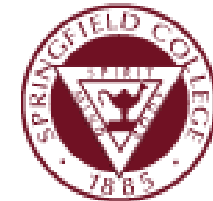# Institutional Research in Support of First Year Experiences

## Springfield College

Mary Ann Coughlin

Jerold Laguilles

## University of Maryland

Michelle Appel

Pam Phillips

# Outline

➤ Two Case Study Examples of how IR can support initiatives for First Year Experience.

   ✓ Each case study will share context of their role in this work and share the various approaches that they have used to inform institutional planning and the understanding of first-year retention.

     ❖ Springfield College

     ❖ University of Maryland

   ✓ Compare and Contrast the role of IR in these two very different settings

   ✓ Questions and Discussion / Sharing of Other Experiences

# Springfield College

➢ Context:

✓ Mission:

❖ To educate students in spirit, mind and body for leadership in service to others.

✓ Institution is:

❖ Committed to the mission

❖ Very student centered

✓ Other Factors:

❖ Preparing for NEASC Reaccreditation

❖ Focus on Outcomes Assessment

❖ Creation of new Coordinator of Institutional Research Position

# Key Elements

➢ Three key factors led to our work with First Year Experiences and have guided the focus of our work with this project.

- ✓ NEASC Self-Study – Process and Outcomes

- ✓ First Year Experience Task Force

- ✓ Support of Outcomes Assessment at the Institutional level

  - ❖ Development and Assessment of Outcomes
  - ❖ Internal and External Comparisons
  - ❖ Bench Marking

# Springfield College
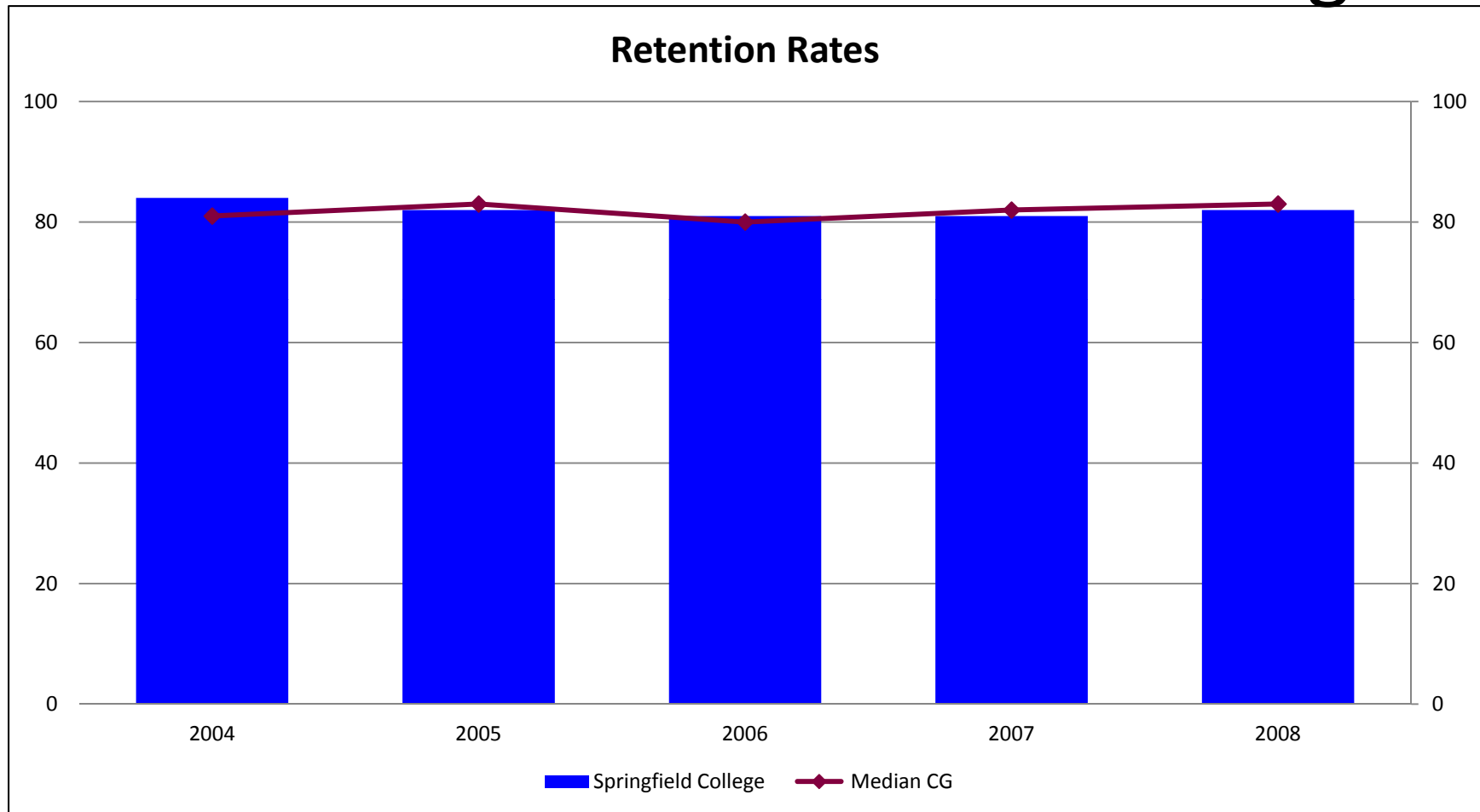
Assessing the First-Year Experience

1. ## SC Retention Data
   - Benchmarking with Peers
   - Institutional-specific sub-cohorts
2. ## FYE Task Force
   - Mapping Outcomes to FYE Preliminary Analysis Outcomes (Institutional Data, NSSE)

