

Determining an Achievable Retention Rate Increase for Institutional Planning

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You may be interested in this session if

- You're responsible for reporting retention rates at your institution.
- You are frustrated hearing about retention rates and whether or not they have increased at your institution.
- You wish that more than just first-time, full-time freshmen were counted in retention rates.
- This was the best session during this timeslot.

This presentation will discuss

- Motivation for the Study
- Literature Review
- Research Questions
- Data, Variables, and Methods
- Results
- Possible Implications
- Questions and Comments

Motivation for the Study

- Retention rates are a measure of accountability.
- To determine if institutions have achieved the long-standing perception of one percentage point gain in retention rates.
- To determine the range of retention rates and gains/losses at institutions within the SAIR region.
- To acquire additional data on four-year institutions in order to evaluate retention rates of peers in our region.

Definitions

- Retention Rate: “A measure of the rate at which students persist in their educational *program* at an institution, expressed as a percentage. For *four-year institutions*, this is the percentage of first-time bachelors (or equivalent) degree-seeking *undergraduates* from the previous fall who are again enrolled in the current fall” (IPEDS, 2008).

Brief Literature Review

- New definitions to count nearly every student were suggested (Adleman, 2007), but were not revised in 2008 HEA.
- Institutions conform to the accountability triangle illustrated by Burke and Associates (2005).
 - In this triangle, colleges and universities must adhere to “state priorities, academic concerns, and market forces” (p. 23).
- Higher education serves students, parents, state and local economies, politics, and many other stakeholders and sectors.
 - If students remain enrolled and thus are retained, then their retention produces more revenue for the institution and all other sectors benefit simultaneously.
- To be effective in higher education, efforts made must equally contribute to all three areas of the accountability triangle: state priorities, academic concerns, and market forces.
 - Using retention rates as a measure of accountability seems appropriate.

Brief Literature Review

- The study utilized the Policy Diffusion Framework developed by Berry and Berry (1990, 1992).
 - The essential idea behind the framework is that development of a policy is a “function of both their characteristics of the specific political systems and a variety of diffusion processes” (Sabatier, 1999, p. 10).
 - This concept is applicable to retention rate goals because many institutions select retention rate goals based upon their peers or sister institutions. As such, the policy is heavily influenced by institutional characteristics (i.e., type of students admitted) as well as retention rate increase goals of nearby institutions (i.e., institutions within the same university system).

Research Questions

- What is a reasonable retention rate?
- What is a reasonable gain in a retention rate?
- Are there financial factors (total revenues) that can help to increase a school's retention rate?

Data, Variables, and Methods

Retrieved IPEDS data for all institutions in the United States and its territories from 2003 to 2006

Incorporated all data into Excel and differentiated groups by sector focusing on 4-year public institutions and 4-year private institutions

Imported data into SPSS and quartile categories were created for certain variables

Deleted institutions that did not report retention rates for 2004, 2005, or 2006

Data, Variables, and Methods

4-Year Public Institutions

There are 678 institutions found in IPEDS representing 50 states, 5 territories.

Institutions with unreported data in the retention rate column were deleted, resulting in 63 deletions.

There were 219 institutions in the SAIR region incorporated into the final analysis.

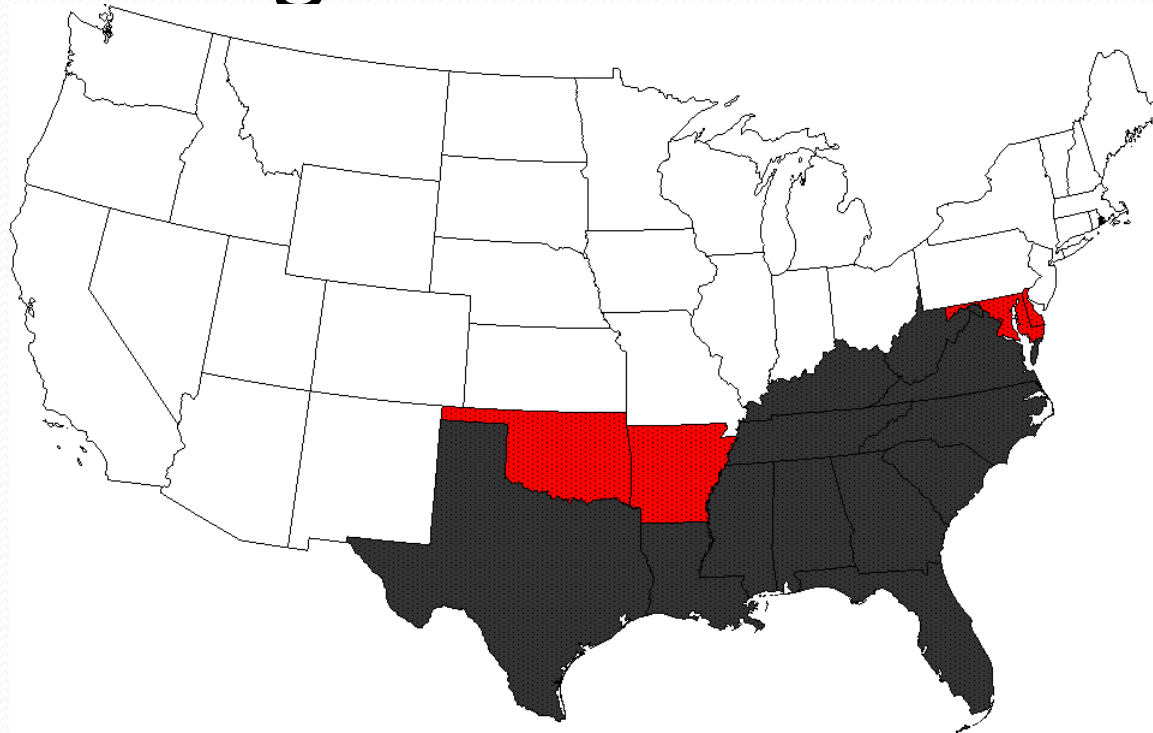
4-Year Private Institutions

There are 1640 institutions found in IPEDS representing 49 states, 2 territories .

Institutions with unreported data in the retention rate column were deleted, resulting in 396 deletions.

There were 360 institutions in the SAIR region incorporated into the final analysis.

