



# **Benchmarking and Dashboards for Boards**

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**Workshop for Board Professionals**  
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## **Benchmarking addresses questions such as:**

- How well are we using resources and performing over time?
- How well are we using resources and performing relative to peers?
- Are we performing at an acceptable level on this criterion?
- Which institutions are performing best on this criterion?
- Are practices of better performing institutions appropriate for our institution?
- Can we perform better?

# Characteristics of Good Comparative Data

- Provide a balanced view of the situation.
- Identify issues and establish progress.
- Relevant to strategically managed activities.
- Sufficient and relevant to key issues.
- Motivate the proper actions.
- Reliable, timely, available and inexpensive.
- Context provides interpretation
  - Trends over time
  - External Comparisons
  - Internal comparisons
  - Ideal standard or goal

# What Are the Different Uses of Comparative Data?

## **Accountability**

- **Accreditation**
- **Public reports**
- **Institution's website**

## **Fulfill Fiduciary Responsibilities**

- **Look at competitive situation**
- **Develop and Monitor Key Performance Indicators**
- **Monitor Red Flags**

# How do you Develop Key Performance Indicators?

Start with a critical success factor:

- Example: The college must remain financially healthy.

Identify the critical components:

- Example: Financial Health
- Composite Financial Indicator
  - Primary Reserve – Assets to expenses
  - Viability – Assets to debt
  - Return on Net Assets – Increased Assets
  - Net Income Ratio – “Percent Profit”

See Appendix for additional information

# Where Can Publicly-Available Data Be Found?

## General Data

- **IPEDS Peer Analysis System**, <http://www.nces.ed.gov/ipedspas/>
- **AGB Benchmarking Service**, [data.agb.org](http://data.agb.org)
- **NSF WebCASPAR**, <http://www.nsf.gov/>
- **U-CAN**, NAICU, <http://www.ucan-network.org/>
- **VSA**, AASCU & NASCLGC, <http://www.collegeportraits.org/>



# Where Can Publicly-Available Data Be Found? (continued)

## Endowment and Finance Data

- NACUBO Endowment Study
- CAE Voluntary Support of Education Data Miner
- IPEDS Finance Survey
- AGB Benchmarking Service
- Delaware Study of Costs and Productivity
- Moody's Municipal Financial Ratio Analysis

