



Financials of Facilities in Higher Education

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AIA Information

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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.



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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:

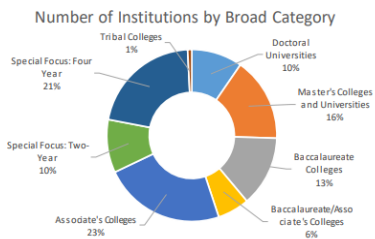
BUDGET & FINANCE

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Higher Education General Facts & Information

Carnegie Classification of Institutions of Higher Education



<http://carnegieclassifications.iu.edu/downloads/CCH2015-FactFigure.pdf>

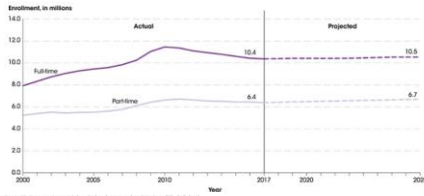
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Higher Education General Facts & Information

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 or higher degrees and participate in Title IV federal financial aid programs. Projections are based 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 2018 through Spring 2016, 14th Enrollment Comparison, and Enrollment in Degree-Granting Institutions Projection Model, 2000 through 2028. See <https://nces.ed.gov/ipeds/data/ipedsdatasys/2018040101.htm>

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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
	Generation Z	Born after 1996	Wifi, high bandwidth, cellular service, social media, constant connectivity

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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

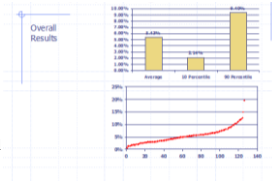
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Higher Education General Facts & Information

• 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



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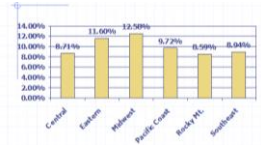
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Higher Education General Facts & Information

• Facilities Condition Index

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

Comparative indicator of the relative condition of facilities



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Higher Education General Facts & Information

- \$36.8 Billion Spent on Facilities Operations.
- \$27 Billion was spent on New Construction, Renovations and Additions to existing buildings.
- Facilities backlog of \$112 Billion

Gordian, State of Facilities in Higher Education 2022

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Higher Education General Facts & Information

- \$1.1 Billion Current Replacement Value (CRV) per institution
- Average age of buildings 33.3 years per institution

Source: 2008-14 Facilities Performance Indicators Report –
 FPI Trend Analysis of Key Performance Indicators

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

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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.

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Higher Education Finance Pyramid

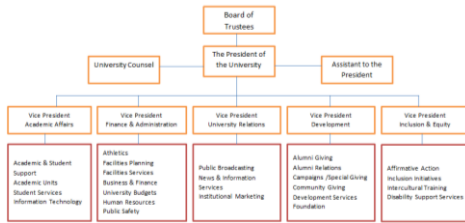


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University Administrative Organization

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
- You



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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

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Scope of Budgeting Activities

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

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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.”

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Headline – Higher Education

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



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Higher Education Finance Trends

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

Yogi Berra

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Sources of Funding for Higher Education

According to the National Center for Education there are Four Primary Sources of Funding

- Tuition and Fees
- Federal Funds
- State Funds
- Sales and Services

Other Minor Sources Would Include:
Research Funds, Indirect Cost Recovery, Grants, Property Rental, Rebates

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Higher Education Revenue Sources

TYPE OF REVENUE	PUBLIC INSTITUTIONS (ALL LEVELS)	PRIVATE (NON-PROFIT) INSTITUTIONS	PRIVATE (FOR-PROFIT) INSTITUTIONS
Tuition & Fees from Students	20.28%	30.49%	91.45%
Federal Appropriations, Grants & Contracts	12.76%	10.41%	3.20%
State Appropriations, Grants & Contracts	20.93%	0.65%	0.0025
Local & Private Appropriations, Gifts, Grants & Contracts	9.07%	11.93%	0.08%
Sales & Services of Auxiliary Enterprises	7.27%	7.42%	0.0157
Sales & Services of Hospitals	12.82%	11.02%	N/A
Independent Operations	0.42%	N/A	N/A
Investment Return (Gain or Loss)	3.85%	20.13%	0.26%
Educational Activities	N/A	3.10%	1.29%
Other Operating Revenues	12.58%	4.84%	1.80%

