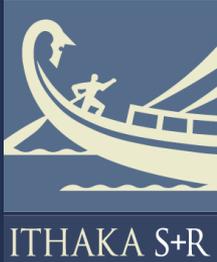


ITHAKA S+R

ITHAKA PRESENTATION TO THE VIRGINIA  
COUNCIL OF PRESIDENTS AND THE  
SCHEV BOARD

*Richard R. Spies, Christine Mulhern and Derek Wu*

September 15, 2014



In partnership with, and special thanks to,  
The Andrew Mellon Foundation and SCHEV,  
especially Peter Blake and Tod Massa.

# MISSION OF A PUBLIC SYSTEM OF HIGHER EDUCATION

- *Ensure an educated workforce and citizenry for the State and Nation*
- *Provide opportunities for social and economic mobility for the people of the State*

# FINDINGS

- 1. Virginia's public colleges and universities have become increasingly dependent on tuition revenues*
- 2. Net costs for students have risen steadily, including for the poor and near poor***
- 3. Net costs have a statistically significant impact on student success rates, especially for the poor and near poor***
- 4. At the same time that public colleges and universities are being pressed to increase accessibility and improve success rates, increasing net costs are pushing us in the opposite direction*

# 1. INCREASING DEPENDENCE ON TUITION

- *Declining public support and rising costs have forced tuition to go up – shifting from a publicly supported good for all toward a privately funded individual commodity*
- *Despite best efforts and some help from the federal and state governments (at times), most institutions have not been able to sustain need-based financial aid budgets sufficient to insulate poor and near poor students*





There are significant differences in these trends across institutions.

# TWO CATEGORIES OF INSTITUTIONS

## ***“Lower Dependency on the State” (LDS)***

10-29% of revenue from state appropriations

Coping with funding reductions largely through higher in-state tuition charges and increased revenue from out-of-state students

University of Virginia, The College of William & Mary, George Mason University, Virginia Military Institute, Virginia Commonwealth University, James Madison University and Virginia Tech

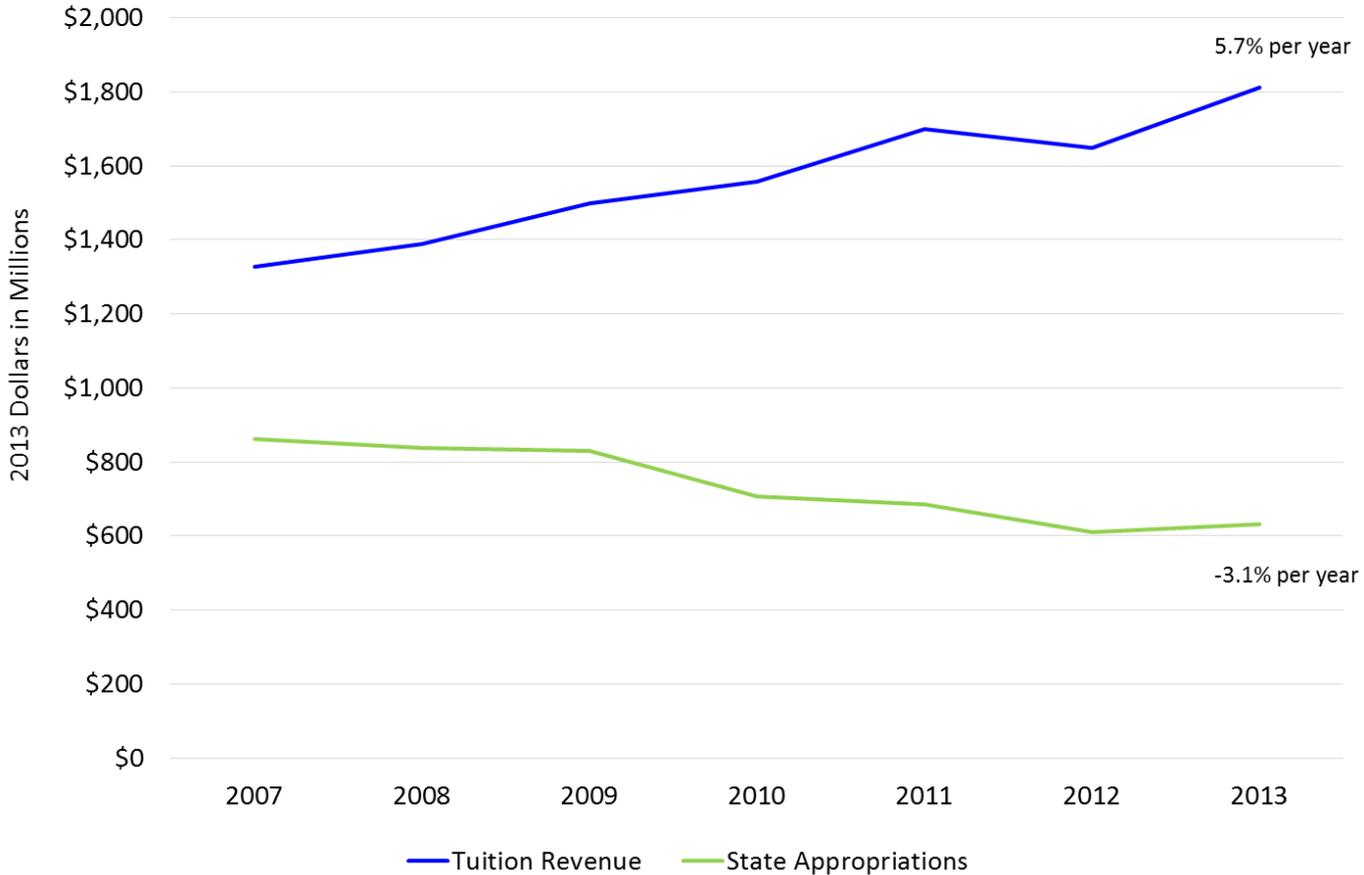
## ***“Higher Dependency on the State” (HDS)***