# Retention – IPEDS Benchmarking
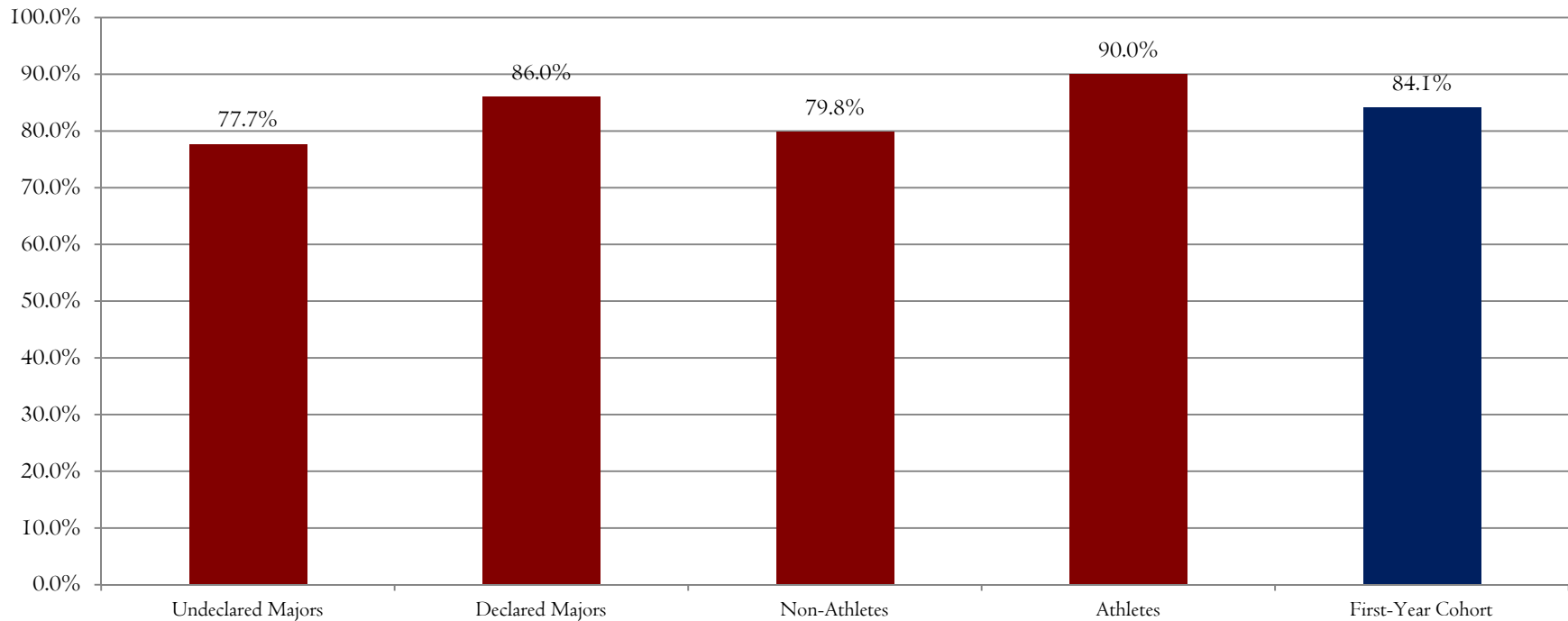


**Retention Rates**

Notes: Retention rate is calculated as the percent of the fall first-time full-time cohort from the prior year that re-enrolled at the institution in the next fall; (Source: IPEDS)

# SC Sub-Cohorts:
# First-year Athletes & Undeclared Majors

**Retention Rates**
**Fall 2008 cohort**



|  | First-Year Cohort | Athletes | Non-Athletes | Declared Majors | Undeclared Majors |
|---|---|---|---|---|---|
| **Number Returning** | 519 | 234 | 285 | 411 | 108 |
| **Number in Entering Cohort** | 617 | 260 | 357 | 478 | 139 |
| **Retention Rate** | 84.1% | 90.0% | 79.8% | 86.0% | 77.7% |