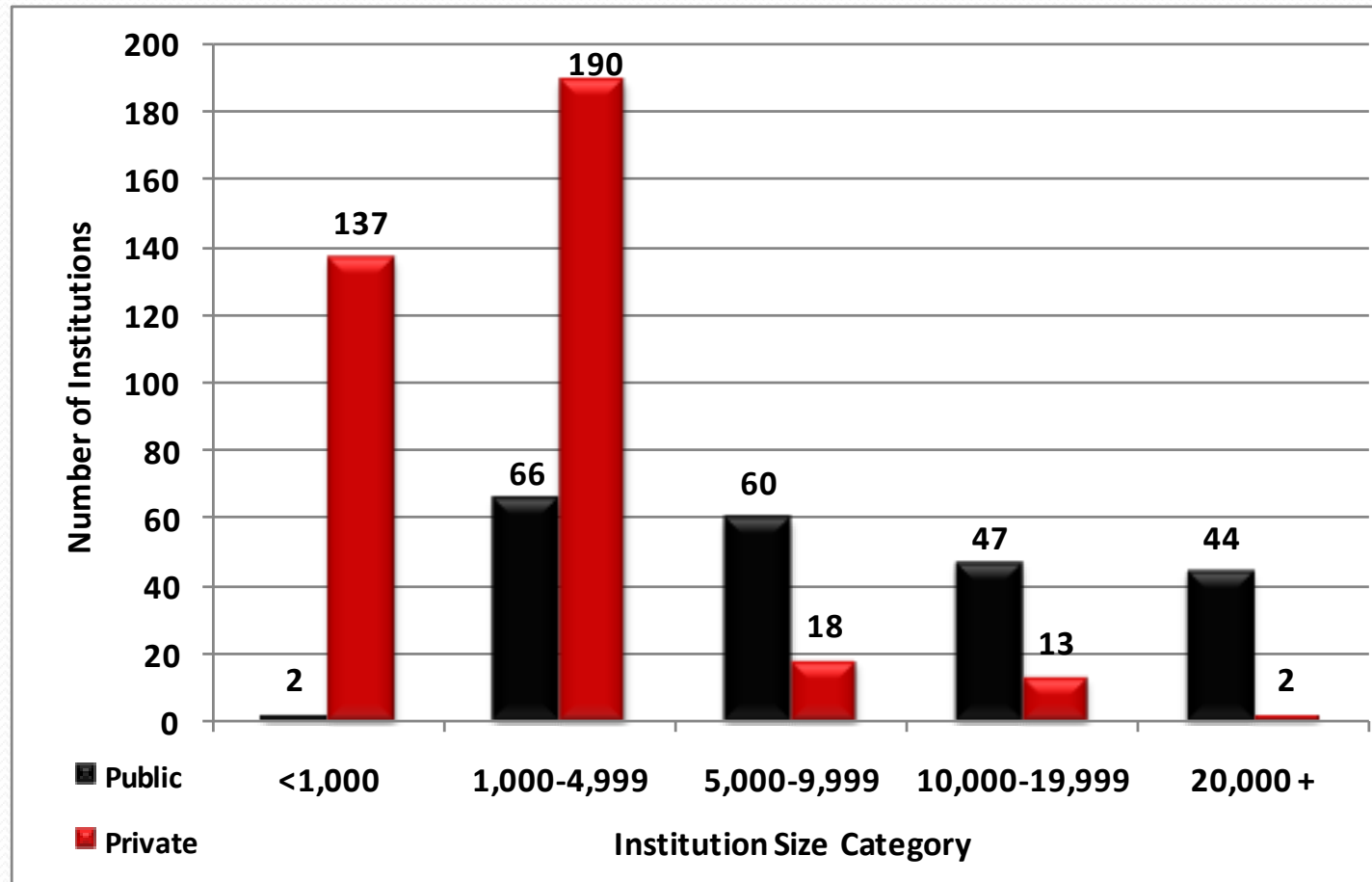
The SAIR Region Defined



Alabama	Kentucky	South Carolina
Arkansas	Louisiana	Tennessee
Delaware	Maryland	Texas
Washington DC	Mississippi	Virginia
Florida	Oklahoma	West Virginia
Georgia	North Carolina	

About the Institutions...

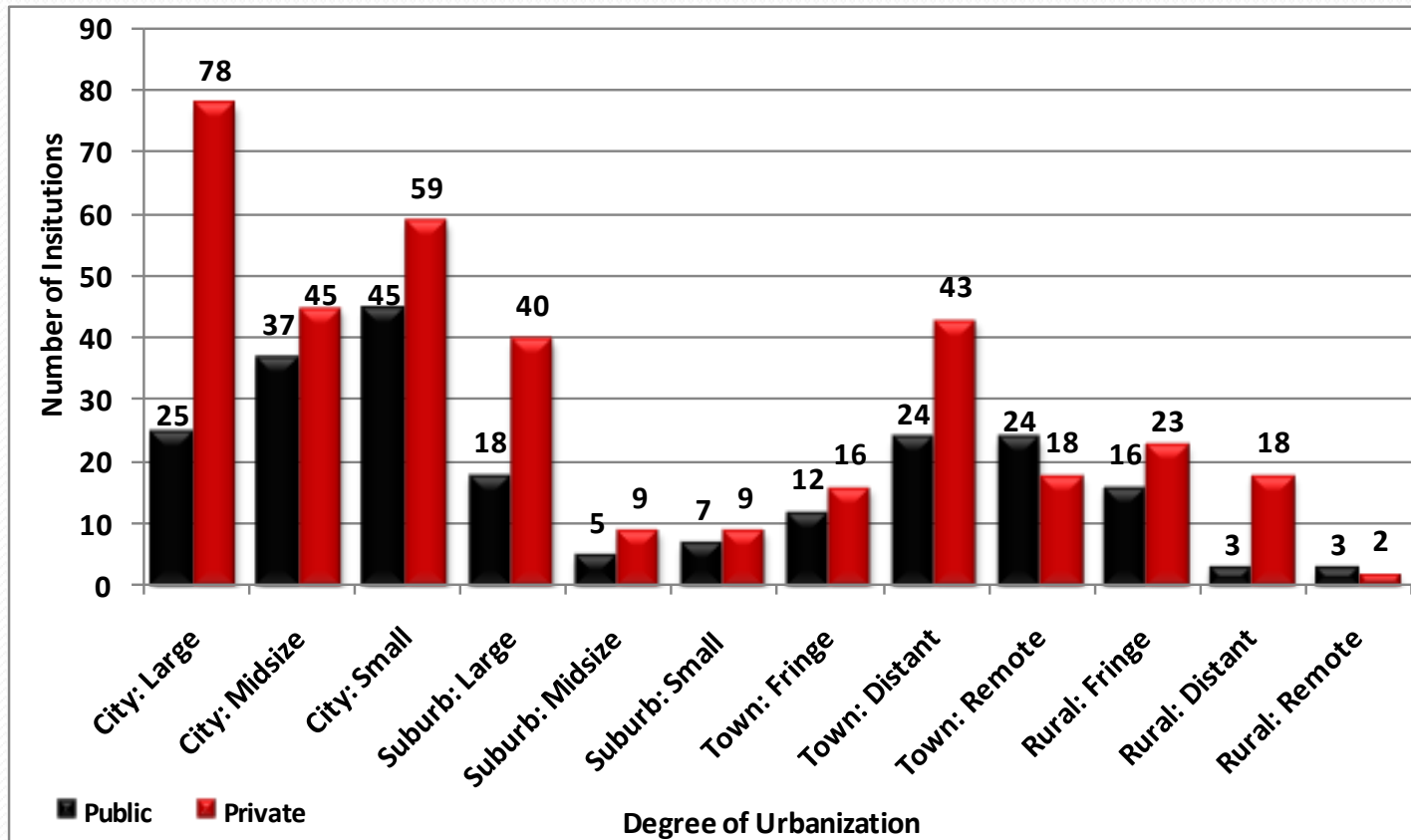
- Public Institutions— 57.53% have between 1,000 students and 9,999 students
- Private Institutions— 90.83% have 4,999 students or less



Source: IPEDS Enrollment Report 2007; VSU Strategic Research and Analysis (SRA), September 2008.

About the Institutions...

