

A Comparative Study of New Freshmen's and New Transfer Students' Persistence

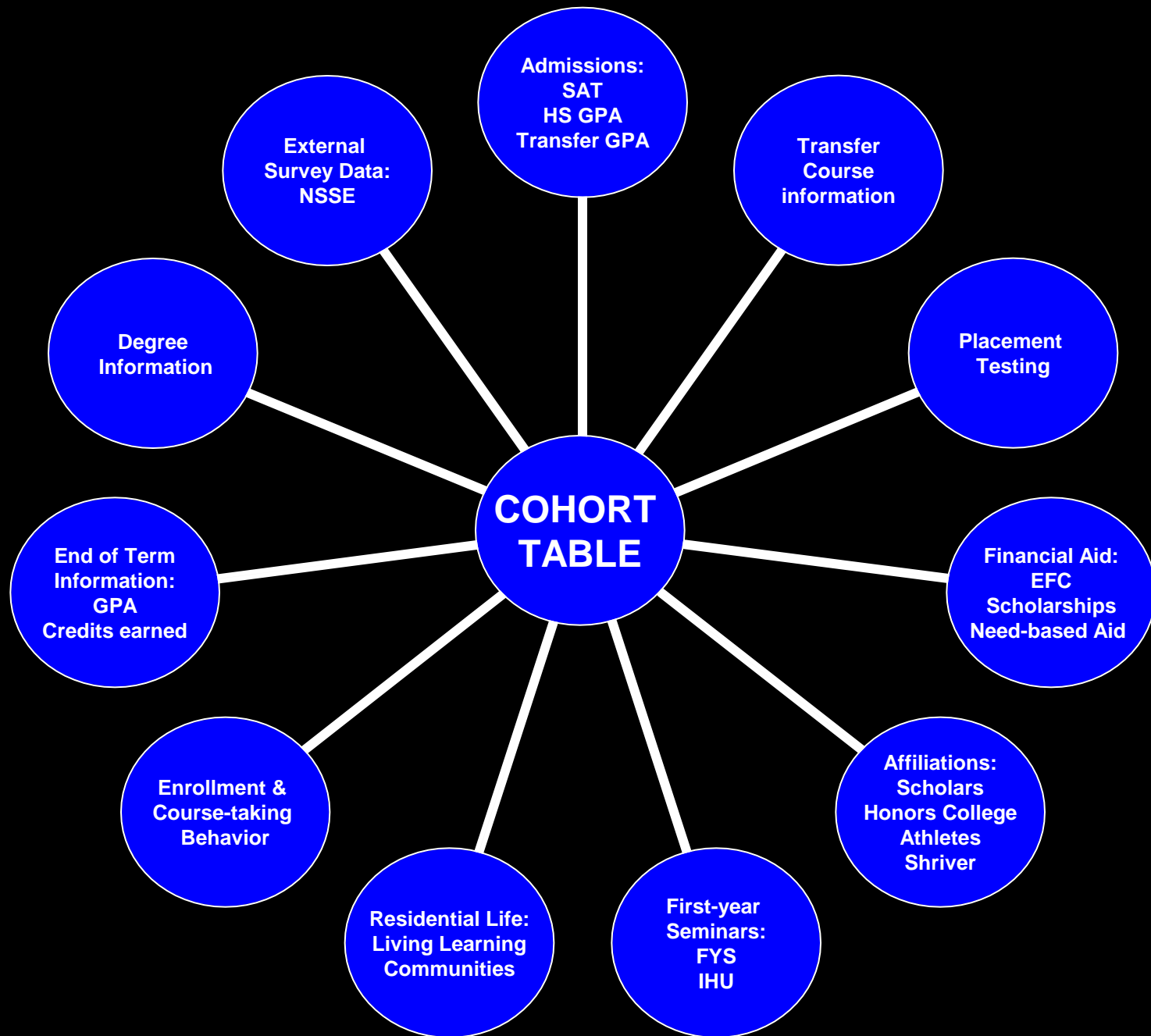
Presented to UMBC's Retention Committee

*Office of Institutional Research
February 28, 2008*

*Please contact Shannon Tinney, OIR Research Analyst, at x52617
with questions or comments*

Background

- OIR developed a cohort table that follows students over their life course at UMBC.
 - New freshmen and new transfer students (1995 fall cohort)
 - Longitudinal database (10 years)
 - Integrates data from across the university
 - Error-checking built into development
 - Flexibility to edit and update as analytical needs change



Background

- Cohort table has been instrumental in understanding factors related to persistence and other phenomena (www.umbc.edu/oir)
 - Baseline modeling of new freshmen's persistence
 - Academic performance and persistence—the role of Math gateway courses
 - First-year experiences as strategic retention initiatives (FYS, IHU, LLC)
 - Major switching behavior
 - Financial holds and re-enrollment
 - Baseline modeling of new transfer students' persistence
 - Academic performance and persistence for new transfer students

And *countless* data requests and smaller-scale analyses...

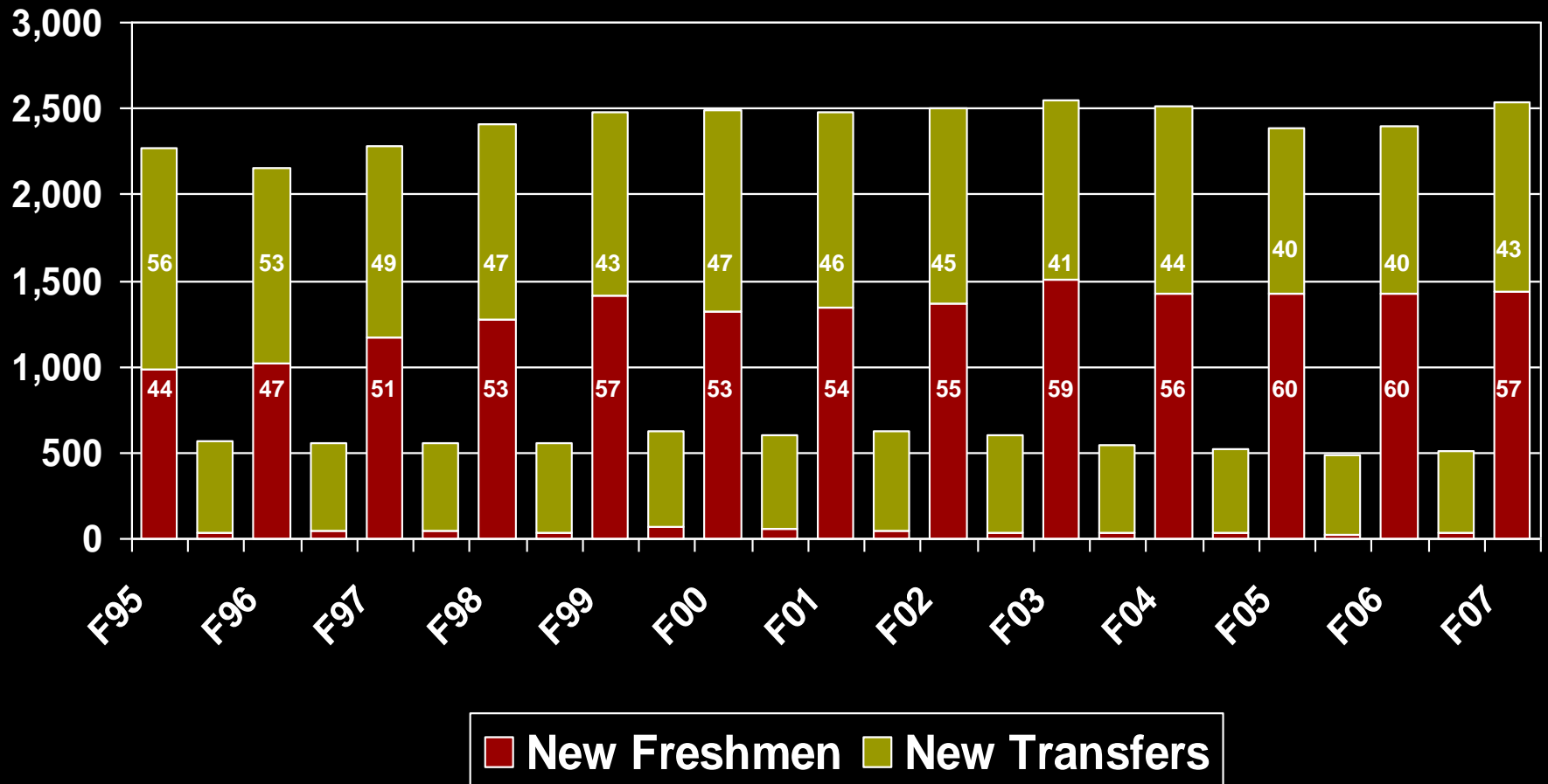
Objectives

- To understand:
 - the historical enrollment trends for new freshmen and new transfer students at UMBC
 - The demographic characteristics of our new freshmen and new transfer students—uniquely different

