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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.
### Undergraduate SCH Trends

Average SCH FY11:14 Compared to FY15 (UA +7%, CALS +3%)

<table>
<thead>
<tr>
<th>Department</th>
<th>FY 2011</th>
<th>FY 2012</th>
<th>FY 2013</th>
<th>FY 2014</th>
<th>FY 2015</th>
<th>Change, FY 2015 to 4-Yr Average</th>
<th>Change, FY 2015 to 4-Yr Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agric &amp; Biosystems Engr</td>
<td>3,146</td>
<td>3,880</td>
<td>4,205</td>
<td>5,336</td>
<td>4,473</td>
<td>7%</td>
<td>331</td>
</tr>
<tr>
<td>Agric &amp; Resource Econ</td>
<td>1,875</td>
<td>2,048</td>
<td>1,988</td>
<td>2,056</td>
<td>1,524</td>
<td>-31%</td>
<td>(468)</td>
</tr>
<tr>
<td>Agricultural Education</td>
<td>1,830</td>
<td>2,317</td>
<td>2,903</td>
<td>3,294</td>
<td>2,940</td>
<td>12%</td>
<td>354</td>
</tr>
<tr>
<td>Animal &amp; Biomedical Sciences</td>
<td>11,518</td>
<td>11,204</td>
<td>10,868</td>
<td>11,100</td>
<td>11,183</td>
<td>0%</td>
<td>11</td>
</tr>
<tr>
<td>Entomology</td>
<td>1,070</td>
<td>1,165</td>
<td>1,442</td>
<td>1,449</td>
<td>1,354</td>
<td>5%</td>
<td>73</td>
</tr>
<tr>
<td>Nutritional Sciences</td>
<td>8,226</td>
<td>8,219</td>
<td>8,319</td>
<td>8,445</td>
<td>8,343</td>
<td>0%</td>
<td>41</td>
</tr>
<tr>
<td>Sch of Family &amp; Consum Sci</td>
<td>12,407</td>
<td>13,647</td>
<td>13,798</td>
<td>14,092</td>
<td>13,248</td>
<td>-2%</td>
<td>(238)</td>
</tr>
<tr>
<td>Sch of Natural Resources</td>
<td>3,578</td>
<td>3,425</td>
<td>3,107</td>
<td>3,431</td>
<td>4,267</td>
<td>21%</td>
<td>882</td>
</tr>
<tr>
<td>School of Plant Sciences</td>
<td>5,950</td>
<td>6,499</td>
<td>6,466</td>
<td>7,718</td>
<td>7,495</td>
<td>11%</td>
<td>837</td>
</tr>
<tr>
<td>Soil Water and Enviro Sci</td>
<td>4,057</td>
<td>3,898</td>
<td>3,933</td>
<td>3,431</td>
<td>3,711</td>
<td>-3%</td>
<td>(119)</td>
</tr>
<tr>
<td>CALS Total</td>
<td>53,657</td>
<td>56,302</td>
<td>57,029</td>
<td>60,351</td>
<td>58,538</td>
<td>3%</td>
<td>1703</td>
</tr>
<tr>
<td>CALS Average</td>
<td>5,366</td>
<td>5,630</td>
<td>5,703</td>
<td>6,035</td>
<td>5,854</td>
<td>2%</td>
<td>170</td>
</tr>
<tr>
<td>CALS Median</td>
<td>3,578</td>
<td>3,880</td>
<td>3,933</td>
<td>3,431</td>
<td>4,267</td>
<td>5%</td>
<td>73</td>
</tr>
<tr>
<td>Department</td>
<td>FY 2011</td>
<td>FY 2012</td>
<td>FY 2013</td>
<td>FY 2014</td>
<td>FY 2015</td>
<td>Change, FY 2015 to 4-Yr Average</td>
<td>Change, FY 2015 to 4-Yr Average</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>---------</td>
<td>--------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>Agric &amp; Biosystems Engr</td>
<td>667</td>
<td>679</td>
<td>675</td>
<td>638</td>
<td>590</td>
<td>-13% (75)</td>
<td></td>
</tr>
<tr>
<td>Agric &amp; Resource Econ</td>
<td>588</td>
<td>509</td>
<td>414</td>
<td>336</td>
<td>336</td>
<td>-37% (126)</td>
<td></td>
</tr>
<tr>
<td>Agricultural Education</td>
<td>206</td>
<td>243</td>
<td>165</td>
<td>204</td>
<td>132</td>
<td>-55% (73)</td>
<td></td>
</tr>
<tr>
<td>Animal &amp; Biomedical Sciences</td>
<td>683</td>
<td>562</td>
<td>533</td>
<td>458</td>
<td>427</td>
<td>-31% (132)</td>
<td></td>
</tr>
<tr>
<td>Entomology</td>
<td>373</td>
<td>316</td>
<td>397</td>
<td>398</td>
<td>274</td>
<td>-35% (97)</td>
<td></td>
</tr>
<tr>
<td>Nutritional Sciences</td>
<td>330</td>
<td>263</td>
<td>261</td>
<td>131</td>
<td>219</td>
<td>-12% (27)</td>
<td></td>
</tr>
<tr>
<td>Sch of Family &amp; Consum Sci</td>
<td>718</td>
<td>711</td>
<td>673</td>
<td>610</td>
<td>586</td>
<td>-16% (92)</td>
<td></td>
</tr>
<tr>
<td>Sch of Natural Resources</td>
<td>2,066</td>
<td>1,702</td>
<td>1,596</td>
<td>1,403</td>
<td>1,282</td>
<td>-32% (410)</td>
<td></td>
</tr>
<tr>
<td>School of Plant Sciences</td>
<td>496</td>
<td>563</td>
<td>557</td>
<td>606</td>
<td>678</td>
<td>18% (123)</td>
<td></td>
</tr>
<tr>
<td>Soil Water and Enviro Sci</td>
<td>1,304</td>
<td>1,083</td>
<td>1,072</td>
<td>904</td>
<td>875</td>
<td>-25% (216)</td>
<td></td>
</tr>
<tr>
<td>CALS Total</td>
<td>7,431</td>
<td>6,632</td>
<td>6,343</td>
<td>5,688</td>
<td>5,399</td>
<td>-21% (1124)</td>
<td></td>
</tr>
<tr>
<td>CALS Average</td>
<td>743</td>
<td>663</td>
<td>634</td>
<td>569</td>
<td>540</td>
<td>-24% (112)</td>
<td></td>
</tr>
<tr>
<td>CALS Median</td>
<td>588</td>
<td>562</td>
<td>533</td>
<td>458</td>
<td>427</td>
<td>-25% (92)</td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>61088</td>
<td>62934</td>
<td>63372</td>
<td>66039</td>
<td>63937</td>
<td>1% (579)</td>
<td></td>
</tr>
</tbody>
</table>
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.