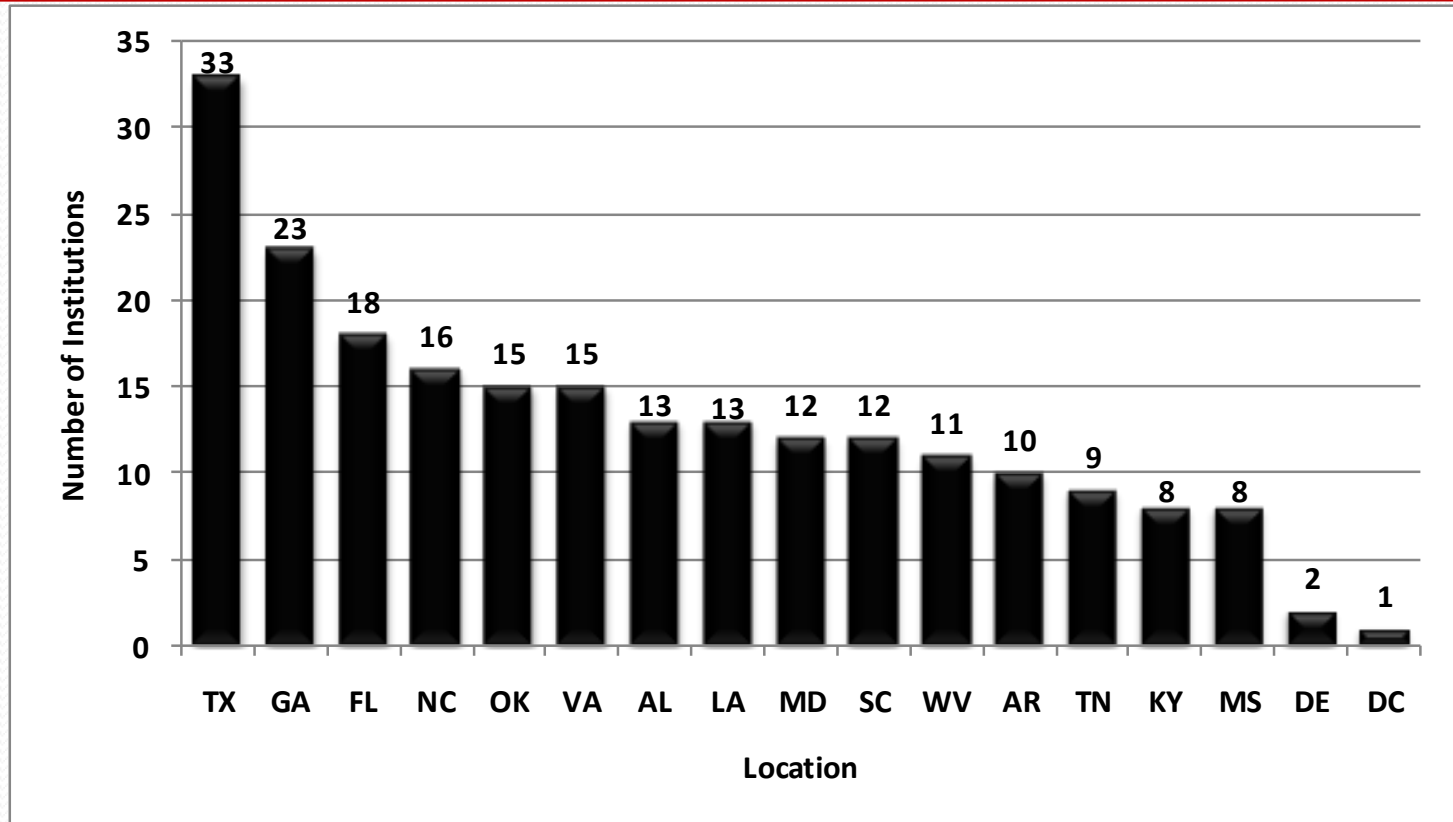
- Public Institutions—
20.55% are located in a small city
- Private Institutions—
21.67% are located in a large city



Source: IPEDS Enrollment Report 2007; VSU SRA, September 2008.

About the Institutions...

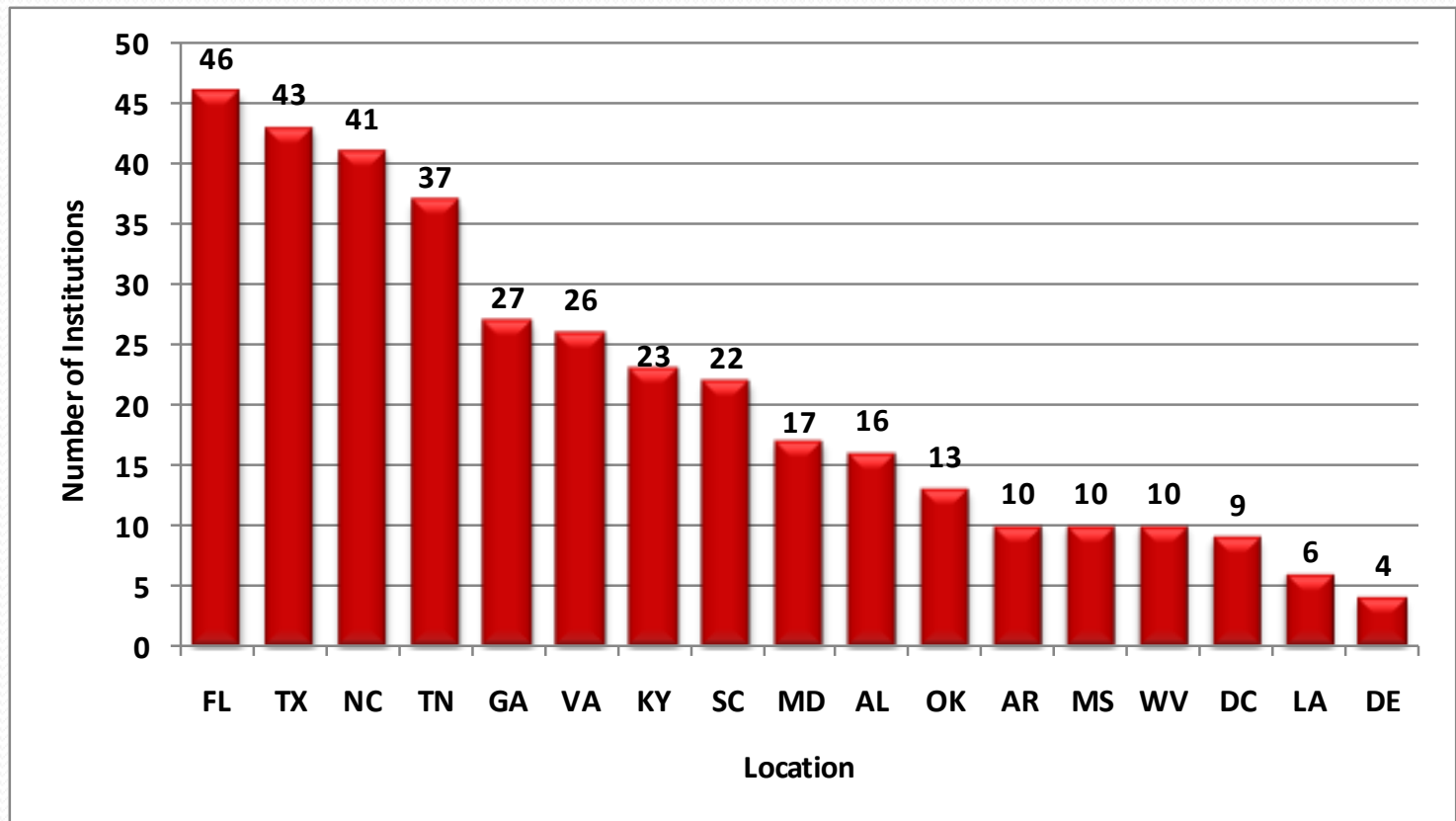
- Texas has the largest number of public institutions (33) in the study.
- Several pairs of states had alike numbers of institutions:
 - Oklahoma-Virginia; Alabama-Louisiana; Maryland-S. Carolina; Kentucky-Mississippi



Source: IPEDS Enrollment Report 2007; VSU SRA, September 2008.

About the Institutions...

