

Financials of Facilities in Higher Education

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Course Description

This session will introduce facility professionals to understand the fundamentals and techniques for capital finance. This introduction provides the broad overview and background information that relates to all levels of facilities management. The session begins with learning the basics of the financial enterprise related to higher education, community colleges, public and private colleges and universities including historically black colleges (HBC's). The presentation illustrates the different "color of money" at institutions and some alternative finance strategies for financing projects at your institution of higher learning. The discussion develops the typical expenditures and revenues measures, general data for higher education and looks at current trends in capital finance. The presentation is summarized with the top five finance strategies to becoming successful and comfortable to be at the decision table at your institution. Finally the session concludes with everything you wanted to know about system revenue bonds (SRB's) but were afraid to ask topic. This knowledge equips the facilities profession with the tools necessary to be included in the finance discussions

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Learning Outcomes

Learning Objective 1:
Understand the fundamentals and techniques for capital finance.

Learning Objective 2:
Provides the broad overview and background information that relates to all levels of facilities management.

Learning Objective 3:
Understand the basics of the financial enterprise related to higher education, community colleges, public and private colleges and universities.


Learning Objective 4:
Learn the top five finance strategies to becoming successful and comfortable to be at the decision table at your institution.

Higher Education General Facts & Information

- What's Going On
 - Teaching, Research, Healthcare
 - Products are: Students, Employees, Research, Books, Intellectual Property
 - Common Issues
- All of these can not happen without:

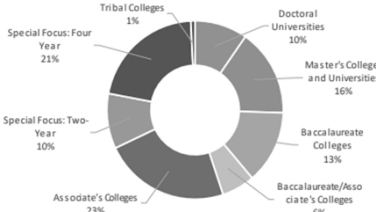
BUDGET & FINANCE



Higher Education General Facts & Information


Carnegie Classification of Institutions of Higher Education

Number of Institutions by Broad Category



Broad Category	Percentage
Tribal Colleges	1%
Doctoral Universities	10%
Master's Colleges and Universities	16%
Baccalaureate Colleges	13%
Baccalaureate/Associate's Colleges	6%
Associate's Colleges	23%
Special Focus: Two-Year	10%
Special Focus: Four-Year	21%

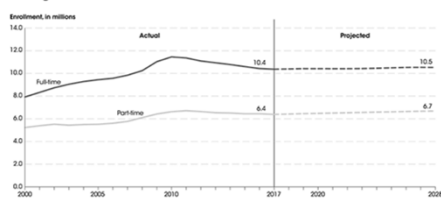
<http://carnegieclassifications.edu/download/CCHE2015-Facts/figures.pdf>



Higher Education General Facts & Information

Enrollment Trends

Figure 3. Actual and projected undergraduate enrollment in degree-granting postsecondary institutions, by attendance status: Fall 2000 through 2028







NOTE: Degree-granting institutions grant associate's or higher degrees and participate in Title IV federal financial aid programs. Institutions are listed on data through 2017. Some data have been revised from previously published figures.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), Spring 2010 through Spring 2018, Fall Enrollment Enrollment and Enrollment in Degree-Granting Institutions Projection Model, 2000 through 2028. See Dept. of Education Reports 2018, table 20.20.



Higher Education General Facts & Information






• Who's Who?

	GI Elders	Born before 1925	Radio, Model-T, Titanic, The war to end all wars
	The Silent Generation	Born between 1926 and 1945	The Great Depression, WW2, Nuclear Age
	Baby Boomers	Born between 1946 and 1964	TV, The Space Age, JFK, Korea, Young Elvis
	Generation X, Gen 13	Born between 1965 and 1975	Moon Landing, MLK Jr., Vietnam, Watergate, Sesame Street
	Generation Y, Millennials	Born after 1975	iPods, Segways, Iraq, 9-11, Mars Rover



Higher Education General Facts & Information

• Who's Who?