Objectives

- To understand:
 - the key factors related to new freshmen's and new transfer students' persistence
 - the importance of one's 1st semester academic performance in the persistence puzzle
 - the relationship between engagement in a first-year experience and persistence

Enrollment Shifts in Degree-seeking New Students (Fall & Spring, 1995 – 2007)



A Tale of Two Students

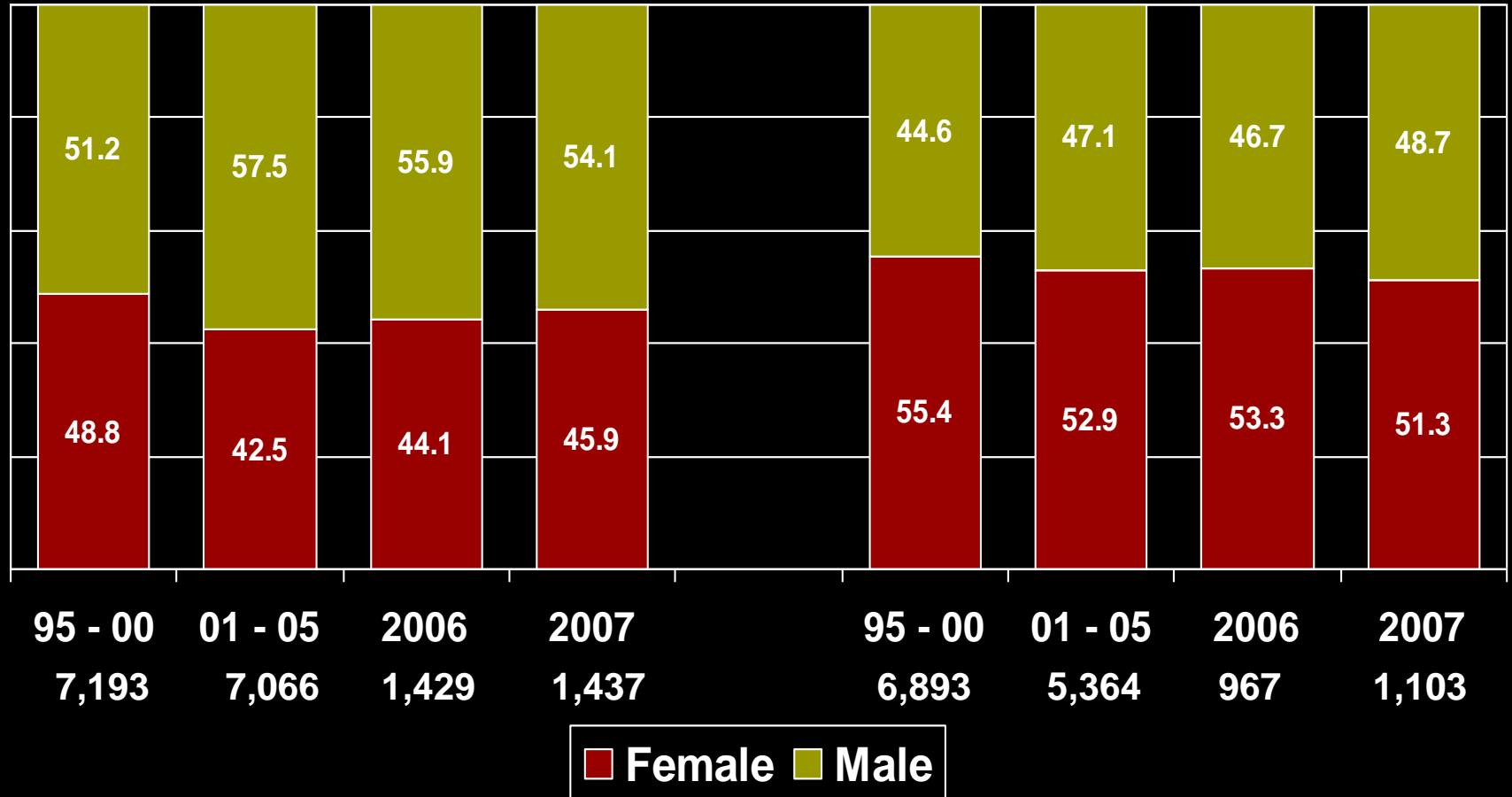
New Freshman v. New Transfer Student

Degree-seeking New Student Enrollment by Gender

(Fall 1995 – Fall 2007)

New Freshmen

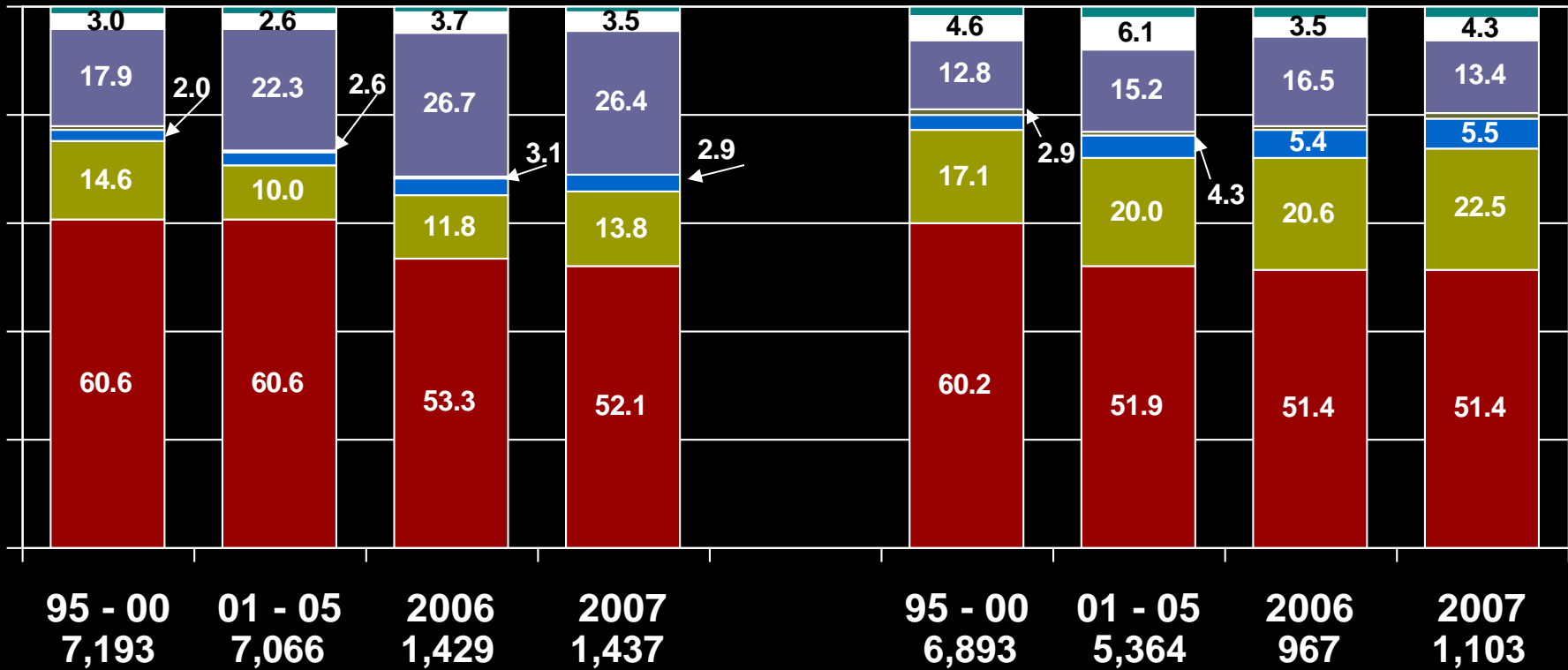
New Transfers



Degree-seeking New Student Enrollment by Race (Fall 1995 – Fall 2007)

