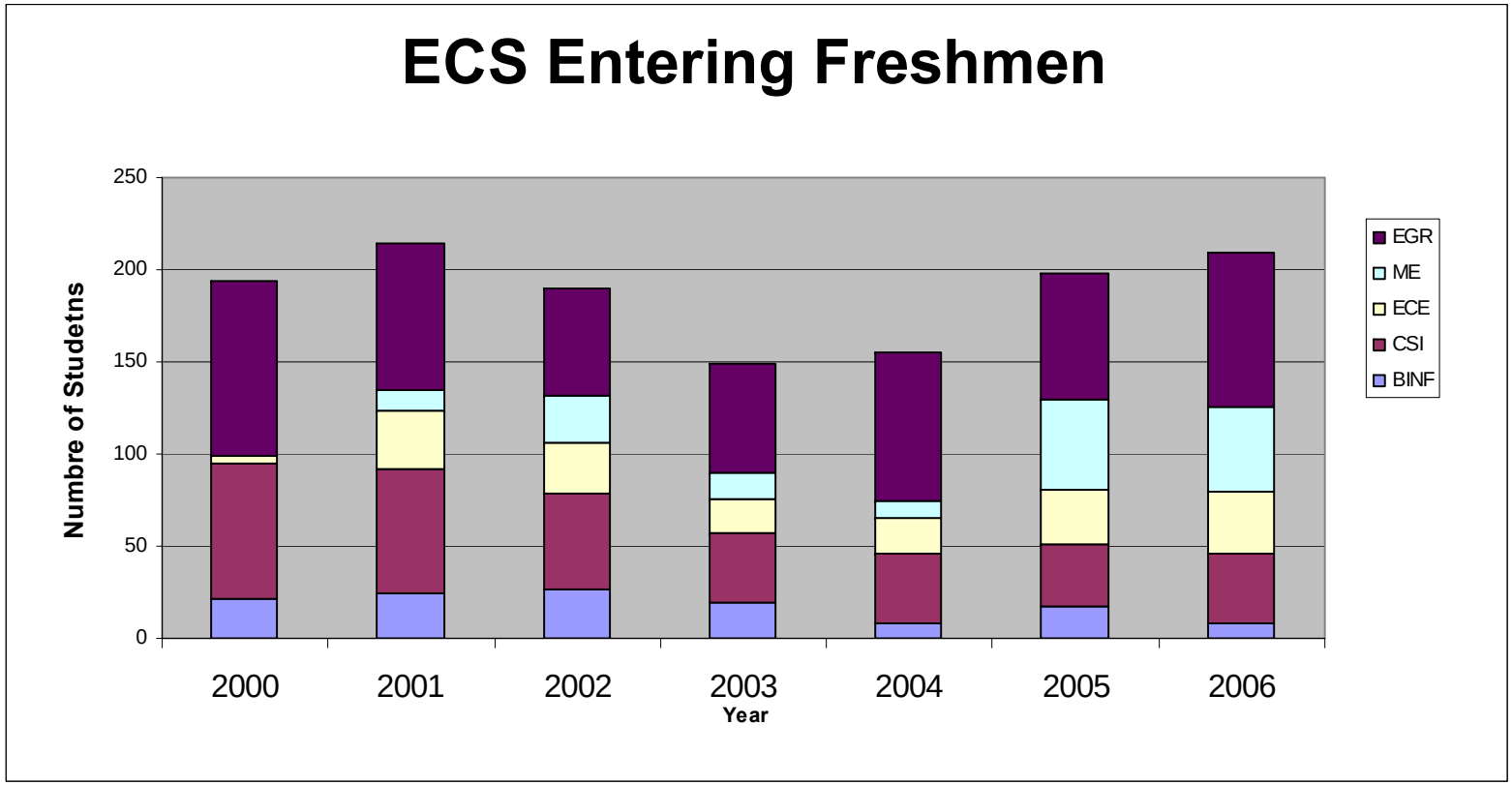
ECS Freshman Enrollment



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Comparison Schools

2004 ECS Enrollment Comparisons		
Group	**Institutions**	**~% ECS**
Baylor	Baylor	4.3
Aspiration	Duke, Northwestern, Notre Dame, Vanderbilt	16.9
US News Peer	Bucknell, Gonzaga, Lafayette, Villanova	17.1
Faith Based	Mercer, Notre Dame, Valparaiso, Villanova	12.5
Big XII	UT, A&M, KU, OU, KSU, CU…	13.4

