

CALS Budget & Operating Performance Guide

CALS Business Services & Data Solutions Team

Final FY 2015 (Revised October 30)

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Introduction

The University of Arizona (UA) operates using Responsibility Centered Management (RCM), and the College of Agriculture & Life Sciences (CALs) strives to balance the metrics of RCM with our mission and vision. The CALs RCM Tool is utilized to assist in measuring the Return on Investment (ROI) for each department within CALs in the context of RCM.

The goal for this document is to provide transparency and understanding of the Tool for departments and units to enable and empower meaningful discussion. This document will be continually revised to better attain this goal and provide current figures. The Tool is *not* for measuring or evaluating faculty or program performance. The figures in this document are *based* on RCM calculations but will not match 1:1 with the actual RCM Model.

Should questions or concerns arise, be sure to direct them to Jeff Ratje, the Assistant Dean for Finance & Administration, and the CALs Data Solutions Team. We welcome your feedback.

Focus on Our Shared Mission

Mission is more important than money. RCM is simply a tool to help achieve the goals for our mission. Unit heads will better lead by focusing their efforts on growing our mission.

Teach more. Perform more sponsored research. Engage in more Extension activities. Reduce costs. Deliver on goals, and strive to achieve for our shared mission.

Instruction Performance

The Instruction component of the Tool is comprised of metrics on both investments and returns. *Returns* are defined as revenues to the College. *Investments* are defined as budgets allocated to departments from CALS and costs to CALS due to activities from departments.

Instruction returns are based upon Majors and Student Credit Hours (SCH). Calculating a dollar amount per major or SCH provides an idea of how much money is being generated to the University and tied to colleges and departments. The actual amount of money allocated to the College is less than what is reflected in this document due to taxes and other factors.

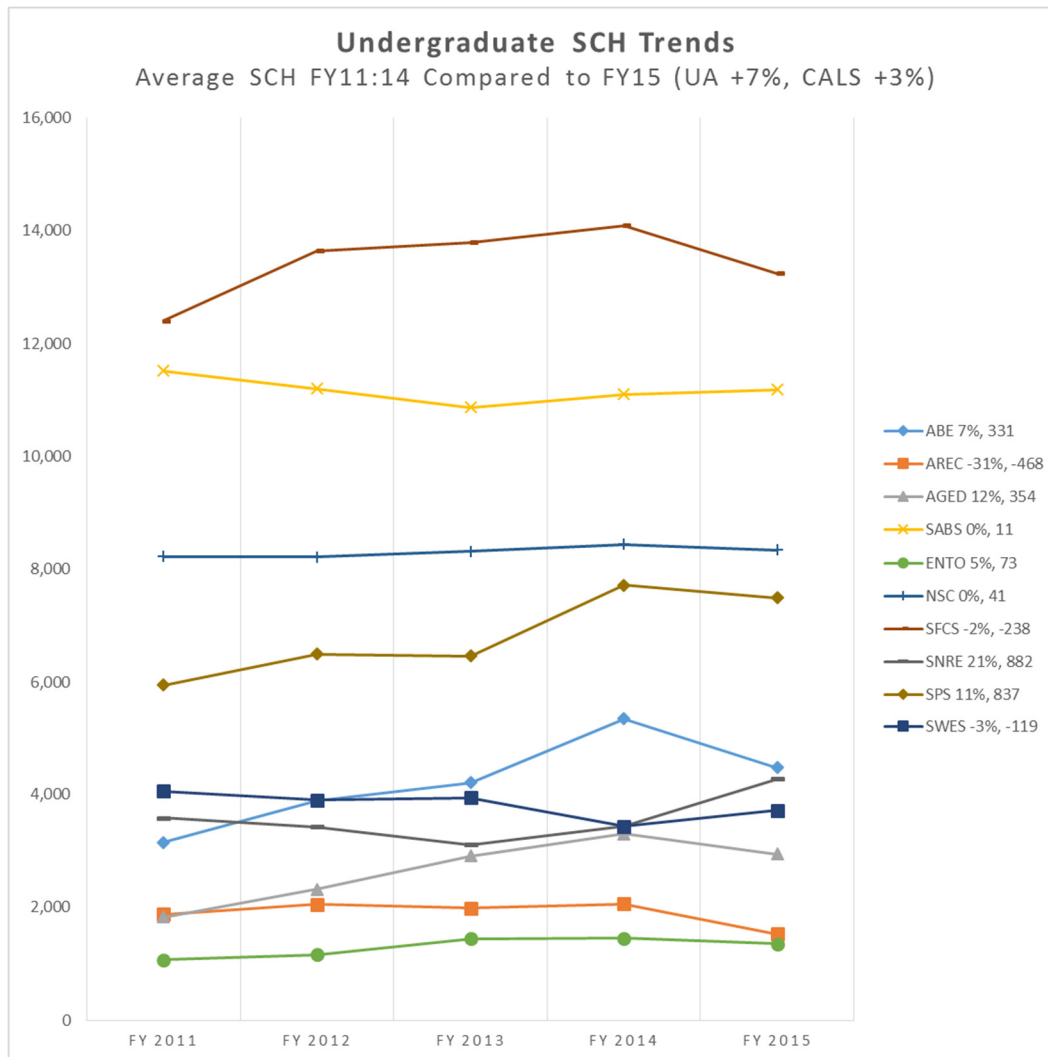
Departments in CALS should focus on primary metrics and proportional performance, not on the dollar amounts. Dollars are used solely to merge financial and academic data. The primary metrics for the returns on the Instruction side in RCM are: 1) the number of SCH, 2) the number of majors, and subsequently 3) the number of students.

Performance with Student Credit Hours (SCH)

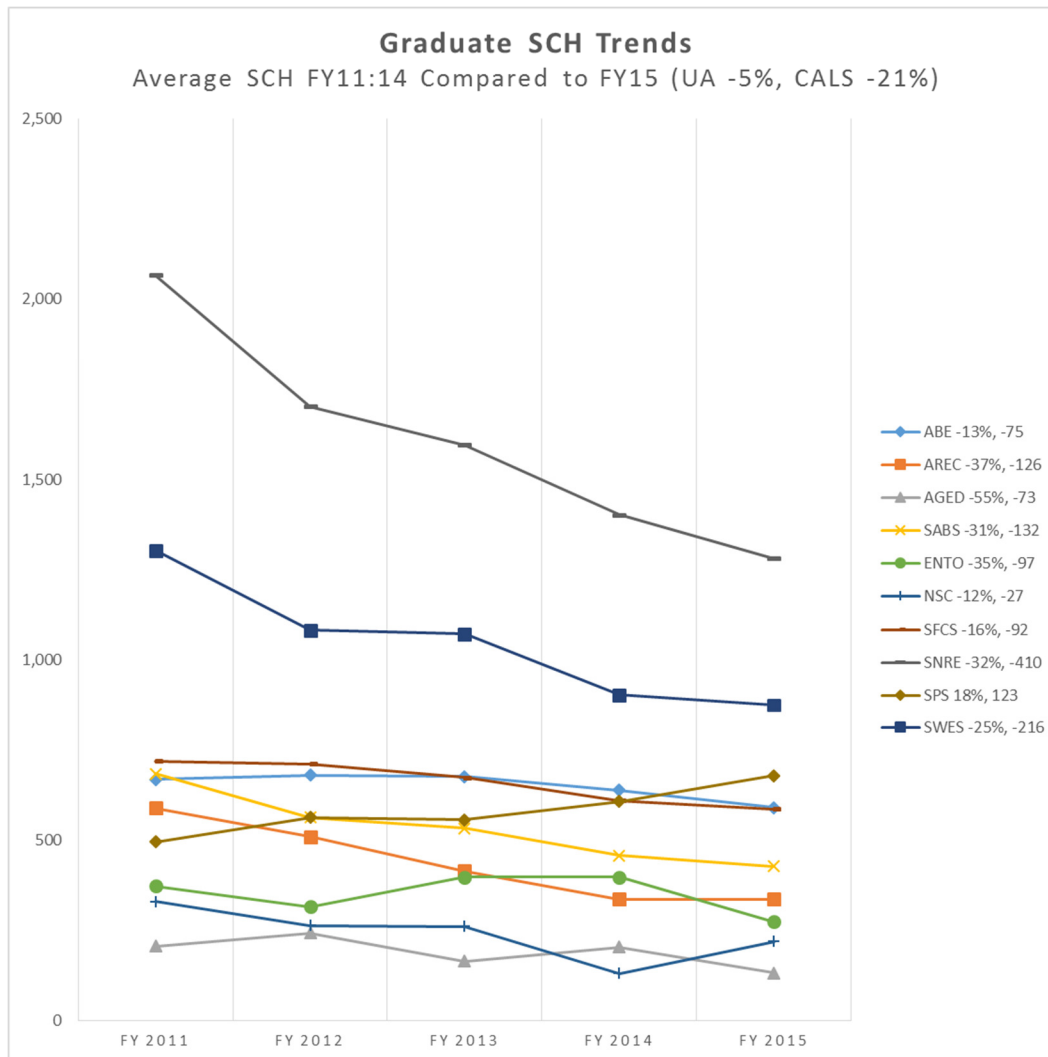
SCH, at the undergraduate level, is tied back to departments by the owner of the position of the instructor teaching a course. Arrangements for exceptions can be made but need significant reasons to do so and must be formally discussed with appropriate College Deans and Unit Heads.

SCH, at the graduate level, is calculated per student per term per major, based on Net Tuition and Units Taken. For the sake of simplicity in this presentation, we are generalizing this to \$/SCH, where the number of Graduate SCH is calculated the same as Undergraduate SCH. This results in figures for Graduate revenue that differ from the actual RCM Model but not *proportionally* at the department level (viz., the ratios between departments remain the same).

Graduate Interdisciplinary Programs (GIDPs) are rolled into their respective departments for display purposes but are utilizing the appropriate calculation which is solely based on SCH.