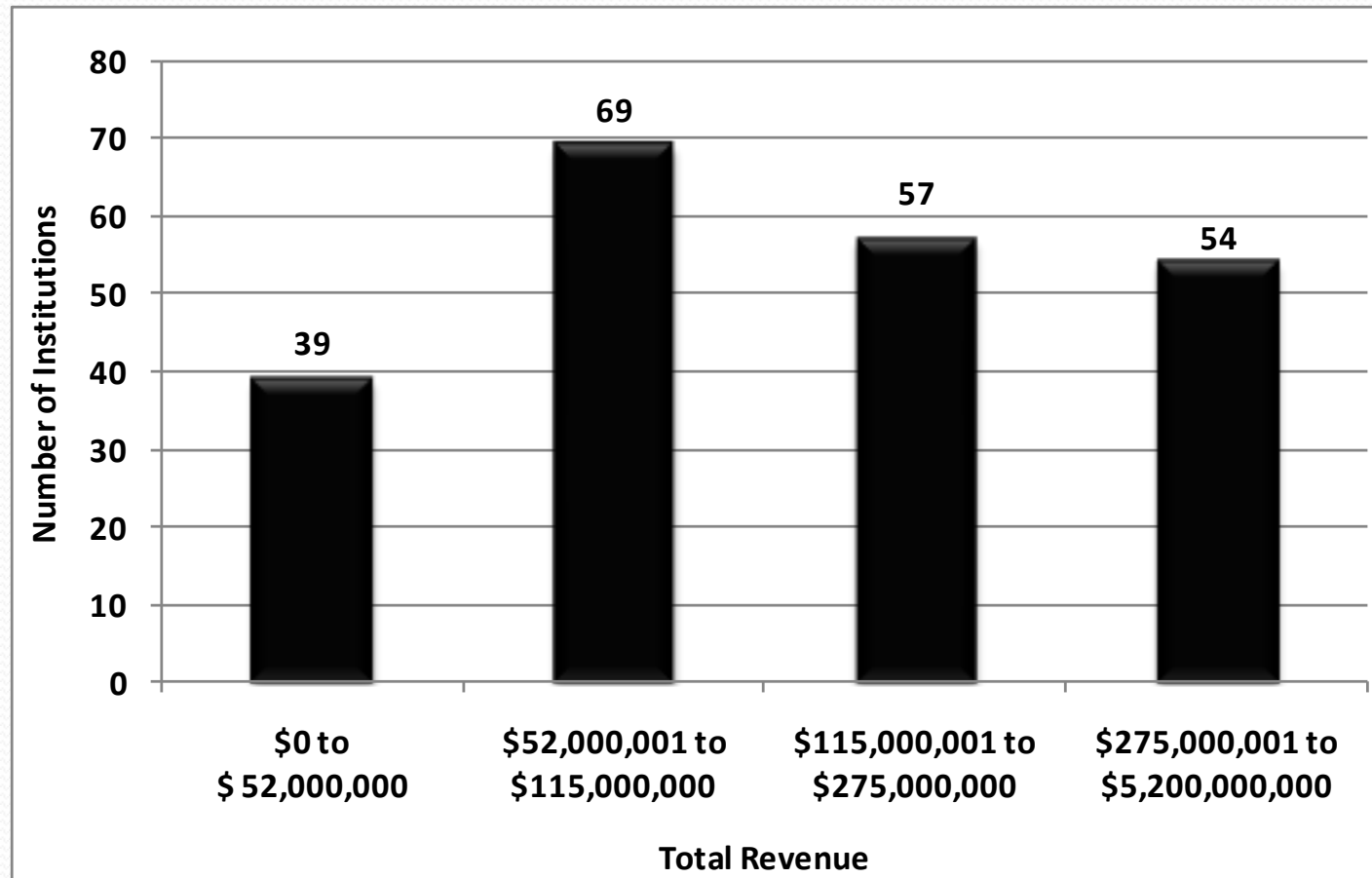
- Florida has the largest number of private institutions (46) in the study.
- Arkansas, Mississippi, and West Virginia all have 10 private institutions.



Source: IPEDS Enrollment Report 2007; VSU SRA, September 2008.

About the Institutions...

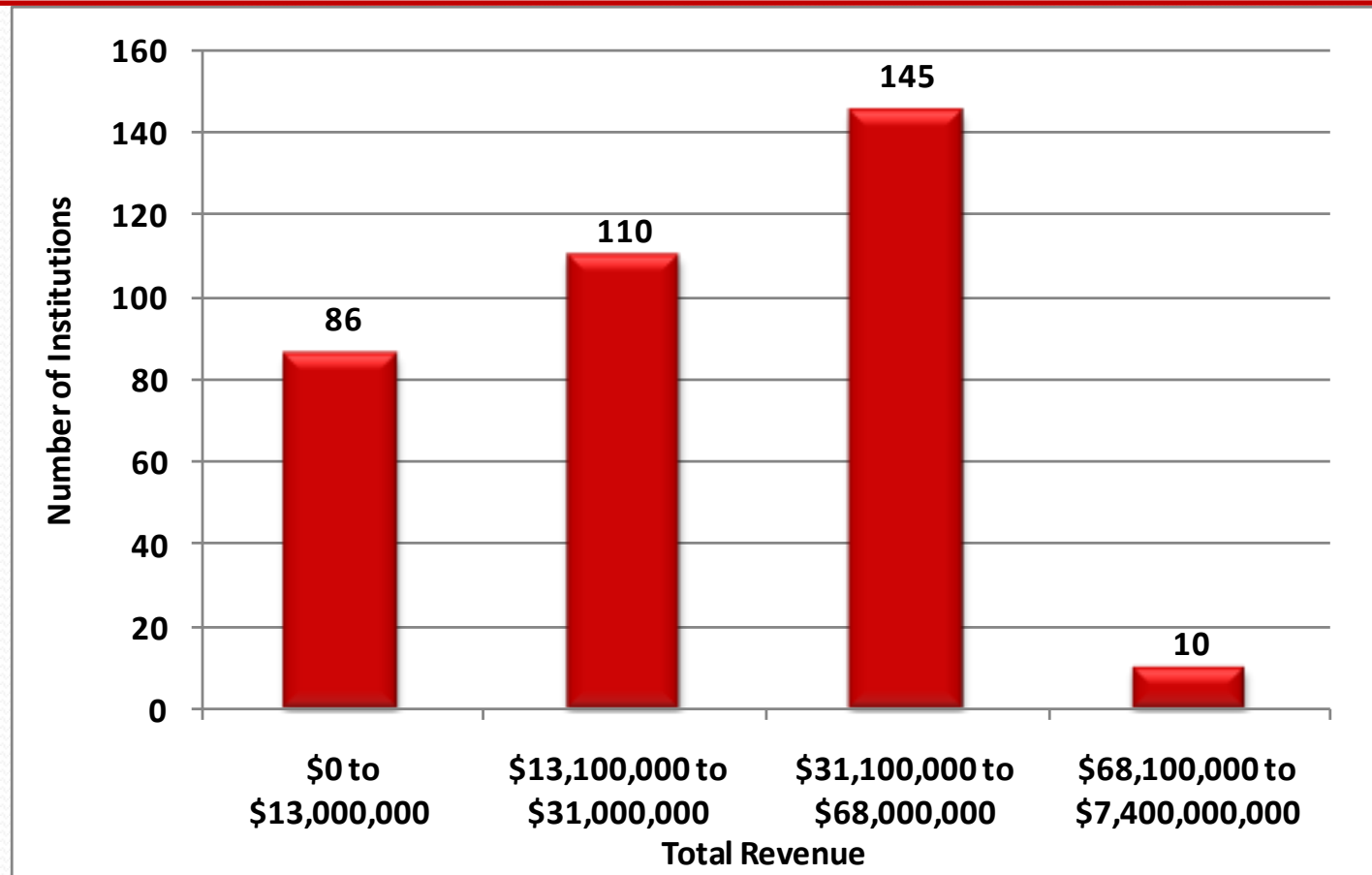
- Sixty-nine public institutions (31.50%) were categorized as generating \$52 million to \$115 million in 2005-06 fiscal year.



Source: IPEDS Financial Report 2006; VSU SRA, September 2008.

About the Institutions...