N/A - Statistics not available for this institution type

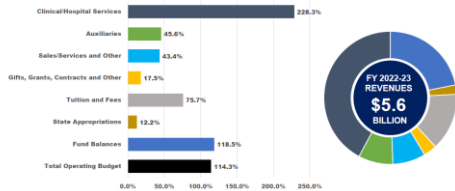
Source: U.S. Department of Education, Digest of Education Statistics 2018
Tables: 333.10, 333.50, 333.55

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University of Kentucky Operating Revenues

OPERATING REVENUES PERCENT CHANGE: FY 2011-12 TO FY 2021-22



<http://www.uky.edu/ubs/sites/www.uky.edu/files/fy2022-23%20Operating%20Budget%20for%20807%20Meeting%206162022.pdf>

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Major Expenses in Higher Education

Higher Education is very labor intensive

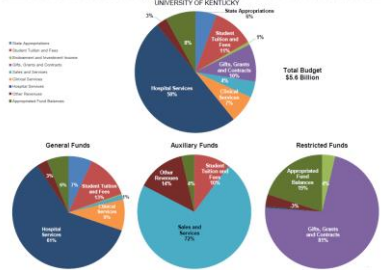
- Salaries & Benefits
- Utilities
- Travel
- Scholarships & Fellowships
- Communication Costs (IT)
- Debt Service on Capital Assets
- Supplies
- Contractual Services

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University of Kentucky Operating Budget

Current Funds Revenues, Appropriated Fund Balances and Net Transfers



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Expenditures by Classification

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

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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%	26.71%
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

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Typical Facilities Budget

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

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Alternative Financing

(Typically for Capital Construction)

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

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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

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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 of Kentucky Budget Summary

OPERATING BUDGET BY FUND GROUP

UK's annual operating budget is comprised of three fund groups: general fund, auxiliary and endowment. Each fund group is budgeted so that it is balanced — revenues plus transfers equal expenses.

GENERAL FUNDS

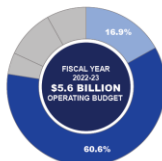
General Funds are unrestricted resources that comprise the majority of the university's operating budget. The activities included with General Funds consist of the core instructional, service, student support and administrative functions of the university. General Funds are further classified as: Undesignated General Funds or Designated General Funds.

Undesignated General Funds
16.9%

\$947.0 million
\$426.0 million
\$521.0 million
\$10.0 million
\$15.0 million

HOW IT IS USED

- Instruction
- Public Service
- Athletics
- Academic Support
- Institutional Student Aid



Designated General Funds
60.6%

\$3,403.3 million
\$1,822.4 million
\$1,580.9 million
\$11.0 million
\$98.9 million

HOW IT IS USED

- Education
- Public Service
- Student Services
- Academic Support

FIGURE 2

UNDESIGNATED GENERAL FUNDS

Undesignated General Funds (UDGF) include state appropriations, student fees and other income. These revenues are received and managed centrally, with the associated expenditures allocated to the colleges and departments as they support educational, research and service. The budget decisions related to the university's educational and general activities are based on the availability of UDGF. For FY 2022-23, UDGF comprise 16.9 percent of the university's total budget.

DESIGNATED GENERAL FUNDS

Designated General Funds (DGF) are received directly by the colleges, departments and programs that provide or own the services. They use the funds in accordance with their mission and to manage self-supporting activities. For FY 2022-23, DGF comprise 60.6 percent of the university's total budget.

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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 produces an annual [Accountability Report](#), statistics are also available on their website.

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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.
 - Balancing Act
 - Triage - A process in which things are ranked in terms of importance or priority



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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?

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Higher Education Finance – Your Knowledge...

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

Custodial Costs per GSF	?
GSF per Custodian	?
Grounds Cost per Acre	?
Maintenance Cost per GSF	?
GSF per Maintenance FTE	?
Energy cost per GSF	?

Source: 2012-13 Facilities Performance Indicators Report –
FPI Trend Analysis of Key Performance Indicators 2008 - 2013 46

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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

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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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