New Freshmen

New Transfers

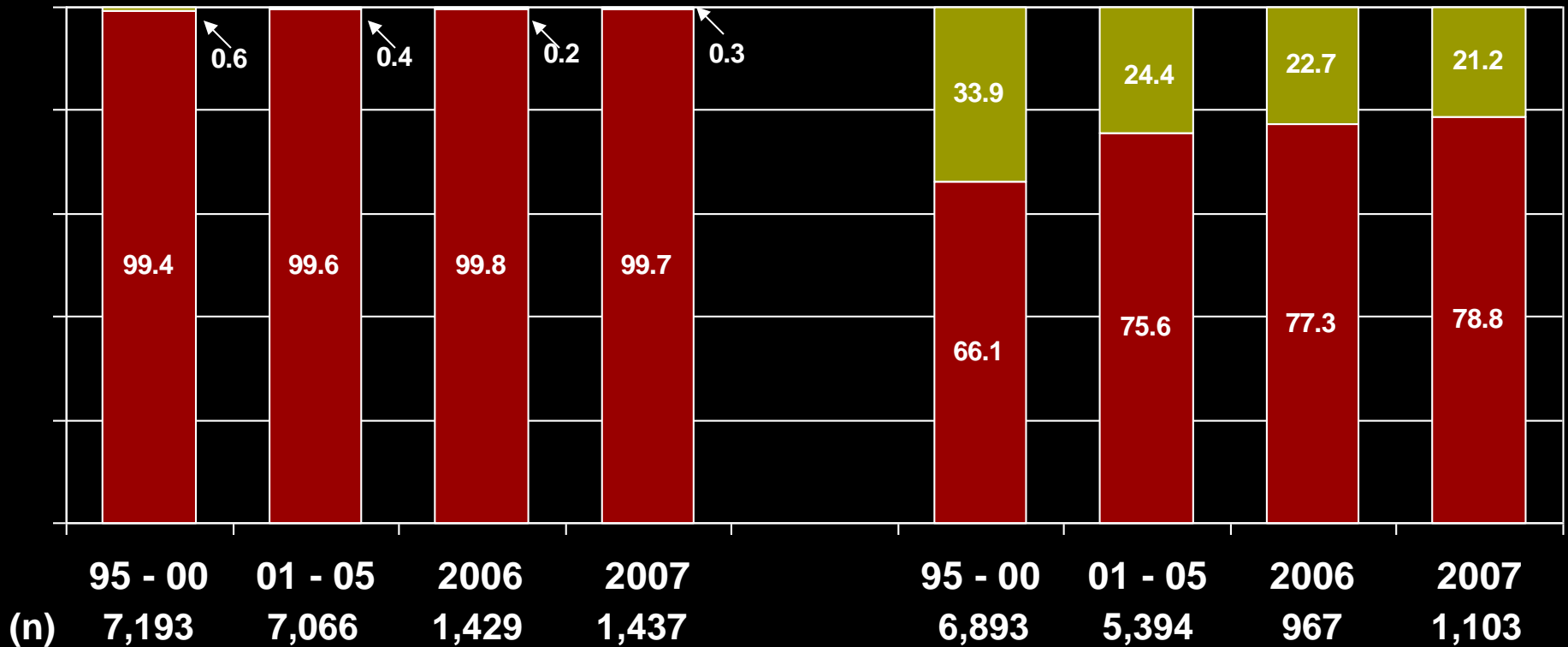


Degree-seeking New Student Enrollment by Age at Matriculation

(Fall 1995 – Fall 2007)

New Freshmen

New Transfers



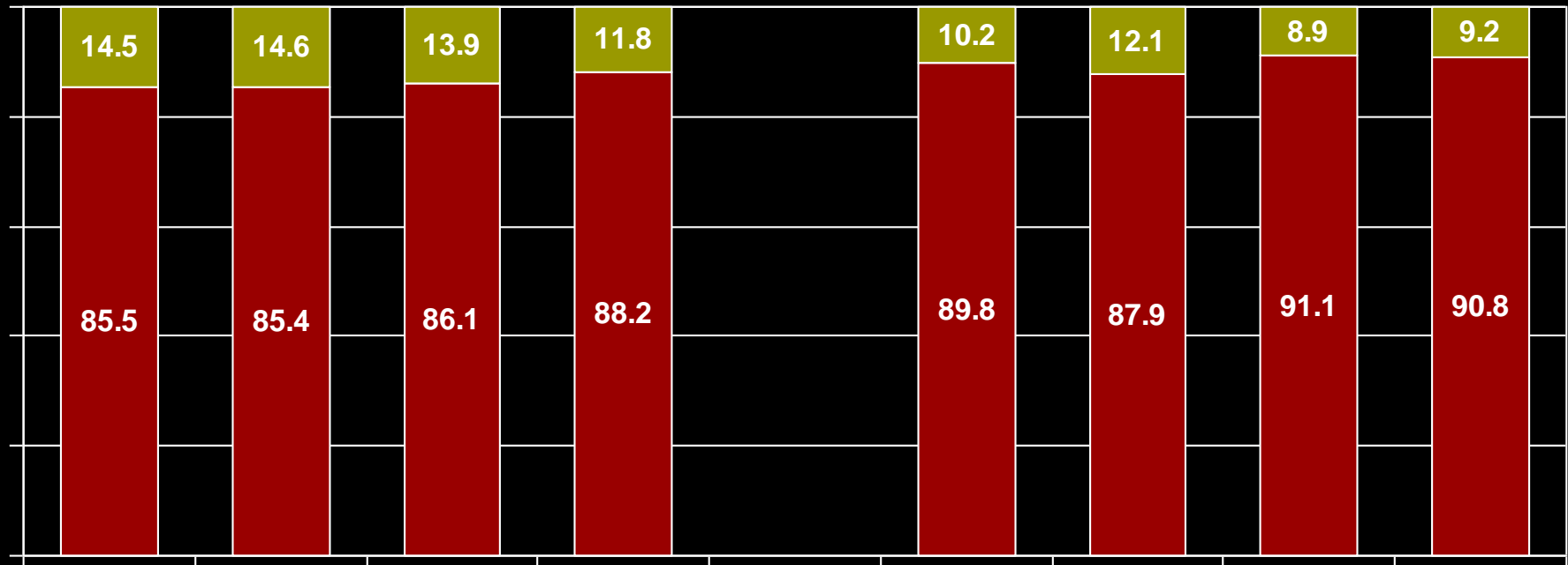
■ Traditional-aged
 ■ Non-traditional (>= 25 yrs.)

Degree-seeking New Student Enrollment by Geographic Origin

(Fall 1995 – Fall 2007)

New Freshmen

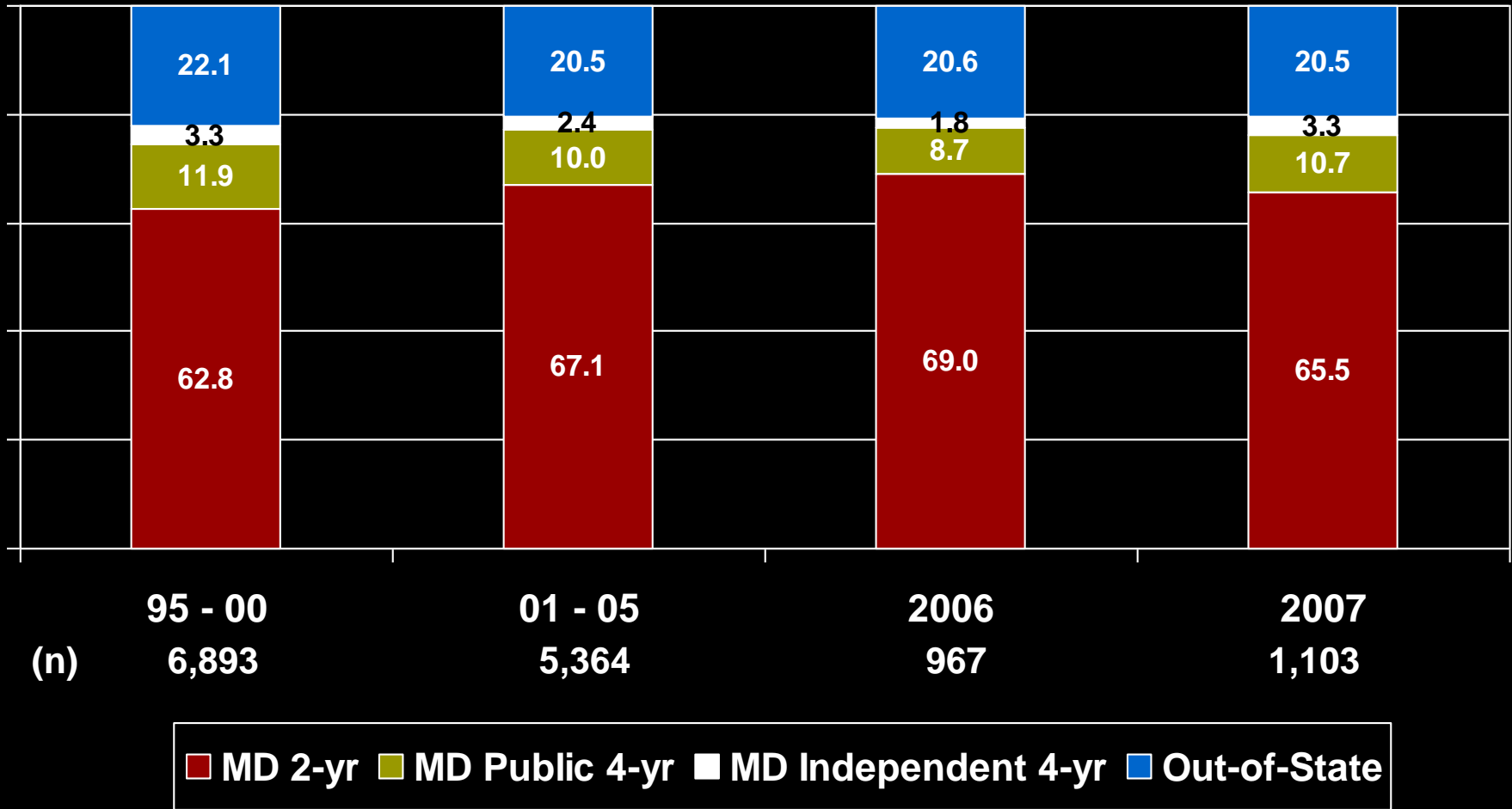
New Transfers



| | 95 - 00 | 01 - 05 | 2006 | 2007 | 95 - 00 | 01 - 05 | 2006 | 2007 |
|-----|---------|---------|-------|-------|---------|---------|------|-------|
| (n) | 7,193 | 7,066 | 1,429 | 1,437 | 6,893 | 5,364 | 967 | 1,103 |