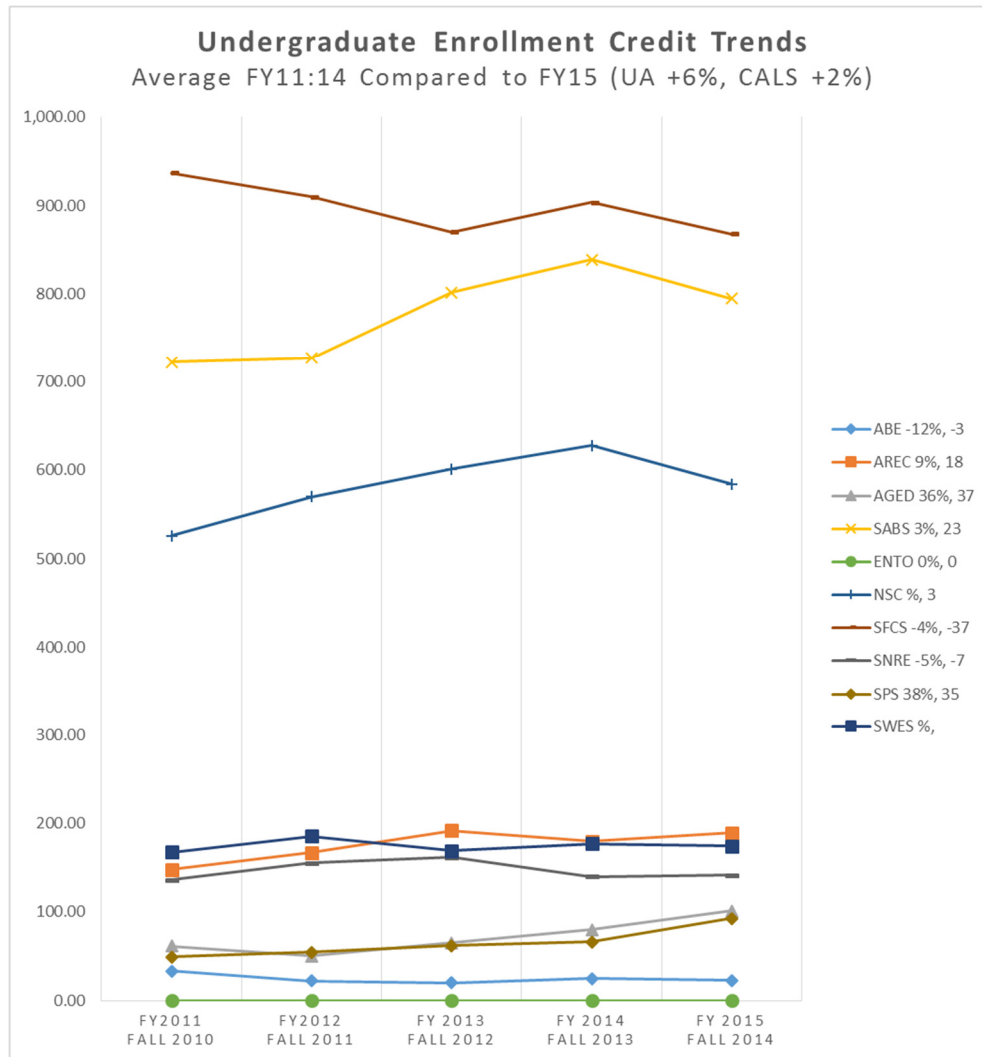
Department	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	Change, FY 2015 to 4-Yr Average	Change, FY 2015 to 4-Yr Average
Agric & Biosystems Engr	3,146	3,880	4,205	5,336	4,473	7%	331
Agric & Resource Econ	1,875	2,048	1,988	2,056	1,524	-31%	(468)
Agricultural Education	1,830	2,317	2,903	3,294	2,940	12%	354
Animal&Biomedical Sciences	11,518	11,204	10,868	11,100	11,183	0%	11
Entomology	1,070	1,165	1,442	1,449	1,354	5%	73
Nutritional Sciences	8,226	8,219	8,319	8,445	8,343	0%	41
Sch of Family & Consum Sci	12,407	13,647	13,798	14,092	13,248	-2%	(238)
Sch of Natural Resources	3,578	3,425	3,107	3,431	4,267	21%	882
School of Plant Sciences	5,950	6,499	6,466	7,718	7,495	11%	837
Soil Water and Enviro Sci	4,057	3,898	3,933	3,431	3,711	-3%	(119)
CALS Total	53,657	56,302	57,029	60,351	58,538	3%	1703
CALS Average	5,366	5,630	5,703	6,035	5,854	2%	170
CALS Median	3,578	3,880	3,933	3,431	4,267	5%	73



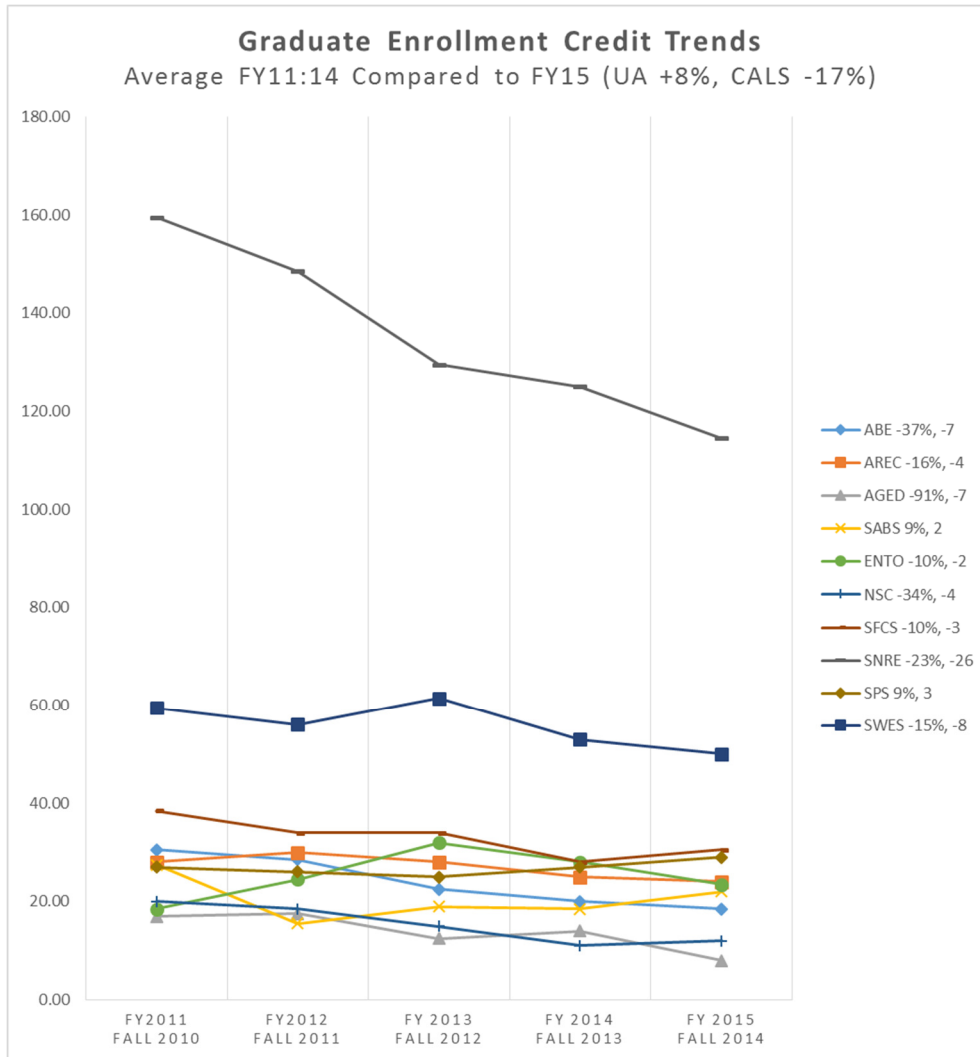
Department	FY2011	FY2012	FY2013	FY2014	FY2015	Change, FY 2015 to 4-Yr Average	Change, FY 2015 to 4-Yr Average
Agric & Biosystems Engr	667	679	675	638	590	-13%	(75)
Agric & Resource Econ	588	509	414	336	336	-37%	(126)
Agricultural Education	206	243	165	204	132	-55%	(73)
Animal&Biomedical Sciences	683	562	533	458	427	-31%	(132)
Entomology	373	316	397	398	274	-35%	(97)
Nutritional Sciences	330	263	261	131	219	-12%	(27)
Sch of Family & Consum Sci	718	711	673	610	586	-16%	(92)
Sch of Natural Resources	2,066	1,702	1,596	1,403	1,282	-32%	(410)
School of Plant Sciences	496	563	557	606	678	18%	123
Soil Water and Enviro Sci	1,304	1,083	1,072	904	875	-25%	(216)
CALS Total	7,431	6,632	6,343	5,688	5,399	-21%	(1124)
CALS Average	743	663	634	569	540	-24%	(112)
CALS Median	588	562	533	458	427	-25%	(92)
Grand Total	61088	62934	63372	66039	63937	1%	579

Performance with Enrollment and Majors

The figures used for enrollment trends are based upon the count of students with splits as of the Census date. Dual majors are counted as they are: two majors. Split programs are equally divided.



Department	FY2011 Fall 2010	FY2012 Fall 2011	FY2013 Fall 2012	FY2014 Fall 2013	FY2015 Fall 2014	Percent Change, FY 2015 to 4-Yr Average	Amount Change, FY 2015 to 4-Yr Average
Agric & Biosystems Engr (split wth Engineering)	33.50	22.00	20.00	25.00	22.50	-12%	(3)
Agric & Resource Econ	148.00	167.00	192.00	180.00	189.50	9%	18
Agricultural Education	61.50	50.50	65.00	80.00	101.00	36%	37
Animal&Biomedical Sciences	722.00	726.83	801.50	838.83	795.00	3%	23
Entomology	0.00	0.00	0.00	0.00	0.00	0%	0
Nutritional Sciences	526.00	569.83	601.00	627.83	584.00	0%	3
Sch of Family & Consum Sci	937.00	910.00	870.00	903.50	868.00	-4%	(37)
Sch of Natural Resources	136.50	155.50	161.50	140.00	141.50	-5%	(7)
School of Plant Sciences (split Crop Production)	49.25	54.75	61.75	66.00	93.00	38%	35
Soil Water and Enviro Sci (split Crop Production)	167.75	185.75	169.00	177.00	174.50	0%	(0)
CALS Total	2,780.00	2,815.17	2,952.00	3,023.33	2,963.50	2%	68
CALS Average	278.15	284.22	294.18	303.82	296.90	7%	7
CALS Median	136.50	155.50	161.50	140.00	141.50	0%	0