# Institutional Research in Support of First-Year Experiences

## Retention Rates:
## Athlete Status by Declared Major Status
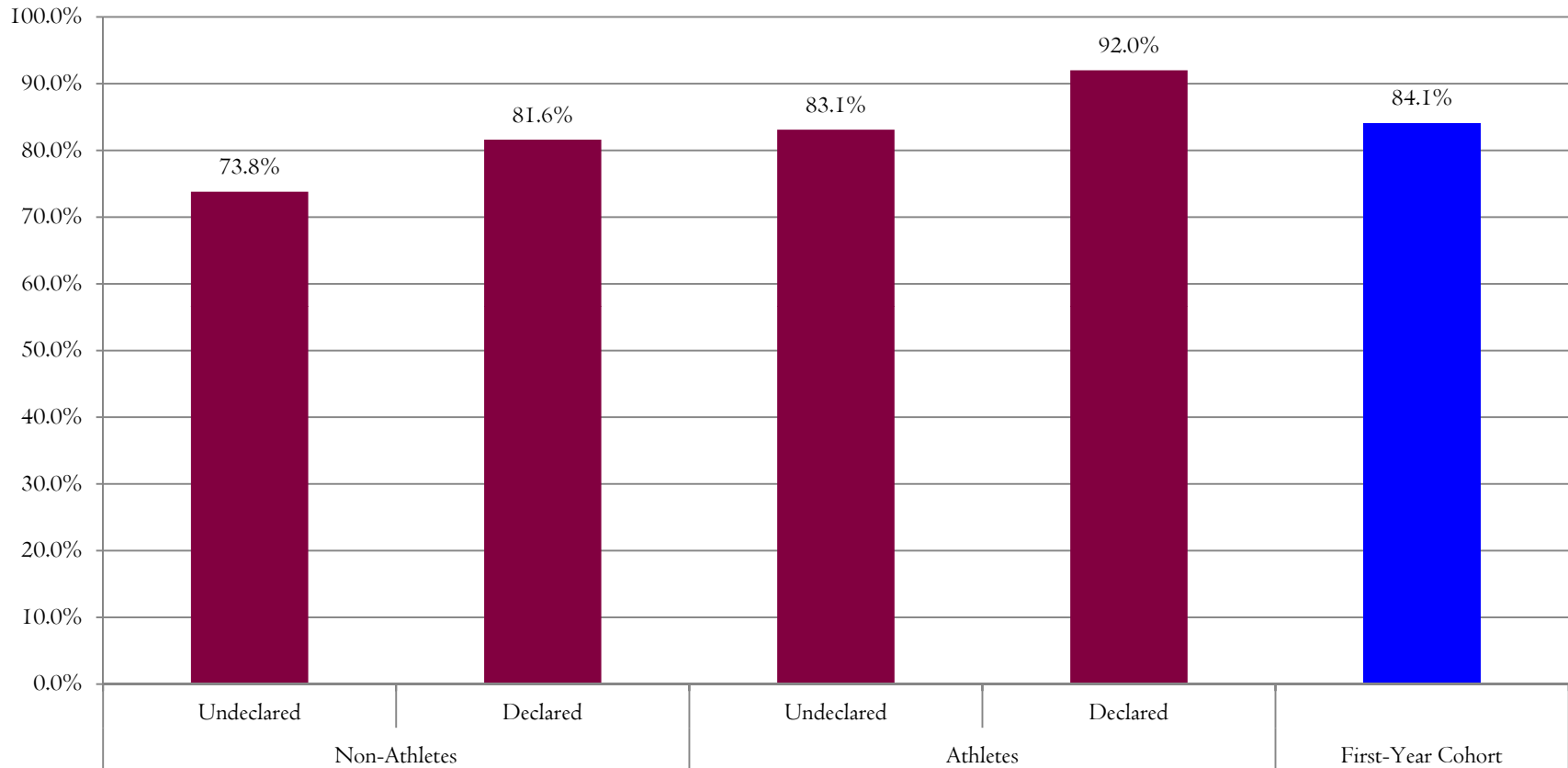


|  | First-Year Cohort | Athletes | | Non-Athletes | |
|---|---|---|---|---|---|
|  |  | Declared | Undeclared | Declared | Undeclared |
| **Number Returning** | 519 | 185 | 49 | 226 | 59 |
| **Number in Entering Cohort** | 617 | 201 | 59 | 277 | 80 |
| **Retention Rate** | 84.1% | 92.0% | 83.1% | 81.6% | 73.8% |

# FYE Task Force

| First-Year Experiences Examples | Outcomes Examples |
|---|---|
| **Pre-First-Year**<br>•Open House<br>•SOAR (Summer Orientation, Advising, Registration)<br>•Pre-Camp<br>•New Student Orientation<br>**First-Year Co-Curricular**<br>•First-year programming<br>•Family & Friends Weekend<br>•On-Campus Employment<br>•Athletics<br>•Student Leadership Positions<br>•Intramurals<br>**First-Year Academic**<br>•First Year Seminar<br>•Academic Advising<br>•Academic Success Center | **Student Retention**<br>•Return as sophomore next Fall<br>**Academic Achievement/Intellectual Development**<br>•Academic Progress (G.P.A.)<br>•Communicate effectively in both written and oral form (NSSE)<br>**Leadership Development**<br>• Engage in group activities that require teamwork, self-understanding, and taking initiative<br>**SC Values and Traditions**<br>• Develop an understanding and appreciation for the College Mission<br>**Emotional Development**<br>**Social Development**<br>**Ethical Development**<br>**Physical Development**<br>**Spiritual Development** |

# FYE/Outcomes Matrix

Please place a "**+**" for items that are a **Major Focus**

Please place an "**-**" for items that are a **Minor Focus**

| | Open House [programmatic] | SOAR [programmatic] | Pre-Camp [programmatic] | Cultural Connections [programmatic] | New Student Orientation [programmatic] | | Welcome Week | Club Fair | First |
|---|---|---|---|---|---|---|---|---|---|
| **Student Retention** | | | | | | | | | |
| Remain enrolled during the Fall term | + | + | + | + | | | + | | + |
| Re-enroll in the Spring Term | + | N | - | - | | | - | | + |
| Return as sophomores in next Fall term | - | N | - | - | | | - | | - |
| Student completes educational goal (e.g. degree) | N | - | - | N | | | N | | N |
| **Academic Achievement / Intellectual Development** | | | | | | | | | |
| Achieve Academically -- Academic Progress | N | - | N | N | | | N | | + |
| Communicate effectively in both written and oral form | N | N | - | - | | | N | | N |
| Develop ability to think critically | N | N | - | + | | | N | | - |
| Learn to interpret information, and to develop well-reasoned conclusions | N | N | - | + | | | N | | - |
| Student was prepared for future goals / career | + | - | N | N | | | N | | N |
| Awareness of academic support and resources | + | - | - | N | | | N | | + |