■ Maryland ■ Out-of-state

New Transfer Student Enrollment by Type of Transfer Institution (Fall 1995 – Fall 2007)



Top Maryland Feeder Schools

Maryland Two-year Colleges (since 1995)

- Anne Arundel Community College
- Community College of Baltimore County--Catonsville
- Howard Community College
- Montgomery College campuses (increase since 2001)

Maryland Public Four-year Colleges & Universities (since 1995)

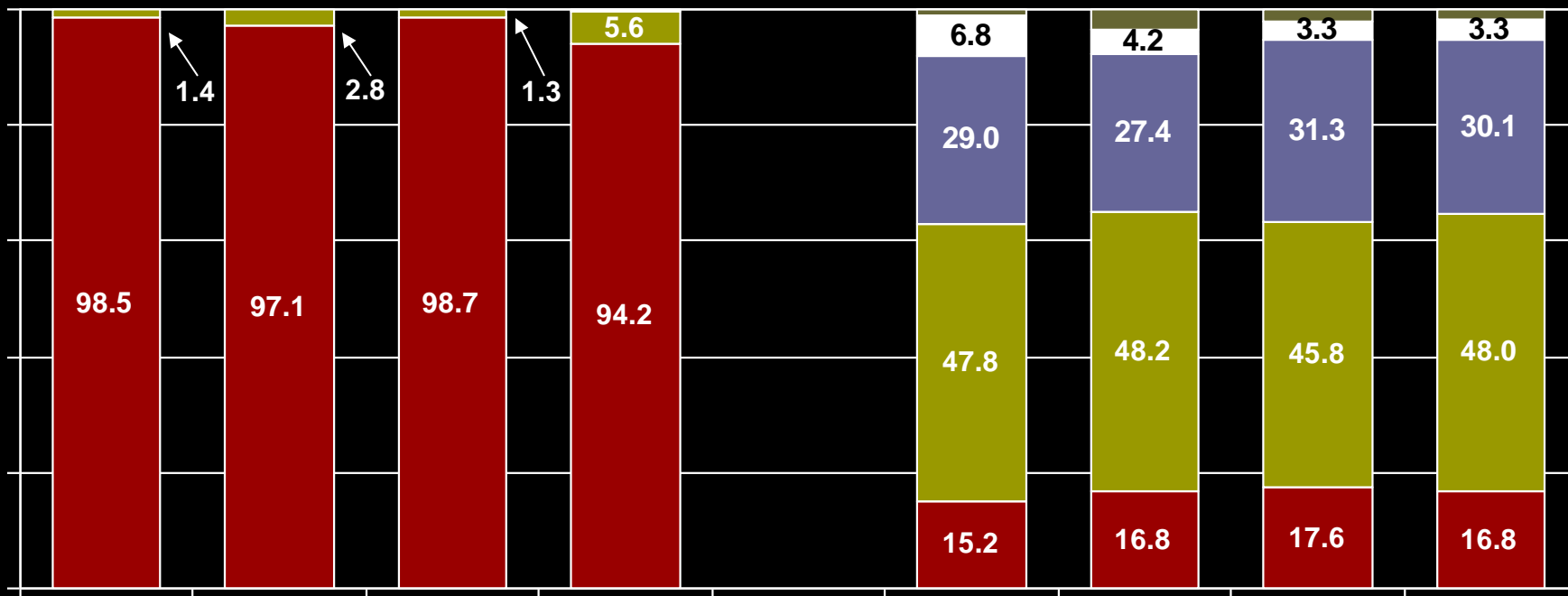
- University of Maryland, College Park
- Towson University

***Click here**

Degree-seeking New Student Enrollment by Student Level at Matriculation (Fall 1995 – Fall 2007)

New Freshmen

New Transfers



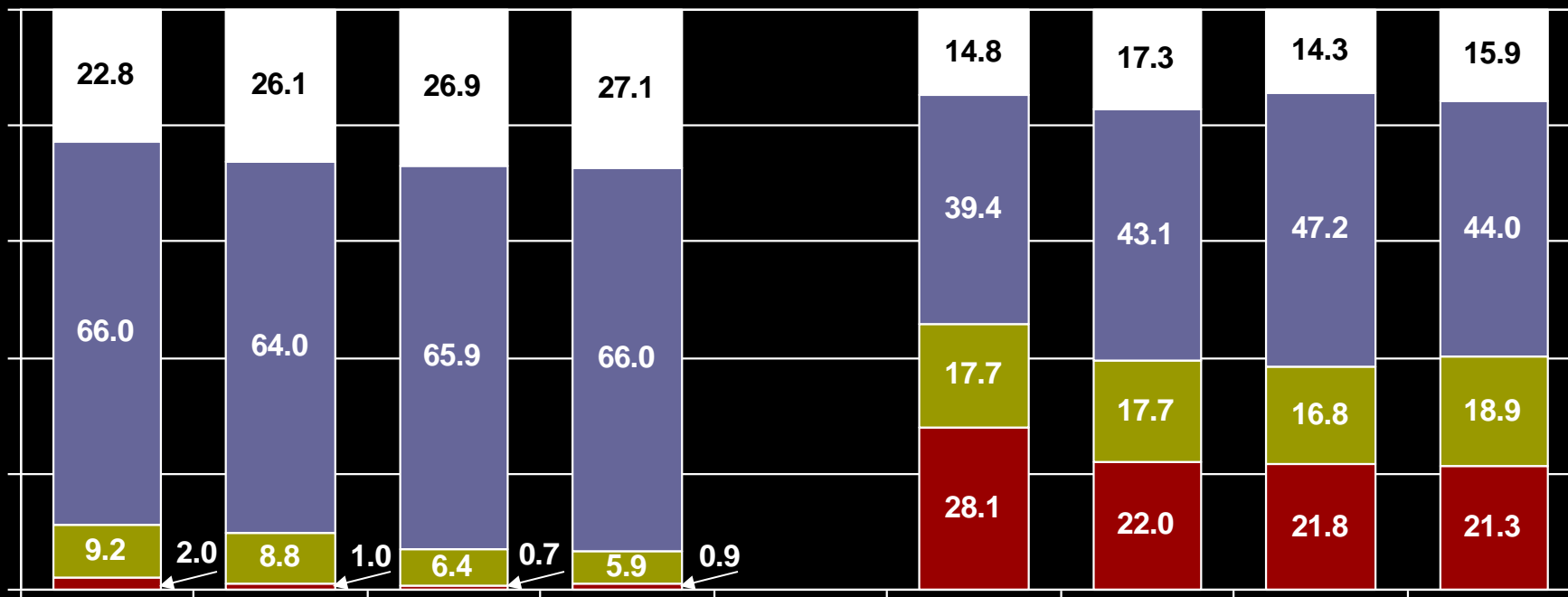
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|-----|---------|---------|-------|-------|--|---------|---------|------|-------|
| | 95 - 00 | 01 - 05 | 2006 | 2007 | | 95 - 00 | 01 - 05 | 2006 | 2007 |
| (n) | 7,193 | 7,066 | 1,429 | 1,437 | | 6,893 | 5,364 | 967 | 1,103 |

Freshman
 Sophomore
 Junior
 Senior
 Unclassified

Degree-seeking New Student Enrollment by FT/PT Status at Matriculation (Fall 1995 – Fall 2007)