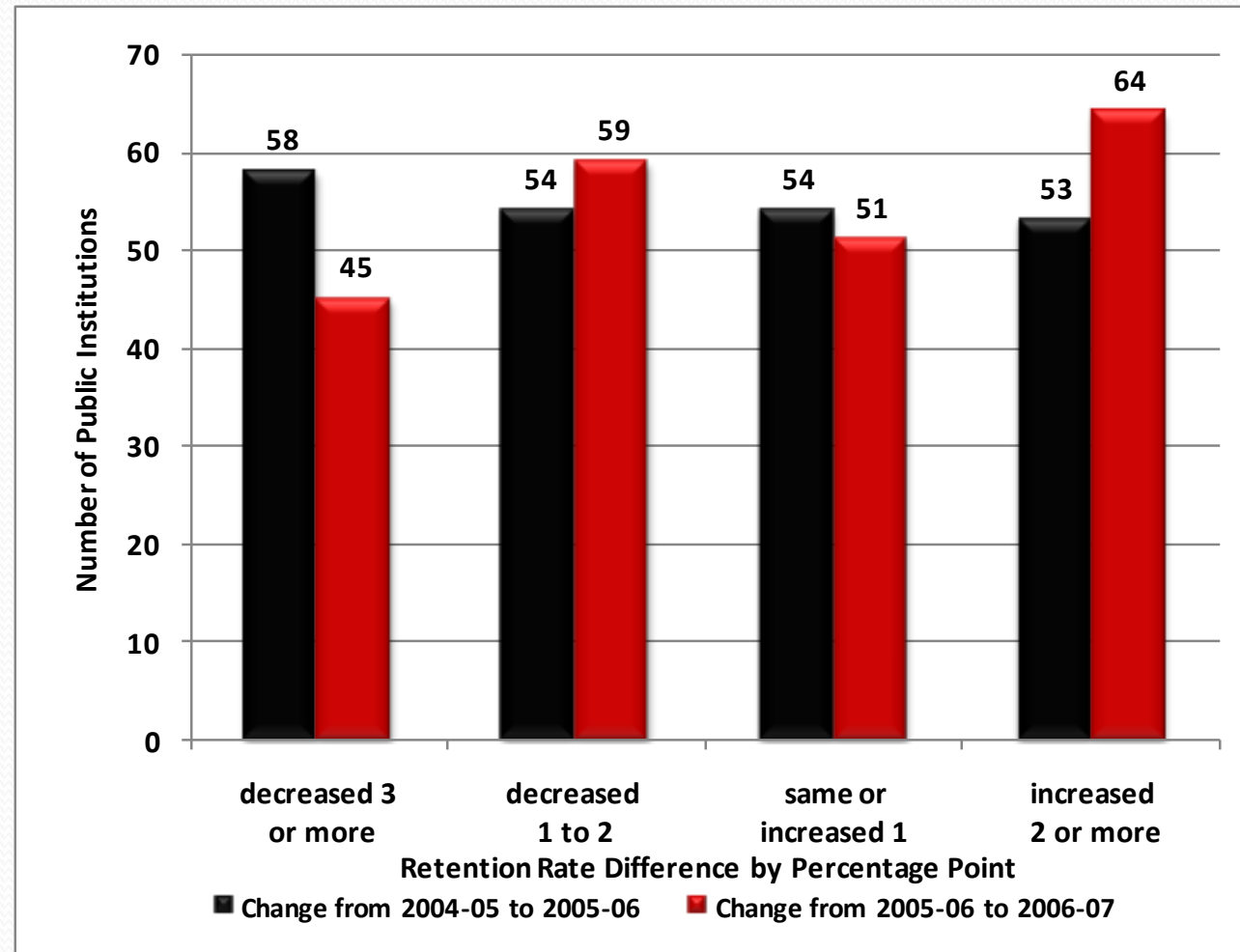
- One hundred and forty-five private institutions (40.28%) were categorized as generating \$31.1 million to \$68 million in 2005-06 fiscal year.



Source: IPEDS Financial Report 2006; VSU SRA, September 2008.
Note: Total revenue information was not available for 9 institutions.

About the Institutions...

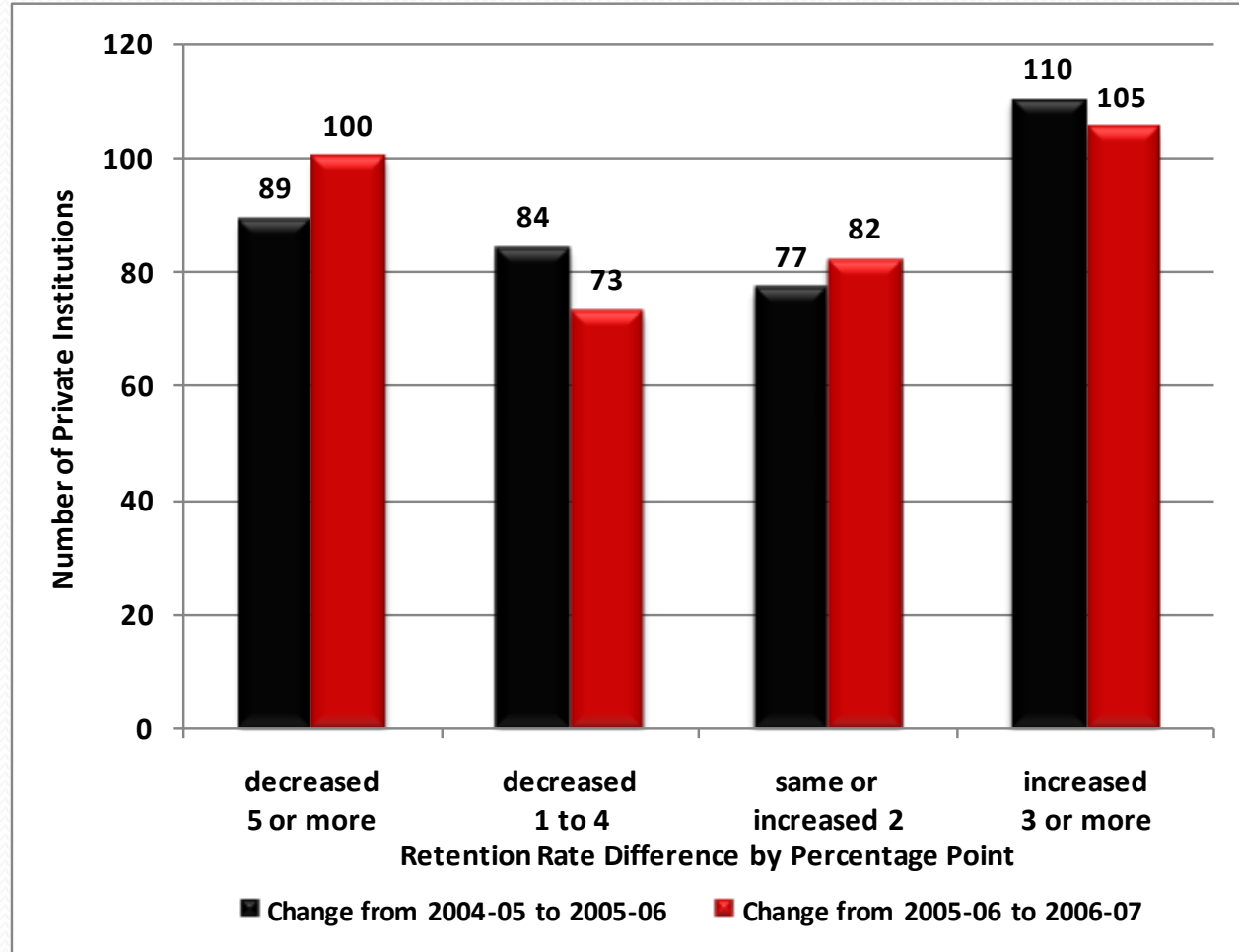
- Public Institutions
 - From 2004 to 2005, 51.14% of institutions had a decrease in retention rates
 - From 2005 to 2006, 52.51% of institutions had the no change or an increase in retention rates



Source: IPEDS Enrollment Report 2004-2006; VSU SRA, September 2008.

About the Institutions...

