APLU Council on Research
Shared/Core Facilities Survey:
_Preliminary Findings_

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Methods

Survey Development Timeline:
• Initial survey was developed by APLU CoR Research Leader Fellows (Fall 2017)
• External review of survey by select VPR/VCRs (January 2018)
• Revised survey approved by APLU CoR Executive Committee (February 2018)

IRB approval through Michigan Tech University (April 17, 2018)

Survey Distribution Timeline:
• May 1, 2018 (156 total recipients – 2 blocked – 6 APLU staff = 148 net recipients)
• May 24, 2018 (157 total recipients – 2 blocked – 6 APLU staff = 149 net recipients)
• June 5, 2018 (177 total recipients – 3 blocked – 6 APLU staff = 168 net recipients)
• June 19, 2018 (177 total recipients – 3 blocked – 6 APLU staff = 168 net recipients)

Qualtrics Analysis (D. Delahanty, Kent State University)

Results presented here are preliminary descriptive analyses. This will not include all data collected, and additional data analysis are expected.
Institutional Profile

Responses from 58 of 168 surveyed (34.5%)
- 46 VPR/VCR (79.3%), 4 Vice Provost for Research (6.9%), 8 Other (13.8%)

Carnegie Classification
- 30 Doctoral Universities: Highest Research Activity (51.7%)
- 27 Doctoral Universities: Higher Research Activity (46.6%)
- 1 Doctoral Universities: Moderate Research Activity (1.7%)

Public vs. Private
- 55 Public (94.8%), 3 Private (5.2%)

Land Grant University
- 31 Land Grant (54.5%), 27 Non-Land Grant (46.5%)

Institutional Size
- Full-time tenure/tenure-track faculty = 993 ± 457 (range, 207 – 2000)
- Full-time nontenure/tenure-track faculty = 507 ± 534 (range, 0 – 2000)
- FY16 HERD expenditures = $244 ± 234 million (range, $13 - $1,194 million)
Q9. What type of general budget model is in place at your institution?

<table>
<thead>
<tr>
<th>Answer</th>
<th>%</th>
<th>Count</th>
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</thead>
<tbody>
<tr>
<td>Unit budgets are typically based on previous year’s level</td>
<td>50.00%</td>
<td>29</td>
</tr>
<tr>
<td>Unit budgets are cleared each fiscal year and future funding is based upon annual request</td>
<td>8.62%</td>
<td>5</td>
</tr>
<tr>
<td>Unit budgets are dependent upon revenue generation by the unit (e.g., student credit hours, enrollments, research awards, etc.)</td>
<td>20.69%</td>
<td>12</td>
</tr>
<tr>
<td>Unit budgets are based upon performance funding model (e.g., graduation rates, research expenditures, etc.)</td>
<td>10.34%</td>
<td>6</td>
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</tbody>
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Q10. Is the size of the VPR/VCR budget directly linked to F&A?

<table>
<thead>
<tr>
<th>Answer</th>
<th>%</th>
<th>Count</th>
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<tbody>
<tr>
<td>Yes</td>
<td>56.90%</td>
<td>33</td>
</tr>
<tr>
<td>No</td>
<td>43.10%</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>58</td>
</tr>
</tbody>
</table>

Q11. What % of F&A contributes to the VPR/VCR budget?
VPR/VCR Budget

Q12. How much flexibility do you have with the VPR/VCR budget?

<table>
<thead>
<tr>
<th>Answer</th>
<th>%</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Flexibility</td>
<td>1.82%</td>
<td>1</td>
</tr>
<tr>
<td>Little Flexibility</td>
<td>18.18%</td>
<td>10</td>
</tr>
<tr>
<td>Moderate Flexibility</td>
<td>50.91%</td>
<td>28</td>
</tr>
<tr>
<td>Considerable Flexibility</td>
<td>20.00%</td>
<td>11</td>
</tr>
<tr>
<td>Complete Flexibility</td>
<td>9.09%</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>55</td>
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</tbody>
</table>

Q13. To what extent do you feel the VPR/VCR office is provided with adequate resources when compared to other budgetary units on campus?