New Freshmen

New Transfers



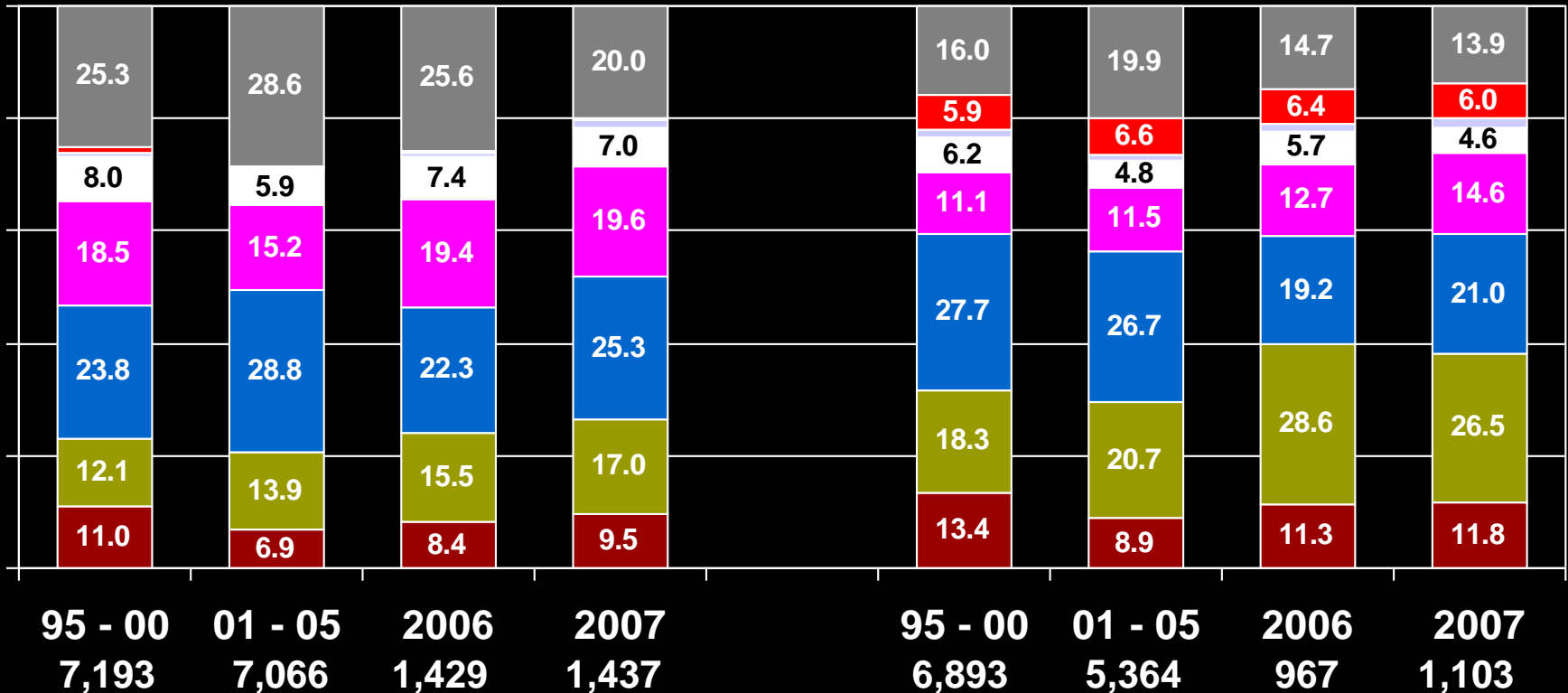
| | | | | | | | | |
|-----|---------|---------|-------|-------|---------|---------|------|-------|
| | 95 - 00 | 01 - 05 | 2006 | 2007 | 95 - 00 | 01 - 05 | 2006 | 2007 |
| (n) | 7,193 | 7,066 | 1,429 | 1,437 | 6,893 | 5,364 | 967 | 1,103 |

■ < 12 hrs
 ■ 12 hrs
 ■ 12.1 - 15 hrs
 ■ > 15 hrs

Degree-seeking New Student Enrollment by Major Area at Matriculation (Fall 1995 – Fall 2007)

New Freshmen

New Transfers



(n)

95 - 00
7,193

01 - 05
7,066

2006
1,429

2007
1,437

95 - 00
6,893

01 - 05
5,364

2006
967

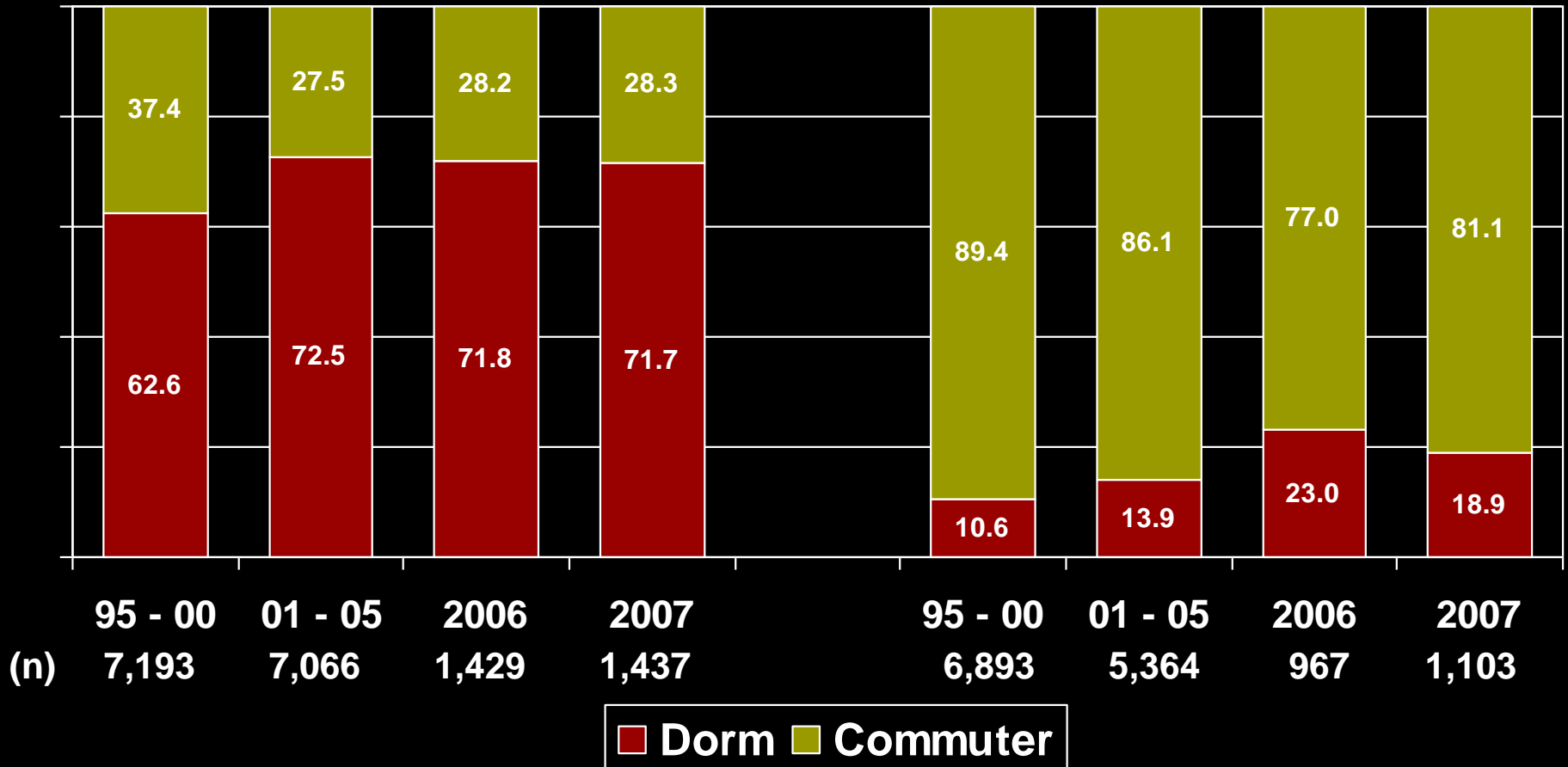
2007
1,103

- Arts & Humanities
- Eng. & Computer Info. Systems
- Allied Health
- Social Work
- Social Sciences
- Natural & Math. Sciences
- Interdisc. Studies
- Undeclared

Degree-seeking New Student Enrollment by Dorm Status ¹ (Fall 1995 – Fall 2007)

New Freshmen

New Transfers



¹ Reflects 10th day enrollment from SIS. Does not include Walker apartment data.