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

Average FY11:14 Compared to FY15 (UA +8%, CALS -17%)

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

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

<table>
<thead>
<tr>
<th>Department</th>
<th>SCH Undergraduate Revenue</th>
<th>SCH Graduate Revenue</th>
<th>SCH Total Revenue</th>
<th>Majors Undergraduate Revenue</th>
<th>Majors Graduate Revenue</th>
<th>Majors Total Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agric &amp; Biosystems Engr</td>
<td>$1,219,088</td>
<td>$123,698</td>
<td>$1,342,786</td>
<td>$59,162</td>
<td>$70,782</td>
<td>$129,943</td>
</tr>
<tr>
<td>Agric &amp; Resource Econ</td>
<td>$408,458</td>
<td>$71,249</td>
<td>$479,707</td>
<td>$477,151</td>
<td>$171,056</td>
<td>$648,207</td>
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<tr>
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<td>$790,599</td>
<td>$30,909</td>
<td>$821,508</td>
<td>$223,785</td>
<td>$55,053</td>
<td>$278,838</td>
</tr>
<tr>
<td>Animal &amp; Biomedical Sciences</td>
<td>$2,972,608</td>
<td>$101,980</td>
<td>$3,074,589</td>
<td>$2,002,491</td>
<td>$169,090</td>
<td>$2,171,581</td>
</tr>
<tr>
<td>Entomology</td>
<td>$363,555</td>
<td>$66,442</td>
<td>$429,997</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Nutritional Sciences</td>
<td>$2,288,803</td>
<td>$63,941</td>
<td>$2,352,744</td>
<td>$1,542,059</td>
<td>$100,943</td>
<td>$1,643,002</td>
</tr>
<tr>
<td>Sch of Family &amp; Consum Sci</td>
<td>$3,567,076</td>
<td>$143,418</td>
<td>$3,710,494</td>
<td>$2,257,143</td>
<td>$230,041</td>
<td>$2,487,184</td>
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<tr>
<td>Sch of Natural Resources</td>
<td>$1,176,758</td>
<td>$326,157</td>
<td>$1,502,914</td>
<td>$349,825</td>
<td>$647,851</td>
<td>$997,676</td>
</tr>
<tr>
<td>School of Plant Sciences</td>
<td>$2,025,081</td>
<td>$161,493</td>
<td>$2,186,575</td>
<td>$151,119</td>
<td>$220,210</td>
<td>$371,330</td>
</tr>
<tr>
<td>Soil Water and Enviro Sci</td>
<td>$1,025,008</td>
<td>$207,018</td>
<td>$1,232,026</td>
<td>$511,333</td>
<td>$402,080</td>
<td>$913,314</td>
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<tr>
<td>CALS Total</td>
<td>$15,837,036</td>
<td>$1,296,305</td>
<td>$17,133,341</td>
<td>$7,573,968</td>
<td>$2,067,106</td>
<td>$9,641,075</td>
</tr>
<tr>
<td>Average</td>
<td>$1,583,704</td>
<td>$129,630</td>
<td>$1,713,334</td>
<td>$757,397</td>
<td>$206,711</td>
<td>$964,107</td>
</tr>
<tr>
<td>Median</td>
<td>$1,197,923</td>
<td>$112,839</td>
<td>$1,422,500</td>
<td>$413,488</td>
<td>$170,073</td>
<td>$680,760</td>
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</table>
## Return on Instruction