## Fall 2008 Cohort Retention Rates:
## Selected Student Involvements
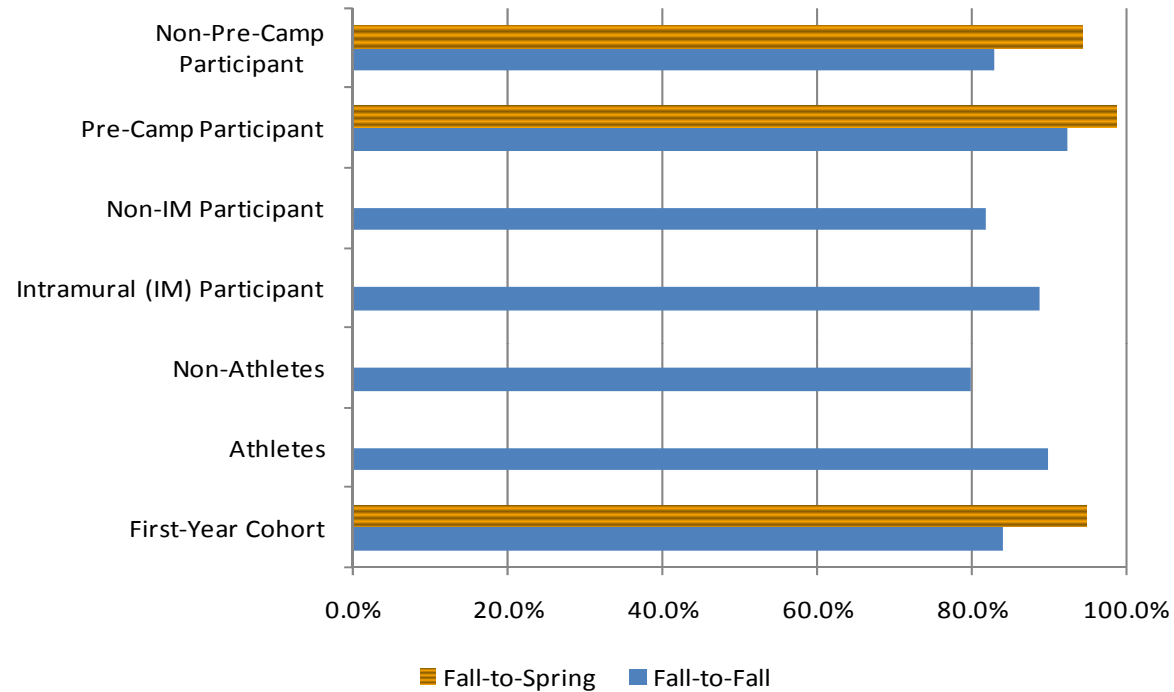


| | First-Year Cohort | Athletes[1] | Non-Athletes | Intramural (IM) Participant[2] | Non-IM Participant | Pre-Camp Participant[3] | Non-Pre-Camp Participant |
|---|---|---|---|---|---|---|---|
| **Number Returning** | 585 | | | | | 79 | 506 |
| **Number in Entering Cohort** | 617 | | | | | 80 | 537 |
| **Fall-to-Spring Retention** | 94.8% | | | | | 98.8% | 94.2% |
| **Number Returning** | 519 | 234 | 285 | 182 | 337 | 74 | 445 |
| **Number in Entering Cohort** | 617 | 260 | 357 | 205 | 412 | 80 | 537 |
| **Fall-to-Fall Retention Rate** | 84.1% | 90.0% | 79.8% | 88.8% | 81.8% | 92.5% | 82.9% |

[1] Played at least one sport during 08-09 year

[2] Participated in at least one IM sport during 08-09 year

[3] Participant in Fall 08

# Institutional Research in Support of First-Year Experiences

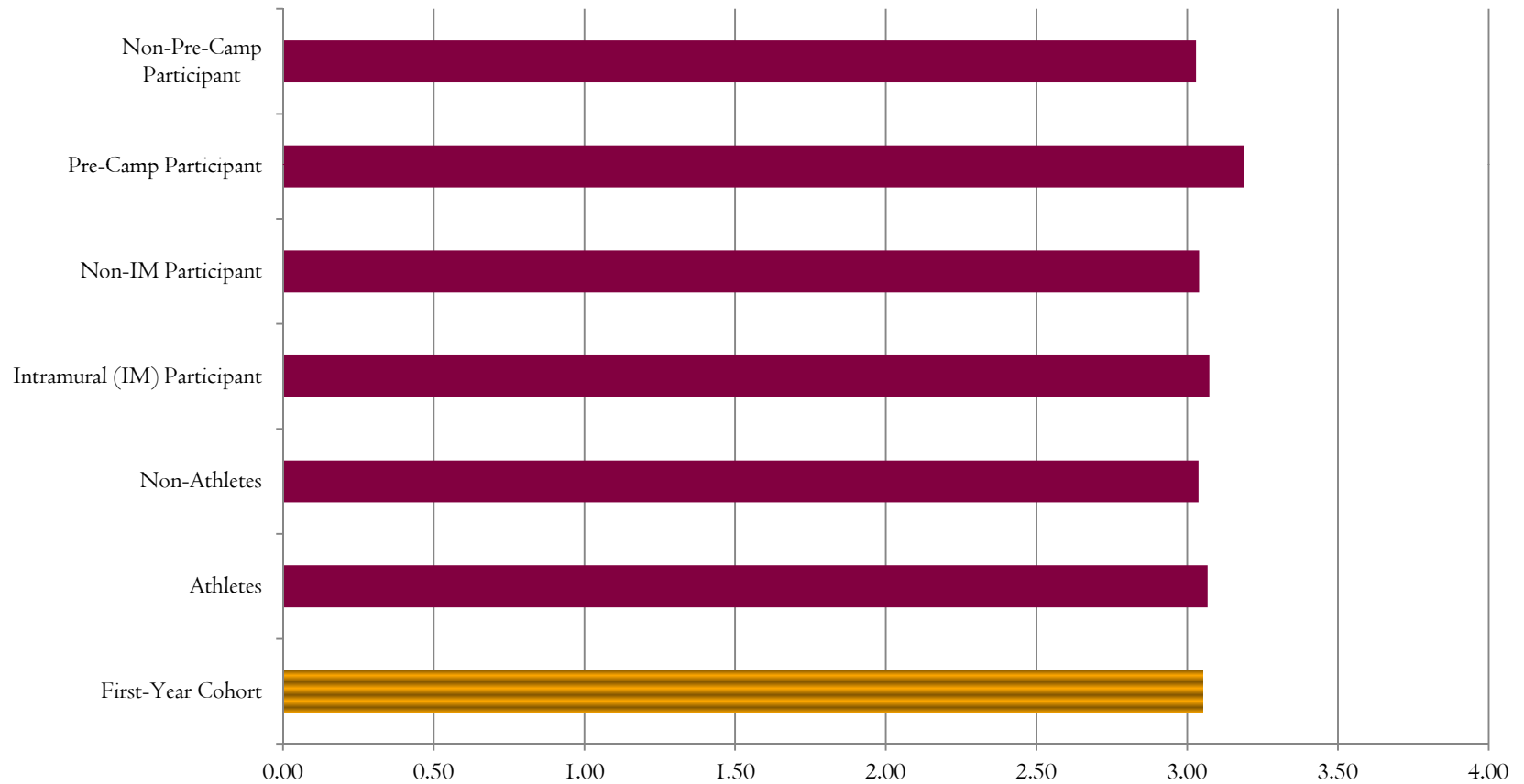| Mean GPA at end of first-year | | | | | | | |
|---|---|---|---|---|---|---|---|
| | First-Year Cohort | Athletes | Non-Athletes | Intramural (IM) Participant | Non-IM Participant | Pre-Camp Participant | Non-Pre-Camp Participant |
| First-Year GPA | 3.05 | 3.07 | 3.04 | 3.07 | 3.04 | 3.19 | 3.03 |
| Number of students | 585 | 260 | 325 | 198 | 387 | 79 | 506 |