<table>
<thead>
<tr>
<th>Answer</th>
<th>%</th>
<th>Count</th>
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<tbody>
<tr>
<td>Inadequate</td>
<td>12.73%</td>
<td>7</td>
</tr>
<tr>
<td>Somewhat Inadequate</td>
<td>43.64%</td>
<td>24</td>
</tr>
<tr>
<td>Adequate</td>
<td>40.00%</td>
<td>22</td>
</tr>
<tr>
<td>Somewhat Plentiful</td>
<td>3.64%</td>
<td>2</td>
</tr>
<tr>
<td>Plentiful</td>
<td>0.00%</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>55</td>
</tr>
</tbody>
</table>
Q14. For the purposes of this survey, core facilities are defined as “shared facilities and infrastructure (including equipment and personnel) that support research across multiple colleges/schools/units.” Does your institution have facilities that you believe meet this (or related) definition?

- Yes (If yes, proceed to Section 4): 52 institutions (94.6%)
- No (If no, proceed to Section 5): 3 institutions (5.4%)
Q17. Core facilities report to whom at your institution (check all that apply)?

- VPR/VCR Office: 43 institutions (82.7%)
- Provost Office: 35 institutions (67.3%)
- College or School: 22 institutions (42.3%)
- Institute or Center: 22 institutions (42.3%)
- Department: Other (please specify)
- If desired, please provide any additional detail or clarification on your response above.
Q18. Does your institution have a formal application process to become a designated core facility?

- Yes, and it is managed centrally by the VPR/VCR and/or Provost Office: 16 institutions (32%)
- Yes, and it is managed by the unit it reports through: 7 institutions (14%)
- No: 20 institutions (40%)
- Other (please specify and add additional detail): 7 institutions (14%)
Q 18. Does your institution have a formal application process to become a designated core facility?

Other (please specify and add additional detail)

<table>
<thead>
<tr>
<th>Text</th>
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<tbody>
<tr>
<td>Centers go through a formal approval process; not all core facilities are designated as centers</td>
</tr>
<tr>
<td>Approval centrally as a service center</td>
</tr>
<tr>
<td>Approval centrally as a service center</td>
</tr>
<tr>
<td>formal process under development</td>
</tr>
<tr>
<td>Yes, it is managed centrally by the VPR/VCR and/or Provost Office and it is managed by the unit it reports through.</td>
</tr>
<tr>
<td>YES: Office of Grant and Contract Accounting</td>
</tr>
<tr>
<td>Somewhat, the decision is at the discretion of the VPR Office</td>
</tr>
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</table>
Q19. Does your institution have a formal evaluation and/or renewal process for designated core facilities? If yes, please indicate in open response box how often this takes place.

- Yes, and it is managed centrally by the VPR/VCR and/or Provost Office: 21 institutions (40.4%)
- Yes, and it is managed by the unit it reports through: 7 institutions (13.5%)
- No: 21 institutions (40.4%)
- Other (please specify):
Q21. In your opinion, rate the overall general effectiveness of each type of core facilities director/supervisor:

- Extremely Effective
  - Admin: 60.5%
  - TTF: 26%
  - NTTF: 50%
  - Prof Staff: 66%

- Very Effective
  - Admin: 32.6%
  - TTF: 58%
  - NTTF: 40%
  - Prof Staff: 31.9%

- Moderately Effective
  - Admin: 6.9%
  - TTF: 16%
  - NTTF: 10%
  - Prof Staff: 2.1%

- Slightly Effective
  - Admin: 5%
  - TTF: 10%
  - NTTF: 5%
  - Prof Staff: 7%

- Not Effective At All
  - Admin: 10%
  - TTF: 15%
  - NTTF: 20%
  - Prof Staff: 12%
Q22. List 2-3 key characteristics of effective/highly effective core facilities directors/supervisors.
Q23. Which of the following ‘common’ core facilities do you have at your institution (or something closely related)? (check all that apply)

