

**Report from the  
Financial and Administrative Policy Committee  
to the WPI Faculty concerning:**

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**Analysis of WPI's  
Administrative and Instructional  
Spending:  
What the Integrated Postsecondary  
Education Data System (IPEDS) Tells Us**

**FAP Members:**

Prof. Nancy Burnham – PH

Prof. Tanja Dominko - BBT

Prof. Tahar El-Korchi - CEE

Prof. Fabienne Miller - FBS

Jeff Solomon - Executive VP and CFO

Kris Sullivan - Associate VP for Academic Affairs

# Introduction and Rationale

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**A NEW GUIDE FROM THE INSTITUTE FOR EFFECTIVE GOVERNANCE**

## **HOW MUCH IS TOO MUCH?**

**Controlling Administrative Costs Through Effective Oversight**

ACTA releases new study on growing administrative expenses in higher education, urging trustees to cut and contain costs.

**READ THE FULL REPORT >>**

Analysis of WPI's institutional administrative vs. instructional spending following The Guide to Controlling Administrative Costs through Effective Oversight that was issued in July 2017 by the American Council of Trustees and Alumni's (ACTA) Institute for Effective Governance.

<https://www.goacta.org/publications/controlling-administrative-costs>

# Introduction and Rationale

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“The relationship between administrative and instructional spending is central to institutional efficiency and reflective of institutional priorities.

- Institutions risk signaling misplaced priorities, which can have adverse effects on their ability to grow in areas pertinent to their academic missions, including attracting and retaining prominent faculty members.
- It raises issues of appearance, public image, and institutional morale.”

# Methodology

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## Data

U.S. Department of Education's National Center for Education Statistics (NCES), through its **Integrated Postsecondary Education Data System (IPEDS)** <https://nces.ed.gov/ipeds/Home/UseTheData>

## Peers

<https://www.wpi.edu/offices/institutional-research/benchmarking>

Rensselaer Polytechnic Institute  
Rochester Institute of Technology  
Illinois Institute of Technology  
Case Western Reserve University  
Stevens Institute of Technology  
Clarkson University  
Drexel University  
Carnegie Mellon University  
Tufts University  
California Institute of Technology  
Massachusetts Institute of Technology

## Period

Fiscal Year 2009-2010 through 2015-2016

# Methodology (using expenses reported to IPEDS):

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## Instructional spending:

### “Instruction”

(less the instruction subcategories of operations and maintenance of plant, depreciation, and interest)

+

### “Academic support”

(less the academic support categories of operation and maintenance of plant, depreciation, and interest)

## Administrative spending:

### “Institutional support”

(less the institutional support subcategories of operation and maintenance of plant, depreciation, and interest)

$$\text{AI Ratio} = \text{Administrative spending} / \text{Instructional spending}$$

# Guidelines

## How Much is Too Much?

### Controlling Administrative Costs through Effective Oversight

A guide for higher education trustees

American Council of Trustees and Alumni

Institute for Effective Governance

July 2017

Four-Year **Private, Not-for-Profit** Undergraduate Institutions  
Median Administrative/Instructional Cost Ratio, FY 2015

Carnegie Classification	ENROLLMENT		
	Small	Medium	Large
Baccalaureate Colleges: Arts & Sciences	0.64	0.45	0.40
Master's Colleges & Universities: Small Programs	0.63	0.53	0.41
Master's Colleges & Universities: Medium Programs	0.50	0.46	0.46
Master's Colleges & Universities: Larger Programs	0.41	0.41	0.39
Doctoral Universities: Moderate Research Activity	0.40	0.39	0.33
Doctoral Universities: Higher Research Activity	0.28	0.32	0.24
Doctoral Universities: Highest Research Activity	0.27	0.21	0.27

## AI Ratios for WPI and its Peers in 2014-2015 (lowest to highest)

Institution Name	UG Pop. 14-15	Size	Group Median	Ratio 14-15
Rochester Institute of Technology	13,460	L	0.33	0.15
Clarkson University	3,247	M	0.39	0.26
Carnegie Mellon University	5,888	S	0.27	0.27
Case Western Reserve University	4,911	S	0.27	0.27
Stevens Institute of Technology	2,892	S	0.28	0.28
Drexel University	16,896	L	0.24	0.28
Tufts University	5,177	S	0.27	0.29
Rensselaer Polytechnic Institute	5,618	M	0.32	0.32
Worcester Polytechnic Institute	4,235	S	0.28	0.33
Illinois Institute of Technology	3,099	S	0.28	0.42
California Institute of Technology	983	S	0.27	0.36
Massachusetts Institute of Technology	4,512	S	0.27	0.38

UG – number of undergraduates; Size – defined by number of undergraduate students and research classification; Group Median – ACTA calculated median of Administrative vs. Instructional spending ratios of the entire group of universities within the same research classification, control and size; 1415 – Academic year 2014/2015; Green - the institution with median ratio in the peer group.