## First-Year GPA

# Institutional Research in Support of First-Year Experiences

To what extent has your experience at this camp contributed to your knowledge, skills, and personal development in the following areas?

| | Pre-Camp Participants | | | | | First-year Cohort | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Very little | Some | Quite a bit | Very much | N | Very little | Some | Quite a bit | Very much | N |
| Speaking clearly and effectively | 3.0% | 27.3% | 24.2% | 45.5% | 33 | 3.2% | 23.5% | 36.4% | 36.9% | 187 |
| Writing clearly and effectively | 3.0% | 21.2% | 33.3% | 42.4% | 33 | 1.6% | 18.0% | 40.7% | 39.7% | 189 |
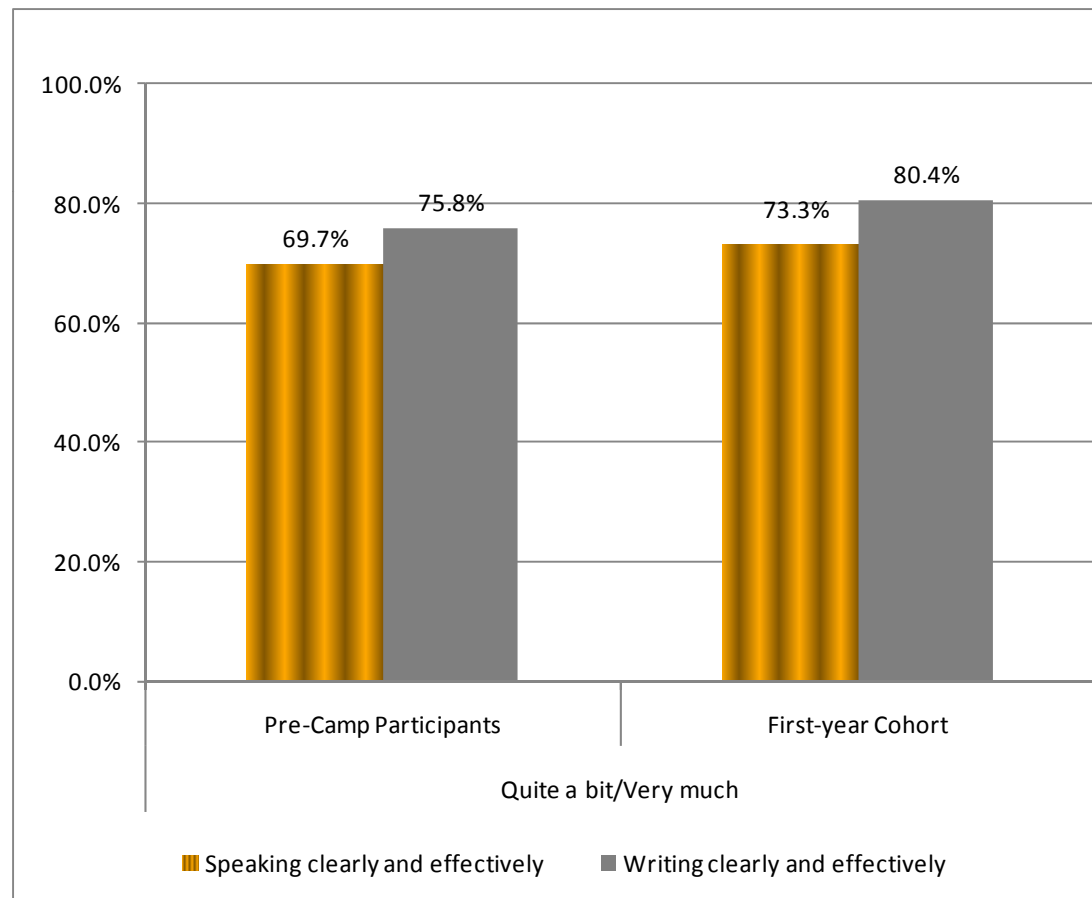
# Next Steps

➢ Identifying measures for each outcome
  ✓ What is already available
  ✓ What would need to be collected

➢ Improve data collection of various first-year experiences

➢ Develop more analytical retention model

# University of Maryland

➤ Context:

✓ Mission:

❖ The University fosters: the education, critical thinking and intellectual growth of students; the creation and application of new knowledge; the economic development of the state; and effective engagement with the surrounding world.

✓ Institution is:

❖ Flagship University

❖ Large and decentralized

✓ Other Factors:

❖ Newly endorsed Strategic Plan

❖ Provost's Task Force on Retention and Graduation

❖ Reorganization of living/learning programs and focus on special undergraduate experiences

# Key Elements

➢ Long term commitment to integrating IR information in initiatives around first year retention

➢ Retention examined not only at University but for programs and units

➢ Collaboration with campus committees and initiatives

 ❖ Living Learning Task Force

 ❖ Undergraduate Studies

 ❖ Provost's Task Force on Retention & Graduation

 ❖ Campus Assessment Working Group (CAWG)

➢ Re-use existing "products" for consistency and efficiency

# Historical Context &Timeline

## Enhancing Undergrad Education

- '88 - LL Prgs: Lang.; Internat.; Honors
- Low Occupancy in Res Halls
- '90 - LL White Paper
- '90 to '95 – Budget Crunch -dept. closings

## "Making big store small"

- '94 - College Park Scholars
- '94 – DRL's Customer Service Initiative
- ' 96 - Gemstone & Honors Humanities
- First-Year Focus
- Course Clusters