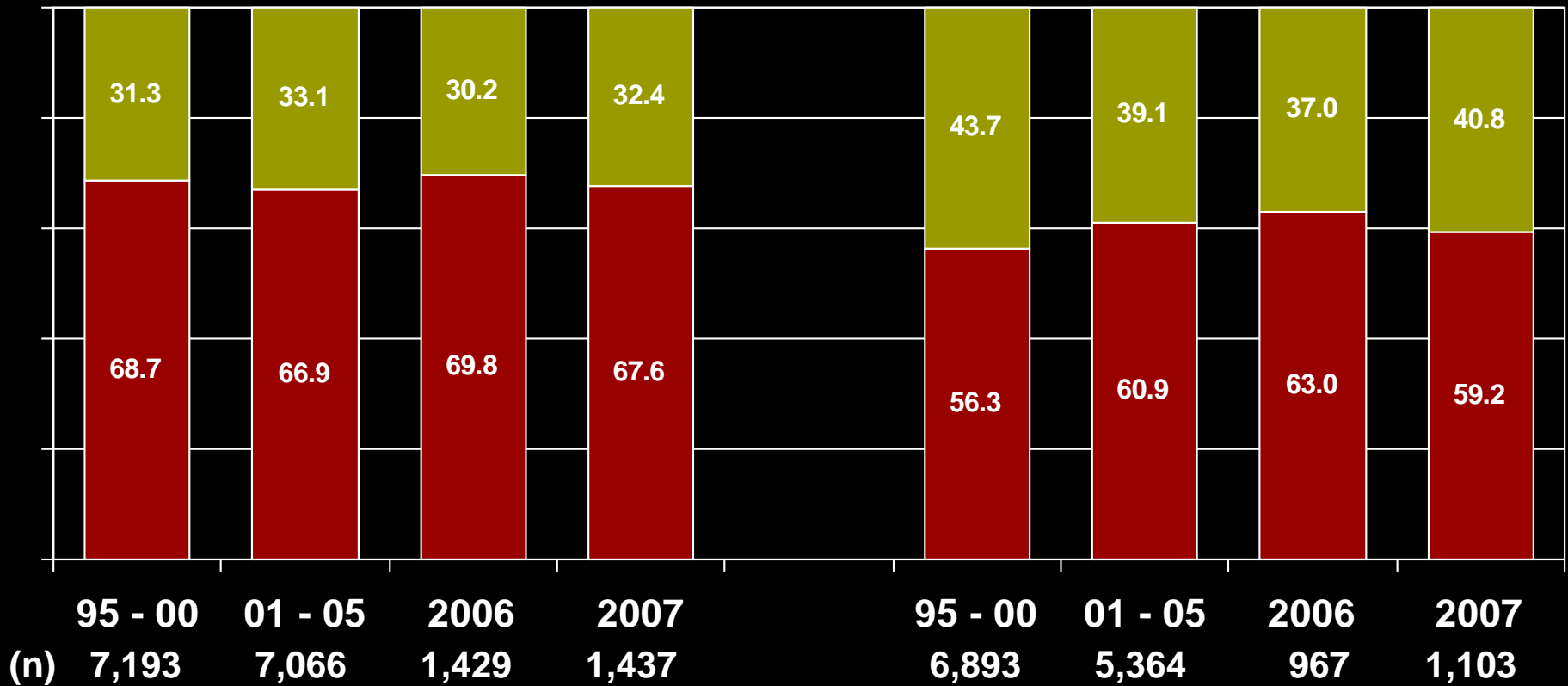
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Degree-seeking New Student Enrollment by 1st Year FAFSA Filers

(Fall 1995 – Fall 2007)

New Freshmen

New Transfers

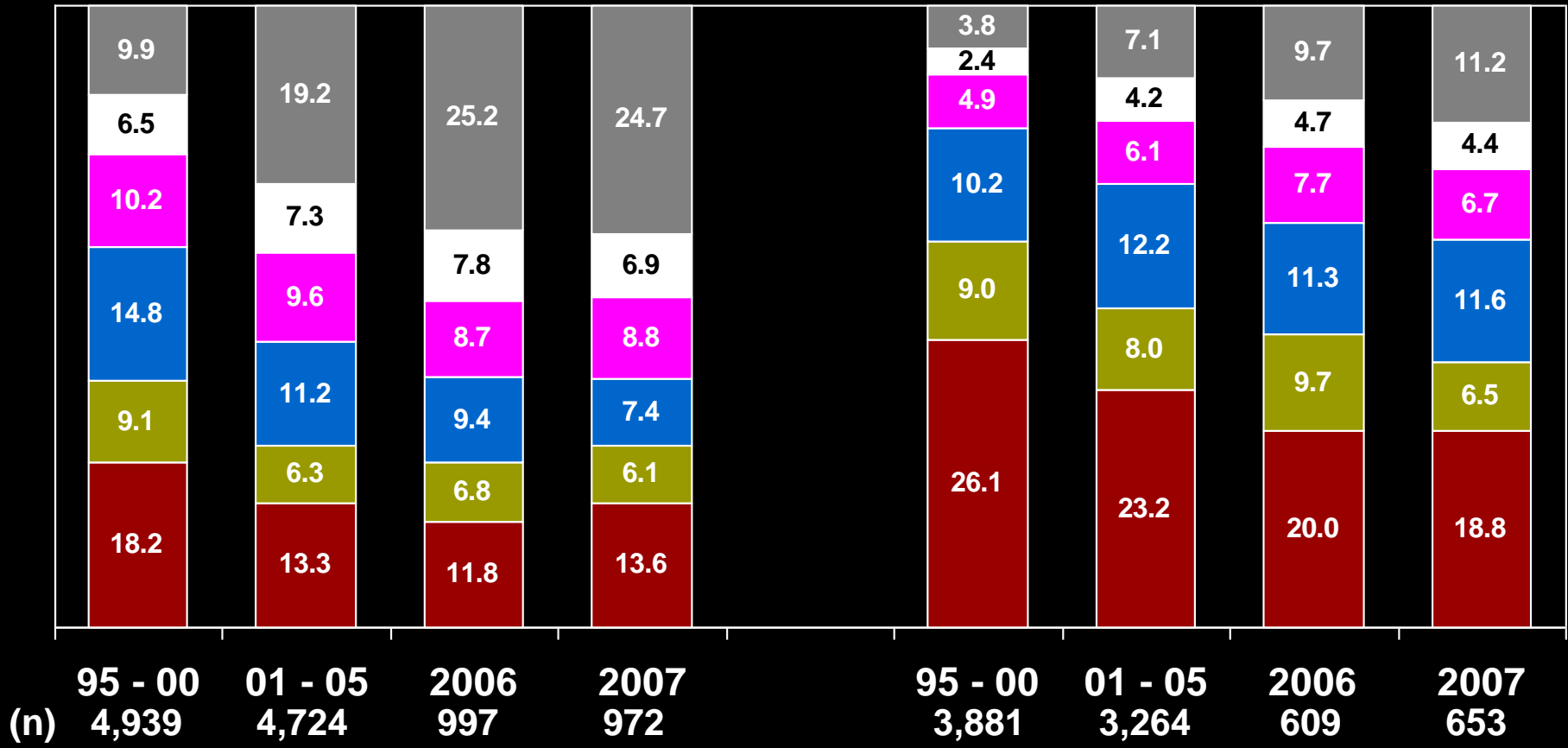


Filed FAFSA **No FAFSA**

Degree-seeking New Student Enrollment by Expected Family Contribution (FAFSA filers) (Fall 1995 – Fall 2007)

New Freshmen

New Transfers

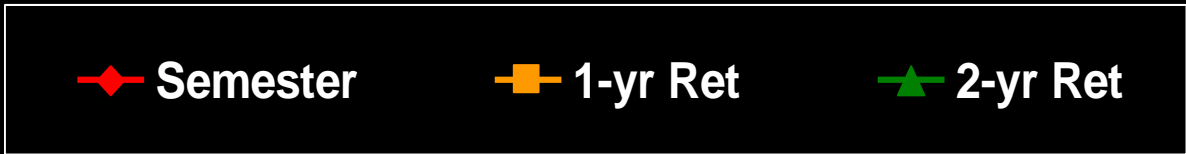
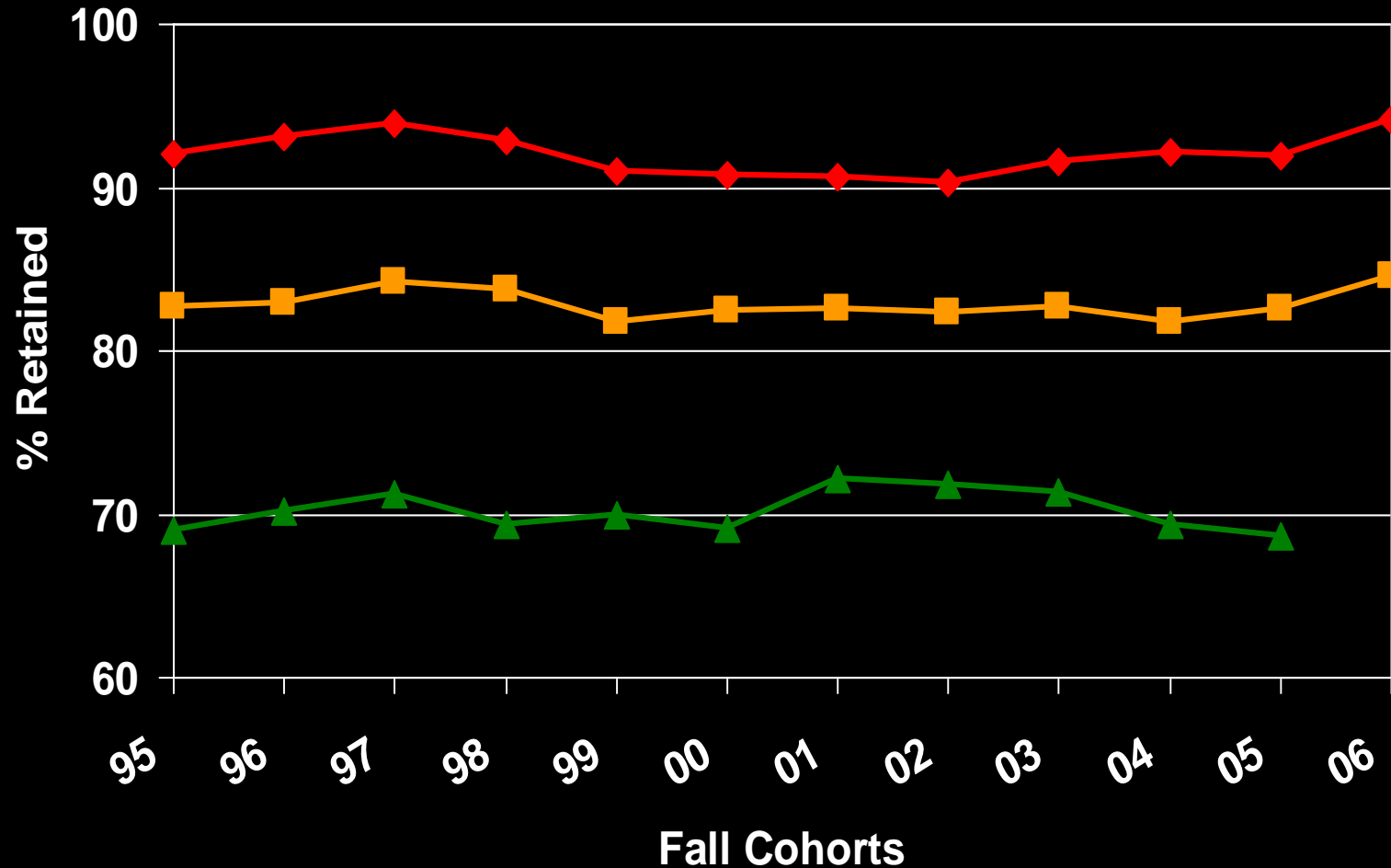