# Where Can Publicly-Available Data Be Found? (continued)

## **Facilities**

- APPA Facilities Core Data Survey
- SCUP Campus Facility Inventory

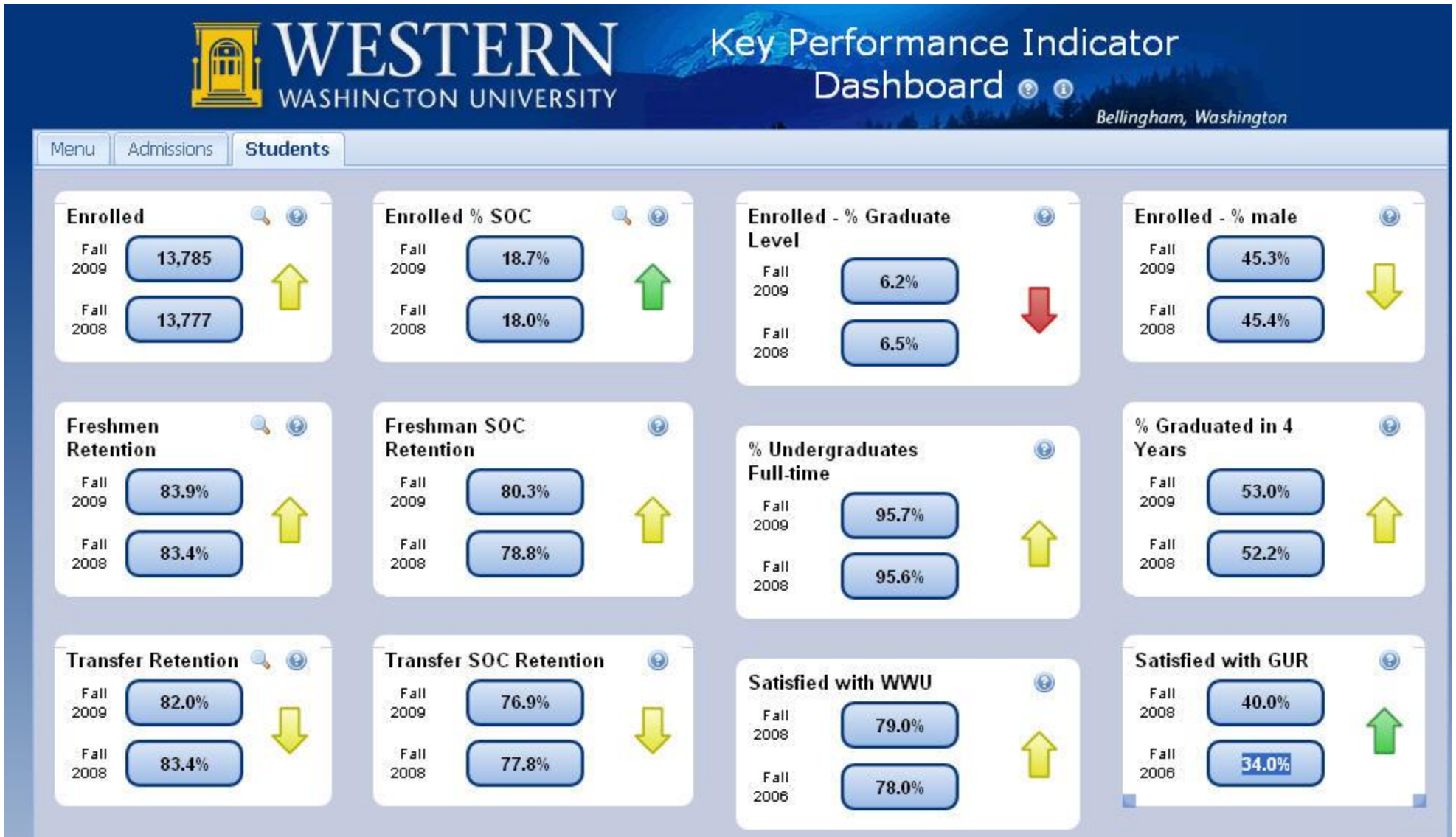
## **Salary and Benefits**

- AAUP Salary Survey
- CUPA-HR DataOnDemand
- IPEDS HR Survey
- AGB Benchmarking Service
- IRS 990, Guidestar

## **Tuition and Discounting**

- NACUBO Tuition Discounting Survey

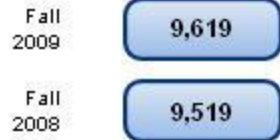
# Western Washington U KPIs



# Enrollment KPIs

## Freshmen

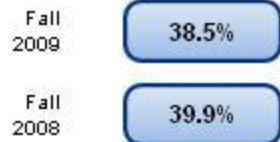
### Applied



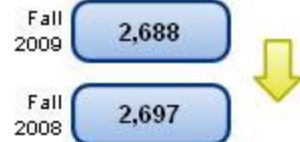
### % Admitted



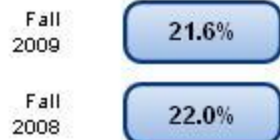
### Yield



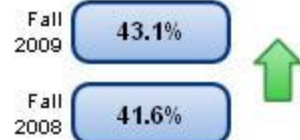
### Enrolled



### Enrolled % SOC



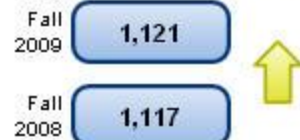
### Enrolled % Male



### Enrolled % Non-Resident



### Average SAT



## Transfers

### Applied



### % Admitted



### Yield



### Enrolled



### Enrolled % SOC



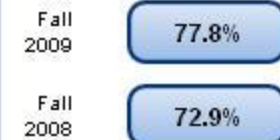
### Enrolled % Male



### Enrolled % Non-Resident



### Enrolled % from WA CC





**Strategic Indicators and  
Comparative Data  
Generated with the  
AGB Benchmarking Service**

# Definition: Net Income Ratio

## Net Income Ratio

### Definition

Net Income Ratio is calculated as the Change in Net Assets divided by (Total Revenues & Investment Return less Total Investment Return).