## Keep the best students

- Early identification and intervention
- New Probation and Dismissal Policies

## Retain through Graduation

- Focus on achieving benchmarks
- Identifying pathways for success
- Four-year plans
- Student Success Degree Completion Policy
- 2010 Task force
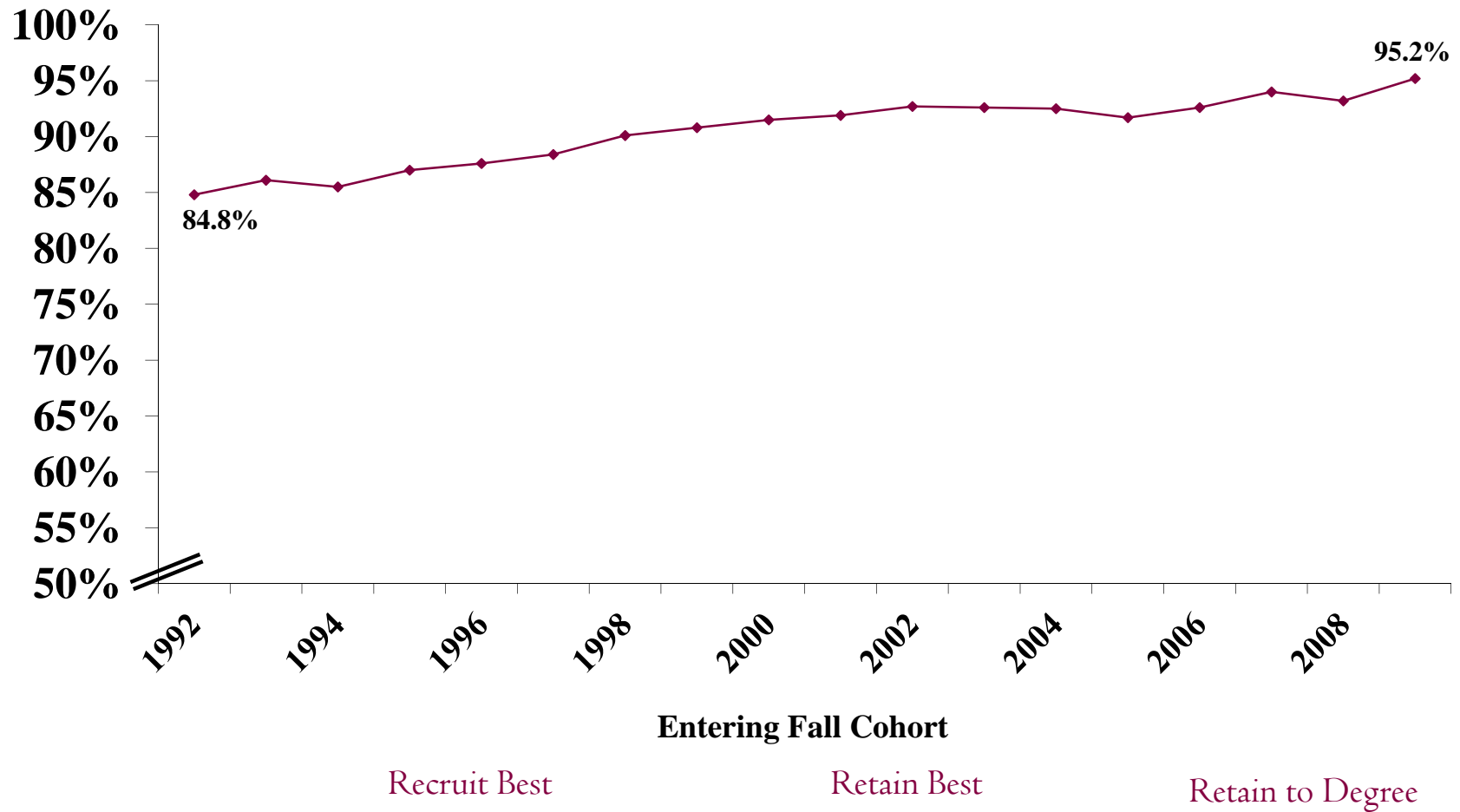
| 80's – 90's | Mid-late 90's | Early 2000's | Mid 2000's |
| --- | --- | --- | --- |
| Gen Educ | Attract Best | Keep the Best | Retain to Graduation |

# Standardized Retention Reporting

**Report: UG Retention and Graduation Rates**

Choose new unit

| | |
|---|---|
| Show retention by continuity: | ☐ |
| Cohort Type: | New Freshmen ▾ |
| Limit on Race/Ethnicity: | All Races ▾ |
| Limit on Sex: | Both Sexes ▾ |
| Show percents: | ☑ |
| Limit on a data set: | No Data Set ▾ |

[ Go ]

✉ E-MAIL
💾 BOOK
🖨 PRINT
📊 EXCEL

**At the university**

New Freshmen
All Races
Both Sexes

| | | Retained or Graduated | | | Graduated | | |
|---|---|---|---|---|---|---|---|
| | Cohort Size | After 1 Year | After 2 Years | After 3 Years | After 4 Years | After 5 Years | After 6 Years |
| Fall 1992 | 3,020 | 84.8% | 76.0% | 73.5% | 32.0% | 58.2% | 64.6% |
| Fall 1993 | 3,145 | 86.1% | 76.9% | 73.1% | 33.5% | 58.7% | 64.0% |
| Fall 1994 | 3,629 | 85.5% | 76.4% | 72.2% | 33.4% | 58.1% | 63.6% |
| Fall 1995 | 3,575 | 87.0% | 76.4% | 73.6% | 37.6% | 59.4% | 64.8% |
| Fall 1996 | 3,540 | 87.6% | 79.5% | 76.4% | 40.9% | 64.2% | 69.2% |
| Fall 1997 | 3,951 | 88.3% | 81.0% | 77.3% | 43.0% | 65.8% | 70.7% |
| Fall 1998 | 4,044 | 90.1% | 82.9% | 79.3% | 46.0% | 68.7% | 73.2% |
| Fall 1999 | 3,875 | 90.7% | 84.7% | 81.7% | 50.1% | 72.9% | 76.5% |
| Fall 2000 | 3,933 | 91.5% | 86.2% | 83.8% | 54.5% | 76.2% | 79.5% |
| Fall 2001 | 4,341 | 91.9% | 86.2% | 83.8% | 58.4% | 77.1% | 80.0% |
| Fall 2002 | 3,886 | 92.7% | 87.1% | 85.3% | 63.1% | 79.6% | 81.8% |
| Fall 2003 | 4,046 | 92.5% | 86.8% | 85.5% | 62.8% | 79.7% | 81.8% |
| Fall 2004 | 4,174 | 92.5% | 87.6% | 85.1% | 62.5% | 79.3% | 81.5% |
| Fall 2005 | 4,192 | 91.7% | 87.2% | 85.1% | 66.0% | 79.7% | |
| Fall 2006 | 3,943 | 92.6% | 87.7% | 85.6% | 62.8% | | |
| Fall 2007 | 4,219 | 94.0% | 89.1% | 87.3% | | | |
| Fall 2008 | 3,900 | 93.2% | 89.6% | | | | |
| Fall 2009 | 4,192 | 95.2% | | | | | |