36-52% of revenue from state appropriations

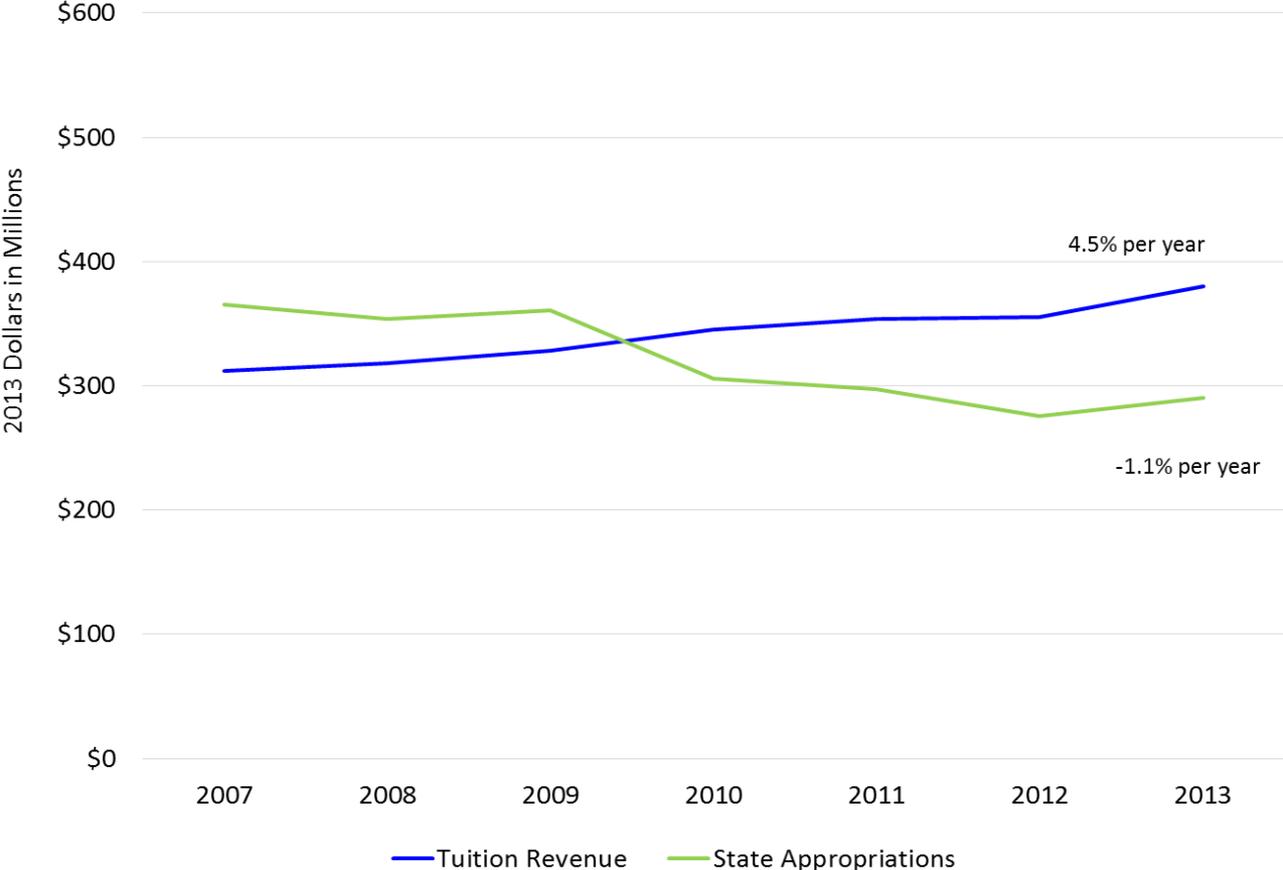
Have had to rely primarily on increases in in-state enrollment