### Based on Tuition Revenue

<table>
<thead>
<tr>
<th>Department</th>
<th>Return on Instruction</th>
<th>Personnel and Fringe Investments</th>
<th>Total Investments</th>
<th>Return on Instruction Loss Investments</th>
<th>% of Total Return</th>
<th>% of Total Investments</th>
<th>Proportional Instruction ROI Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agric &amp; Biosystems Engr</td>
<td>$1,472,730</td>
<td>$558,391</td>
<td>$558,391</td>
<td>$914,339</td>
<td>0.5%</td>
<td>0.75%</td>
<td>0.73</td>
</tr>
<tr>
<td>Agric &amp; Resource Econ</td>
<td>$1,127,914</td>
<td>$436,462</td>
<td>$436,462</td>
<td>$691,452</td>
<td>0.4%</td>
<td>0.5%</td>
<td>0.72</td>
</tr>
<tr>
<td>Agricultural Education</td>
<td>$1,100,346</td>
<td>$415,738</td>
<td>$415,738</td>
<td>$684,608</td>
<td>0.4%</td>
<td>0.5%</td>
<td>0.74</td>
</tr>
<tr>
<td>Animal &amp; Biomedical Sciences</td>
<td>$5,246,170</td>
<td>$1,167,272</td>
<td>$1,167,272</td>
<td>$4,078,898</td>
<td>19.6%</td>
<td>15.7%</td>
<td>1.25</td>
</tr>
<tr>
<td>Entomology</td>
<td>$429,997</td>
<td>$258,097</td>
<td>$258,097</td>
<td>$171,900</td>
<td>0.1%</td>
<td>0.3%</td>
<td>0.46</td>
</tr>
<tr>
<td>Nutritional Sciences</td>
<td>$3,995,746</td>
<td>$537,605</td>
<td>$537,605</td>
<td>$3,458,142</td>
<td>14.9%</td>
<td>14.9%</td>
<td>2.18</td>
</tr>
<tr>
<td>Sch of Family &amp; Consum Sci</td>
<td>$6,197,678</td>
<td>$1,258,042</td>
<td>$1,258,042</td>
<td>$4,939,635</td>
<td>23.1%</td>
<td>16.9%</td>
<td>1.37</td>
</tr>
<tr>
<td>Sch of Natural Resources</td>
<td>$2,500,590</td>
<td>$1,322,975</td>
<td>$1,322,975</td>
<td>$1,177,615</td>
<td>0.9%</td>
<td>17.8%</td>
<td>0.53</td>
</tr>
<tr>
<td>School of Plant Sciences</td>
<td>$2,557,904</td>
<td>$862,472</td>
<td>$862,472</td>
<td>$1,695,432</td>
<td>0.9%</td>
<td>11.6%</td>
<td>0.83</td>
</tr>
<tr>
<td>Soil Water and Enviro Sci</td>
<td>$2,145,340</td>
<td>$634,568</td>
<td>$634,568</td>
<td>$1,510,772</td>
<td>0.8%</td>
<td>0.8%</td>
<td>0.94</td>
</tr>
<tr>
<td>CALS Total</td>
<td>$26,774,416</td>
<td>$7,451,622</td>
<td>$7,451,622</td>
<td>$19,322,794</td>
<td>100.0%</td>
<td>100.0%</td>
<td>N/A</td>
</tr>
<tr>
<td>Average</td>
<td>$2,677,442</td>
<td>$745,162</td>
<td>$745,162</td>
<td>$1,932,279</td>
<td>10.0%</td>
<td>10.0%</td>
<td>0.96</td>
</tr>
<tr>
<td>Median</td>
<td>$2,322,965</td>
<td>$596,479</td>
<td>$596,479</td>
<td>$1,344,194</td>
<td>0.8%</td>
<td>0.8%</td>
<td>0.78</td>
</tr>
</tbody>
</table>