### Notes & Caveats

This ratio helps to answer the question: Did the institution live within its means (or not) during the year?

### Source

IPEDS Finance Forms (FASB).

## Net Income Ratio

<b>Northeast Nine / Highest 500 / AY 2006-07</b>		
1	Hamilton College (Clinton, NY)	1.38
2	Haverford College (Haverford, PA)	1.34
3	Colby College (Waterville, ME)	1.08
4	Trinity College (Hartford, CT)	0.68
5	Bates College (Lewiston, ME)	0.61
6	Wheaton College (Norton, MA)	0.53
7	Connecticut College (New London, CT)	0.48
8	Muhlenberg College (Allentown, PA)	0.41
9	Hobart and William Smith Colleges (Geneva, NY)	0.40

# Definition: Net Assets Ratio

## Return on Net Assets Ratio

### Definition

Return on Net Assets is calculated as Change in Net Assets divided by Net Assets at Beginning of Year (Total Net Assets).

### Notes & Caveats

This ratio helps to answer the question: How has the institution performed in terms of generating net assets (institutional equity) compared to its capital base?  
Are we increasing our net assets and thereby able to set aside financial resources to strengthen our future financial flexibility?

### Source

IPEDS Finance Forms (FASB).

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## Return on Net Assets

### Northeast Nine / Highest 500 / AY 2006-07

1	Colby College (Waterville, ME)	0.35
2	Hamilton College (Clinton, NY)	0.19
3	Trinity College (Hartford, CT)	0.19
4	Connecticut College (New London, CT)	0.19
5	Wheaton College (Norton, MA)	0.17
6	Haverford College (Haverford, PA)	0.15
7	Bates College (Lewiston, ME)	0.14
8	Hobart and William Smith Colleges (Geneva, NY)	0.12
9	Muhlenberg College (Allentown, PA)	0.12