University of Mary Washington, Virginia State University, Christopher Newport University, Longwood University, Old Dominion University, University of Virginia’s College at Wise, Radford University and Norfolk State University

## Total Tuition Revenue and State Appropriations LDS Institutions: 2007-2013



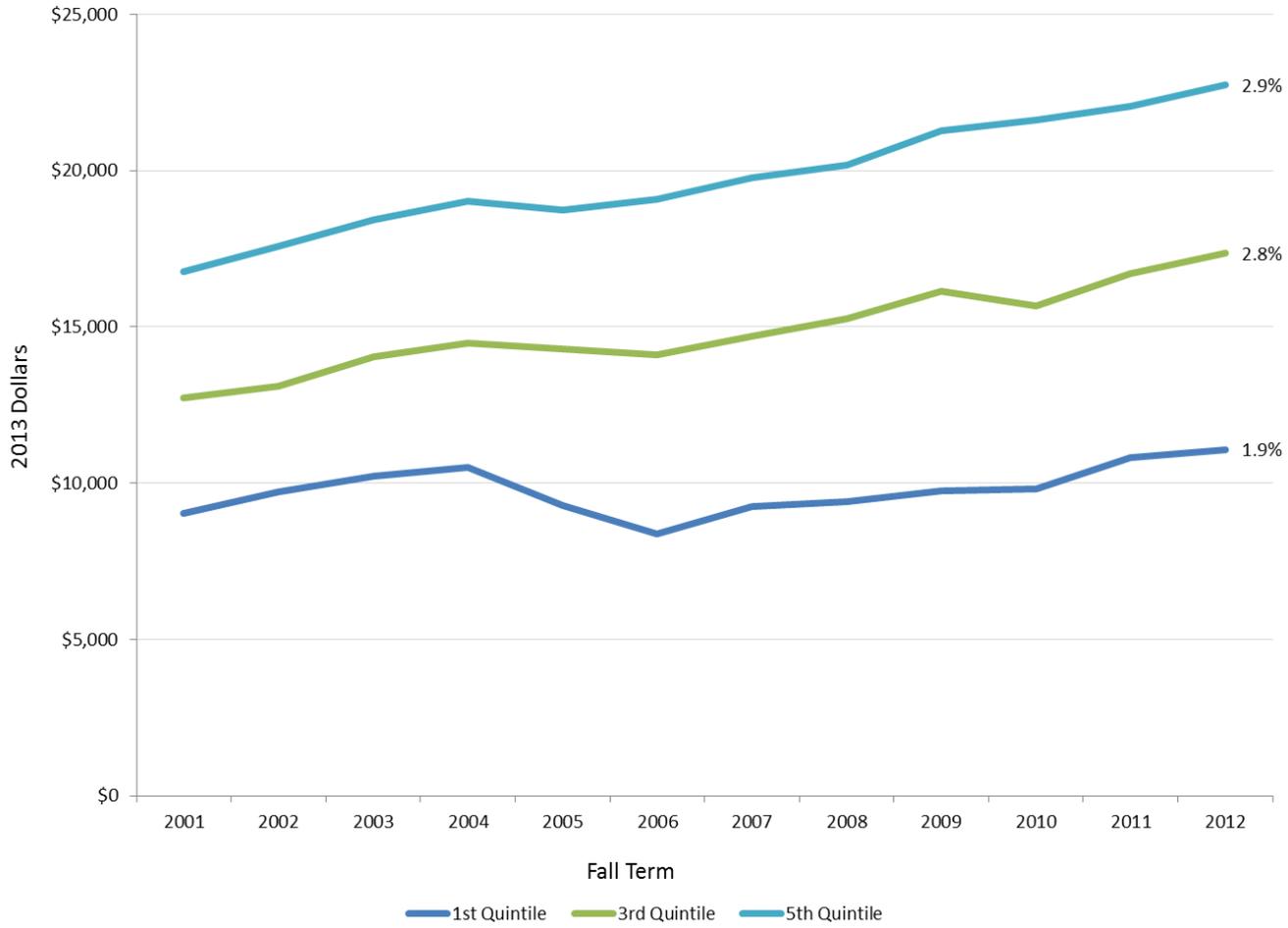
# Total Tuition Revenue and State Appropriations HDS Institutions: 2007-2013