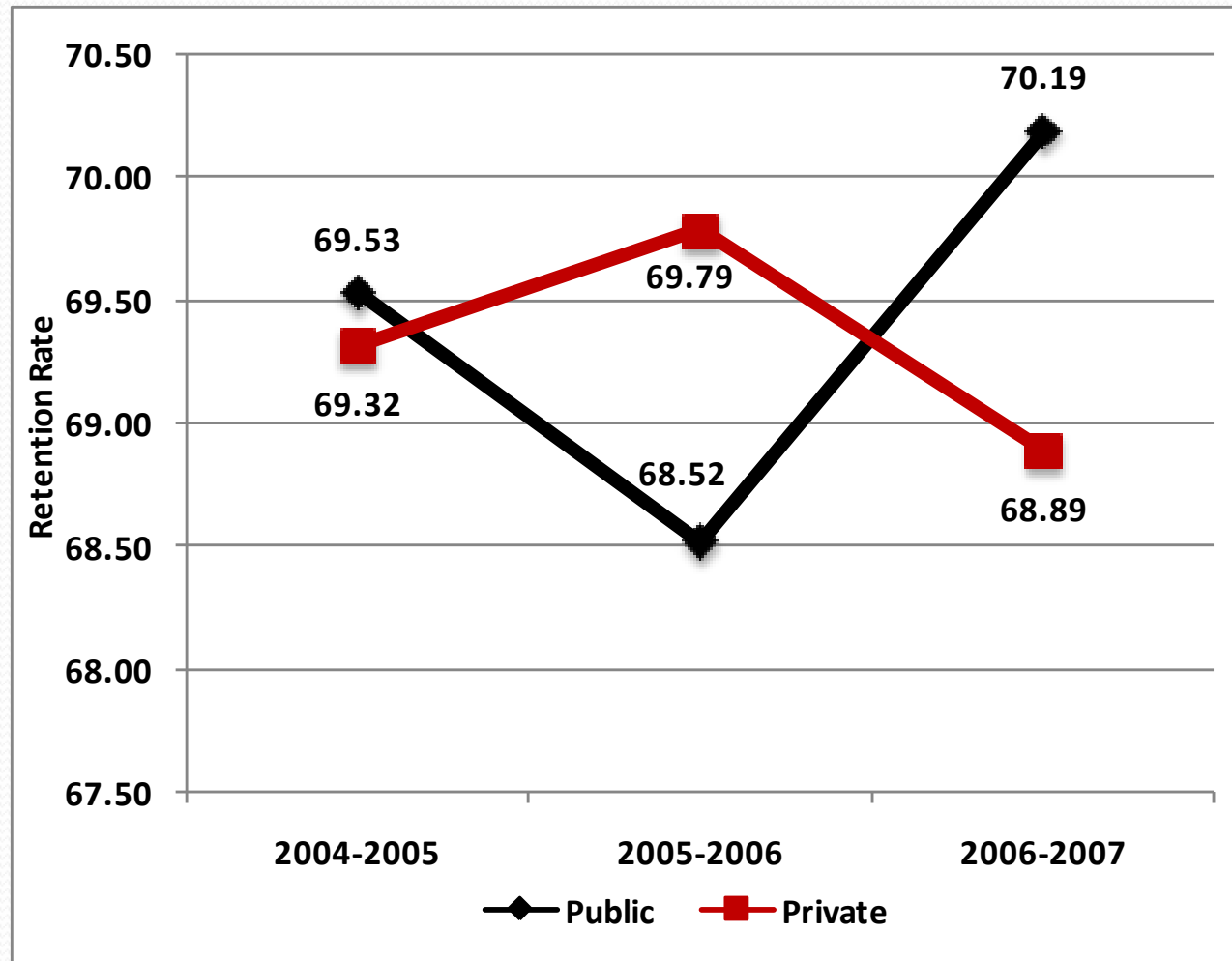
- For two consecutive years, a greater percent of private institutions' retention rates remained the same or increased.
 - 2004 to 2005 and 2005 to 2006— 51.94%



Source: IPEDS Enrollment Report 2004-2006; VSU SRA, September 2008.

Results-Average Retention Rate

- Public Institutions—highest retention rate (70.19%) in 2006-07 academic year
- Private Institutions—highest retention rate (69.79%) in 2005-06 academic year



Source: IPEDS Enrollment Report 2004-2006; VSU SRA, September 2008.

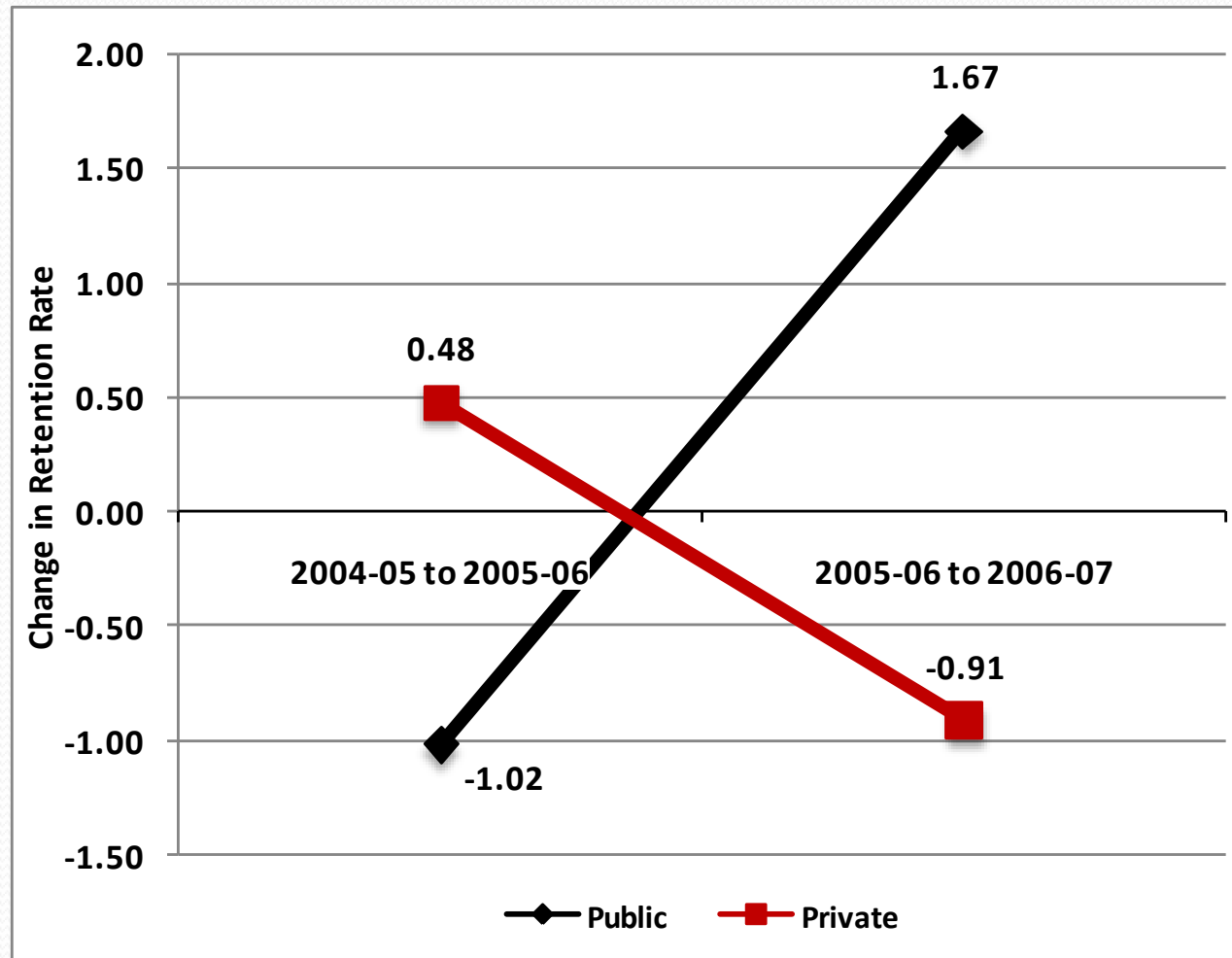
Results-Average Retention Rate Change

Public Institutions—

- **2004 to 2005** average retention rate loss was -1.02
- **2005 to 2006** average retention rate gain was 1.67

Private Institutions—

- **2004 to 2005** average retention rate gain was 0.48
- **2005 to 2006** average retention rate loss was -0.91



Source: IPEDS Enrollment Report 2004-2006; VSU SRA, September 2008.

Results

Public Institutions

- 2004-05 to 2005-06
 - The highest percentage (13.24%) of institutions were generating between 275 million and 5.2 billion dollars and had no change in their retention rates or it increased by 1 percentage point.

- 2005-06 to 2006-07
 - The highest percentage (10.50%) of institutions were generating between 275 million and 5.2 billion dollars and had no change in their retention rates or it increased by 1 percentage point.