Department	FY2011 Fall 2010	FY2012 Fall 2011	FY2013 Fall 2012	FY2014 Fall 2013	FY2015 Fall 2014	Percent Change, FY 2015 to 4-Yr Average	Amount Change, FY 2015 to 4-Yr Average
Agric & Biosystems Engr	30.50	28.50	22.50	20.00	18.50	-37%	(7)
Agric & Resource Econ	28.00	30.00	28.00	25.00	24.00	-16%	(4)
Agricultural Education	17.00	17.50	12.50	14.00	8.00	-91%	(7)
Animal & Biomedical Sciences	27.50	15.50	19.00	18.50	22.00	9%	2
Entomology	18.50	24.50	32.00	28.00	23.50	-10%	(2)
Nutritional Sciences	20.00	18.50	15.00	11.00	12.00	-34%	(4)
Sch of Family & Consum Sci	38.50	34.00	34.00	28.00	30.50	-10%	(3)
Sch of Natural Resources	159.50	148.50	129.50	125.00	114.50	-23%	(26)
School of Plant Sciences	27.00	26.00	25.00	27.00	29.00	9%	3
Soil Water and Enviro Sci (split Water Policy with Science)	59.50	56.00	61.50	53.00	50.00	-15%	(8)
CALS Total	425.00	397.00	378.00	349.50	331.50	-17%	(56)
CALS Average	42.60	39.90	37.90	34.95	33.20	-22%	(6)
CALS Median	27.50	26	25	25	23.5	-15%	(4)

Performance with Instruction Investments & Returns

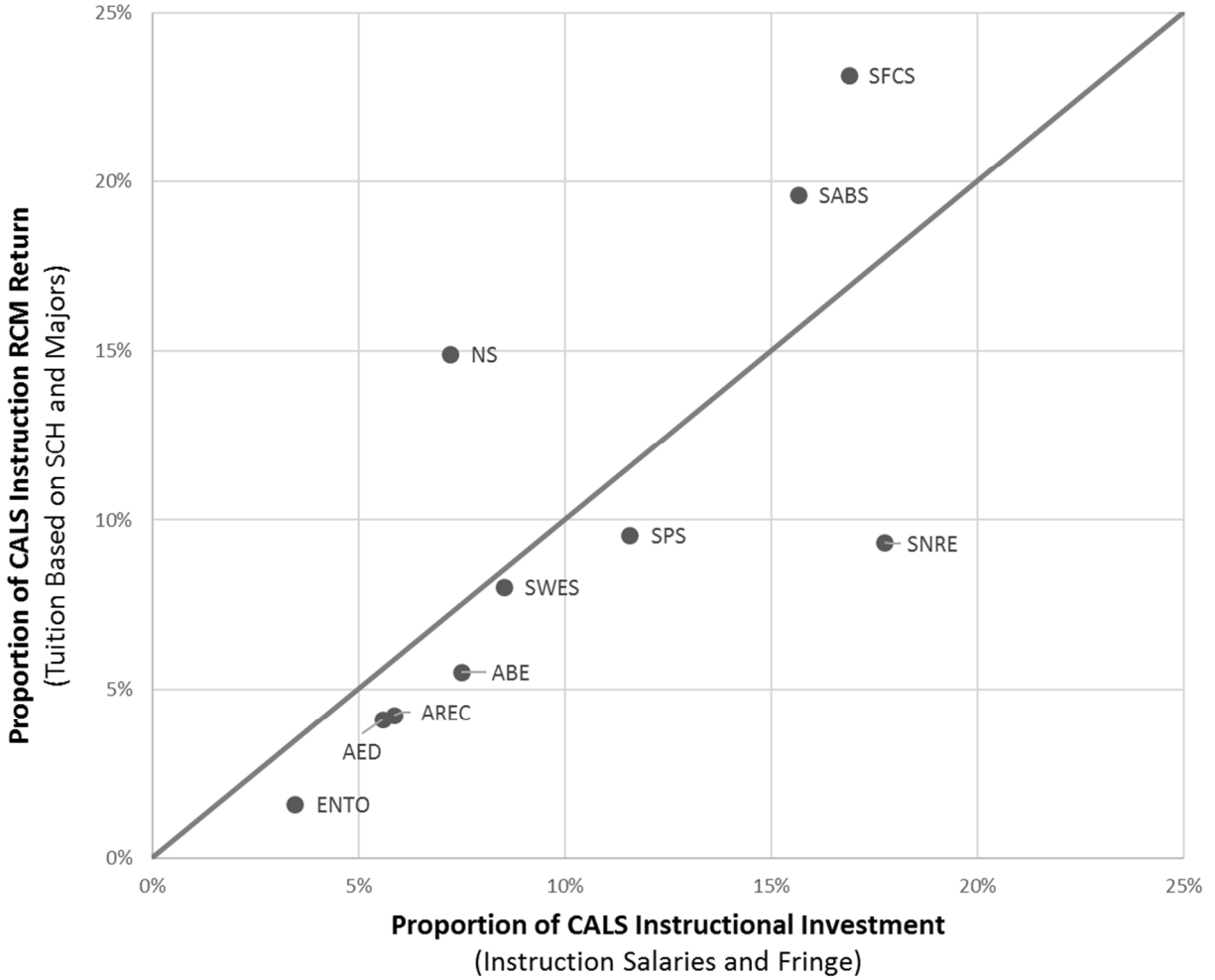
Instruction Returns are based upon revenue generated from SCH and Majors, not the number of students. Further, the returns are derived from a snapshot at the end of the term. This is done to help properly merge academic and financial data.

Academic metrics are still based upon the Census date snapshot and the number of students, as displayed in the previous sections.

Department	SCH	SCH	SCH	Majors	Majors	Majors
	Undergraduate	Graduate	Total	Undergraduate	Graduate	Total
Agric & Biosystems Engr	4,540	516	5,056	46	18	64
Agric & Resource Econ	1,521	297	1,818	371	44	415
Agricultural Education	2,944	129	3,073	174	14	188
Animal&Biomedical Sciences	11,069	426	11,495	1,557	43	1,600
Entomology	1,354	277	1,631	0	0	0
Nutritional Sciences	8,523	267	8,790	1,199	26	1,225
Sch of Family & Consum Sci	13,283	599	13,881	1,755	59	1,814
Sch of Natural Resources	4,382	1,361	5,743	272	165	437
School of Plant Sciences	7,541	674	8,215	118	56	174
Soil Water and Enviro Sci	3,817	864	4,681	398	102	500
CALS Total	58,973	5,410	64,383	5,889	526	6,415
Average	5,897	541	6,438	589	53	641
Median	4,461	471	5,400	322	43	426

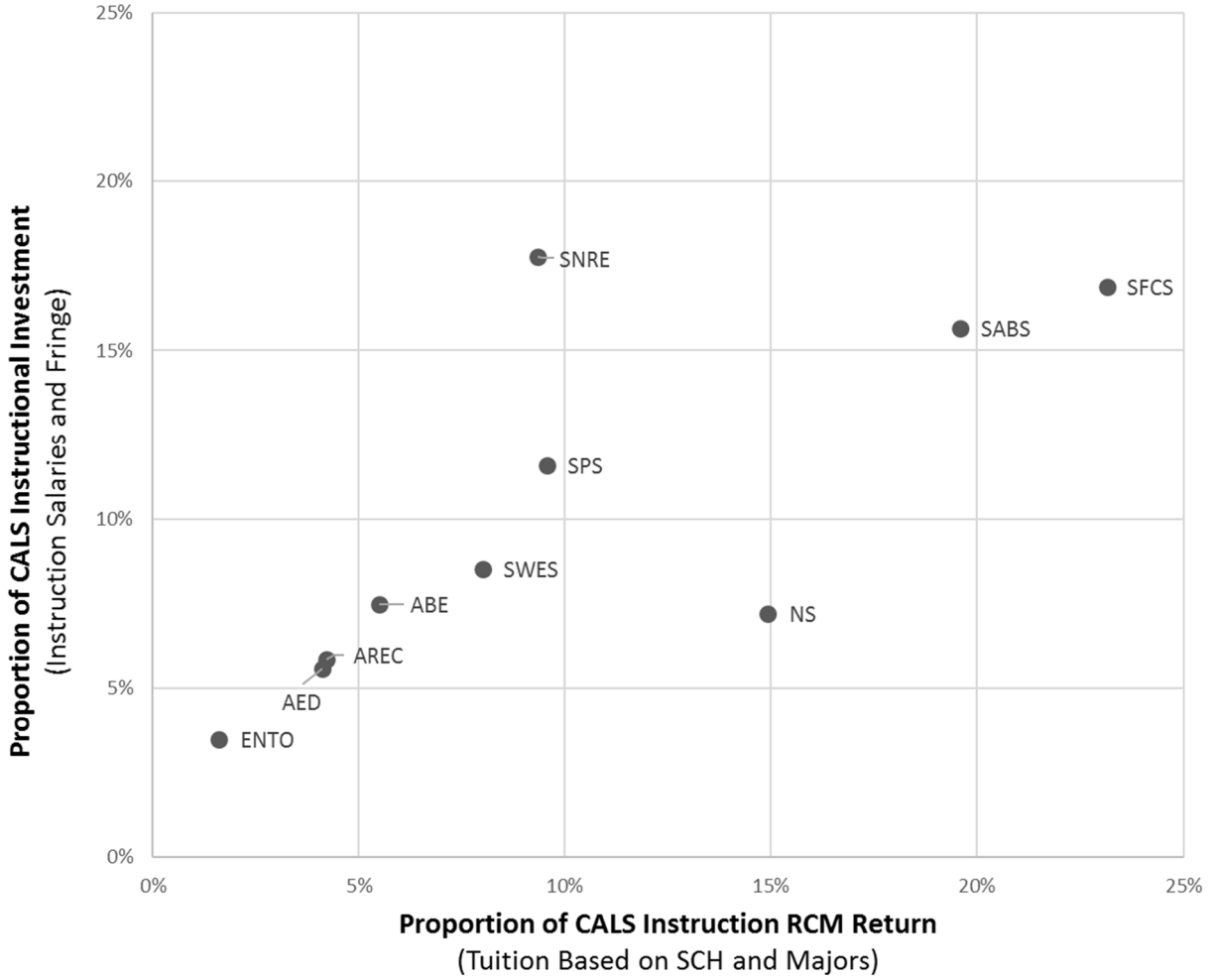
Department	SCH	SCH	SCH	Majors	Majors	Majors
	Undergraduate Revenue	Graduate Revenue	Total Revenue	Undergraduate Revenue	Graduate Revenue	Total Revenue
Agric & Biosystems Engr	\$1,219,088	\$123,698	\$1,342,786	\$59,162	\$70,782	\$129,943
Agric & Resource Econ	\$408,458	\$71,249	\$479,707	\$477,151	\$171,056	\$648,207
Agricultural Education	\$790,599	\$30,909	\$821,508	\$223,785	\$55,053	\$278,838
Animal&Biomedical Sciences	\$2,972,608	\$101,980	\$3,074,589	\$2,002,491	\$169,090	\$2,171,581
Entomology	\$363,555	\$66,442	\$429,997	\$0	\$0	\$0
Nutritional Sciences	\$2,288,803	\$63,941	\$2,352,744	\$1,542,059	\$100,943	\$1,643,002
Sch of Family & Consum Sci	\$3,567,076	\$143,418	\$3,710,494	\$2,257,143	\$230,041	\$2,487,184
Sch of Natural Resources	\$1,176,758	\$326,157	\$1,502,914	\$349,825	\$647,851	\$997,676
School of Plant Sciences	\$2,025,081	\$161,493	\$2,186,575	\$151,119	\$220,210	\$371,330
Soil Water and Enviro Sci	\$1,025,008	\$207,018	\$1,232,026	\$511,233	\$402,080	\$913,314
CALS Total	\$15,837,036	\$1,296,305	\$17,133,341	\$7,573,968	\$2,067,106	\$9,641,075
Average	\$1,583,704	\$129,630	\$1,713,334	\$757,397	\$206,711	\$964,107
Median	\$1,197,923	\$112,839	\$1,422,850	\$413,488	\$170,073	\$780,760