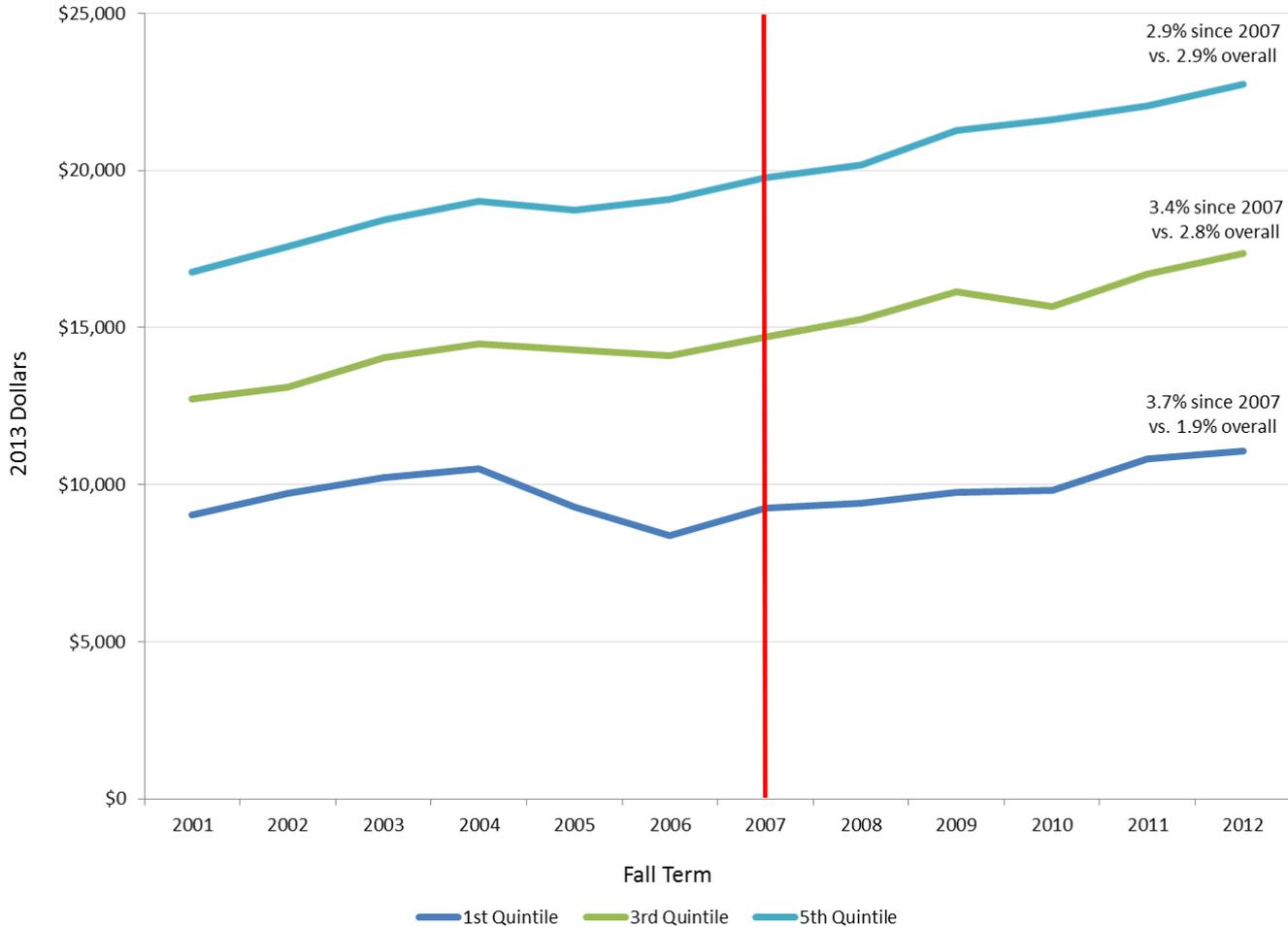
## 2. STEADY INCREASES IN NET COSTS, INCLUDING FOR POOR AND NEAR-POOR STUDENTS

- *Focus on in-state, full-time, first-time freshmen entering 4-year public universities between 2001 and 2012; total of 272,084 students*
- *Net cost is defined as total student budget minus total gift aid*
- *All dollar numbers are inflation-adjusted (2013 dollars); all rates of increase are calculated over and above inflation*