G.I. GENERATION	SILENTS	BOOMERS	GENX	MILLENNIALS
				
1901-1926	1927-1945	1946-1964	1965-1981	1982-PRESENT
They saved the world and then built a nation. Their Depression was The Great One; their war was The Big One. An ACTION generation.	Came of age deferring to the more assertive G.I. Generation. Our country's last Innocent Generation. A RIGHTS generation.	The Golden Generation in the American workplace. Assertive. Leaders. Ethical. Demanding. A generation about VALUES.	The latch-key kids grew up street-smart but isolated, often with divorced or time-starved, dual-career parents. This generation is all about SURVIVAL.	The older half of America's next great generation is optimistic, idealistic, patriotic, and adult-supervised. They'll be all about ACTION.



Higher Education General Facts & Information

- Total Institutions: 4,313
 - Public Institutions: 1,626
 - Private – Nonprofit: 1,689
 - Private – For-profit: 998
- Total Students: 20,138,447
- Total Staff: 3,976,901



Source: U.S. Department of Education, Digest of Education Statistics 2017
https://nces.ed.gov/ipeds/data/digest/digest18_317.10.asp?current=yes

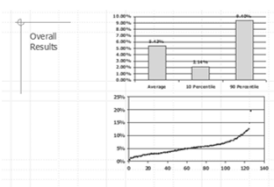


Higher Education General Facts & Information

• Facility Operating/GIE Index

Annual Facility Maintenance Operating Expenditures (\$) Divided By Gross Institutional Expenditures (GIE)

Level of funding provided for the stewardship responsibility of the institution's education and general capital assets

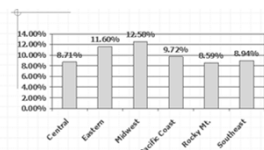


Higher Education General Facts & Information

• Facilities Condition Index

Deferred Maintenance Deficiencies (\$) Divided By Current Replacement Value (CRV)

Comparative indicator of the relative condition of facilities



Higher Education General Facts & Information

- \$19 Billion Spent on Facilities Operations.
- 2012 \$9.7 Billion was spent on New Construction, Renovations and Additions to existing buildings.

Sources: U.S. Department of Education, Digest of Education Statistics 2012

Tables: 412

<http://nces.ed.gov/pubs2014/2014015.pdf>

College Planning & Management 2013 Annual College Construction Report



Higher Education General Facts & Information

- \$1.1 Billion Current Replacement Value (CRV) per institution
- Average age of buildings 33.3 years per institution
- According Society for College and University Planning (SCUP) in 2007 the Net Assignable Square Footage (NASF) on all college campuses is 6.0 Billion and growing *(this statistic is no longer calculated)*

Source: 2008-14 Facilities Performance Indicators Report –

FPI Trend Analysis of Key Performance Indicators 2008 - 2013

<http://www.appa.org/research/FPI/documents/Web%20Report%202014.pdf>

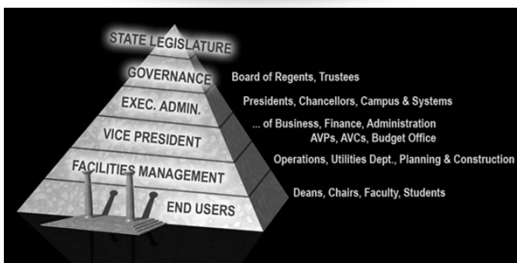


Accountability of Higher Education

- Higher education is focused on the delivery of a service as efficiently as possible. We are accountable to students, tax payers, parents, faculty and the state and federal systems.
- The discussion is changing in Higher Education, what was important historically has changed.
- Models of funding for higher education have been changing.



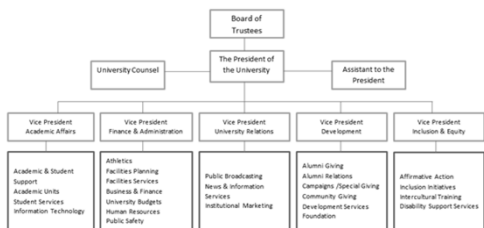
Higher Education Finance Pyramid



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University Administrative Organization

Sample Administrative Chart – Model Grand Valley State University



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Key Players in Higher Education Finance

- Vice President for Finance & Administration
- Controller
- Budget Office
- Other Vice President's
- Institutional Research



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Mission of University Budget Office


- Budget Planning
- Budget Allocation
- Budget Control & Maintenance
- Financial Planning
- Financial Reporting (Accountability Reports)
- State Budget Requests
- Governs University Budget Policies & Procedures.