# Changes in AI ratios for WPI and its Peers between Academic Year 2009-2010 and 2014-2015

Institution Name	R		Size	Group Median	Ratio 14-15	Ratio 9-10	5 year Change 9-10 to 14-15	% Change 9-10 to 14-15
Rensselaer Polytechnic Institute	R2	pr	M	0.32	0.32	0.44	-0.12	-27%
Rochester Institute of Technology	R3	pr	L	0.33	0.15	0.20	-0.05	-24%
Illinois Institute of Technology	R2	pr	S	0.28	0.42	0.45	-0.03	-6%
Case Western Reserve University	R1	pr	S	0.27	0.27	0.28	-0.01	-3%
Stevens Institute of Technology	R2	pr	S	0.28	0.28	0.27	0.01	2%
Clarkson University	R3	pr	M	0.39	0.26	0.25	0.01	4%
Drexel University	R2	pr	L	0.24	0.28	0.24	0.05	19%
Carnegie Mellon University	R1	pr	S	0.27	0.27	0.22	0.05	20%
Tufts University	R1	pr	S	0.27	0.29	0.23	0.06	28%
Worcester Polytechnic Institute	R2	pr	S	0.28	0.33	0.19	0.14	74%
California Institute of Technology	R1	pr	S	0.27	0.36	0.36	0.01	2%
Massachusetts Institute of Technology	R1	pr	S	0.27	0.38	0.33	0.05	15%

R – Research Classification; pr = private; UG – number of undergraduates; Size – defined by number of undergraduate students and research classification; Group Median – ACTA calculated median of Administrative vs. Instructional spending ratios of the entire group of universities within the same research classification, control and size; 1415 – Academic year 2014/2015; Green - the institution with median ratio in the peer group.

ACTA cautions that based on the broad definition of instructional cost and narrow definition of administrative cost used in this guide, the ratios reported likely underestimate the amount institutions spend on administration.



# Distance from the Median AI ratio in 2014-2015 and What is its Budget Impact?

Institution Name	Group Median	Ratio (14-15)	Distance from Group median (14-15)
Rochester Institute of Technology	0.33	0.15	-0.18
Clarkson University	0.39	0.26	-0.13
Carnegie Mellon University	0.27	0.27	0.00
Case Western Reserve University	0.27	0.27	0.00
Stevens Institute of Technology	0.28	0.28	0.00
Rensselaer Polytechnic Institute	0.32	0.32	0.00
Tufts University	0.27	0.29	0.02
Drexel University	0.24	0.28	0.04
Worcester Polytechnic Institute	0.28	0.33	0.05
Illinois Institute of Technology	0.28	0.42	0.14
California Institute of Technology	0.27	0.36	0.09
Massachusetts Institute of Technology	0.27	0.38	0.11

 **\$3.8M**

# AI Ratios for WPI and its Peers in 2015-2016 (lowest to highest)

Institution Name	A Instruction-Total amount (F15-16)	B Academic support-Total amount (F15-16)	C Institutional support-Total amount (F15-16)	AI Ratio = C/(A+B) (F15-16)
Rochester Institute of Technology	\$ 257,188,000	\$ 56,118,000	\$ 50,373,000	0.16
Carnegie Mellon University	\$ 401,775,222	\$ 128,881,442	\$ 117,747,687	0.22
Stevens Institute of Technology	\$ 78,194,000	\$ 29,596,000	\$ 25,727,000	0.24
Tufts University	\$ 253,254,075	\$ 213,577,349	\$ 116,316,216	0.25
Clarkson University	\$ 57,979,595	\$ 12,358,622	\$ 18,468,394	0.26
Drexel University	\$ 362,951,025	\$ 173,304,398	\$ 150,884,103	0.28
Rensselaer Polytechnic Institute	\$ 131,705,000	\$ 24,241,000	\$ 46,064,000	0.30
Worcester Polytechnic Institute	\$ 106,640,000	\$ 16,011,000	\$ 38,820,000	0.32
Case Western Reserve University	\$ 311,880,106	\$ 21,875,899	\$ 110,751,144	0.33
Illinois Institute of Technology	\$ 86,898,000	\$ 19,447,000	\$ 57,225,000	0.54
California Institute of Technology	\$ 220,440,000	\$ 48,434,000	\$ 82,168,000	0.31
Massachusetts Institute of Technology	\$ 805,883,000	\$ 352,224,000	\$ 530,758,000	0.46