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

![Proportional Return on Investment in CALS Instruction with 1:1 Guide, FY 2015](image)

### Proportion of CALS Instruction RCM Return

(Tuition Based on SCH and Majors)
<table>
<thead>
<tr>
<th>Department</th>
<th>Return on Instruction Based on Tuition</th>
<th>Personnel and Fringe Investments</th>
<th>Total Investments</th>
<th>Return on Instruction Less Investments</th>
<th>% of Total Return</th>
<th>% of Total Investments</th>
<th>Proportional Instruction ROI Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agric &amp; Biosystems Engr</td>
<td>$1,472,730</td>
<td>$558,391</td>
<td>$558,391</td>
<td>$914,339</td>
<td>05.5%</td>
<td>07.5%</td>
<td>0.73</td>
</tr>
<tr>
<td>Agric &amp; Resource Econ</td>
<td>$1,127,914</td>
<td>$436,462</td>
<td>$436,462</td>
<td>$691,452</td>
<td>04.2%</td>
<td>05.9%</td>
<td>0.72</td>
</tr>
<tr>
<td>Agricultural Education</td>
<td>$1,100,346</td>
<td>$415,738</td>
<td>$415,738</td>
<td>$684,608</td>
<td>04.1%</td>
<td>05.6%</td>
<td>0.74</td>
</tr>
<tr>
<td>Animal &amp; Biomedical Sciences</td>
<td>$5,246,170</td>
<td>$1,167,272</td>
<td>$1,167,272</td>
<td>$4,078,898</td>
<td>19.6%</td>
<td>15.7%</td>
<td>1.25</td>
</tr>
<tr>
<td>Entomology</td>
<td>$429,997</td>
<td>$258,097</td>
<td>$258,097</td>
<td>$171,900</td>
<td>01.6%</td>
<td>03.9%</td>
<td>0.46</td>
</tr>
<tr>
<td>Nutritional Sciences</td>
<td>$3,995,746</td>
<td>$537,605</td>
<td>$537,605</td>
<td>$3,458,142</td>
<td>14.9%</td>
<td>07.2%</td>
<td>2.07</td>
</tr>
<tr>
<td>Sch of Family &amp; Consum Sci</td>
<td>$6,197,678</td>
<td>$1,258,042</td>
<td>$1,258,042</td>
<td>$4,939,635</td>
<td>23.1%</td>
<td>16.9%</td>
<td>1.37</td>
</tr>
<tr>
<td>Sch of Natural Resources</td>
<td>$2,500,590</td>
<td>$1,322,975</td>
<td>$1,322,975</td>
<td>$1,177,615</td>
<td>09.3%</td>
<td>17.8%</td>
<td>0.53</td>
</tr>
<tr>
<td>School of Plant Sciences</td>
<td>$2,557,904</td>
<td>$862,472</td>
<td>$862,472</td>
<td>$1,695,432</td>
<td>09.6%</td>
<td>11.6%</td>
<td>0.83</td>
</tr>
<tr>
<td>Soil Water and Enviro Sci</td>
<td>$2,145,340</td>
<td>$634,568</td>
<td>$634,568</td>
<td>$1,510,772</td>
<td>08.0%</td>
<td>08.5%</td>
<td>0.94</td>
</tr>
<tr>
<td>CALS Total</td>
<td>$26,774,416</td>
<td>$7,451,622</td>
<td>$7,451,622</td>
<td>$19,322,794</td>
<td>100.0%</td>
<td>100.0%</td>
<td>N/A</td>
</tr>
<tr>
<td>Average</td>
<td>$2,677,442</td>
<td>$745,162</td>
<td>$745,162</td>
<td>$1,932,279</td>
<td>10.0%</td>
<td>10.0%</td>
<td>0.96</td>
</tr>
<tr>
<td>Median</td>
<td>$2,322,965</td>
<td>$596,479</td>
<td>$596,479</td>
<td>$1,344,194</td>
<td>08.7%</td>
<td>08.0%</td>
<td>0.78</td>
</tr>
</tbody>
</table>
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)