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Mission of University Budget Office

The mission of the University Budget Office is to coordinate and provide leadership for University-wide financial and resource planning, budgeting and policy analysis.

These activities include financial and resource analysis and planning; capital planning and budgeting; development of biennial budget requests and annual operating budgets; institutional data management; and budgetary and policy analysis.

University of Kentucky Budget Office 20 


Scope of Budgeting Activities

- General Operating Funds
- Designated Funds
- Auxiliary Funds
- Benefits
- Capital Maintenance Funds
- Plant Funds
- Grants and Contracts

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Terminology

- Higher Education Terminology
- Finance Terminology



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Higher Education Terminology


It is important to know the language of Higher Education

- **Interdisciplinary Curriculum** – A curriculum that is structured to study a topic or concept by gathering and relating ideas from multiple disciplines.
- **Pedagogy** - the art, science, or profession of teaching
- **Built Environment** - refers to the human-made surroundings that provide the setting for human activity, ranging in scale from buildings and parks or green space to neighborhoods and cities that can often include their supporting infrastructure, such as water supply, or energy networks.
- **Integrated Budgeting or Performance Based Budgeting** - Performance budgets use statements of missions, goals and objectives to explain why the money is being spent. It is a way to allocate resources to achieve specific objectives based on program goals and measured results.
- **Academy** - A school for special instruction.
- **Enterprise** - A business organization.
- **Collegial** - Characterized by or having power and authority vested equally among colleagues

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Finance Terminology

- ROI – Return on Investment
- Net Asset/Net Value
- Capitalization
- Book Value
- Accrual Basis/Method
- Restricted Funds
- Auxiliary Funds
- Debt Service – Capacity - Ratio
- Bonds
- Commercial Paper



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Finance is a Balancing Act

Definitions:

- Assets/Revenues = Income

“something that is owned by a person or company”



Find the right balance

- Liabilities/ Expenditures = Costs

“something (such as the payment of money) for which a person or business is legally responsible.”



Headline – Higher Education

- Higher Education Costs are Rising
- Higher Education funding sources are changing.
- There is greater accountability and justification is required.

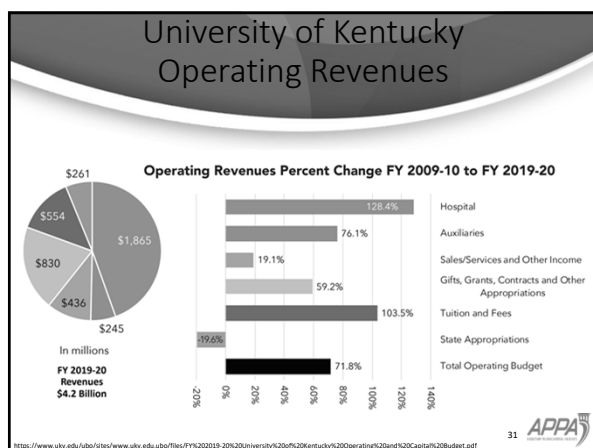


Higher Education Finance Trends

You better cut the pizza in four pieces. I'm not hungry enough to eat eight.

Yogi Berra



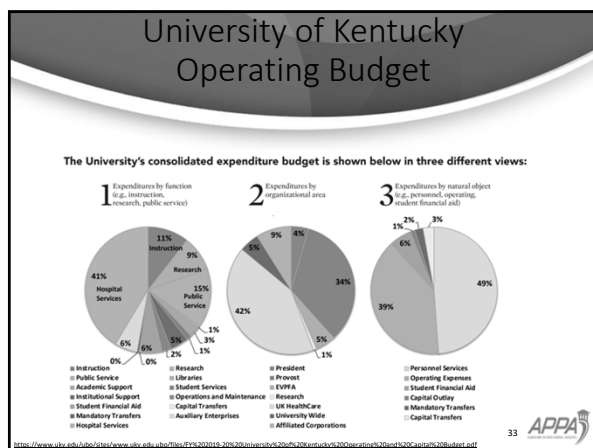


Major Expenses in Higher Education

Higher Education is very labor intensive

- Salaries & Benefits
- Utilities
- Travel
- Scholarships & Fellowships
- Communication Costs (IT)
- Debt Service on Capital Assets
- Supplies
- Contractual Services