# Application of Standard Across Programs

## Sample Data Set for Program          R. H. Smith School of Business

**At the university**

New Freshmen
All Races
Both Sexes

|  | | Retained or Graduated | | | Graduated | | |
|---|---|---|---|---|---|---|---|
|  | Cohort Size | After 1 Year | After 2 Years | After 3 Years | After 4 Years | After 5 Years | After 6 Years |
| Fall 2003 | 50 | 98.0% | 74.0% | 68.0% | 30.0% | 50.0% | 52.0% |
| Fall 2004 | 41 | 87.8% | 87.8% | 78.0% | 29.3% | 48.8% | 53.7% |
| Fall 2005 | 34 | 97.1% | 76.5% | 73.5% | 23.5% | 52.9% | |
| Fall 2006 | 46 | 93.5% | 80.4% | 71.7% | 47.8% | | |
| Fall 2007 | 48 | 95.8% | 75.0% | 68.8% | | | |
| Fall 2008 | 35 | 97.1% | 85.7% | | | | |
| Fall 2009 | 46 | 93.5% | | | | | |

- Initial cohort includes only full time, degree seeking, new freshmen
- For years 1-3, percent includes those retained or graduated
- For years 4-6, percent includes only those that graduated

**29 -- Robert H. Smith School of Business**

New Freshmen
All Races
Both Sexes

|  | | Retained or Graduated | | | Graduated | | |
|---|---|---|---|---|---|---|---|
|  | Cohort Size | After 1 Year | After 2 Years | After 3 Years | After 4 Years | After 5 Years | After 6 Years |
| Fall 1992 | 360 | 88.1% | 77.2% | 77.8% | 43.6% | 66.9% | 71.1% |
| Fall 1993 | 428 | 89.7% | 82.5% | 75.7% | 40.0% | 66.6% | 70.1% |
| Fall 1994 | 445 | 85.2% | 77.5% | 73.5% | 42.5% | 62.5% | 65.6% |
| Fall 1995 | 438 | 87.4% | 78.1% | 76.5% | 47.0% | 64.2% | 69.6% |
| Fall 1996 | 365 | 86.0% | 81.1% | 76.4% | 46.6% | 68.2% | 71.0% |
| Fall 1997 | 437 | 89.7% | 82.2% | 78.5% | 49.7% | 72.3% | 75.7% |
| Fall 1998 | 373 | 91.4% | 86.6% | 85.5% | 56.6% | 78.0% | 79.6% |
| Fall 1999 | 148 | 95.3% | 90.5% | 87.8% | 64.2% | 81.8% | 83.8% |
| Fall 2000 | 176 | 97.2% | 94.9% | 93.8% | 71.0% | 88.1% | 90.3% |
| Fall 2001 | 212 | 93.9% | 94.3% | 91.0% | 79.2% | 89.2% | 90.1% |
| Fall 2002 | 302 | 92.7% | 89.7% | 87.4% | 76.5% | 85.8% | 86.8% |
| Fall 2003 | 291 | 93.5% | 91.4% | 91.1% | 75.3% | 89.3% | 90.4% |
| Fall 2004 | 283 | 95.8% | 93.6% | 92.6% | 77.0% | 89.8% | 90.8% |
| Fall 2005 | 376 | 95.5% | 92.3% | 92.0% | 80.6% | 89.9% | |
| Fall 2006 | 370 | 93.8% | 90.0% | 90.0% | 73.8% | | |
| Fall 2007 | 428 | 96.0% | 93.0% | 93.0% | | | |
| Fall 2008 | 404 | 95.0% | 93.1% | | | | |
| Fall 2009 | 401 | 96.5% | | | | | |

# Living Learning Project

➢ Initial reports for task force
- ✓ Task force resulted in reorganization
- ✓ Ongoing need for consistent data across programs

➢ Undergraduate Studies assumed responsibility for annual reporting

➢ Data for annual program review reports
- ✓ Demographics
- ✓ Admissions – Invites and Yield, Profile
- ✓ Program participation
- ✓ Retention and Graduation

# Living Learning Sample Data

## Admissions Data:

| Category | Metric | Fall 2005 | Fall 2006 | Fall 2007 | Fall 2008 | Fall 2009 |
|---|---|---|---|---|---|---|
| | **NEW FRESHMEN** | | | | | |
| **Yield Rate** | Accepted invite; enrolled in program | 17 | 47 | 24 | 22 | 32 |
| | Accepted invite; not enrolled at univ | 12 | 19 | 11 | 10 | 22 |
| | Declined invite; enrolled at univ | 167 | 184 | 103 | 83 | 77 |
| | Declined invite; not enrolled at univ | 293 | 279 | 142 | 169 | 218 |
| | Yield rate for program | 3.5% | 8.9% | 8.6% | 7.7% | 9.2% |
| **Academic Performance** | Combined SAT 25th Percentile | 1240 | 1180 | 1040 | 1130 | 1118 |
| | Combined SAT 75th Percentile | 1380 | 1340 | 1270 | 1270 | 1263 |
| | Avg. Weighted High School GPA | 3.74 | 3.85 | 3.71 | 4.10 | 3.86 |
| | Avg. Unweighted High School GPA | 3.28 | 3.77 | 3.47 | 3.61 | 3.65 |
| | **Avg. Combined High School GPA** | **3.61** | **3.84** | **3.67** | **4.01** | **3.81** |