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

Performance on Research Investments

<table>
<thead>
<tr>
<th>Department</th>
<th>Foregone F&amp;A Costs</th>
<th>AES Budgets Investments</th>
<th>Personnel and Fringe Investments</th>
<th>Cost Sharing Investment</th>
<th>CALS Venture Investments</th>
<th>CALS Subsidy Costs</th>
<th>Total Investments (and Costs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agric &amp; Biosystems Engr</td>
<td>$114,864</td>
<td>$838,074</td>
<td>$2,023,595</td>
<td>$120,365</td>
<td>$115,573</td>
<td>$31,269</td>
<td>$3,243,739</td>
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<tr>
<td>Agric &amp; Resource Econ</td>
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<td>$17,668</td>
<td>$1,257,985</td>
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<td>$0</td>
<td>$23,953</td>
<td>$1,358,962</td>
</tr>
<tr>
<td>Agricultural Education</td>
<td>$165,452</td>
<td>$0</td>
<td>$156,320</td>
<td>$0</td>
<td>$0</td>
<td>$321,772</td>
<td></td>
</tr>
<tr>
<td>Animal &amp; Biomedical Sciences</td>
<td>$383,059</td>
<td>$1,581,495</td>
<td>$3,359,972</td>
<td>$101,080</td>
<td>$270,000</td>
<td>$160,628</td>
<td>$5,856,233</td>
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<tr>
<td>Entomology</td>
<td>$307,258</td>
<td>$711,689</td>
<td>$1,854,401</td>
<td>$152,202</td>
<td>$115,573</td>
<td>$213,312</td>
<td>$3,354,435</td>
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<tr>
<td>Nutritional Sciences</td>
<td>$140,350</td>
<td>$0</td>
<td>$1,058,460</td>
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<td>$0</td>
<td>$91,858</td>
<td>$1,360,564</td>
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<tr>
<td>Sch of Family &amp; Consum Sci</td>
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<td>$24,250</td>
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<td>$1,330,790</td>
</tr>
<tr>
<td>Sch of Natural Resources</td>
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<td>$211,802</td>
<td>$0</td>
<td>$39,627</td>
<td>$4,233,726</td>
</tr>
<tr>
<td>School of Plant Sciences</td>
<td>$1,185,143</td>
<td>$1,759,801</td>
<td>$4,901,529</td>
<td>$168,240</td>
<td>$115,573</td>
<td>$245,743</td>
<td>$8,376,029</td>
</tr>
<tr>
<td>Soil Water and Enviro Sci</td>
<td>$783,453</td>
<td>$875,997</td>
<td>$2,721,239</td>
<td>$327,075</td>
<td>$115,573</td>
<td>$131,525</td>
<td>$4,954,862</td>
</tr>
<tr>
<td>Total</td>
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<td>$20,442,570</td>
<td>$1,159,761</td>
<td>$1,051,253</td>
<td>$34,391,111</td>
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</tr>
<tr>
<td>Average</td>
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<td>$115,976</td>
<td>$105,125</td>
<td>$3,439,111</td>
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</tr>
<tr>
<td>Median</td>
<td>$345,158</td>
<td>$451,585</td>
<td>$1,938,998</td>
<td>$110,723</td>
<td>$115,573</td>
<td>$102,599</td>
<td>$3,293,087</td>
</tr>
</tbody>
</table>
### Proportional Return on Investment in CALS Research (F&A) with 1:1 Guide, FY 2015

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

Performance on Research Investments and F&A Returns
### Performance on Research Investments and MTDC Returns