## Summary

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- WPI AI ratio has increased 74% over the past 6 years – the **highest** increase among peers
- WPI AI ratio was the **second highest** among peers in 2014-15
- WPI was the **second highest** in its AI ratio departure from the group median in 2014-15
- Based on actual reported expenditures, this departure was equivalent to **\$3.8M dollars** in 2014-15

**01 – Instruction** – Enter the instruction expenses of the colleges, schools, departments, and other instructional divisions of the institution and expenses for departmental research and public service that are not separately budgeted. The instruction category includes general academic instruction, occupational and vocational instruction, special session instruction, community education, preparatory and adult basic education, and remedial and tutorial instruction conducted by the teaching faculty for the institution’s students. Include expenses for both credit and non-credit activities. Exclude expenses for academic administration if the primary function is administration (e.g., academic deans). Such expenses should be entered on line 04. (FARM para. 703.4)

**02 – Research** – Enter the expenses for activities specifically organized to produce research outcomes and either commissioned by an agency external to the institution or separately budgeted by an organizational unit within the institution. The category includes institutes and research centers, and individual and project research. Do not report nonresearch sponsored programs (e.g., training programs) on this line. Training programs generally are reported on line 01 (Instruction). (FARM para. 703.5)

**03 – Public service** – Enter the expenses specifically for public service and for activities established primarily to provide noninstructional services beneficial to groups external to the institution. Examples are seminars and projects provided to the particular sectors of the community. Include expenses for community services, cooperative extension services, and public broadcasting services. (FARM para. 703.6)

**04 – Academic support** – Enter the expenses for support services that are an integral part of the institution’s primary mission of instruction, research, or public service and that are not charged directly to these primary programs. Include expenses for libraries, museums, galleries, audio/visual services, academic development, academic computing support, course and curriculum development, and academic administration. Include expenses for medical, veterinary and dental clinics if their primary purpose is to support the institutional program, that is, they are not part of a hospital. (FARM para. 703.7)

**05 – Student services** – Enter the expenses for admissions, registrar activities and activities whose primary purpose is to contribute to students emotional and physical well-being and to their intellectual, cultural and social development outside the context of the formal instructional program. Examples are career guidance, counseling, financial aid administration, student records, athletics, and student health services, except when operated as a self-supporting auxiliary enterprise. (FARM para. 703.8)

**06 – Institutional support** – Enter the expenses for the day-to-day operational support of the institution. Include expenses for general administrative services, executive direction and planning, legal and fiscal operations, administrative computing support, and public relations/development. (FARM para. 703.9)

**07 – Auxiliary enterprises** – Enter expenses of essentially self-supporting operations of the institution that exist to furnish a service to students, faculty, or staff, and that charge a fee that is directly related to, although not necessarily equal to, the cost of the service. Examples are residence halls, food services, student health services, intercollegiate athletics (only if essentially self-supporting), college unions, college stores, faculty and staff parking, and faculty housing. (FARM para. 703.11)

**08 – Net grant aid to students (net of tuition and fee allowances)** - Enter on this line ONLY scholarships and fellowships recognized as expenses in your GPFS. Do not include Federal Work Study expenses on this line. Work study expenses should be reported within the function where the student worked. Whereas in the past, most student awards were recorded as expenses under this classification, most student awards are now reported as either scholarship allowances or agency transactions. Student awards, made from contributed funds or grant funds, that are under the control of the institution (the institution decides who gets the award) result in allowances that reduce tuition or auxiliary enterprise revenue. Student awards, made from grant funds, that are made to students identified by the grantor are considered agency transactions and do not result in either revenues or expenses. Scholarships and fellowships in the form of allowances applied to tuition and fees should be reported in Part C, line 09, and not included in Part E, line 08. Scholarships and fellowships in the form of allowances applied to auxiliary services should be reported in Part C, line 9, and not included in Part E, line 08. (FARM para. 703.10)