Proportional Return on Investment in CALS Instruction with 1:1 Guide, FY 2015



Department	Return on Instruction Based on Tuition Revenue	Personnel and Fringe Investments	Total Investments	Return on Instruction Less Investments	% of Total Return	% of Total Investments	Proportional Instruction ROI Ratio
Agric & Biosystems Engr	\$1,472,730	\$558,391	\$558,391	\$914,339	05.5%	07.5%	0.73
Agric & Resource Econ	\$1,127,914	\$436,462	\$436,462	\$691,452	04.2%	05.9%	0.72
Agricultural Education	\$1,100,346	\$415,738	\$415,738	\$684,608	04.1%	05.6%	0.74
Animal&Biomedical Sciences	\$5,246,170	\$1,167,272	\$1,167,272	\$4,078,898	19.6%	15.7%	1.25
Entomology	\$429,997	\$258,097	\$258,097	\$171,900	01.6%	03.5%	0.46
Nutritional Sciences	\$3,995,746	\$537,605	\$537,605	\$3,458,142	14.9%	07.2%	2.07
Sch of Family & Consum Sci	\$6,197,678	\$1,258,042	\$1,258,042	\$4,939,635	23.1%	16.9%	1.37
Sch of Natural Resources	\$2,500,590	\$1,322,975	\$1,322,975	\$1,177,615	09.3%	17.8%	0.53
School of Plant Sciences	\$2,557,904	\$862,472	\$862,472	\$1,695,432	09.6%	11.6%	0.83
Soil Water and Enviro Sci	\$2,145,340	\$634,568	\$634,568	\$1,510,772	08.0%	08.5%	0.94
CALS Total	\$26,774,416	\$7,451,622	\$7,451,622	\$19,322,794	100.0%	100.0%	N/A
Average	\$2,677,442	\$745,162	\$745,162	\$1,932,279	10.0%	10.0%	0.96
Median	\$2,322,965	\$596,479	\$596,479	\$1,344,194	08.7%	08.0%	0.78

Proportional Return on Investment in CALS Instruction, FY 2015



Department	Return on Instruction Based on Tuition Revenue	Personnel and Fringe Investments	Total Investments	Return on Instruction Less Investments	% of Total Return	% of Total Investments	Proportional Instruction ROI Ratio
Agric & Biosystems Engr	\$1,472,730	\$558,391	\$558,391	\$914,339	05.5%	07.5%	0.73
Agric & Resource Econ	\$1,127,914	\$436,462	\$436,462	\$691,452	04.2%	05.9%	0.72
Agricultural Education	\$1,100,346	\$415,738	\$415,738	\$684,608	04.1%	05.6%	0.74
Animal&Biomedical Sciences	\$5,246,170	\$1,167,272	\$1,167,272	\$4,078,898	19.6%	15.7%	1.25
Entomology	\$429,997	\$258,097	\$258,097	\$171,900	01.6%	03.5%	0.46
Nutritional Sciences	\$3,995,746	\$537,605	\$537,605	\$3,458,142	14.9%	07.2%	2.07
Sch of Family & Consum Sci	\$6,197,678	\$1,258,042	\$1,258,042	\$4,939,635	23.1%	16.9%	1.37
Sch of Natural Resources	\$2,500,590	\$1,322,975	\$1,322,975	\$1,177,615	09.3%	17.8%	0.53
School of Plant Sciences	\$2,557,904	\$862,472	\$862,472	\$1,695,432	09.6%	11.6%	0.83
Soil Water and Enviro Sci	\$2,145,340	\$634,568	\$634,568	\$1,510,772	08.0%	08.5%	0.94
CALS Total	\$26,774,416	\$7,451,622	\$7,451,622	\$19,322,794	100.0%	100.0%	N/A
Average	\$2,677,442	\$745,162	\$745,162	\$1,932,279	10.0%	10.0%	0.96
Median	\$2,322,965	\$596,479	\$596,479	\$1,344,194	08.7%	08.0%	0.78

Research Performance

The Research component of the Tool is comprised of metrics on both investments and returns. *Returns* are defined as revenues to the College. *Investments* are defined as budgets allocated to departments from CALS and costs to CALS due to activities from departments.

Research returns are based upon Facilities & Administrative Recovery Allocations or Modified Total Direct Costs. The actual amount of money allocated to the College is less than what is reflected in this document due to taxes and other factors.

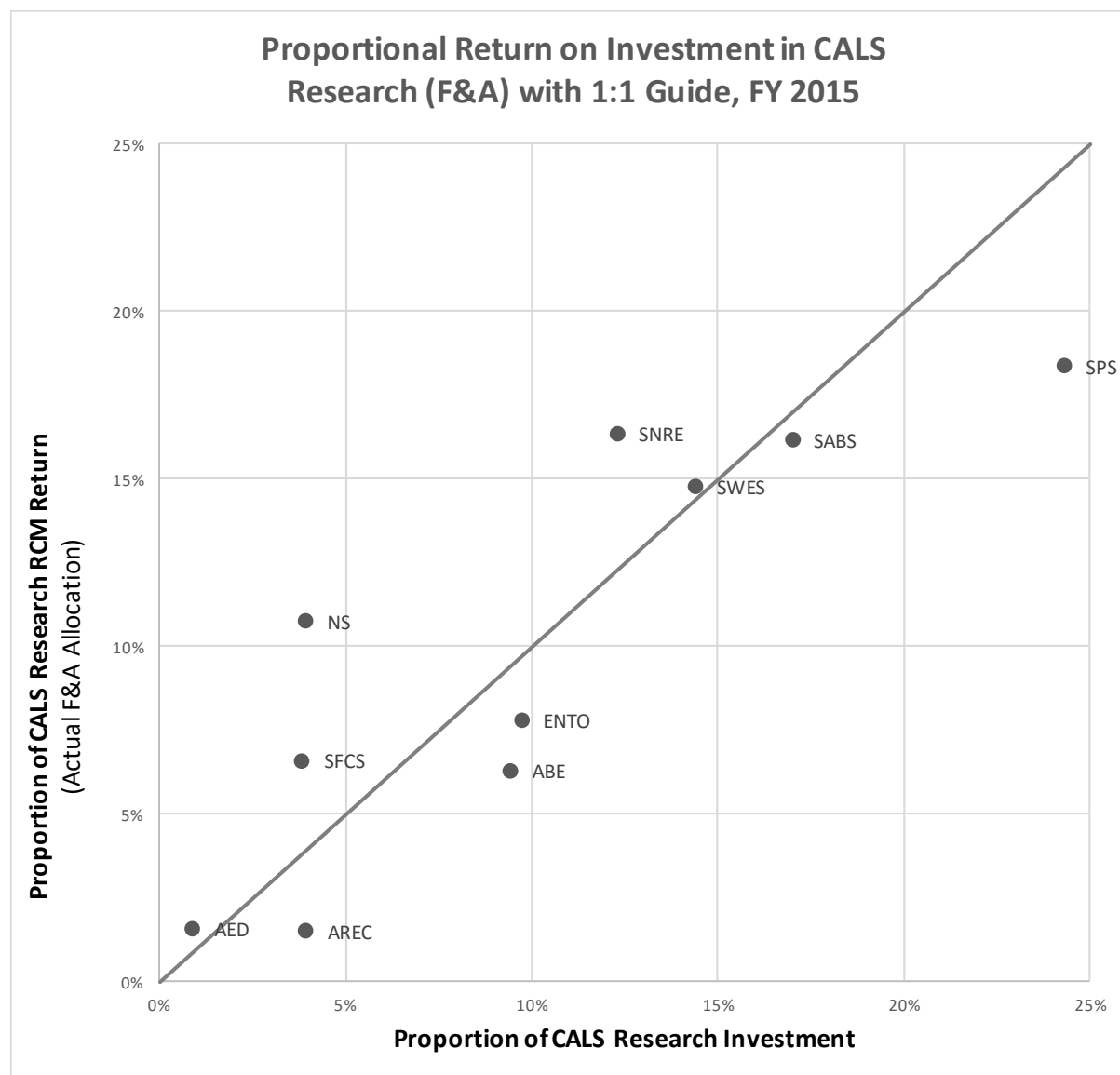
Performance on Research Returns (F&A and MTDC)

Department	Return on Research Based on F&A Return	Return on Research Based on MTDC Return
Agric & Biosystems Engr	\$323,104	\$843,940
Agric & Resource Econ	\$77,052	\$296,925
Agricultural Education	\$80,294	\$869,055
Animal&Biomedical Sciences	\$830,707	\$2,293,021
Entomology	\$400,357	\$1,439,206
Nutritional Sciences	\$552,319	\$1,838,981
Sch of Family & Consum Sci	\$338,634	\$1,630,310
Sch of Natural Resources	\$839,939	\$4,567,124
School of Plant Sciences	\$943,006	\$4,363,135
Soil Water and Enviro Sci	\$758,555	\$3,410,383
Total	\$5,143,967	\$21,552,080
Average	\$514,397	\$2,155,208
Median	\$476,338	\$1,734,645