<table>
<thead>
<tr>
<th>Department</th>
<th>Total Investments (and Costs)</th>
<th>MTDC Return Less Investments with AES Splits</th>
<th>% of MTDC Return</th>
<th>% of Total Investments</th>
<th>Proportional Research ROI Ratio (MTDC Form)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agric &amp; Biosystems Engr</td>
<td>$3,243,739 ($2,399,799)</td>
<td>0.39%</td>
<td>0.09%</td>
<td>0.42%</td>
<td></td>
</tr>
<tr>
<td>Agric &amp; Resource Econ</td>
<td>$1,358,962 ($1,062,037)</td>
<td>0.14%</td>
<td>0.04%</td>
<td>0.35%</td>
<td></td>
</tr>
<tr>
<td>Agricultural Education</td>
<td>$321,772 $547,284</td>
<td>0.04%</td>
<td>0.00%</td>
<td>4.31%</td>
<td></td>
</tr>
<tr>
<td>Animal &amp; Biomedical Sciences</td>
<td>$5,856,233 ($3,563,212)</td>
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<td>0.62%</td>
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</tr>
<tr>
<td>Entomology</td>
<td>$3,354,435 ($1,915,229)</td>
<td>0.67%</td>
<td>0.98%</td>
<td>0.68%</td>
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</tr>
<tr>
<td>Nutritional Sciences</td>
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</tr>
<tr>
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<td>0.39%</td>
<td>1.95%</td>
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</tr>
<tr>
<td>Sch of Natural Resources</td>
<td>$4,233,726 $333,399</td>
<td>21.2%</td>
<td>12.3%</td>
<td>1.72%</td>
<td></td>
</tr>
<tr>
<td>School of Plant Sciences</td>
<td>$8,376,029 ($4,012,894)</td>
<td>20.2%</td>
<td>24.4%</td>
<td>0.83%</td>
<td></td>
</tr>
<tr>
<td>Soil Water and Enviro Sci</td>
<td>$4,954,862 ($1,544,480)</td>
<td>15.8%</td>
<td>14.4%</td>
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</tr>
<tr>
<td>Total</td>
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<td>100.0%</td>
<td>100.0%</td>
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</tr>
<tr>
<td>Average</td>
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<td>10.0%</td>
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<tr>
<td>Median</td>
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<td>0.96%</td>
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</tr>
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<td>Department</td>
<td>Total Investments (and Costs)</td>
<td>MTDC Return Less Investments with AES Splits</td>
<td>% of MTDC Return</td>
<td>% of Total Investments</td>
<td>Proportional Research ROI Ratio (MTDC Form)</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>------------------------------</td>
<td>---------------------------------------------</td>
<td>-------------------</td>
<td>------------------------</td>
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</tr>
<tr>
<td>Agric &amp; Biosystems Engr</td>
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<td>09.4%</td>
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<td>4.31</td>
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<tr>
<td>Animal &amp; Biomedical Sciences</td>
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<td>($3,563,212)</td>
<td>10.6%</td>
<td>17.0%</td>
<td>0.62</td>
</tr>
<tr>
<td>Entomology</td>
<td>$3,354,435</td>
<td>($1,915,229)</td>
<td>06.7%</td>
<td>09.8%</td>
<td>0.68</td>
</tr>
<tr>
<td>Nutritional Sciences</td>
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<td>07.6%</td>
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<td>1.95</td>
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<tr>
<td>Sch of Natural Resources</td>
<td>$4,233,726</td>
<td>$333,399</td>
<td>21.2%</td>
<td>12.3%</td>
<td>1.72</td>
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<tr>
<td>School of Plant Sciences</td>
<td>$8,376,029</td>
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<td>20.2%</td>
<td>24.4%</td>
<td>0.83</td>
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<tr>
<td>Soil Water and Enviro Sci</td>
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<td>($1,544,480)</td>
<td>15.8%</td>
<td>14.4%</td>
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<tr>
<td>Total</td>
<td>$34,391,111</td>
<td>($12,839,031)</td>
<td>100.0%</td>
<td>100.0%</td>
<td>N/A</td>
</tr>
<tr>
<td>Average</td>
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<td>($1,283,903)</td>
<td>10.0%</td>
<td>10.0%</td>
<td>1.41</td>
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<tr>
<td>Median</td>
<td>$3,299,087</td>
<td>($1,303,258)</td>
<td>08.0%</td>
<td>09.6%</td>
<td>0.96</td>
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</table>
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.