# Changes in Net Costs From 2001



# Changes in Net Costs From 2001



## Average Annual Growth Rates of Net Costs by Income Quintiles

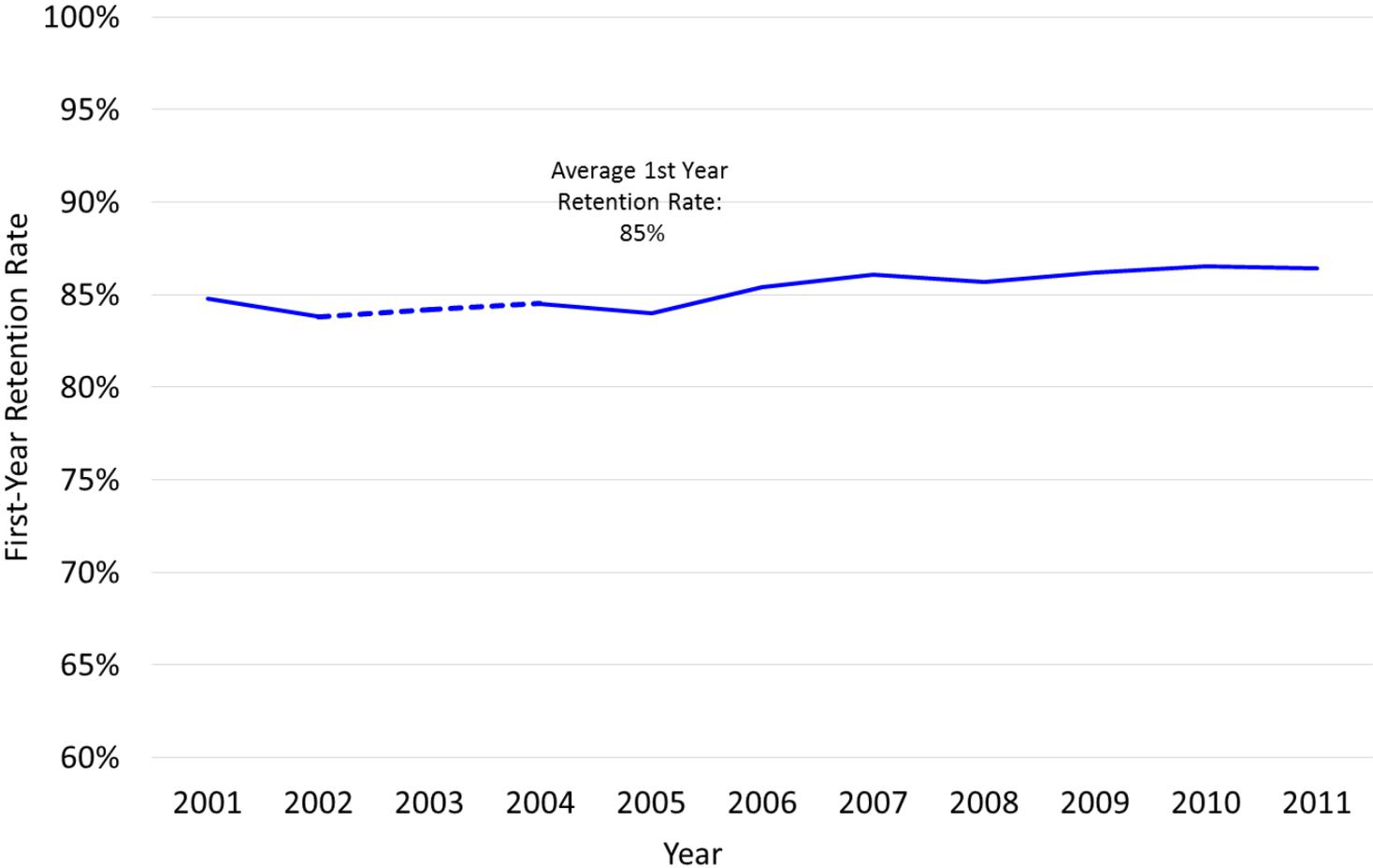
		1 <sup>st</sup> Quintile	3 <sup>rd</sup> Quintile	5 <sup>th</sup> Quintile
All 4-Year Institutions	2001-07	0.3%	2.4%	2.8%
	2007-12	<b>3.7%</b>	<b>3.4%</b>	2.9%

		1 <sup>st</sup> Quintile	3 <sup>rd</sup> Quintile	5 <sup>th</sup> Quintile
HDS Institutions	2001-07	2.6%	3.5%	3.5%
	2007-12	3.0%	2.7%	2.8%
LDS Institutions	2001-07	-2.4%	1.6%	2.6%
	2007-12	<b>4.9%</b>	<b>4.0%</b>	2.9%

### 3. NET COSTS HAVE A SIGNIFICANT IMPACT ON STUDENT RETENTION RATES

- *Lower overall first-year retention rates*
- *Big gap between lower-income students and higher-income students*