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Expenditures by Classification

- Instruction
- Research
- Public Service
- Academic Support
- Student Service
- Instructional Support
- Operations and Maintenance
- Scholarship
- Auxiliary



Higher Education Expenditures

TYPE OF EXPENDITURES	PUBLIC INSTITUTIONS (ALL LEVELS)	PRIVATE (NON-PROFIT) INSTITUTIONS	PRIVATE (FOR-PROFIT) INSTITUTIONS
Instruction (Including Salary & Wages)	30.13%	31.51%	26.72%
Research	10.05%	10.64%	*0.12%
Public Service	4.19%	1.46%	*
Academic Support	8.37%	8.20%	**62.55%
Student Services	5.70%	8.50%	**
Institutional Support	9.67%	13.03%	**
Net Grant Aid to Students	4.14%	0.48%	0.18%
Auxiliary Enterprises, Hospitals, Independent			
Operations & Interest	22.58%	23.76%	2.17%
Other	5.17%	2.43%	8.28%

* Combined Research & Public Service

** Combined Student Services, Academic and Institutional Support

Source: U.S. Department of Education, Digest of Education Statistics 2018

Tables 334.10, 334.40, 334.50

<https://nces.ed.gov/pubs2020/2020009.pdf>



Typical Facilities Budget

- Personnel
- Equipment
- Supplies
- Operations and Maintenance
- Renovation/Repair Projects
- Capital Construction
- Others



Alternative Financing

(Typically for Capital Construction)

- Private 3rd Party Finance
- Land Lease
- Asset Leveraging
- Lease vs. Build
- Joint Ventures
- Performance Contracting



Higher Education Finance What You Should Know!

- What do I need to know about funding (Finance)
- What funding strategies do I need to know
- Where the funding (\$\$\$) comes from
- Where the funding (\$\$\$) goes



University Budgets – Tools of the Trade Establishing a Budget

Beware of little expenses. A small leak will sink a great ship.
Benjamin Franklin

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University Budget Tools of the Trade

Building the Base Budget


- Forecast University Resources
 - State Appropriations
 - Tuition
 - Program Revenues
- Prioritize New Initiatives
- Compensation Increases
 - Collective Bargaining Contracts
 - Other University Staff

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University Budget Tools of the Trade

Budgeting Request Process


- Base Budget Requests (Permanent Budget Requests)
 - A Base Budget request is an expense that would be anticipated annually.
 - This type of request would be renewed annually
- Working Budget Requests (One-Time Budget Request)
 - A Working Budget request would be an item that does not roll over into the next fiscal year
 - Types of Working Budget Requests
 - One time expense for equipment
 - One time request for additional programming or supplies for that fiscal year

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University Budget Tools of the Trade

Line Item Budgeting

- Salaries & Compensations
 - Position Control Budgeting
 - Position Control for Regular Staff Appointments
 - Budgeted by Position
 - Base dollars are associated with the position or salary
 - Compensation is the Base dollars and associated Fringe Benefits depending on the Appointment (FICA, Retirement, other Fringe)
- Non-Position Control Budgeting
 - Temporary Employee Line Items
 - Budgeted in a Lump Sum
 - Students & Grad Assistants
 - Adjunct Faculty

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University Budget Tools of the Trade

Line Item Budgeting

- Revenue Accounts
- CSSM – Contracts, Services, Supplies & Maintenance
 - Sub-Category Account Budgeting
 - Broad Categories for Supplies, Equipment, Travel, Maintenance, Transfers, Contractors
 - Account Detail for each category/code.