<table>
<thead>
<tr>
<th>Department</th>
<th>Return on Instruction Based on Tuition</th>
<th>Return on Research Based on F&amp;A</th>
<th>Return on Research Based on MTDC</th>
<th>Total Return (F&amp;A Form)</th>
<th>Total Return (MTDC Form)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agric &amp; Biosystems Engr</td>
<td>$1,472,730</td>
<td>$323,104</td>
<td>$843,940</td>
<td>$1,795,834</td>
<td>$2,316,670</td>
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<tr>
<td>Agric &amp; Resource Econ</td>
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<td>$77,052</td>
<td>$296,925</td>
<td>$1,404,966</td>
<td>$1,424,840</td>
</tr>
<tr>
<td>Agricultural Education</td>
<td>$1,100,346</td>
<td>$80,294</td>
<td>$869,055</td>
<td>$1,180,640</td>
<td>$1,969,401</td>
</tr>
<tr>
<td>Animal &amp; Biomedical Sciences</td>
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<td>$830,707</td>
<td>$2,293,021</td>
<td>$6,076,876</td>
<td>$7,539,191</td>
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<tr>
<td>Entomology</td>
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<td>$400,357</td>
<td>$1,439,206</td>
<td>$830,354</td>
<td>$1,869,203</td>
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<tr>
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<td>$1,630,310</td>
<td>$6,536,311</td>
<td>$7,827,987</td>
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<tr>
<td>Sch of Natural Resources</td>
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<td>$839,939</td>
<td>$4,567,124</td>
<td>$3,340,529</td>
<td>$7,097,715</td>
</tr>
<tr>
<td>School of Plant Sciences</td>
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<td>$943,006</td>
<td>$4,363,135</td>
<td>$3,500,910</td>
<td>$6,921,039</td>
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<tr>
<td>Soil Water and Enviro Sci</td>
<td>$2,145,340</td>
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<td>$2,903,895</td>
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<td>$2,155,208</td>
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<td>$1,414,275</td>
<td>$3,925,276</td>
<td>$2,492,084</td>
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<tr>
<td>Maximum</td>
<td>$6,197,678</td>
<td>$943,006</td>
<td>$4,567,124</td>
<td>$6,536,311</td>
<td>$7,827,987</td>
</tr>
<tr>
<td>Minimum</td>
<td>$429,997</td>
<td>$77,052</td>
<td>$296,925</td>
<td>$830,354</td>
<td>$1,424,840</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Department</th>
<th>Total Investment on Instruction</th>
<th>Total Investment on Research</th>
<th>Total Investment</th>
</tr>
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<tbody>
<tr>
<td>Agric &amp; Biosystems Engr</td>
<td>$558,391</td>
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<td>$737,509</td>
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<tr>
<td>Animal &amp; Biomedical Sciences</td>
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<td>$5,856,233</td>
<td>$7,023,505</td>
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<tr>
<td>Entomology</td>
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<td>$3,354,435</td>
<td>$3,612,532</td>
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<td>Nutritional Sciences</td>
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<td>$1,360,564</td>
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<td>$2,588,832</td>
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<td>$5,556,701</td>
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<td>School of Plant Sciences</td>
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<td>$9,238,501</td>
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<td>Standard Deviation</td>
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<td>$2,515,867</td>
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<tr>
<td>Maximum</td>
<td>$1,322,975</td>
<td>$8,376,029</td>
<td>$9,238,501</td>
</tr>
<tr>
<td>Minimum</td>
<td>$258,097</td>
<td>$321,772</td>
<td>$737,509</td>
</tr>
<tr>
<td>Department</td>
<td>Normalization Factor on Investment</td>
<td>Proportional Total Investment</td>
<td>Proportional Total Return (F&amp;A Form)</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------------------------------</td>
<td>------------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Agric &amp; Biosystems Engr</td>
<td>1.20</td>
<td>08.6%</td>
<td>05.6%</td>
</tr>
<tr>
<td>Agric &amp; Resource Econ</td>
<td>0.80</td>
<td>06.1%</td>
<td>03.8%</td>
</tr>
<tr>
<td>Agricultural Education</td>
<td>0.80</td>
<td>02.5%</td>
<td>03.7%</td>
</tr>
<tr>
<td>Animal &amp; Biomedical Sciences</td>
<td>1.20</td>
<td>15.8%</td>
<td>19.0%</td>
</tr>
<tr>
<td>Entomology</td>
<td>1.20</td>
<td>08.1%</td>
<td>02.6%</td>
</tr>
<tr>
<td>Nutritional Sciences</td>
<td>1.20</td>
<td>04.3%</td>
<td>14.2%</td>
</tr>
<tr>
<td>Sch of Family &amp; Consum Sci</td>
<td>0.80</td>
<td>08.7%</td>
<td>20.5%</td>
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<tr>
<td>Sch of Natural Resources</td>
<td>1.20</td>
<td>12.5%</td>
<td>10.5%</td>
</tr>
<tr>
<td>School of Plant Sciences</td>
<td>1.20</td>
<td>20.8%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Soil Water and Enviro Sci</td>
<td>1.20</td>
<td>12.6%</td>
<td>09.1%</td>
</tr>
<tr>
<td>CALS Total</td>
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<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Average</td>
<td>1.08</td>
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<td>10.0%</td>
</tr>
<tr>
<td>Median</td>
<td>1.20</td>
<td>08.7%</td>
<td>09.8%</td>
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</table>
### Total Return Less Investments (F&A Method)