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Model 1: Efficiency

- 20 Students in senior courses
- Historical Frosh→Soph→Jr→Sr student retention fractions

ECS Enrollment Model					
Frosh	Soph	Jr	Sr	Graduates	Total
281	196	145	200	130	823

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Model 2: Comparison

- **Choose 12% of BU undergrad population**
  - **Conservative vs. comparison**
  - **Liberal vs. current actuals**
  - **Plug into back end of model**

~1440 undergraduate ECS students; factor of 1.75 vs. efficiency

ECS Enrollment Model					
Frosh	Soph	Jr	Sr	Graduates	Total
490	340	250	350	225	1440

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Feasible- 490 Freshman?

- Not with current facilities
- Not with current faculty
- Not with current budget
- Not with current support infrastructure
- Not with current matriculation statistics

Infrastructure?

- Facilities Expansion
- Student Support
  - Joint BS/MS
  - Honors Track
  - Career Services
  - Study Abroad (I^5)
  - Internships
  - Gaming
  - Early Alert
  - Undergraduate research
  - Discipline-Specific Missions
  - Software Engineering
  - Biomedical Engineering
  - Living-Learning Center
  - Graduate Engineering
  - Engaged Learning Groups
  - Scholars Day

Applicant Pool?

Increase Applicant Pool

BU & ECS Prospective Data from 2003→2006						
Year: Fall	Inquiries		Applications		Gross Deposits	
	BU	ECS	BU	ECS	BU	ECS
2003	88,369	5,498	8,934	657	3,227	203
2004	91,535	4,292	10,938	799	3,383	204
2005	98,915	3,701	15,477	1,036	3,973	235
2006	115,586	4,607	21,449	1,662	3,970	260
2007- thru 1-1-07	122,613	5,415	13,614	1,588	--	--