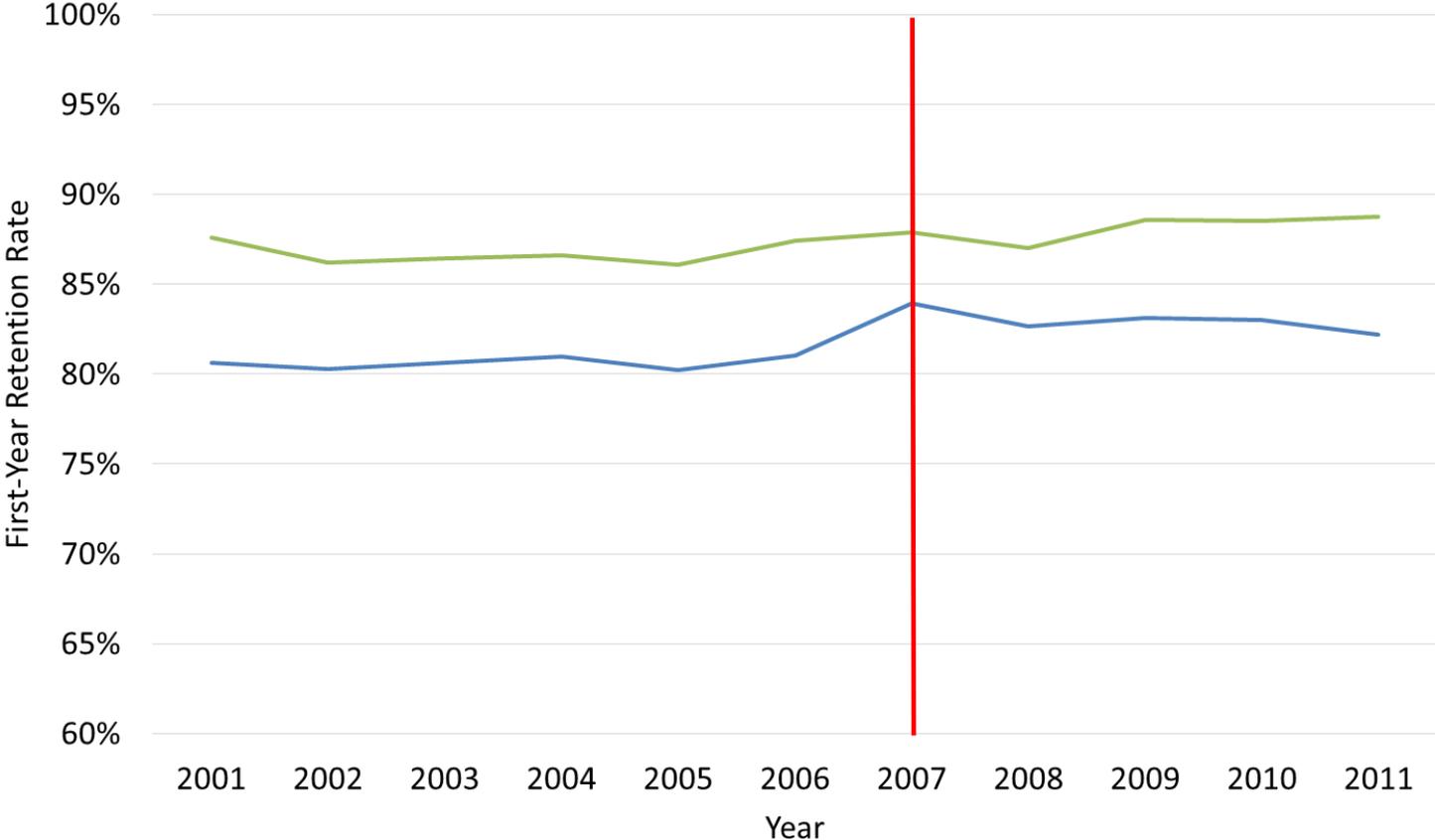
# First-Year Retention Rate



## Components of First-Year Retention Rate

Dropout	Take Time Off	Transfer	Retention Rate
4.2%	4.0%	6.4%	85%

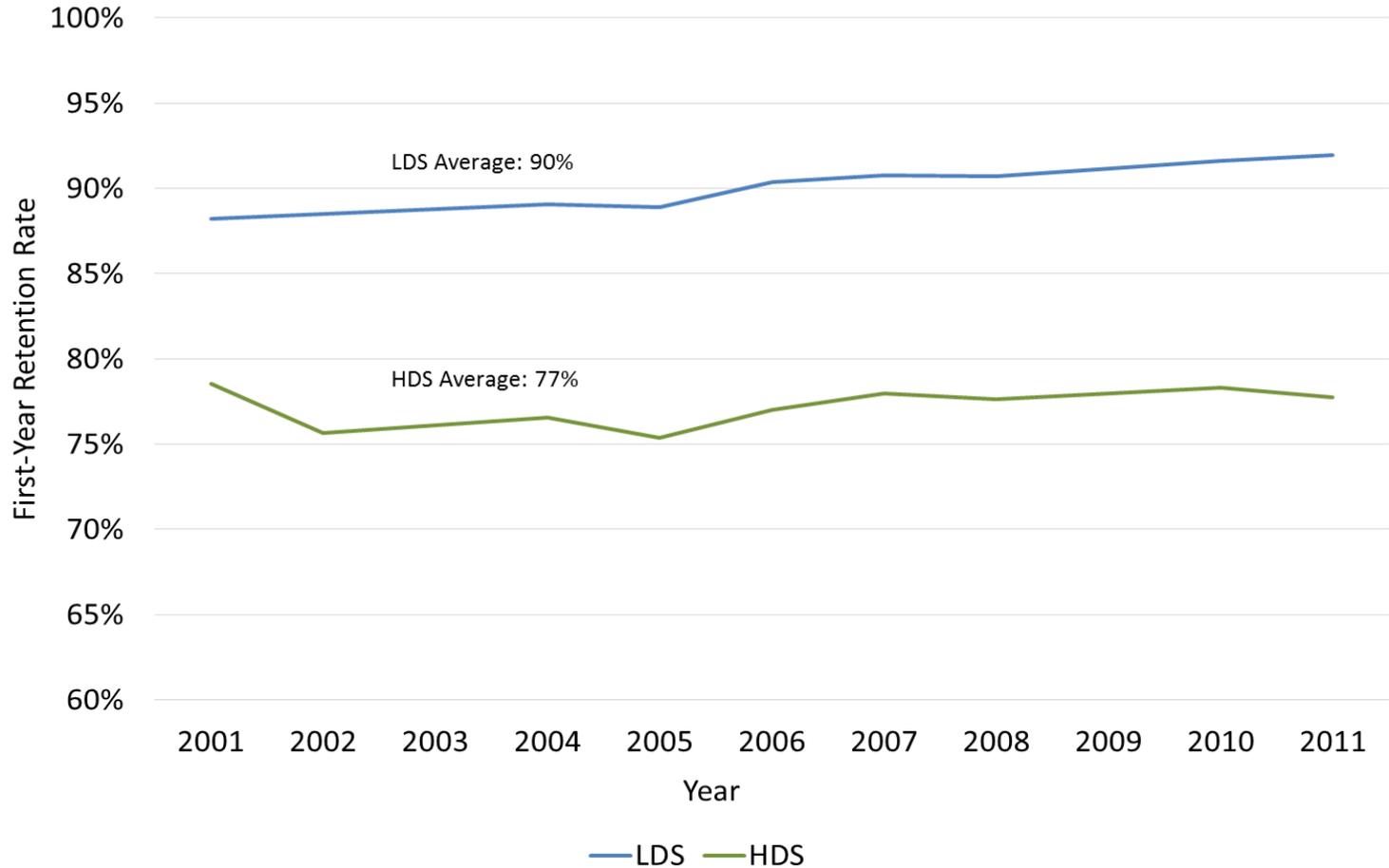
# First-Year Retention Rate



— Lower Inc: Quintiles 1, 2 & 3      — Upper Inc: Quintiles 4 & 5

# Some Differences Between LDS and HDS Schools

# First-Year Retention Rate by LDS and HDS



# Multivariable Regression Results

**Impact of a \$1,000 increase in net costs on probability of re-enrolling in original institution after first year**

	All Institutions	HDS	LDS
<b>Overall</b>	-0.00345*** (0.00022)	-0.00804*** (0.00048)	-0.00140*** (0.00021)
<b>Inc Q1</b>	-0.01266*** (0.00081)	-0.01967*** (0.00137)	-0.00757*** (0.00088)
<b>Inc Q2</b>	-0.01092*** (0.00069)	-0.02181*** (0.00132)	-0.00512*** (0.00072)
<b>Inc Q3</b>	-0.00576*** (0.00059)	-0.01026*** (0.00118)	-0.00319*** (0.00061)
<b>Inc Q4</b>	-0.00316*** (0.00054)	-0.00683*** (0.00117)	-0.00151*** (0.00055)
<b>Inc Q5</b>	-0.00027 (0.00047)	-0.00172 (0.00131)	0.00012 (0.00044)

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Standard errors are in parentheses. Controls include family income, age, gender, race, SAT, dependent status, unemployment rate of original address, whether or not they live in campus housing, fixed effects for each institution, fixed effect for each year, and institutional time trends. These regressions only look at students entering 2004-2011.