# Major Expenditures, Salaries & Wages

IPEDS FASB AY2006-07

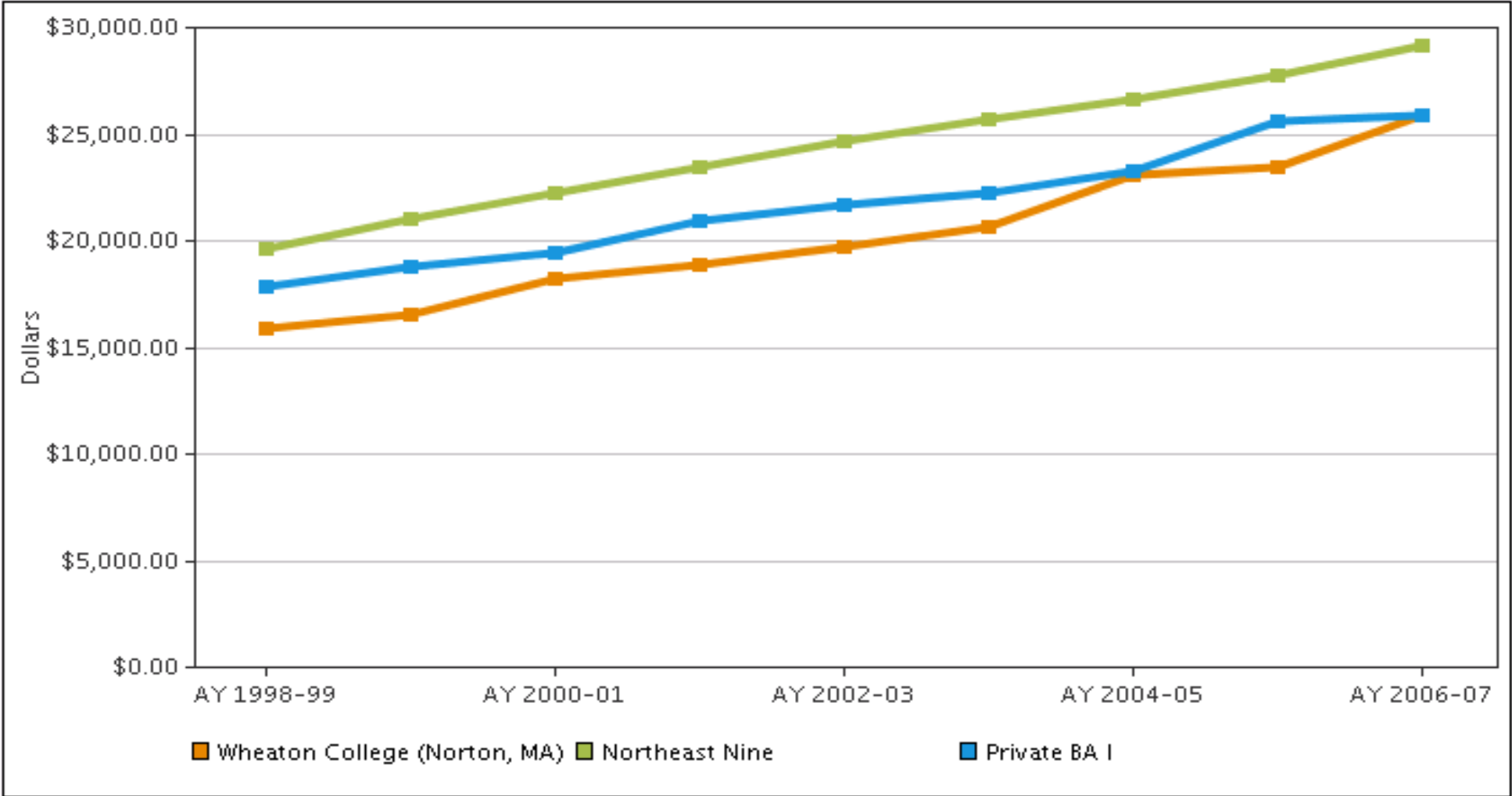
Institution	<u>Instruction- total</u>	<u>Instruction- salaries and wages</u>	<u>Academic support- total</u>	<u>Academic support- salaries and wages</u>	<u>Student services- total</u>	<u>Student services- salaries and wages</u>	<u>Institutional support- total</u>	<u>Institutional support- salaries and wages</u>	<u>Total expenses- total</u>	<u>Total expenses- salaries and wages</u>
Bates College (Lewiston, ME)	\$30,648,920	\$16,653,258	\$11,320,645	\$4,131,431	\$12,923,661	\$4,673,753	\$12,645,407	\$5,858,687	\$80,386,537	\$39,021,276
Colby College (Waterville, ME)	\$31,767,000	\$17,535,000	\$9,539,000	\$2,721,000	\$15,475,000	\$5,305,000	\$14,621,000	\$6,899,000	\$91,002,000	\$38,487,000
Connecticut College (New London, CT)	\$29,975,000	\$16,428,000	\$7,889,000	\$2,449,000	\$10,681,000	\$4,730,000	\$15,745,000	\$8,349,000	\$82,439,000	\$40,047,000
Hamilton College (Clinton, NY)	\$40,840,000	\$21,199,000	\$12,209,000	\$4,992,000	\$10,637,000	\$4,492,000	\$15,089,000	\$5,411,000	\$102,362,000	\$39,702,000
Hobart and William Smith Colleges (Geneva, NY)	\$24,317,121	\$13,765,492	\$6,884,237	\$2,827,968	\$15,416,518	\$5,485,727	\$12,377,998	\$5,271,364	\$72,855,663	\$29,194,276
Wheaton College (Norton, MA)	\$20,924,008	\$11,284,505	\$6,854,623	\$3,414,669	\$12,452,834	\$6,327,544	\$13,921,778	\$6,307,462	\$66,969,614	\$30,025,405