<table>
<thead>
<tr>
<th>Department</th>
<th>Instruction Return Less Investments</th>
<th>Research Return Less Investments (F&amp;A Form)</th>
<th>Total Return Less Investments (F&amp;A Form)</th>
</tr>
</thead>
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<tr>
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<td>$443,131</td>
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<td>Animal &amp; Biomedical Sciences</td>
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<td>($946,629)</td>
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<tr>
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<td><strong>($992,435)</strong></td>
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<tr>
<td>Department</td>
<td>Normalization Factor on Investment</td>
<td>Proportional Total Investment</td>
<td>Proportional Total Return (MTDC Form)</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-----------------------------------</td>
<td>------------------------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>Agric &amp; Biosystems Engr</td>
<td>1.20</td>
<td>08.6%</td>
<td>04.8%</td>
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<tr>
<td>Agric &amp; Resource Econ</td>
<td>0.80</td>
<td>06.1%</td>
<td>02.9%</td>
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<tr>
<td>Agricultural Education</td>
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<td>1.20</td>
<td>15.8%</td>
<td>15.6%</td>
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<tr>
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<td>08.1%</td>
<td>03.9%</td>
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<tr>
<td>Nutritional Sciences</td>
<td>1.20</td>
<td>04.3%</td>
<td>12.1%</td>
</tr>
<tr>
<td>Sch of Family &amp; Consum Sci</td>
<td>0.80</td>
<td>08.7%</td>
<td>16.2%</td>
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<tr>
<td>Sch of Natural Resources</td>
<td>1.20</td>
<td>12.5%</td>
<td>14.6%</td>
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<tr>
<td>School of Plant Sciences</td>
<td>1.20</td>
<td>20.8%</td>
<td>14.3%</td>
</tr>
<tr>
<td>Soil Water and Enviro Sci</td>
<td>1.20</td>
<td>12.6%</td>
<td>11.5%</td>
</tr>
<tr>
<td>CALS Total</td>
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<td>100.0%</td>
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<tr>
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<tr>
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<td>08.7%</td>
<td>11.8%</td>
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</table>

Combined Proportional Return on Investment in CALS Instruction and MTDC with 1:1 Guide, FY 2015
<table>
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<th>Proportional Total Investment</th>
<th>Proportional Total Return (MTDC Form)</th>
<th>Return on Investment Ratio (MTDC Form)</th>
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<td>Sch of Natural Resources</td>
<td>1.20</td>
<td>12.5%</td>
<td>14.6%</td>
<td>1.17</td>
</tr>
<tr>
<td>School of Plant Sciences</td>
<td>1.20</td>
<td>20.8%</td>
<td>14.3%</td>
<td>0.69</td>
</tr>
<tr>
<td>Soil Water and Enviro Sci</td>
<td>1.20</td>
<td>12.6%</td>
<td>11.5%</td>
<td>0.91</td>
</tr>
<tr>
<td>CALS Total</td>
<td>N/A</td>
<td>100.0%</td>
<td>100.0%</td>
<td>1.00</td>
</tr>
<tr>
<td>Average</td>
<td>1.08</td>
<td>10.0%</td>
<td>10.0%</td>
<td>1.14</td>
</tr>
<tr>
<td>Median</td>
<td>1.20</td>
<td>08.7%</td>
<td>11.8%</td>
<td>0.95</td>
</tr>
</tbody>
</table>

Combined Proportional Return on Investment in CALS Instruction and MTDC, FY 2015
## Total Return Less Investments (MTDC Method)

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

CALS Budget & Operating Performance Guide, Final
FY 2015 (Revised October 30)