- Microscopy/Imaging Core(s): 50 institutions (96.2%)
- Microanalytic Chemistry and/or Molecular Core(s): 39 institutions (75%)
- Fabrication (or Microfabrication Core(s)): 32 institutions (61.5%)
- Animal Care Facility Core(s): 48 institutions (92.3%)
- High Performance Computing Core(s): 41 institutions (78.8%)
- Marine or Aquatic Core(s): 18 institutions (34.6%)
- Agricultural or Field-Based Core(s): 15 institutions (28.8%)
Q25. How are your core facilities funded? (check all that apply)

- **Use fee structure**: 50 institutions (96.2%)
- **Annual general fund allocation**: 32 institutions (61.5%)
- **Percentage of F&A is allocated to core facilities**: 24 institutions (46.2%)
- **Directors or professional staff are funded by managing unit or centrally**: 40 institutions (76.9%)
- **Internal grant program**: 16 institutions (30.8%)
- **Other (please specify)**
Q26. Are your core facilities considered “service centers”, thus calculated into the institutional F&A rates?

- Yes; all core facilities are considered “service centers” for F&A purposes: 15 institutions (28.9%)
- Yes, but only some of our core facilities are considered “service centers” for F&A purposes: 26 institutions (50%)
- No; core facilities are not considered “service centers” for F&A purposes: 9 institutions (17.3%)
- I do not know if our core facilities are considered “service centers” for F&A purposes
Q29a. Are directors fully or partially funded from use fees?

Q29b. Are staff fully or partially funded from use fees?
Q 31. For each category of common core facilities, please indicate your preference for service contracts vs. on-campus service options for maintenance and service of core facilities?
Q32. To what extent do you feel your core facilities are provided with adequate resources for their given mission and responsibilities?

Q33. If we were to ask the previous question to each of your core facility directors/supervisors (i.e., to what extent do you feel your core facility is provided with adequate resources for your given mission and responsibilities?), what do you believe would be the typical answer?
Q 34. If you have designated resources to put toward core facilities (or were successful at receiving new resources if no current resources exist), rank order your preference of funding the following: (1-most important, 2-next important, etc.)

Preferred Investments by VPR/VCR

- Current Equipment maintenance/repair/replacement
- New Equipment
- Space rental/renovation
- Repair/maintenance
- Core facilities directors/supervisors
- Other facility personnel (e.g. technicians, student, etc.)
- Other (please specify)
Q 36. Who pays for new equipment for core facilities? (check all that apply)

- Central institutional funds: 43 institutions (82.7%)
- College/school/departmental funds: 38 institutions (73.1%)
- External grants (i.e., NSF MRI, etc.): 45 institutions (86.5%)
- Donations: 14 institutions (26.9%)
- F & A resources: 28 institutions (53.8%)
- Use fees: 26 institutions (50%)
- Other (please specify)
- If desired, please provide any additional detail or clarification about your response above.
Defining Success for Shared/Core Facilities

Q37. How do you characterize success of a core facility?
Additional Resources

• A survey run annually by iLab Solutions, a core facility management software company, now owned by Agilent. The surveys were primarily completed by core facility managers and directors, and are focused on management issues.

• FASEB survey primarily designed for two groups – 1) Facility Directors and 2) Facility Users.

https://nexus.od.nih.gov/all/2015/09/10/core-facts-about-core-facilities/
• NIH communication from Dr. Sally Rockey. Within the blog is another link to a workshop report on “Enhancing the Efficiency of Research Core Facilities.”

• Videos and other resources of the Workshop that was held at the Association of Biomolecular Research Facilities (ABRF) 2015 meeting that was held in conjunction with NIH.
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David Reed, Michigan Technological University

Janet Nelson, University of Idaho

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