# Major Expenses as % of Total Expenses

IPEDS FASB AY2006-07

Institution	<u>Instruction-total</u>	<u>Instruction-salaries and wages</u>	<u>Academic support-total</u>	<u>Academic support-salaries and wages</u>	<u>Student services-total</u>	<u>Student services-salaries and wages</u>	<u>Institutional support-total</u>	<u>Institutional support-salaries and wages</u>	<u>Total expenses-total</u>	<u>Total expenses-salaries and wages</u>
Bates College (Lewiston, ME)	0.381	0.207	0.141	0.051	0.161	0.058	0.157	0.073	1.000	0.485
Colby College (Waterville, ME)	0.349	0.193	0.105	0.030	0.170	0.058	0.161	0.076	1.000	0.423
Connecticut College (New London, CT)	0.364	0.199	0.096	0.030	0.130	0.057	0.191	0.101	1.000	0.486
Hamilton College (Clinton, NY)	0.399	0.207	0.119	0.049	0.104	0.044	0.147	0.053	1.000	0.388
Hobart and William Smith Colleges (Geneva, NY)	0.334	0.189	0.094	0.039	0.212	0.075	0.170	0.072	1.000	0.401
Wheaton College (Norton, MA)	0.312	0.169	0.102	0.051	0.186	0.094	0.208	0.094	1.000	0.448

### Instructional, Academic & Student Services Costs Per Student (FTE)















# **Two Examples of College and University Dashboards**

# Sample Comparative Peer Data for Enrollment and Aid





## Admission Indicators


<b>Top HS Decile</b>  Mid. of Peers <b>62%</b>	<b>Average SAT</b>  <b>Below Peers</b> <b>1260</b>	<b>Accept Rate</b>  Mid. of Peers <b>46%</b>	<b>Yield Rate</b>  <b>Below Peers</b> <b>26%</b>
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## Student Body Indicators

<b>NF Enrollment</b>  Mid. of Peers <b>2,277</b>	<b>UG Enrollment</b>  Mid. of Peers <b>10,537</b>	<b>Grad. Enrollment</b>  <b>Below Peers</b> <b>3,219</b>	<b>Prof. Enrollment</b>  Mid. of Peers <b>1,918</b>
<b>Doctoral Degrees</b>  <b>Below Peers</b> <b>156</b>	<b>NF Retention Rate</b>  <b>Below Peers</b> <b>89%</b>	<b>Graduation Rate</b>  <b>Below Peers</b> <b>71%</b>	<b>% On-campus-DUG</b>  Mid. of Peers <b>41%</b>
<b>% Female-UG</b>  <b>Above Peers</b> <b>57%</b>	<b>% Minority-UG</b>  <b>Above Peers</b> <b>43%</b>	<b>% Int'l-UG</b>  <b>Above Peers</b> <b>7%</b>	<b>% Out-of-State-DUG</b>  Mid. of Peers <b>46%</b>