Performance on Research Investments

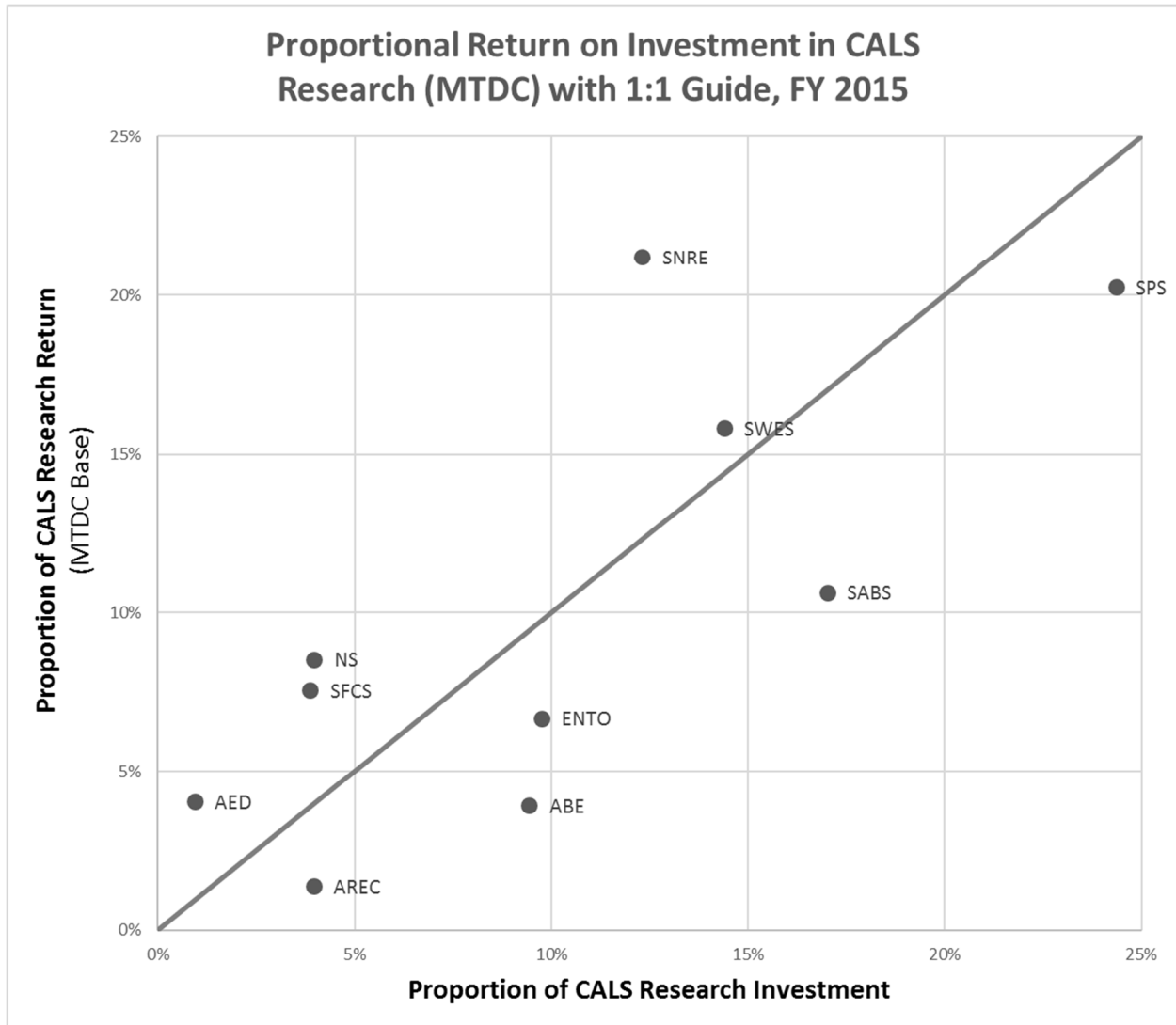
Department	Foregone F&A Costs	AES Budgets Investments	Personnel and Fringe Investments	Cost Sharing Investment	CALS Venture Investments	CALS Subsidy Costs	Total Investments (and Costs)
Agric & Biosystems Engr	\$114,864	\$838,074	\$2,023,595	\$120,365	\$115,573	\$31,269	\$3,243,739
Agric & Resource Econ	\$54,486	\$17,686	\$1,257,985	\$4,852	\$0	\$23,953	\$1,358,962
Agricultural Education	\$165,452	\$0	\$156,320	\$0	\$0	\$0	\$321,772
Animal&Biomedical Sciences	\$383,059	\$1,581,495	\$3,359,972	\$101,080	\$270,000	\$160,628	\$5,856,233
Entomology	\$307,258	\$711,689	\$1,854,401	\$152,202	\$115,573	\$213,312	\$3,354,435
Nutritional Sciences	\$140,350	\$0	\$1,058,460	\$69,895	\$0	\$91,858	\$1,360,564
Sch of Family & Consum Sci	\$461,777	\$0	\$467,873	\$4,250	\$283,550	\$113,340	\$1,330,790
Sch of Natural Resources	\$1,149,620	\$191,481	\$2,641,196	\$211,802	\$0	\$39,627	\$4,233,726
School of Plant Sciences	\$1,185,143	\$1,759,801	\$4,901,529	\$168,240	\$115,573	\$245,743	\$8,376,029
Soil Water and Enviro Sci	\$783,453	\$875,997	\$2,721,239	\$327,075	\$115,573	\$131,525	\$4,954,862
Total	\$4,745,462	\$5,976,223	\$20,442,570	\$1,159,761	\$1,015,843	\$1,051,253	\$34,391,111
Average	\$474,546	\$597,622	\$2,044,257	\$115,976	\$101,584	\$105,125	\$3,439,111
Median	\$345,158	\$451,585	\$1,938,998	\$110,723	\$115,573	\$102,599	\$3,299,087

Performance on Research Investments and F&A Returns



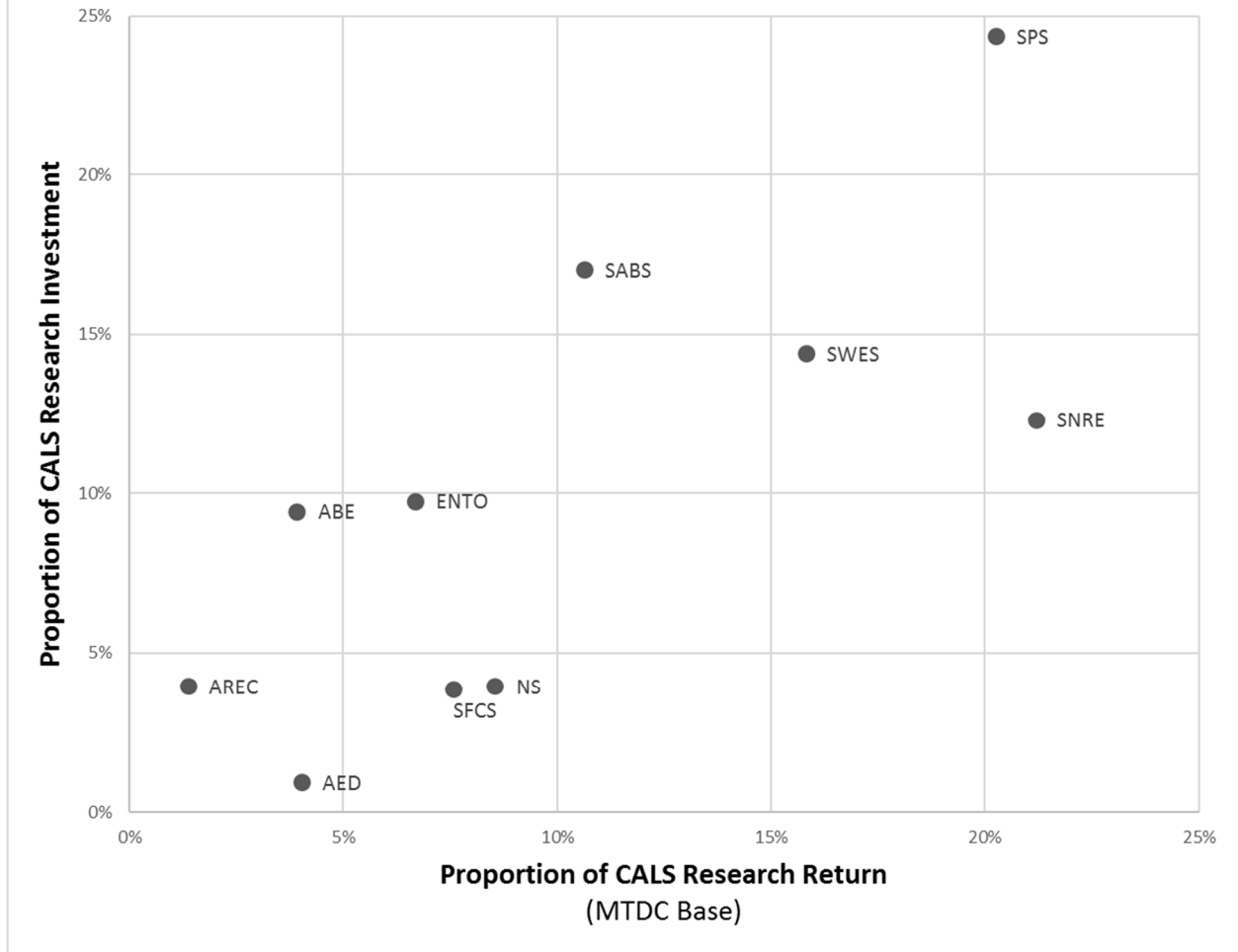
Department	Total Investments (and Costs)	F&A Return Less Investments with AES Splits	% of F&A Return	% of Total Investments	Proportional Research ROI Ratio (F&A Form)
Agric & Biosystems Engr	\$3,243,739	(\$2,920,635)	06.3%	09.4%	0.67
Agric & Resource Econ	\$1,358,962	(\$1,281,910)	01.5%	04.0%	0.38
Agricultural Education	\$321,772	(\$241,477)	01.6%	00.9%	1.67
Animal&Biomedical Sciences	\$5,856,233	(\$5,025,527)	16.1%	17.0%	0.95
Entomology	\$3,354,435	(\$2,954,078)	07.8%	09.8%	0.80
Nutritional Sciences	\$1,360,564	(\$808,244)	10.7%	04.0%	2.71
Sch of Family & Consum Sci	\$1,330,790	(\$992,156)	06.6%	03.9%	1.70
Sch of Natural Resources	\$4,233,726	(\$3,393,787)	16.3%	12.3%	1.33
School of Plant Sciences	\$8,376,029	(\$7,433,023)	18.3%	24.4%	0.75
Soil Water and Enviro Sci	\$4,954,862	(\$4,196,307)	14.7%	14.4%	1.02
Total	\$34,391,111	(\$29,247,145)	100.0%	100.0%	N/A
Average	\$3,439,111	(\$2,924,714)	10.0%	10.0%	1.20
Median	\$3,299,087	(\$2,937,357)	09.3%	09.6%	0.99