University Budget Tools of the Trade

Position Management Explained

- Why Position Control:
 - Compensation continues to be 75% or more of the University's operating budget
- Line Items are Budgeted at the Position Level
 - Regular Continuing and Terminal Staff Appointments
 - Includes (FTE – Full Time Equivalency)
 - Based on Time and Effort
 - Track Permanent and One-time Changes for State Budget Request requirements and other analysis



University of Kentucky Budget Summary


In millions	FY 2017-18
Undesignated General Funds	
State Appropriations	\$ 267.1
Tuition	468.9
Other	41.7
	777.7
Designated General Funds	
UK HealthCare - Hospitals	1,590.2
Other	419.0
	2,009.2
Auxiliary Funds	211.1
Restricted Funds	385.5
Fund Balances (non-recurring)	277.2
Total	\$3,660.7



Top 5 Finance Things to Know

5) Language


If you want to be successful and move up the ladder in Higher Education you cannot avoid discussions and decisions about finance. Every Director and AVP is immersed in budgets. Some sort of additional training in finance and budgeting is always advantageous.

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Top 5 Finance Things to Know

4) Numbers

There are numbers (\$) and there are the numbers (data). Using both in combination is the art of reliable and credible persuasion to build a business case.


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Top 5 Finance Things to Know

3) How to read your University Financial Statement!

The annual campus financial statement should be available in the Facilities Management area. Reviewing the University Financial Statements as well as some of your Facilities data and metrics will help you in financial discussions and arguments.

In part, it will give you a sense of the general equity across campus.

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Top 5 Finance Things to Know

2) Finance is really Accountability

More and more accountability is expected by everyone: the students, the public, the parents, and the government! We need to be able to show value more than ever before as we are consuming limited public dollars.



Grand Valley State University
Accountability Report 2013-2014



Grand Valley State University produces an annual Accountability Report, statistics are also available on their website.



Top 5 Finance Things to Know

1) Understand Revenue Bonds (System)

Revenue Bonds continue to represent the single most popular financial instrument/vehicle for most public colleges and universities to borrow money and fund capital construction. Understand how these instruments work in your state, along with the debt capacity and service.



What is a Revenue Bond Anyway?

A special type of bond distinguished by its guarantee of repayment solely from revenues generated by a specified revenue-generating entity. Unlike general obligation bonds, only the revenues specified in a legal contract between the bond issuer are required to be used for repayment of the principal and interest of the bond; other revenues (notably tax revenues) and the general credit of the issuing agency are not so encumbered. Because the pledge of security is not as great as that of general obligation bonds, revenue bonds may carry a slightly higher interest rate than G.O. bonds; however, they are usually considered the second-most secure type of municipal bonds.

Revenue bonds may be issued to construct or expand upon various revenue-generating entities, including:

- Infrastructure/Utilities
- Facilities that generate revenue – Residence Halls, Dining/Rec.
- Toll Roads and bridges
- Airports, and other transportation type hubs
- Power Plants and electrical generation facilities



Ensuring Sustainability in Post-Secondary Education

- “The bodies that fund higher education need to know that the activity they fund is well-managed, efficient and sustainable, to ensure that public investment (including through student tuition fees) will deliver value for money.”
- “... Sustainability is broader in scope and longer-term than whether an institution is financially solvent, or a going concern. It includes an assessment of whether an institution is delivering on its academic and business objectives (and how realistic these are), not just whether it can manage financially for the next three years.”

From the Report commissioned by the Higher Education Funding Council for England,
“Assessing the Sustainability of Higher Education Institutions”, June 2011



Trust & Responsibility

- Does your team all have the same understanding about priorities and risk?
- A key is consistency and transparency. Create that through messages that tell your story with conviction and consistency in good and bad times.
 - The 85 % Solution
 - Balancing Act
 - Triage - A process in which things are ranked in terms of importance or priority



Higher Education Finance – Your Knowledge...

- Do you know your institution's budget?
- Do you know the trending of your campus budget?
- What is your total facility operating budget?
- Do you know the trending of your facility budget and FTE count?
- How much capital construction is your campus doing?
- What other metrics are helpful to create a ratio with your institution and facility budget?



Higher Education Finance – Your Knowledge...