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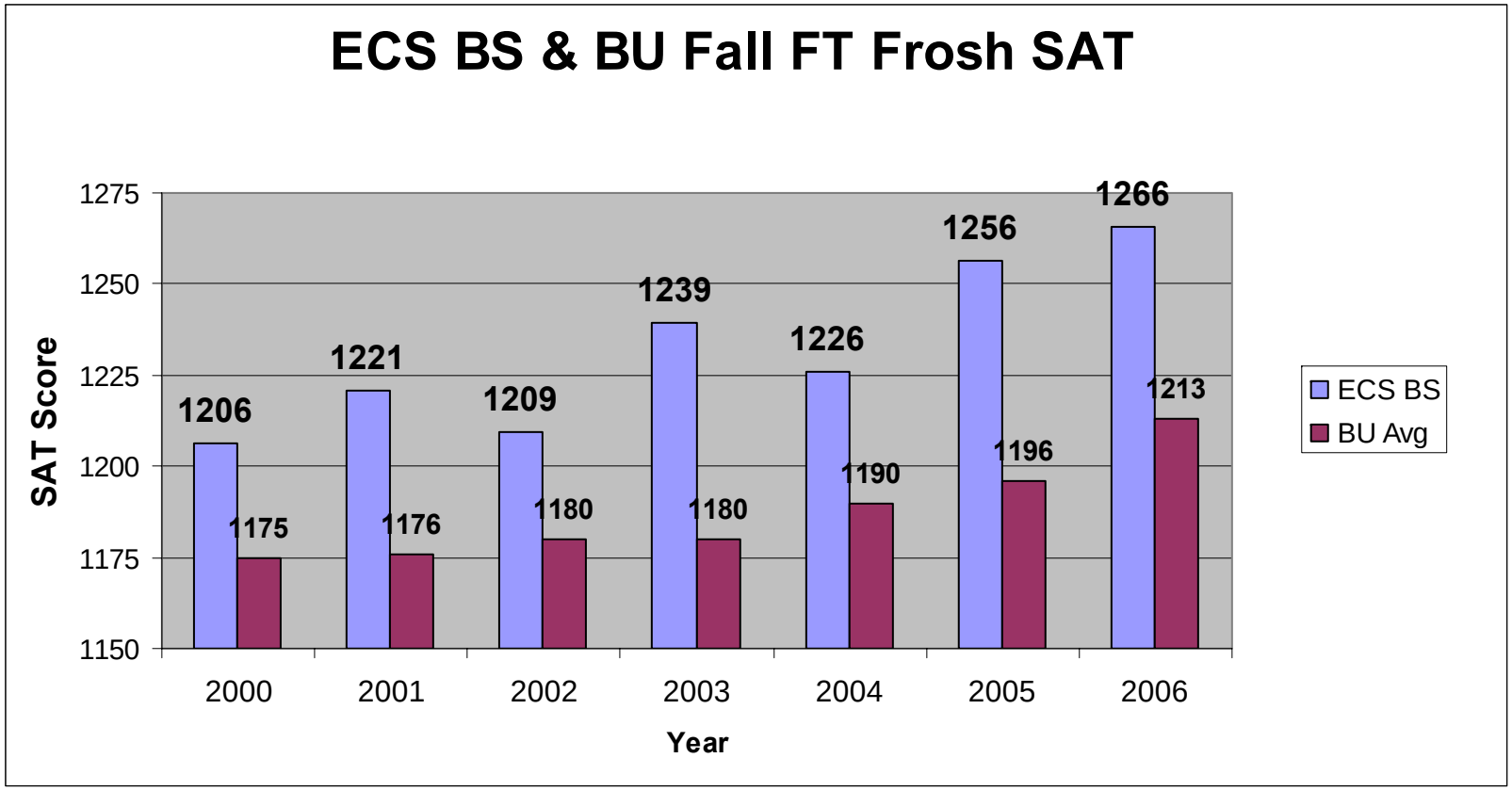
Student Matriculation?

Increase Average Student Quality



To move in this direction

Guiding Process

- New University-Wide Admissions Process
  - Early Action admissions system helps ensure selection of brightest/best fit students
  - Recruitment efforts and the new admissions system continue to mean ↑SAT and ACT
  - Current averages (Fall 2006): SAT 1213, ACT 25

ECS Enrollment Plan

- **Background**
  - **Objective:**
    - **High quality students matriculate to ECS**
    - **Faculty resources used more effectively**
    - **All affected students find avenues for success**
  - **Standard: 1110/24 (one standard deviation from ECS mean scores)**
- **Execution**
  - **Students above 1110/24 receive traditional Dean's welcome letter**
  - **Students below 1110/24 receive letter from Dean asking them to contact Student Success Specialist for an interview**

Enrollment Plan Interviews

- The Interview
  - Investigate student's math and science background
  - Investigate what the student knows about the academic program
  - Investigate student's motivation
  - Ensure that the student is aware of the study requirements
- The Outcome
  - Students deemed good fit advised of resources in ECS Foster Success Center and put on "Early Warning" list
  - Students not deemed a good fit are placed with resources to help them find an alternate path for success at Baylor
  - No student is forcibly turned away from (we want them to make their own decisions)

Enrollment Plan in Action

- 11 “contact us” letters sent out after Early Action 1 decisions (only 11 out of 200 + fell below the scores)
- 2 interviews held to date, and several more appointments set
- All interactions with parents and students have been both positive and fruitful

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