Performance on Research Investments and MTDC Returns



Department	Total Investments (and Costs)	MTDC Return Less Investments with AES Splits	% of MTDC Return	% of Total Investments	Proportional Research ROI Ratio (MTDC Form)
Agric & Biosystems Engr	\$3,243,739	(\$2,399,799)	03.9%	09.4%	0.42
Agric & Resource Econ	\$1,358,962	(\$1,062,037)	01.4%	04.0%	0.35
Agricultural Education	\$321,772	\$547,284	04.0%	00.9%	4.31
Animal&Biomedical Sciences	\$5,856,233	(\$3,563,212)	10.6%	17.0%	0.62
Entomology	\$3,354,435	(\$1,915,229)	06.7%	09.8%	0.68
Nutritional Sciences	\$1,360,564	\$478,417	08.5%	04.0%	2.16
Sch of Family & Consum Sci	\$1,330,790	\$299,520	07.6%	03.9%	1.95
Sch of Natural Resources	\$4,233,726	\$333,399	21.2%	12.3%	1.72
School of Plant Sciences	\$8,376,029	(\$4,012,894)	20.2%	24.4%	0.83
Soil Water and Enviro Sci	\$4,954,862	(\$1,544,480)	15.8%	14.4%	1.10
Total	\$34,391,111	(\$12,839,031)	100.0%	100.0%	N/A
Average	\$3,439,111	(\$1,283,903)	10.0%	10.0%	1.41
Median	\$3,299,087	(\$1,303,258)	08.0%	09.6%	0.96

Proportional Return on Investment in CALS Research (MTDC), FY 2015



Department	Total Investments (and Costs)	MTDC Return Less Investments with AES Splits	% of MTDC Return	% of Total Investments	Proportional Research ROI Ratio (MTDC Form)
Agric & Biosystems Engr	\$3,243,739	(\$2,399,799)	03.9%	09.4%	0.42
Agric & Resource Econ	\$1,358,962	(\$1,062,037)	01.4%	04.0%	0.35
Agricultural Education	\$321,772	\$547,284	04.0%	00.9%	4.31
Animal&Biomedical Sciences	\$5,856,233	(\$3,563,212)	10.6%	17.0%	0.62
Entomology	\$3,354,435	(\$1,915,229)	06.7%	09.8%	0.68
Nutritional Sciences	\$1,360,564	\$478,417	08.5%	04.0%	2.16
Sch of Family & Consum Sci	\$1,330,790	\$299,520	07.6%	03.9%	1.95
Sch of Natural Resources	\$4,233,726	\$333,399	21.2%	12.3%	1.72
School of Plant Sciences	\$8,376,029	(\$4,012,894)	20.2%	24.4%	0.83
Soil Water and Enviro Sci	\$4,954,862	(\$1,544,480)	15.8%	14.4%	1.10
Total	\$34,391,111	(\$12,839,031)	100.0%	100.0%	N/A
Average	\$3,439,111	(\$1,283,903)	10.0%	10.0%	1.41
Median	\$3,299,087	(\$1,303,258)	08.0%	09.6%	0.96

Combined Instruction and Research Performance

A more comprehensive view of your performance combines instruction and research measures.

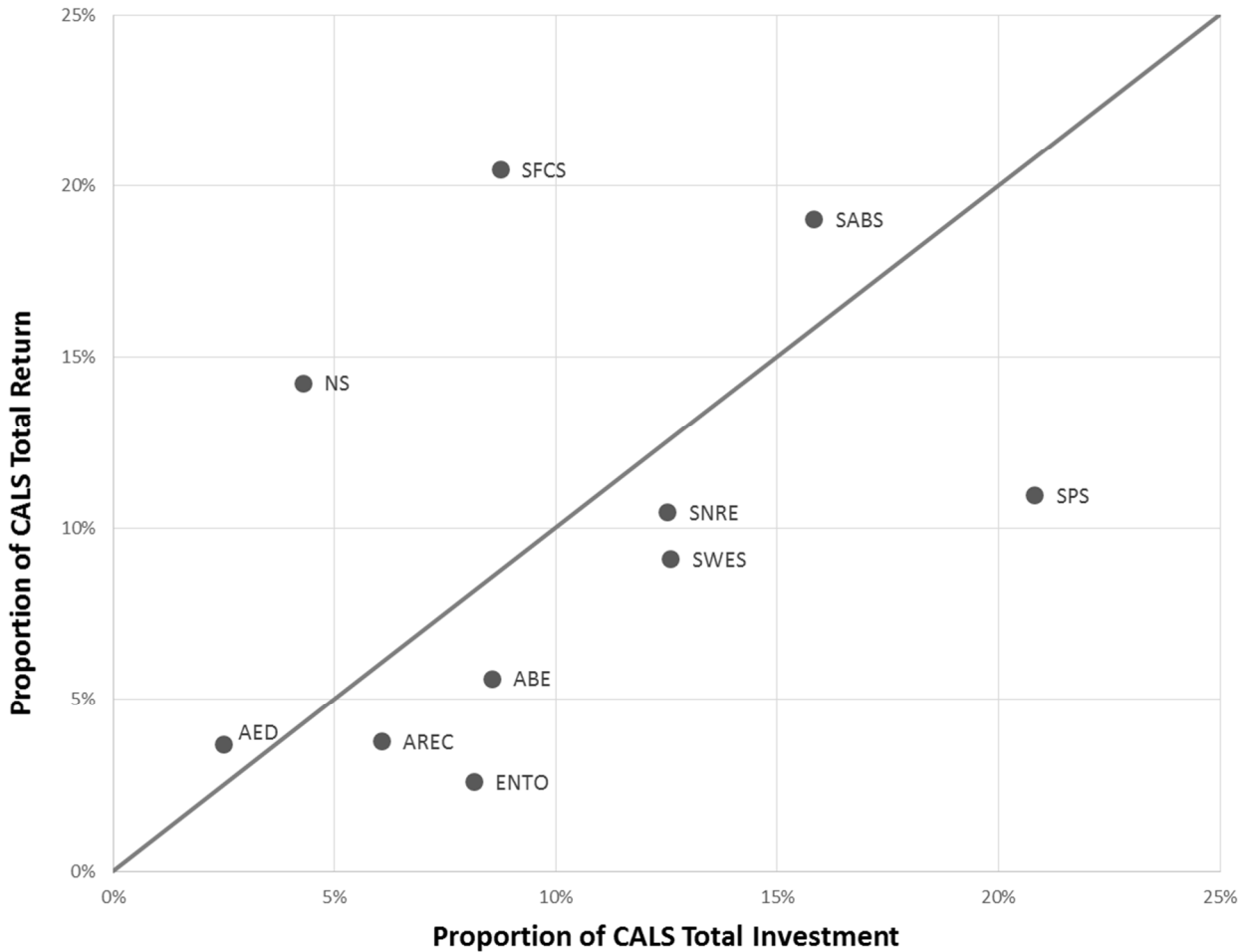
The University normalizes colleges based on a national study on the cost of doing business in respective academic disciplines associated with units (known as the *Delaware Cost Study*). This normalization is applied based on natural costs using one of three factors: 1.2, 1.0, and 0.8. As an example, physical and lab sciences require more costly equipment and startup packages than humanities, so they would be assigned a higher factor. CALS has been assigned a 1.0 due to the diversity of disciplines in the college.

The combined view of department performance includes a normalization factor assigned to each individual department similarly based on the Delaware Cost Study. This is used to better measure proportional performance. So, the Proportional Return views include the normalization factor while the Total Return views exclude it.

Department	Return on Instruction Based on Tuition	Return on Research Based on F&A	Return on Research Based on MTDC	Total Return (F&A Form)	Total Return (MTDC Form)
Agric & Biosystems Engr	\$1,472,730	\$323,104	\$843,940	\$1,795,834	\$2,316,670
Agric & Resource Econ	\$1,127,914	\$77,052	\$296,925	\$1,204,966	\$1,424,840
Agricultural Education	\$1,100,346	\$80,294	\$869,055	\$1,180,640	\$1,969,401
Animal&Biomedical Sciences	\$5,246,170	\$830,707	\$2,293,021	\$6,076,876	\$7,539,191
Entomology	\$429,997	\$400,357	\$1,439,206	\$830,354	\$1,869,203
Nutritional Sciences	\$3,995,746	\$552,319	\$1,838,981	\$4,548,066	\$5,834,727
Sch of Family & Consum Sci	\$6,197,678	\$338,634	\$1,630,310	\$6,536,311	\$7,827,987
Sch of Natural Resources	\$2,500,590	\$839,939	\$4,567,124	\$3,340,529	\$7,067,715
School of Plant Sciences	\$2,557,904	\$943,006	\$4,363,135	\$3,500,910	\$6,921,039
Soil Water and Enviro Sci	\$2,145,340	\$758,555	\$3,410,383	\$2,903,895	\$5,555,723
CALS Total	\$26,774,416	\$5,143,967	\$21,552,080	\$31,918,382	\$48,326,495
Average	\$2,677,442	\$514,397	\$2,155,208	\$3,191,838	\$4,832,650
Median	\$2,322,965	\$476,338	\$1,734,645	\$3,122,212	\$5,695,225
Standard Deviation	\$1,801,323	\$301,827	\$1,414,275	\$1,925,276	\$2,492,084
Maximum	\$6,197,678	\$943,006	\$4,567,124	\$6,536,311	\$7,827,987
Minimum	\$429,997	\$77,052	\$296,925	\$830,354	\$1,424,840