**Impact of a \$1,000 increase in net costs on probability of re-enrolling in original institution after first year**

	All Institutions	HDS	LDS
<b>Overall</b>	-0.35%	-0.80%	-0.14%
<b>Inc Q1</b>	-1.27%	-1.97%	-0.76%
<b>Inc Q2</b>	-1.09%	-2.18%	-0.51%
<b>Inc Q3</b>	-0.58%	-1.03%	-0.32%
<b>Inc Q4</b>	-0.32%	-0.68%	-0.15%
<b>Inc Q5</b>	-0.03%	-0.17%	0.01%

Note: % indicates percentage points

**Impact of a \$1,000 increase in net costs on percent of credits attempted that are completed in first year**

	All Institutions	HDS	LDS
<b>Overall</b>	-0.00153*** (0.00012)	-0.00369*** (0.00026)	-0.00072*** (0.00012)
<b>Inc Q1</b>	-0.00831*** (0.00048)	-0.01323*** (0.00082)	-0.00471*** (0.00052)
<b>Inc Q2</b>	-0.00647*** (0.00040)	-0.01249*** (0.00077)	-0.00325*** (0.00041)
<b>Inc Q3</b>	-0.00309*** (0.00033)	-0.00612*** (0.00065)	-0.00166*** (0.00034)
<b>Inc Q4</b>	-0.00155*** (0.00029)	-0.00253*** (0.00062)	-0.00135*** (0.00028)
<b>Inc Q5</b>	-0.00030 (0.00024)	0.00021 (0.00067)	-0.00072*** (0.00012)

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1. Standard errors are in parentheses. Controls include family income, age, gender, race, SAT, dependent status, unemployment rate of original address, whether or not they live in campus housing, fixed effects for each institution, fixed effect for each year, and institutional time trends. These regressions only look at students entering 2004-2011.

**Impact of a \$1,000 increase in net costs on percent of credits attempted that are completed in first year**

	All Institutions	HDS	LDS
<b>Overall</b>	-0.15%	-0.37%	-0.07%
<b>Inc Q1</b>	-0.83%	-1.32%	-0.47%
<b>Inc Q2</b>	-0.65%	-1.25%	-0.33%
<b>Inc Q3</b>	-0.31%	-0.61%	-0.17%
<b>Inc Q4</b>	-0.16%	-0.25%	-0.14%
<b>Inc Q5</b>	-0.03%	0.02%	-0.07%

Note: % indicates percentage points

So where does that leave us?

4. PUBLIC COLLEGES AND UNIVERSITIES ARE BEING  
PRESSED TO INCREASE ACCESSIBILITY AND  
IMPROVE SUCCESS RATES, BUT INCREASING NET  
COSTS ARE PUSHING HARD IN THE OPPOSITE  
DIRECTION

CLEARLY, INCREASING NET COSTS HAVE MADE IT MORE DIFFICULT TO ACHIEVE AGREED-UPON PUBLIC AND INSTITUTIONAL GOALS

- *Expand enrollment and increase overall educational attainment*
- *Narrow the gap between economically disadvantaged and more advantaged students in access and in rates of completion*
- *Make college affordable for as many people as possible*

# INSTEAD WE GET...

- *Limited progress on expanding accessibility*
- *Bigger gaps in success between poor and near-poor students and those who are better off; lower overall success rates well short of public goals*
- *Institutions more at risk financially and in terms of student willingness to pay*

# Possible Responses

# CONTINUING RESEARCH ON THE IMPACT OF RISING NET COSTS

- *Understand better the nature and extent of the impact of rising net costs on student access, including the type of institution chosen*
- *Understand better the impact of rising net costs on student success, including persistence rates and ultimate attainment of a degree, for different groups of students and at different types of institutions*

## POSSIBLE STRATEGIC INITIATIVES

- *Greater coordination and collaboration across the system*
- *Targeted use of technology in teaching, learning, and advising*
- *More strategic approach to tuition and financial aid across the system*
- *Multi-year strategic plans and budgets for each institution and the system as a whole*

# I T H A K A

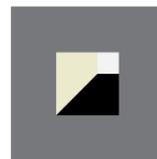
*ITHAKA is a not-for-profit organization that helps the academic community use digital technologies to preserve the scholarly record and to advance research and teaching in sustainable ways.*



JSTOR is a not-for-profit digital library of academic journals, books, and primary sources.



Ithaka S+R is a not-for-profit research and consulting service that helps academic, cultural, and publishing communities thrive in the digital environment.



PORTICO

Portico is a not-for-profit preservation service for digital publications, including electronic journals, books, and historical collections.