What is the average cost in higher education facilities per gross square foot for:

Custodial Costs per GSF	\$ 1.37
GSF per Custodian	34,551
Grounds Cost per Acre	\$ 5,114
Maintenance Cost per GSF	\$ 1.63
GSF per Maintenance FTE	73,296
Energy cost per GSF	\$ 2.15

Source: 2012-13 Facilities Performance Indicators Report –
FPI Trend Analysis of Key Performance Indicators 2008 - 2013



Finance Broad Policy Questions

- What level of state funding to Higher Education is necessary to achieve the education goals required for economic and social well-being of the American People?
- What tuition levels are appropriate given the cost of Higher Education, its benefits to the individual, and the desirability of encouraging participation




Finance Broad Policy Questions

- What amounts and forms of student financial assistance are required to provide meaningful educational opportunities to students from low and moderate-income families?
- To what extent might Higher Education increase productivity or reduce expenditures without impairing the quality of services to students?



Higher Education Associations


- National Higher Education Efforts
 - Targeting CHEMA Organizations (Council on Higher Education Management Association) CHEMA is an umbrella organization consisting of 35 associations representing all of the professions in the management of higher education.



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Good Reference Materials

- Thought Leader Series (TLS)
- Center for Facilities Research (CF@R)
- Facilities Performance Index (FPI)



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Financing Facilities in Higher Education

Questions?

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Financing Facilities in Higher Education

Appendix



Headline – Higher Education

Forbes

Creative Solutions to Higher Education Finance, Part 1.

Andrew Kelly, Contributor 4/29/2014 @ 12:32PM

<http://www.forbes.com/sites/akelly/2014/04/29/creative-solutions-to-higher-education-finance-part-1/>

Forbes

Creative Solutions to Higher Education Finance, Part 2: Using Private Money to Promote the Public Good.

Andrew Kelly, Contributor 4/30/2014 @ 8:05AM

<http://www.forbes.com/sites/akelly/2014/04/30/creative-solutions-to-higher-education-finance-part-2-using-private-money-to-promote-the-public-good/>



Headline – Higher Education

KPMG Survey: Higher Education Leaders Worried about Enrollments

By Terri Eyden on Sep 13 2013

<http://www.accountingweb.com/article/kpmg-survey-higher-education-leaders-worried-about-enrollments/222397>

The Chronicle of Higher Education

Accounting for Success: Brenau U., a women's college in Georgia, is running million-dollar surpluses. Here's how.

By Scott Carlson, February 3, 2014 <http://chronicle.com/article/Accounting-for-Success/14351/>

The Chronicle of Higher Education

Higher Education Price Index Climbs to 2.3%, as Utility Costs Rise

By Collin Eaton, September 14, 2011


<http://chronicle.com/article/Higher-Education-Price-Index/128993/>



Headline – Higher Education

U.S. News & World Report
 The Rise in Tuition Is Slowing, But College Still Costs More - Tuition prices aren't increasing as rapidly, but what students actually pay is still on the rise.
 By Allie Bidwell, October 24, 2013
<http://www.usnews.com/news/articles/2013/10/24/the-rise-in-tuition-is-slowing-but-college-still-costs-more>

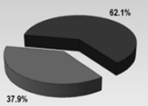
The Chronicle of Higher Education
 Students and States Near a 50-50 Split on the Cost of Public Higher Education
 By Eric Kelderman, March 6, 2013
<http://chronicle.com/article/StudentsStates-Near-a/137709/>

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Higher Education Funding has Changed

Appropriation vs. Tuition Income
Percent of Budget


1988-89
\$39,056,977



62.1%
37.9%


■ State Appropriation Percent ■ Tuition Revenue Percent

2013-14
\$325,588,006



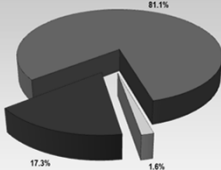
17.6%
82.4%

■ State Appropriation Percent ■ Tuition Revenue Percent

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General Fund Resources (GVSU)

Appropriation vs. Tuition Income vs. Other General Fund Revenue
Percent of Budget



81.1%
17.3%
1.6%

■ Working State Appropriations ■ Student Tuition □ Other General Fund Revenue

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