Change in Retention Rate 2004-05 to 2005-06	State	Total Revenue Categories				Total
		\$0 to \$52M	\$52M+1 to \$115M	\$115M+1 to \$275M	\$275M+1 to \$5.2B	
Decreased 3 or more percentage points	All	11	21	18	8	58
Decreased 1 to 2 percentage points	All	11	18	14	11	54
Remained constant or increased 1 percentage point	All	6	9	10	29	54
Increased 2 or more percentage points	All	11	21	15	6	53

Change in Retention Rate 2005-06 to 2006-07	State	Total Revenue Categories				Total
		\$0 to \$52M	\$52M+1 to \$115M	\$115M+1 to \$275M	\$275M+1 to \$5.2B	
Decreased 3 or more percentage points	All	11	20	13	1	45
Decreased 1 to 2 percentage points	All	10	14	19	16	59
Remained constant or increased 1 percentage point	All	4	15	9	23	51
Increased 2 or more percentage points	All	14	20	16	14	64

Source: IPEDS Enrollment Report 2004-2006; Financial Report 2006; VSU SRA, September 2008.

Results

Private Institutions

- 2004-05 to 2005-06
 - The highest percentage (14.44%) of institutions were generating between 31.1 million and 68 million dollars and had no change in their retention rates or it increased by 2 percentage points.
- 2005-06 to 2006-07
 - The highest percentage (10.83%) of institutions were generating between 31.1 million and 68 million dollars and either decreased 4 points or less, had no change in their retention rates, or it increased by 2 percentage points.

Change in Retention Rate 2004-05 to 2005-06	State	Total Revenues and Investments					Total
		\$0 to \$13M	\$13.1M to \$31M	\$31.1M to \$68M	\$68.1M to \$7.4B	Missing	
Decreased 5 or more percentage points	All	27	38	22	0	2	89
Decreased 1 to 4 percentage points	All	9	26	41	6	2	84
Remained constant or increased 2 percentage points	All	7	12	52	4	2	77
Increased 3 or more percentage points	All	43	34	30	0	3	110

Change in Retention Rate 2005-06 to 2006-07	State	Total Revenues and Investments					Total
		\$0 to \$13M	\$13.1M to \$31M	\$31.1M to \$68M	\$68.1M to \$7.4B	Missing	
Decreased 5 or more percentage points	All	33	33	31	1	2	100
Decreased 1 to 4 percentage points	All	4	26	39	1	3	73
Remained constant or increased 2 percentage points	All	12	23	39	8	0	82
Increased 3 or more percentage points	All	37	28	36	0	4	105

Source: IPEDS Enrollment Report 2004-2006; Financial Report 2006; VSU SRA, September 2008.

Discussion and Possible Implications

- Retention rates vary:
 - Year to year
 - State to state
 - Institution to institution
- Begs the question ... What should our institution's retention rate goal be?
 - See handout.

Thank You

Questions and Comments





Determining an Achievable Retention Rate Increase for Institutional Planning
4-Year Public Institutions



Change in Retention Rate 2004-05 to 2005-06	State	Total Revenue Categories				Total
		\$0 to \$52M	\$52M+1 to \$115M	\$115M+1 to \$275M	\$275M+1 to \$5.2B	
Decreased 3 or more percentage points	AL	1	1	1	0	3
	AR	0	2	2	1	5
	DC	0	0	1	0	1
	DE	0	0	0	0	0
	FL	0	0	2	2	4
	GA	3	3	0	1	7
	KY	0	0	1	0	1
	LA	0	2	1	0	3
	MD	0	2	2	0	4
	MS	0	1	1	0	2
	NC	1	2	2	2	7
	OK	3	2	0	0	5
	SC	1	3	0	0	4
	TN	0	1	2	1	4
	TX	1	1	3	1	6
	VA	1	0	0	0	1
WV	0	1	0	0	1	
Total		11	21	18	8	58
Decreased 1 to 2 percentage points	AL	1	0	1	1	3
	AR	1	0	0	0	1
	DC	0	0	0	0	0
	DE	0	0	0	0	0
	FL	0	1	1	0	2
	GA	3	2	2	1	8
	KY	0	1	1	0	2
	LA	0	2	2	1	5
	MD	0	1	1	0	2
	MS	0	1	0	2	3
	NC	0	1	1	0	2
	OK	1	1	0	2	4
	SC	1	2	0	2	5
	TN	0	0	1	1	2
	TX	0	2	3	1	6
	VA	0	4	1	0	5
WV	4	0	0	0	4	
Total		11	18	14	11	54

Change in Retention Rate 2004-05 to 2005-06	State	Total Revenue Categories				Total
		\$0 to \$52M	\$52M+1 to \$115M	\$115M+1 to \$275M	\$275M+1 to \$5.2B	
Remained constant or increased 1 percentage point	AL	0	0	0	2	2
	AR	1	0	0	0	1
	DC	0	0	0	0	0
	DE	0	0	0	1	1
	FL	2	0	1	5	8
	GA	1	3	0	1	5
	KY	0	0	1	2	3
	LA	1	0	1	0	2
	MD	0	1	0	3	4
	MS	0	0	0	1	1
	NC	0	0	1	2	3
	OK	1	1	1	0	3
	SC	0	1	1	0	2
	TN	0	0	1	1	2
	TX	0	2	2	5	9
	VA	0	0	1	5	6
WV	0	1	0	1	2	
Total		6	9	10	29	54
Increased 2 or more percentage points	AL	0	3	1	1	5
	AR	1	1	1	0	3
	DC	0	0	0	0	0
	DE	0	1	0	0	1
	FL	1	1	1	1	4
	GA	0	3	0	0	3
	KY	0	0	2	0	2
	LA	1	0	2	0	3
	MD	0	2	0	0	2
	MS	0	2	0	0	2
	NC	0	2	1	1	4
	OK	2	0	1	0	3
	SC	1	0	0	0	1
	TN	0	1	0	0	1
	TX	2	4	3	3	12
	VA	0	1	2	0	3
WV	3	0	1	0	4	
Total		11	21	15	6	53

Source: IPEDS Enrollment Report 2004-2006; Financial Report 2006; VSU SRA, September 2008.

Citation: Cragg, K. M., and Thompson, J. D. (2008). *Determining an achievable retention rate increase for institutional planning*. SAIR Annual Conference, Nashville, TN.

Determining an Achievable Retention Rate Increase for Institutional Planning
4-Year **Public** Institutions

Change in Retention Rate 2005-06 to 2006-07	State	Total Revenue Categories				Total
		\$0 to \$52M	\$52M+1 to \$115M	\$115M+1 to \$275M	\$275M+1 to \$5.2B	
Decreased 3 or more percentage points	AL	1	1	0	0	2
	AR	1	0	0	0	1
	DC	0	0	0	0	0
	DE	0	1	0	0	1
	FL	1	1	1	0	3
	GA	1	3	0	0	4
	KY	0	1	0	0	1
	LA	1	1	2	0	4
	MD	0	0	2	0	2
	MS	0	2	1	0	3
	NC	0	3	2	0	5
	OK	1	1	2	0	4
	SC	1	1	0	0	2
	TN	0	0	0	0	0
	TX	1	3	2	1	7
	VA	1	1	1	0	3
WV	2	1	0	0	3	
Total		11	20	13	1	45
Decreased 1 to 2 percentage points	AL	0	2	0	2	4
	AR	2	1	2	0	5
	DC	0	0	0	0	0
	DE	0	0	0	0	0
	FL	0	0	0	4	4
	GA	3	1	2	1	7
	KY	0	0	3	1	4
	LA	0	1	1	0	2
	MD	0	3	1	2	6
	MS	0	0	0	1	1
	NC	0	1	1	2	4
	OK	3	0	0	0	3
	SC	1	0	1	0	2
	TN	0	0	2	0	2
	TX	1	3	5	3	12
	VA	0	2	1	0	3
WV	0	0	0	0	0	
Total		10	14	19	16	59