## Financial Aid Indicators\*

<b>% Rec. Any Aid</b>  <b>Above Peers</b> <b>87%</b>	<b>% Rec. Inst. Grts.</b>  <b>Above Peers</b> <b>78%</b>	<b>Avg. Inst. Grants</b>  Mid. of Peers <b>\$15,123</b>	<b>% Rec. Loans</b>  Mid. of Peers <b>49%</b>
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<b>Average Loans</b>  <b>Above Peers</b> <b>\$7,015</b>
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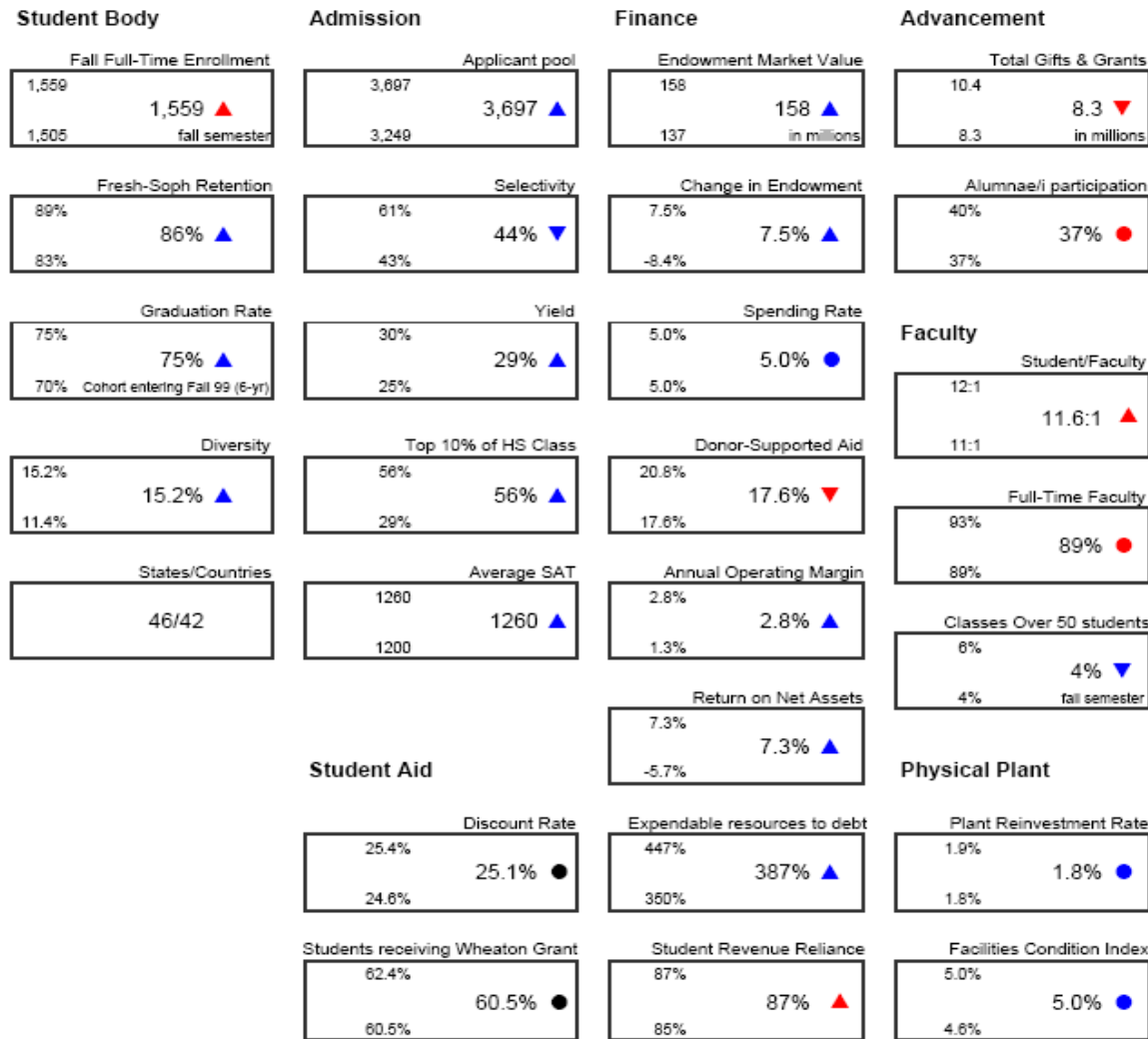
\* Comparisons for all Financial Aid Indicators are limited to the nine private peer institutions included in the list below.

Arrow (up/down) means UM trend is significantly higher/lower over the prior 6-year period. A flat line means no significant trend.

"Above Peers"/"Below Peers" means that UM is significantly above/below the mean of 12 peer institutions listed below using last year's data (not shown). "Mid. of Peers" means UM is not significantly diff. from the mean. Green means a positive trend/comparison. Red means a negative trend/comparison. Neutral trends are shown in black.