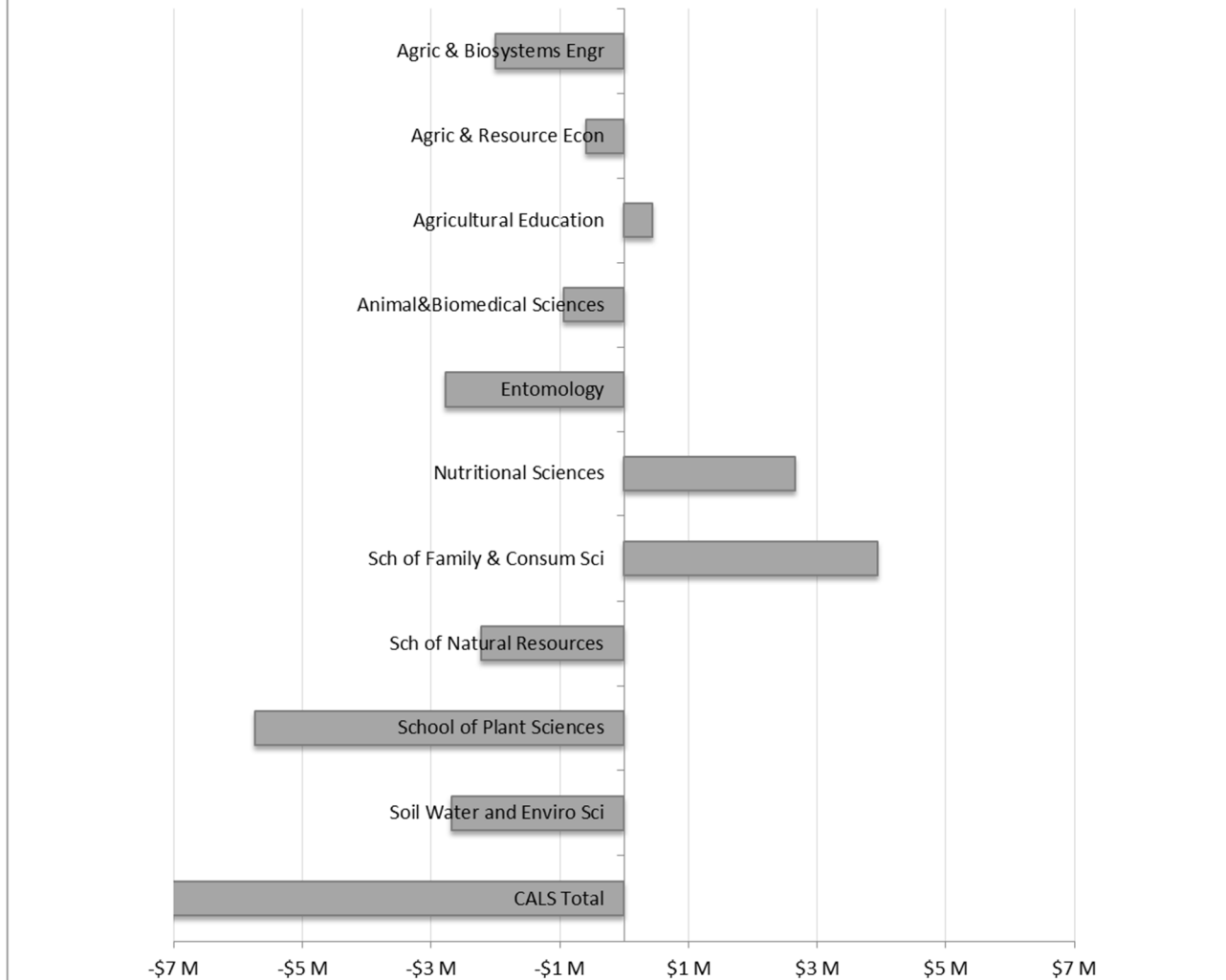
Department	Total Investment on Instruction	Total Investment on Research	Total Investment
Agric & Biosystems Engr	\$558,391	\$3,243,739	\$3,802,130
Agric & Resource Econ	\$436,462	\$1,358,962	\$1,795,424
Agricultural Education	\$415,738	\$321,772	\$737,509
Animal&Biomedical Sciences	\$1,167,272	\$5,856,233	\$7,023,505
Entomology	\$258,097	\$3,354,435	\$3,612,532
Nutritional Sciences	\$537,605	\$1,360,564	\$1,898,168
Sch of Family & Consum Sci	\$1,258,042	\$1,330,790	\$2,588,832
Sch of Natural Resources	\$1,322,975	\$4,233,726	\$5,556,701
School of Plant Sciences	\$862,472	\$8,376,029	\$9,238,501
Soil Water and Enviro Sci	\$634,568	\$4,954,862	\$5,589,430
CALS Total	\$7,451,622	\$34,391,111	\$41,842,733
Average	\$745,162	\$3,439,111	\$4,184,273
Median	\$596,479	\$3,299,087	\$3,707,331
Standard Deviation	\$363,331	\$2,366,434	\$2,515,867
Maximum	\$1,322,975	\$8,376,029	\$9,238,501
Minimum	\$258,097	\$321,772	\$737,509

Combined Proportional Return on Investment in CALS Instruction and F&A with 1:1 Guide, FY 2015



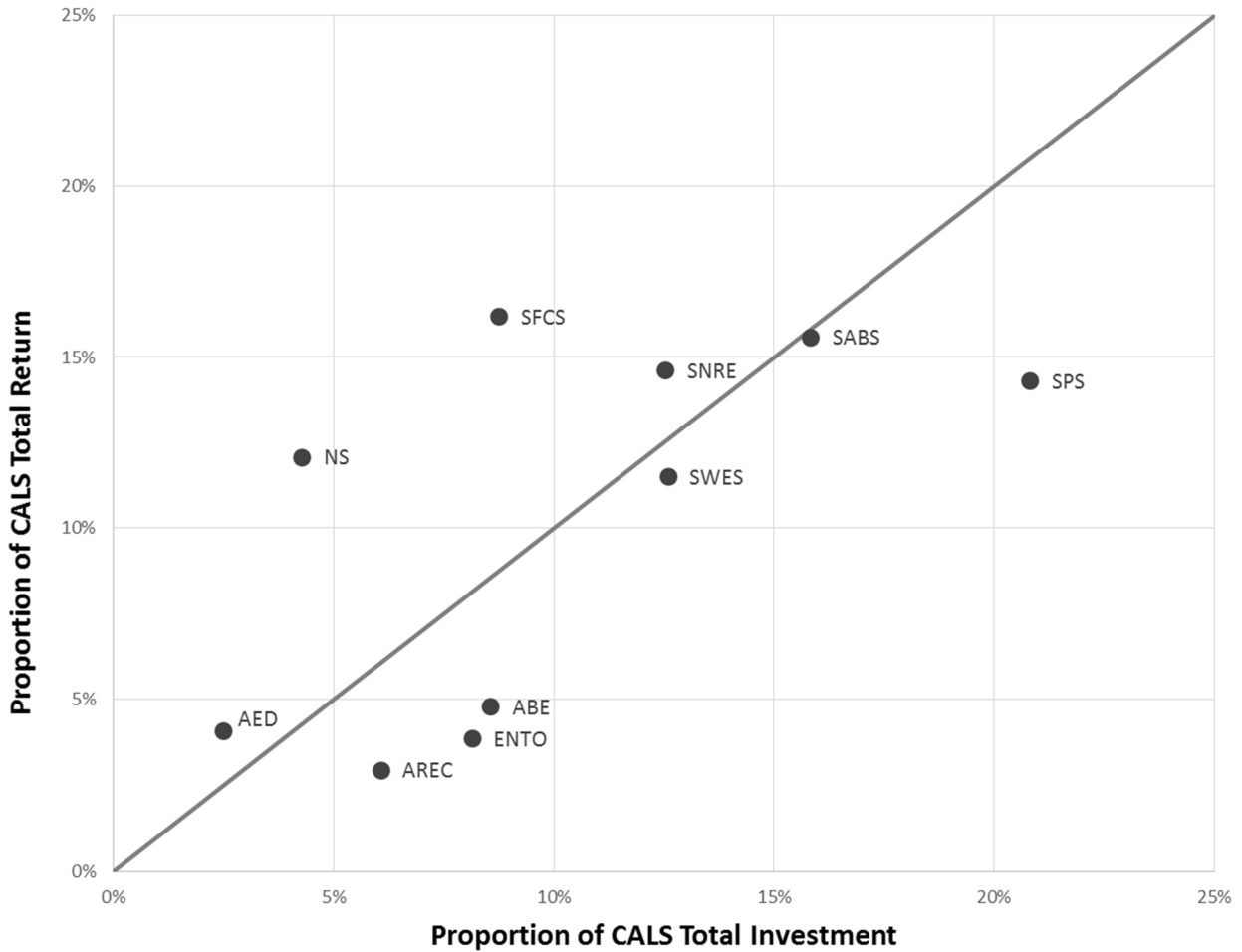
Department	Normalization Factor on Investment	Proportional Total Investment	Proportional Total Return (F&A Form)	Return on Investment Ratio (F&A Form)
Agric & Biosystems Engr	1.20	08.6%	05.6%	0.66
Agric & Resource Econ	0.80	06.1%	03.8%	0.62
Agricultural Education	0.80	02.5%	03.7%	1.48
Animal&Biomedical Sciences	1.20	15.8%	19.0%	1.20
Entomology	1.20	08.1%	02.6%	0.32
Nutritional Sciences	1.20	04.3%	14.2%	3.33
Sch of Family & Consum Sci	0.80	08.7%	20.5%	2.34
Sch of Natural Resources	1.20	12.5%	10.5%	0.84
School of Plant Sciences	1.20	20.8%	11.0%	0.53
Soil Water and Enviro Sci	1.20	12.6%	09.1%	0.72
CALS Total	N/A	100.0%	100.0%	1.00
Average	1.08	10.0%	10.0%	1.19
Median	1.20	08.7%	09.8%	0.78

Total Return Less Investments (F&A Method)