Baseline Persistence Models

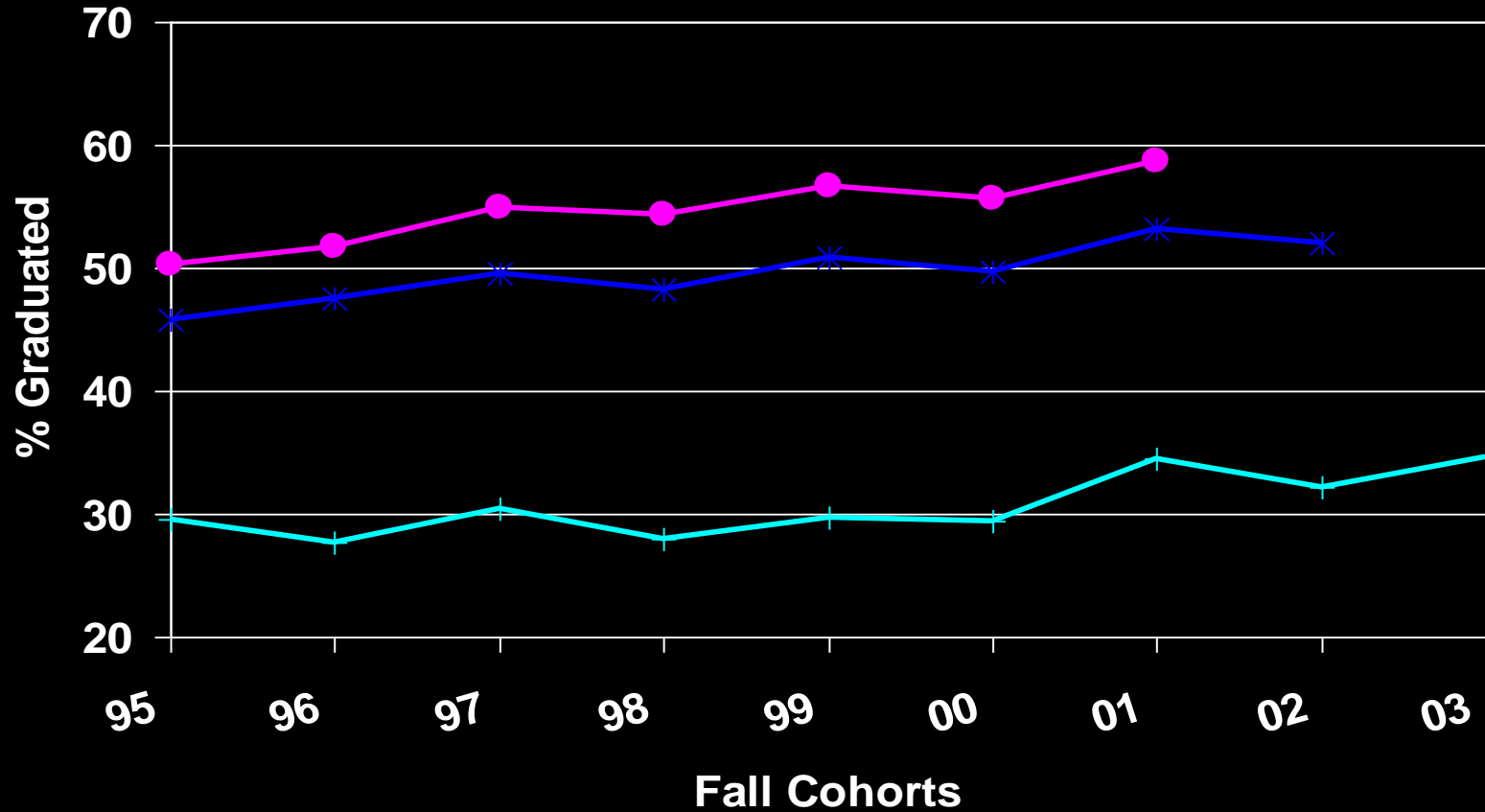
New Freshmen

Trends in Retention Rates for New Freshmen

(Fall cohorts, 1995 – 2006)



Trends in Graduation Rates for New Freshmen (Fall cohorts, 1995 – 2003)



Methodology

Population

- Semester, one-year and two-year retention models
 - 1995 – 2005 fall cohorts of degree-seeking new freshmen
(n = 14,245)

- Four-year and six-year graduation models
 - 1995 – 2000 fall cohorts of degree-seeking new freshmen
(n = 7,183)

- Based on 10th day enrollments

- Deceased excluded

Methodology

Baseline Model Variables

- Fall cohort term
- Sex
- Race
- Geographic origin
- High school GPA
- SAT Verbal/Math
- AP credit
- Math placement
- English placement
- Major area @ matriculation
- Dorm status
- Scholars' programs
- Honors College
- Athlete
- UMBC merit scholarship
- Applied for financial aid
- Pell Grant recipient
- Expected family contribution
- Credits attempted (BOT)
- % STEM coursework
- Difficulty of coursework
- Withdrew/cancelled registration 1st semester

Factors contributing to New Freshmen Graduating within Six Years (Baseline)

Top 5:

- **High School GPA**
- **Math placement**
- **Affiliated**
 - **Scholars' programs**
 - **Honors College**
 - **Athlete**
- **AP credit**
- **Dorm status**
- **Sex**
- **Geographic origin**
- **Major Area**
- **UMBC merit scholarship**
- **Expected family contribution**
- **Difficulty of coursework**

Academic Performance is Crucial to Persistence

New Freshmen

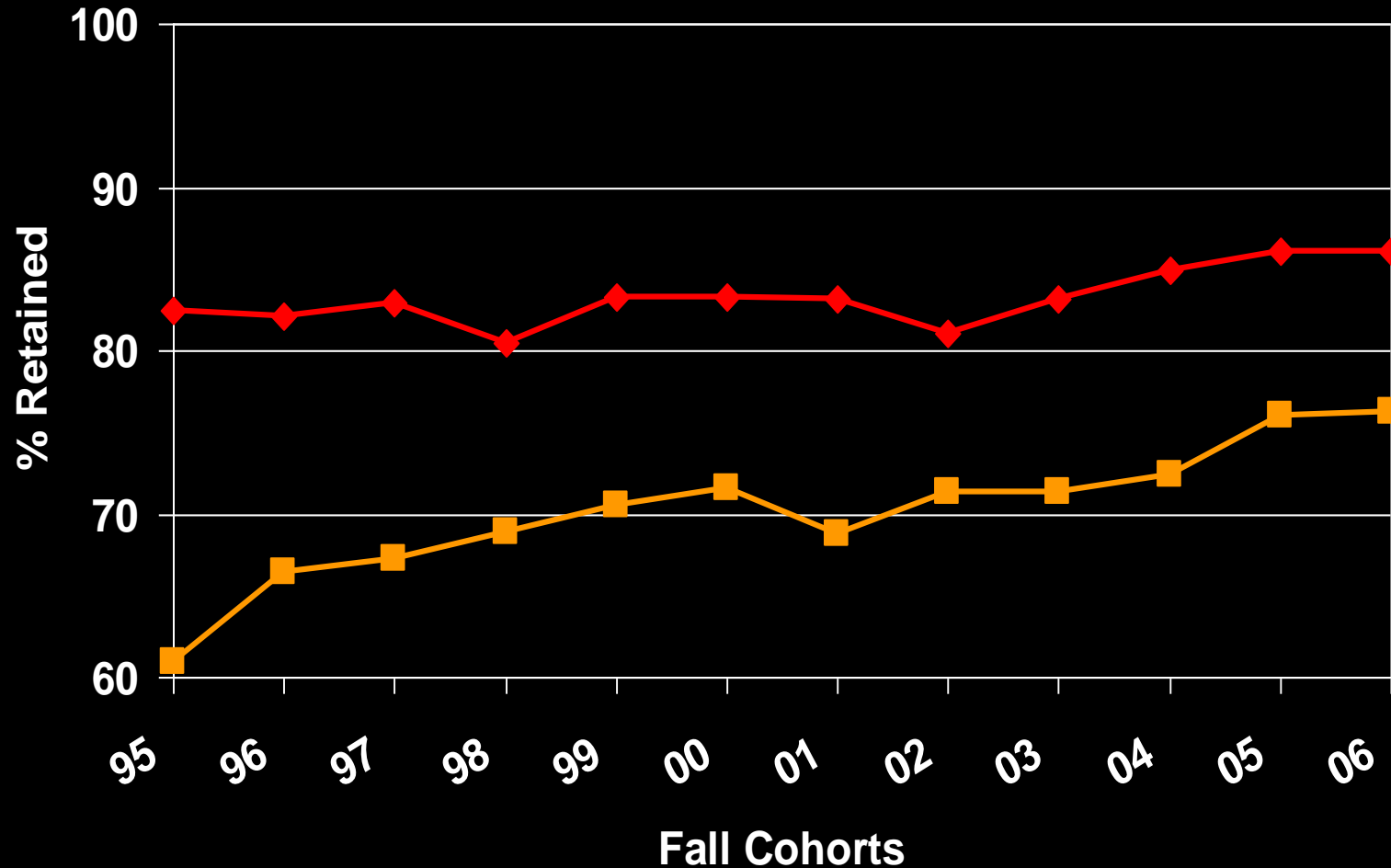
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Baseline Persistence Models