Change in Retention Rate 2005-06 to 2006-07	State	Total Revenue Categories				Total
		\$0 to \$52M	\$52M+1 to \$115M	\$115M+1 to \$275M	\$275M+1 to \$5.2B	
Remained constant or increased 1 percentage point	AL	0	0	2	0	2
	AR	0	1	0	0	1
	DC	0	0	0	0	0
	DE	0	0	0	1	1
	FL	0	1	2	2	5
	GA	0	2	0	2	4
	KY	0	0	0	1	1
	LA	0	1	1	1	3
	MD	0	2	0	1	3
	MS	0	1	0	1	2
	NC	0	0	2	2	4
	OK	0	3	0	1	4
	SC	0	1	0	1	2
	TN	0	2	0	1	3
	TX	1	1	0	4	6
	VA	0	0	1	4	5
WV	3	0	1	1	5	
Total		4	15	9	23	51
Increased 2 or more percentage points	AL	1	1	1	2	5
	AR	0	1	1	1	3
	DC	0	0	1	0	1
	DE	0	0	0	0	0
	FL	2	0	2	2	6
	GA	3	5	0	0	8
	KY	0	0	2	0	2
	LA	1	1	2	0	4
	MD	0	1	0	0	1
	MS	0	1	0	1	2
	NC	1	1	0	1	3
	OK	3	0	0	1	4
	SC	1	4	0	1	6
	TN	0	0	2	2	4
	TX	0	2	4	2	8
	VA	0	2	1	1	4
WV	2	1	0	0	3	
Total		14	20	16	14	64

Change in Retention Rate 2004-05 to 2005-06	State	Total Revenues and Investments					Total
		\$0 to \$13M	\$13.1M to \$31M	\$31.1M to \$68M	\$68.1M to \$7.4B	Missing	
Decreased 5 or more percentage points	AL	0	2	0	0	0	2
	AR	2	0	0	0	0	2
	DC	0	1	0	0	0	1
	DE	0	0	1	0	0	1
	FL	4	6	2	0	2	14
	GA	2	3	2	0	0	7
	KY	1	3	1	0	0	5
	LA	0	1	2	0	0	3
	MD	1	0	1	0	0	2
	MS	2	1	0	0	0	3
	NC	4	6	4	0	0	14
	OK	3	0	2	0	0	5
	SC	0	3	1	0	0	4
	TN	3	2	1	0	0	6
	TX	4	5	2	0	0	11
	VA	1	4	2	0	0	7
	WV	0	1	1	0	0	2
Total		27	38	22	0	2	89
Decreased 1 to 4 percentage points	AL	0	1	1	0	0	2
	AR	0	0	2	0	0	2
	DC	1	0	1	1	0	3
	DE	0	0	1	0	0	1
	FL	2	0	7	0	1	10
	GA	0	2	2	1	0	5
	KY	1	4	0	0	0	5
	LA	0	0	0	0	0	0
	MD	2	2	4	1	0	9
	MS	0	1	2	0	0	3
	NC	0	3	4	2	0	9
	OK	1	0	1	0	0	2
	SC	0	3	1	0	0	4
	TN	1	5	4	0	0	10
	TX	1	2	5	1	1	10
	VA	0	2	6	0	0	8
	WV	0	1	0	0	0	1
Total		9	26	41	6	2	84

Change in Retention Rate 2004-05 to 2005-06	State	Total Revenues and Investments					Total
		\$0 to \$13M	\$13.1M to \$31M	\$31.1M to \$68M	\$68.1M to \$7.4B	missing	
Remained constant or increased 2 percentage points	AL	1	0	1	0	0	2
	AR	0	0	0	0	0	0
	DC	0	0	1	2	0	3
	DE	0	0	0	0	0	0
	FL	0	0	7	1	1	9
	GA	0	2	3	0	0	5
	KY	1	2	3	0	0	6
	LA	0	0	1	0	0	1
	MD	0	0	3	0	0	3
	MS	0	0	1	0	0	1
	NC	0	4	6	0	0	10
	OK	0	0	1	0	0	1
	SC	0	3	3	0	1	7
	TN	1	0	5	1	0	7
	TX	2	1	11	0	0	14
	VA	0	0	5	0	0	5
	WV	2	0	1	0	0	3
Total		7	12	52	4	2	77
Increased 3 or more percentage points	AL	5	2	3	0	0	10
	AR	2	2	2	0	0	6
	DC	0	1	1	0	0	2
	DE	0	1	0	0	1	2
	FL	8	1	3	0	1	13
	GA	5	4	1	0	0	10
	KY	3	2	2	0	0	7
	LA	1	1	0	0	0	2
	MD	0	1	2	0	0	3
	MS	2	0	1	0	0	3
	NC	3	4	1	0	0	8
	OK	2	1	2	0	0	5
	SC	1	3	2	0	1	7
	TN	7	5	2	0	0	14
	TX	2	2	4	0	0	8
	VA	1	1	4	0	0	6
	WV	1	3	0	0	0	4
Total		43	34	30	0	3	110

Source: IPEDS Enrollment Report 2004-2006; Financial Report 2006; VSU SRA, September 2008.

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Determining an Achievable Retention Rate Increase for Institutional Planning
4-Year **Private** Institutions

Change in Retention Rate 2005-06 to 2006-07	State	Total Revenues and Investments					Total
		\$0 to \$13M	\$13.1M to \$31M	\$31.1M to \$68M	\$68.1M to \$7.4B	missing	
Decreased 5 or more percentage points	AL	2	2	2	0	0	6
	AR	1	1	0	0	0	2
	DC	0	2	1	1	0	4
	DE	0	1	0	0	0	1
	FL	3	2	4	0	1	10
	GA	3	3	0	0	0	6
	KY	3	3	2	0	0	8
	LA	1	2	1	0	0	4
	MD	0	1	2	0	0	3
	MS	0	0	2	0	0	2
	NC	3	5	2	0	0	10
	OK	1	1	0	0	0	2
	SC	1	2	1	0	1	5
	TN	6	1	3	0	0	10
	TX	6	3	4	0	0	13
	VA	1	1	6	0	0	8
	WV	2	3	1	0	0	6
	Total		33	33	31	1	2
Decreased 1 to 4 percentage points	AL	1	1	2	0	0	4
	AR	0	0	1	0	0	1
	DC	0	0	2	1	0	3
	DE	0	0	0	0	0	0
	FL	0	0	4	0	2	6
	GA	0	4	3	0	0	7
	KY	0	3	2	0	0	5
	LA	0	0	1	0	0	1
	MD	0	1	2	0	0	3
	MS	0	0	1	0	0	1
	NC	0	6	4	0	0	10
	OK	1	0	1	0	0	2
	SC	0	7	0	0	1	8
	TN	1	2	4	0	0	7
	TX	0	1	6	0	0	7
	VA	0	1	6	0	0	7
	WV	1	0	0	0	0	1
	Total		4	26	39	1	3

Change in Retention Rate 2005-06 to 2006-07	State	Total Revenues and Investments					Total
		\$0 to \$13M	\$13.1M to \$31M	\$31.1M to \$68M	\$68.1M to \$7.4B	missing	
Remained constant or increased 2 percentage points	AL	1	1	1	0	0	3
	AR	1	1	0	0	0	2
	DC	0	0	0	1	0	1
	DE	0	0	0	0	0	0
	FL	2	1	4	1	0	8
	GA	0	2	2	1	0	5
	KY	2	2	1	0	0	5
	LA	0	0	0	0	0	0
	MD	0	1	2	1	0	4
	MS	2	1	1	0	0	4
	NC	1	3	6	2	0	12
	OK	2	0	1	0	0	3
	SC	0	2	6	0	0	8
	TN	1	7	2	1	0	11
	TX	0	1	10	1	0	12
	VA	0	1	2	0	0	3
	WV	0	0	1	0	0	1
	Total		12	23	39	8	0
Increased 3 or more percentage points	AL	2	1	0	0	0	3
	AR	2	0	3	0	0	5
	DC	1	0	0	0	0	1
	DE	0	0	2	0	1	3
	FL	9	4	7	0	2	22
	GA	4	2	3	0	0	9
	KY	1	3	1	0	0	5
	LA	0	0	1	0	0	1
	MD	3	0	4	0	0	7
	MS	2	1	0	0	0	3
	NC	3	3	3	0	0	9
	OK	2	0	4	0	0	6
	SC	0	1	0	0	0	1
	TN	4	2	3	0	0	9
	TX	3	5	2	0	1	11
	VA	1	4	3	0	0	8
	WV	0	2	0	0	0	2
	Total		37	28	36	0	4