## Retention/Graduation Data:

| | After 0 years | | Retained or Graduated After 1 year | | After 2 years | | After 3 years | | Graduated After 4 years | | After 5 years | | After 6 years | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cohort | N | % | N | % | N | % | N | % | N | % | N | % | N | % |
| Fall 2005 | 17 | 100.0% | 16 | 94.0% | 15 | 88.0% | 16 | 94.0% | 15 | 88.0% | | | | |
| Fall 2006 | 46 | 100.0% | 39 | 85.0% | 39 | 85.0% | 37 | 80.0% | | | | | | |
| Fall 2007 | 23 | 100.0% | 21 | 91.0% | 21 | 91.0% | | | | | | | | |
| Fall 2008 | 22 | 100.0% | 22 | 100.0% | | | | | | | | | | |
| Fall 2009 | 32 | 100.0% | | | | | | | | | | | | |

# Examples of Survey Data Support

➢ Beginning Student Survey

 ✓ Home-grown survey on first-year transition issues

 ✓ As requested, IRPA provides program-level results

➢ National Study of Living-Learning Programs

 ✓ Researcher provided campus-level results

 ✓ IRPA conducted analysis for program-level results

➢ Consultation

 ✓ For within-program surveys, directors consult with IRPA staff

# Provost's Task Force on Retention

- ➢ Focus on first year retention and identifying subgroups at risk

- ➢ Movement away from single cohort analysis toward multi-year/multi-cohort analysis

- ➢ Grounded in Strategic Plan
  - ✓ University below identified peers
  - ✓ Attempt to engage entire University in process

- ➢ Incorporate existing work (e.g., CAWG) while developing new analyses

# Retention Committee Sample Data

## Retention Rates, by Students' Academic Standing at the End of First Fall Term

|  | 1st Year | | 2nd Year | | 3rd Year | |
|---|---|---|---|---|---|---|
|  | Cohort N | Retention Rate | Cohort N | Retention Rate | Cohort N | Retention Rate |
| **Good Standing** | 11,103 | 95.6% | 7,490 | 91.6% | 3,601 | 89.3% |
| **Probation** | 959 | 66.2% | 672 | 53.1% | 342 | 47.1% |

# Top 10 Major Reasons For Leaving UM

CAWG Retention: "My Story"

**Transfer Outs**

Academ. svc./advising not helpful
***Cost of tuition/fees too high***
***Inadequate financial aid***
Not enough fac. interaction/attention
Too many people in classes
Dissatisfied with qual. instruction
Depression/anxiety
UM didn't have program/major
Felt like an outsider
***Loss of motivation***

**Stop Outs**

Grades
***Cost of tuition/fees too high***
***Inadequate financial aid***
Lack of focus or direction
***Loss of motivation***
Cost of books/supplies too high
Cost of living in area too high
Did not have good study habits
Had trouble balancing work/school
Encountered unexpected expenses

# Institutional Research in Support of First-Year Experiences

| Type of Institution | First Fall GPA | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 0.00-2.50 | | 2.51-2.99 | | 3.00 plus | | All GPA groups | |
| | N | % | N | % | N | % | N | % |
| **Maryland Public 2-year** | 298 | 57% | 30 | 27% | 40 | 11% | 368 | 36% |
| **Maryland Public 4-year** | 48 | 9% | 18 | 16% | 47 | 13% | 113 | 11% |
| **Maryland Private 4-year** | 3 | 1% | 4 | 4% | 4 | 1% | 11 | 1% |
| **Other Public 2-year** | 84 | 16% | 10 | 9% | 26 | 7% | 120 | 12% |
| **Other Public 4-year** | 55 | 10% | 33 | 29% | 145 | 39% | 233 | 23% |
| **Other Private 4-year** | 38 | 7% | 17 | 15% | 112 | 30% | 167 | 17% |
| **Total** | 526 | 100% | 112 | 100% | 374 | 100% | 1,012 | 100% |

# Challenges and Next Steps

➢ Challenges

- ✓ Decentralization
- ✓ Identifying students, maintaining program participation
- ✓ Identifying and tracking new initiatives
- ✓ Differences in programs, student preparation impact findings
- ✓ Scope creep - resource cost/benefit

➢ Next Steps

- ✓ Continue to work with programs to improve data quality
- ✓ Continue incorporating program needs with ongoing projects
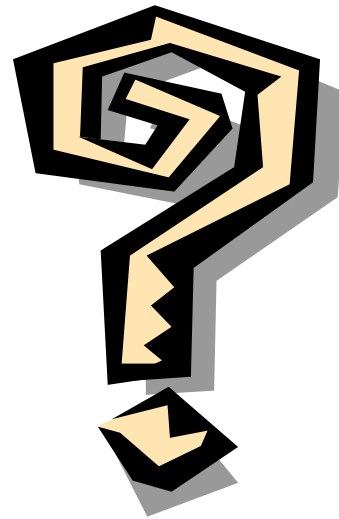- ✓ Automation - expand "Self Serve" products

# Comparison of Case Studies

➤ More Similarities than Differences

- ✓ Program participation data challenges
- ✓ Attempt to re-use existing work
  - ❖ Surveys
  - ❖ Reporting structures
- ✓ Integrate with other campus initiatives and priorities
- ✓ Use of IPEDS methodology for peer comparison data
- ✓ Move beyond an overall rate and look at sub-groups to better understand what works and where retention can get better
  - ❖ Utilization of additional measures beyond IPEDS retention
  - ❖ Exploration of "at risk" groups

# Comparison of Case Studies

- ➢ Differences generally relate to institutional context
  - ✓ Institutional history/familiarity with retention information
  - ✓ Availability of resources with which to explore retention and student success

# Questions & Discussion



# Other Experiences?