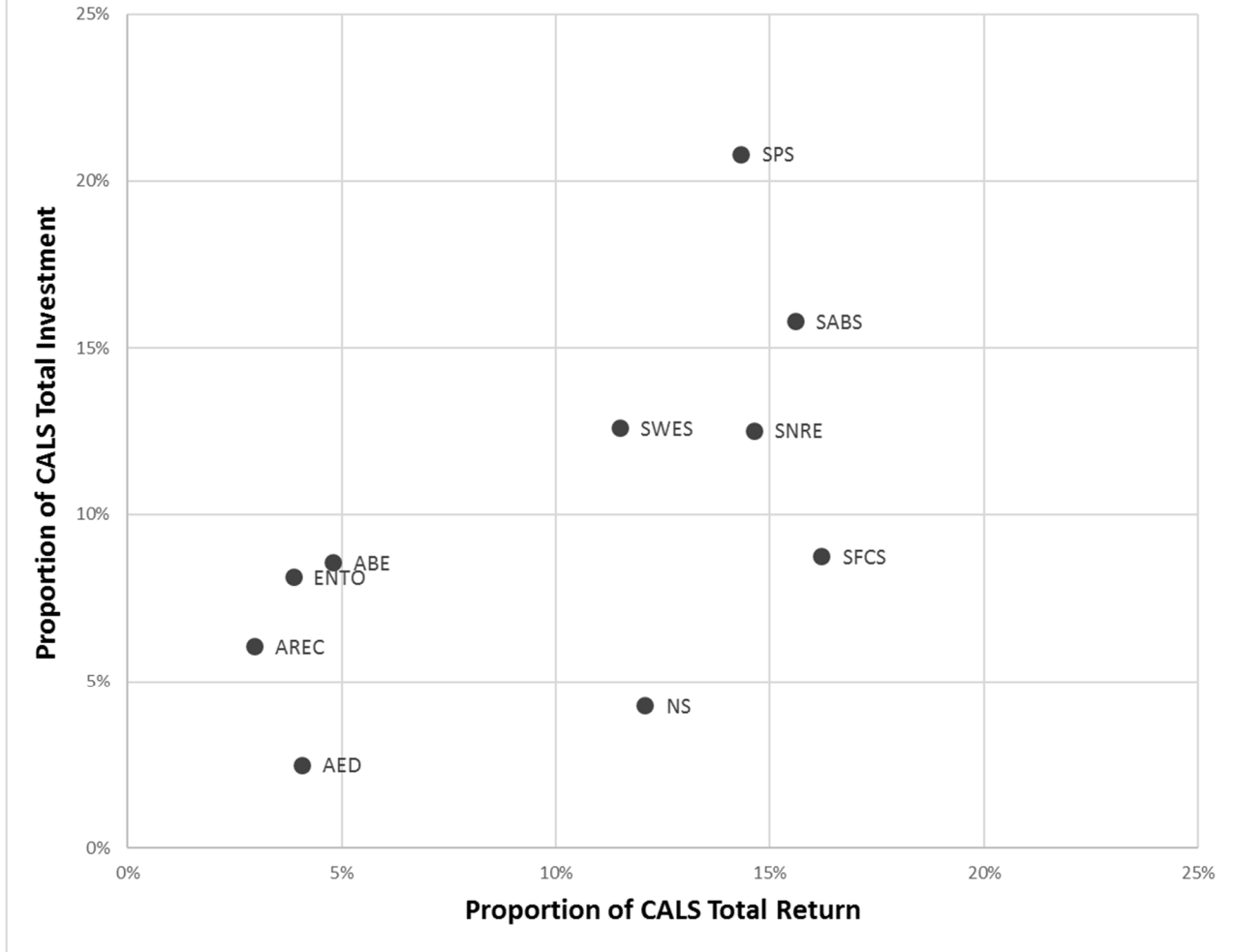
Department	Instruction Return Less Investments	Research Return Less Investments (F&A Form)	Total Return Less Investments (F&A Form)
Agric & Biosystems Engr	\$914,339	(\$2,920,635)	(\$2,006,296)
Agric & Resource Econ	\$691,452	(\$1,281,910)	(\$590,458)
Agricultural Education	\$684,608	(\$241,477)	\$443,131
Animal&Biomedical Sciences	\$4,078,898	(\$5,025,527)	(\$946,629)
Entomology	\$171,900	(\$2,954,078)	(\$2,782,178)
Nutritional Sciences	\$3,458,142	(\$808,244)	\$2,649,898
Sch of Family & Consum Sci	\$4,939,635	(\$992,156)	\$3,947,479
Sch of Natural Resources	\$1,177,615	(\$3,393,787)	(\$2,216,171)
School of Plant Sciences	\$1,695,432	(\$7,433,023)	(\$5,737,591)
Soil Water and Enviro Sci	\$1,510,772	(\$4,196,307)	(\$2,685,535)
CALS Total	\$19,322,794	(\$29,247,145)	\$9,924,351
Average	\$1,932,279	(\$2,924,714)	(\$992,435)
Median	\$1,344,194	(\$2,937,357)	(\$1,476,462)

Combined Proportional Return on Investment in CALS Instruction and MTDC with 1:1 Guide, FY 2015



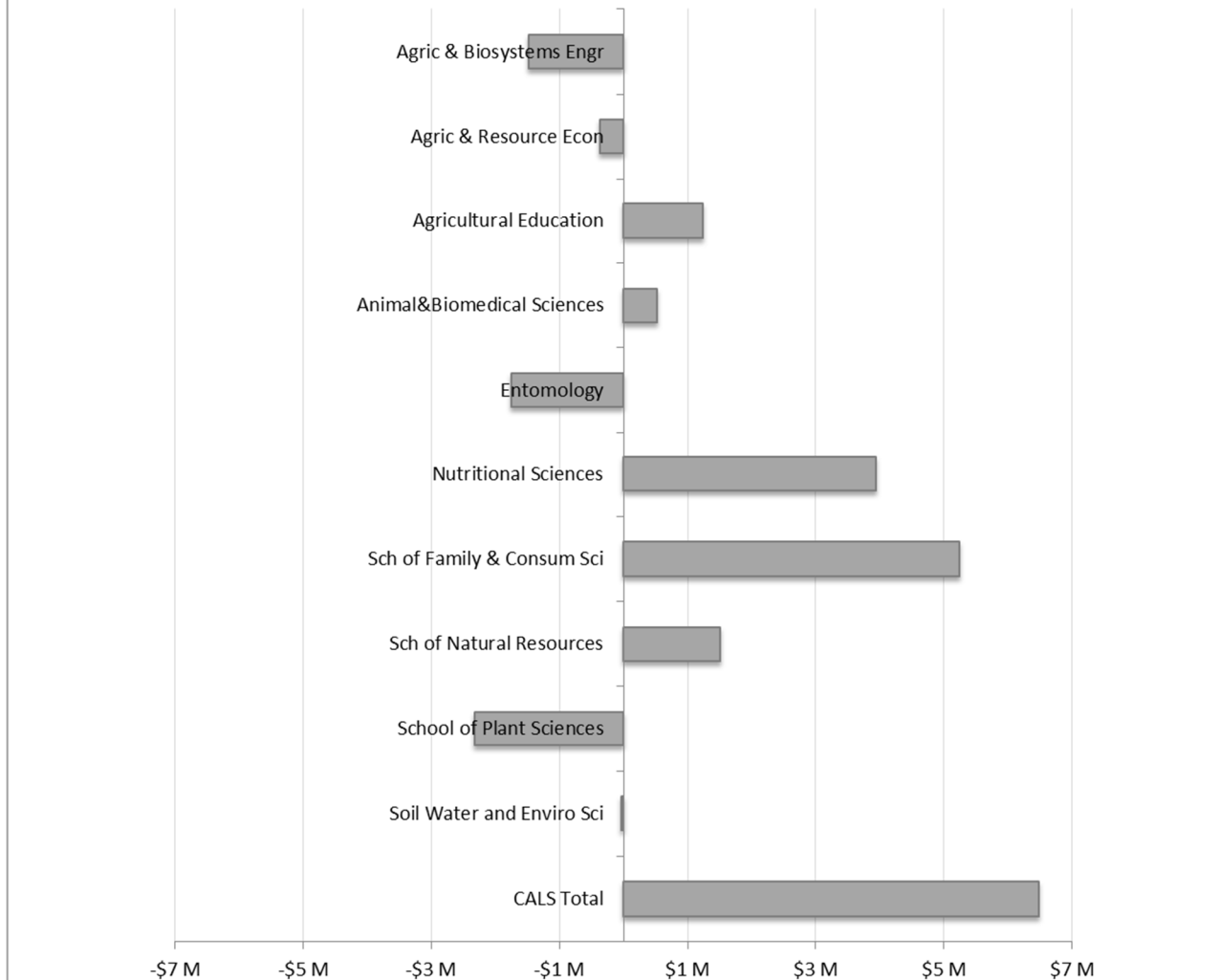
Department	Normalization Factor on Investment	Proportional Total Investment	Proportional Total Return (MTDC Form)	Return on Investment Ratio (MTDC Form)
Agric & Biosystems Engr	1.20	08.6%	04.8%	0.56
Agric & Resource Econ	0.80	06.1%	02.9%	0.49
Agricultural Education	0.80	02.5%	04.1%	1.64
Animal&Biomedical Sciences	1.20	15.8%	15.6%	0.99
Entomology	1.20	08.1%	03.9%	0.48
Nutritional Sciences	1.20	04.3%	12.1%	2.82
Sch of Family & Consum Sci	0.80	08.7%	16.2%	1.85
Sch of Natural Resources	1.20	12.5%	14.6%	1.17
School of Plant Sciences	1.20	20.8%	14.3%	0.69
Soil Water and Enviro Sci	1.20	12.6%	11.5%	0.91
CALS Total	N/A	100.0%	100.0%	1.00
Average	1.08	10.0%	10.0%	1.14
Median	1.20	08.7%	11.8%	0.95

Combined Proportional Return on Investment in CALS Instruction and MTDC, FY 2015



Department	Normalization Factor on Investment	Proportional Total Investment	Proportional Total Return (MTDC Form)	Return on Investment Ratio (MTDC Form)
Agric & Biosystems Engr	1.20	08.6%	04.8%	0.56
Agric & Resource Econ	0.80	06.1%	02.9%	0.49
Agricultural Education	0.80	02.5%	04.1%	1.64
Animal&Biomedical Sciences	1.20	15.8%	15.6%	0.99
Entomology	1.20	08.1%	03.9%	0.48
Nutritional Sciences	1.20	04.3%	12.1%	2.82
Sch of Family & Consum Sci	0.80	08.7%	16.2%	1.85
Sch of Natural Resources	1.20	12.5%	14.6%	1.17
School of Plant Sciences	1.20	20.8%	14.3%	0.69
Soil Water and Enviro Sci	1.20	12.6%	11.5%	0.91
CALS Total	N/A	100.0%	100.0%	1.00
Average	1.08	10.0%	10.0%	1.14
Median	1.20	08.7%	11.8%	0.95

Total Return Less Investments (MTDC Method)



Department	Instruction Return Less Investments	Research Return Less Investments (MTDC Form)	Total Return Less Investments (MTDC Form)
Agric & Biosystems Engr	\$914,339	(\$2,399,799)	(\$1,485,460)
Agric & Resource Econ	\$691,452	(\$1,062,037)	(\$370,584)
Agricultural Education	\$684,608	\$547,284	\$1,231,892
Animal&Biomedical Sciences	\$4,078,898	(\$3,563,212)	\$515,686
Entomology	\$171,900	(\$1,915,229)	(\$1,743,329)
Nutritional Sciences	\$3,458,142	\$478,417	\$3,936,559
Sch of Family & Consum Sci	\$4,939,635	\$299,520	\$5,239,155
Sch of Natural Resources	\$1,177,615	\$333,399	\$1,511,014
School of Plant Sciences	\$1,695,432	(\$4,012,894)	(\$2,317,462)
Soil Water and Enviro Sci	\$1,510,772	(\$1,544,480)	(\$33,708)
CALS Total	\$19,322,794	(\$12,839,031)	\$6,483,762
Average	\$1,932,279	(\$1,283,903)	\$648,376
Median	\$1,344,194	(\$1,303,258)	\$240,989