New Transfer Students

Trends in Retention Rates for New Transfer Students

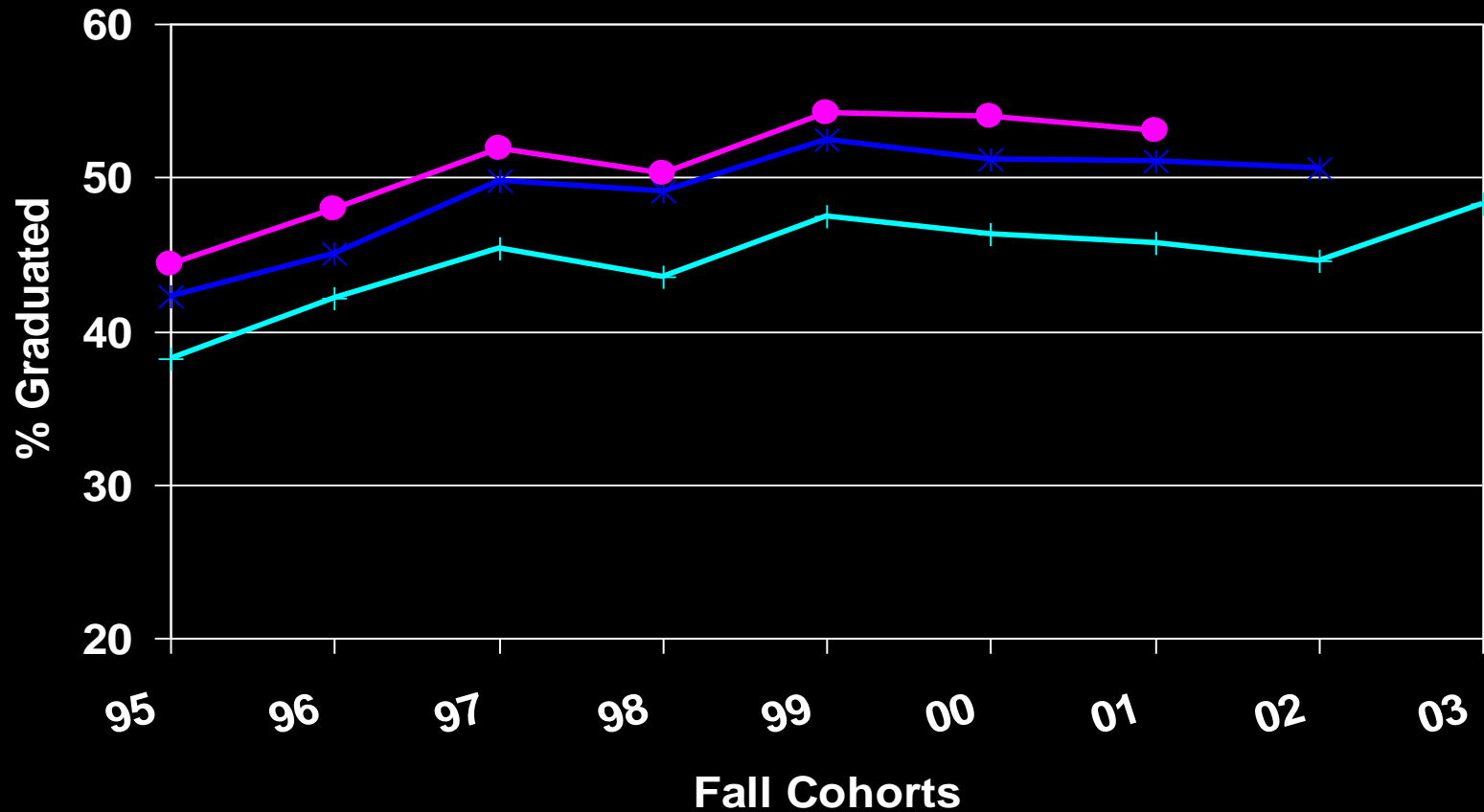
(Fall cohorts, 1995 – 2006)



◆ Semester

■ 1-yr Ret

Trends in Graduation Rates for New Transfer Students (Fall cohorts, 1995 – 2003)



—+— 4-yr Grad

—*— 5-yr Grad

—●— 6-yr Grad

Methodology

Population

- Semester and one-year retention models
 - 1995 – 2006 fall and spring cohorts of degree-seeking new transfer students (n = 19,010)

- Four-year and six-year graduation models
 - 1995 – 2000 fall and spring cohorts of degree-seeking new transfer students (n = 9,520)

- Based on 10th day enrollments

- Deceased excluded

Methodology

Baseline Model Variables

- Cohort term
- Fall/Spring entrant
- Sex
- Race
- Geographic origin
- Non-traditional-aged student
- Transfer institutional type
- Transfer GPA
- Type of degree transferred in
- Student-level at entry
- Major area @ matriculation
- Dorm status
- Scholars' programs
- Honors College
- Athlete
- UMBC merit scholarship
- Applied for financial aid
- Pell Grant recipient
- Expected family contribution
- Credits attempted (BOT)
- % STEM coursework
- Difficulty of coursework
- Withdrew/cancelled registration 1st semester

Factors contributing to New Transfer Students Graduating within Six Years (Baseline)

Top 5:

- Credits attempted (BOT)
- Major area @ matriculation
- Race
- Student-level at entry
- Transfer GPA
- Cohort term (trend)
- Geographic origin
- Non-traditional-aged student
- Transfer institutional type
- Athlete
- UMBC merit scholarship
- Difficulty of coursework
- Type of degree transferred in
- Withdrew/cancelled registration 1st semester

Academic Performance is Crucial to Persistence

New Transfer Students

***Click here**

Engagement Matters: The Role of First-year Experiences

- Study presented in June 2007; extends and complements prior analysis (www.umbc.edu/oir)
- Focused on 1st semester engagement in an FYS, IHU or LLC (fall cohorts, 2000 – 2006)
- Objectives:
 - Assess participation rates and who was more/less likely to participate
 - Assess the relationship of engagement in an FYE to retention—semester, one-year and two-year

Engagement Matters: The Role of First-year Experiences

- Prior OIR analyses using the NSSE (2005) showed that FYS & IHU participants stated they were more engaged than non-participants (www.umbc.edu/oir).
- Students at-risk were less likely to voluntarily enroll.
 - Non-Scholar students and Non-Honors College students
 - Commuting students
 - Transfer students
- Highlighted the question: “What does a first-year experience look like for new transfer students?”

Engagement Matters: The Role of First-year Experiences

- For ***new freshmen***, first semester engagement in an FYE is positively related to retention—semester, one-year and two-year—after controlling for other factors.
- For ***new transfer students***, first semester engagement in an FYE is positively related to semester retention, after controlling for other factors.¹

¹ Given that few new transfer students participate in an FYE, there is limited statistical power in modeling the longer term impact of FYE engagement on retention.

Looking Ahead...

- Further exploration of the significance of race for new transfer students' persistence
- Taking a few steps back and a few forward:
 - Developing a baseline yield model to tie to retention and graduation
 - Looking beyond the first semester in modeling persistence with survival analysis

Discussion

Questions & Comments