Peer institutions: Institution A, Institution B, Institution C, Institution D, Institution E, Institution F, Institution G, Institution H, Institution I, Institution J, Institution K, Institution L, Institution M

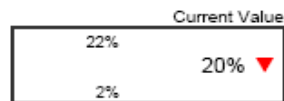
# Sample Trend Data on Key Performance Indicators



**KEY:**

highest value for the past 5 years

lowest value for the past 5 years



direction of change:

- ▲ higher
- ▼ lower
- no change

importance of change:

- blue = better
- red = worse
- black = neutral

# **Three Examples of Common Key Performance Indicators (KPIs)**

# Core Performance Indicators

## Burke and Minassians's Suggested Core Performance Indicators:

- **Funding:** State appropriations per FTE student
- **Affordability:** Tuition minus financial aid as % median income
- **Participation:** % HS graduates going to higher education
- **Degree attainment:** Degrees awarded
- **Job placements:** Jobs obtained by college graduates
- **College-school collaboration:** % Fresh with college prep
- **Articulation:** Transfers between 2- and 4-year institutions
- **Completion:** 3 and 6 year graduation rates
- **Sponsored research:** \$ of external funding
- **Student development:** Alumni survey on college value added

# Top Indicators In U.S. Higher Education

- **Revenue Structure**
  - **Source, Stability, Change**
- **Expenditure Structure**
  - **Costs, Trends, Stability**
- **Current Fund Revenues/Current Fund Expenditures**
- **Institutional Selectivity vs. Institutional Yield**
  - **% Applicants Accepted, % Accepted Matriculated**
- **Faculty Workload (Academic Staff)**
  - **FTE Students/FTE Faculty**

# North Central Association Operational Indicators

## **Demographics**

- Student enrollment by level by FT/PT status.
- Faculty and staff counts.

## **Educational Programs**

- Instructional spending per FTE Student.
- Credit hours by type of faculty.

## **Financial Strength**

- Bond ratings.
- Financial Ratios.

## **Scope of Activities**

- List of distance education degrees.
- Collaborative Education.

# Watch Out for Red Flags



Red flags are KPI outcomes or trends that indicate that a problem might be developing or already has developed!

Areas of Concern:

- Financial Assets
- Student Assets
- Learning Assets
- Staff Assets

# Warning Signs - Financial Assets



*Perhaps you should be concerned if:*

- Increasing cost of debt service
- Current expenditures > Current revenues
- Decreasing key revenue streams while expenditures increase
- Increasing student aid as proportion of tuition
- Decreasing reserves to operating expenses
- Increasing tuition discount rate
- Decreasing major secondary revenue streams
- Cost per FTE much greater than competitor
- Decreasing business support of grad programs

# Warning Signs – Student Assets



*Perhaps you should be concerned if:*

- Decreasing applicants or yield
- Increasing difference in qualifications of accepted not-enrolled & enrolled
- Decreasing graduation/retention rates
- Increasing number of students not returning
- Decreasing % of students in top 10% of HS
- Decreasing % of graduate students from top schools
- Increasing enrollment losses to a competitor

# Warning Signs - Learning Assets



*Perhaps you should be concerned if:*

- Increasing instruction costs compared to price
- Increasing costs per credit hour
- Increasing faculty salaries and benefits relative to tuition revenue
- Decreasing academic support \$ per FTE student
- Stagnating academic programs
- Increasing faculty turn-over

# Warning Signs - Staff Assets



*Perhaps you should be concerned if:*

- Increasing staff to faculty ratio
- Increasing ratio of Part-time to Full-time
- Increasing staff turnover/terminations
- Decreasing gender and ethnic diversity of senior staff
- Increasing number of key employees > 60 yrs old
- Increasing benefits cost relative to salary

AGB ASSOCIATION OF  
GOVERNING BOARDS  
OF UNIVERSITIES AND COLLEGES