UM System CIO Report to Board of Curators

Fiscal Year 2016

Missouri University of Science and Technology
## GRA and IT Fee Budget

<table>
<thead>
<tr>
<th></th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT Fee</td>
<td>2,037,000</td>
<td>2,220,102</td>
<td>2,326,000</td>
<td>2,388,000</td>
<td>2,646,307</td>
<td>2,754,000</td>
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<tr>
<td>GRA Total</td>
<td>4,810,846</td>
<td>4,982,923</td>
<td>4,936,855</td>
<td>4,875,009</td>
<td>4,932,860</td>
<td>3,982,914</td>
</tr>
<tr>
<td>IT Fee SWB</td>
<td>1,016,411</td>
<td>1,066,051</td>
<td>1,156,204</td>
<td>1,175,657</td>
<td>1,227,121</td>
<td>1,223,714</td>
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<tr>
<td>GRA SWB</td>
<td>3,448,415</td>
<td>3,620,492</td>
<td>3,654,069</td>
<td>3,830,077</td>
<td>3,901,587</td>
<td>3,200,954</td>
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<tr>
<td>IT Fee E&amp;E</td>
<td>1,020,589</td>
<td>1,154,051</td>
<td>1,169,796</td>
<td>1,212,343</td>
<td>1,419,186</td>
<td>1,496,325</td>
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<tr>
<td>GRA E&amp;E</td>
<td>1,362,431</td>
<td>1,362,431</td>
<td>1,194,432</td>
<td>1,044,932</td>
<td>1,031,273</td>
<td>782,781</td>
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<tr>
<td>Total</td>
<td>6,847,846</td>
<td>7,203,025</td>
<td>7,262,855</td>
<td>7,263,009</td>
<td>7,579,167</td>
<td>6,736,914</td>
</tr>
</tbody>
</table>
## IT Income Statement

<table>
<thead>
<tr>
<th></th>
<th>FY13 Income</th>
<th>FY14 Income</th>
<th>FY15 Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning Balance</td>
<td>$2,746,252</td>
<td>$2,944,626</td>
<td>$2,903,189</td>
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<tr>
<td>GRA</td>
<td>$4,936,855</td>
<td>$4,932,860</td>
<td>$3,982,914</td>
</tr>
<tr>
<td>IT Fee</td>
<td>$2,326,000</td>
<td>$2,388,000</td>
<td>$2,754,000</td>
</tr>
<tr>
<td>Internal Sales</td>
<td>$1,297,645</td>
<td>$1,513,702</td>
<td>$1,670,663</td>
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<tr>
<td>Misc.</td>
<td>$247,873</td>
<td>$126,431</td>
<td>$119,403</td>
</tr>
<tr>
<td>Total Revenue</td>
<td>$8,808,373</td>
<td>$8,960,993</td>
<td>$8,526,914</td>
</tr>
<tr>
<td>Staff SW&amp;B</td>
<td>$4,392,881</td>
<td>$4,633,375</td>
<td>$4,751,463</td>
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<tr>
<td>Student S&amp;W</td>
<td>$239,867</td>
<td>$234,997</td>
<td>$278,993</td>
</tr>
<tr>
<td>Other Expenses</td>
<td>$2,346,443</td>
<td>$2,729,119</td>
<td>$3,087,382</td>
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<tr>
<td>Total Expenses</td>
<td>$6,979,191</td>
<td>$7,597,491</td>
<td>$8,117,838</td>
</tr>
</tbody>
</table>
Teaching Technology: Blackboard, Academic Content Services, Classroom Technology, Clickers, Instructional Technology Support, Instructional Software Licenses, $887,463, 36%


Tech Support: Help Desk, Walkin Center, Desktop Support, 3D Printing, Loaner Computers, Library Renovations, $104,866, 4%

Other: Strategic Planning, Data Reporting, Project Management, Misc., $223,043, 9%

Student Workers and Experiential Learning, $107,247, 5%

CLC: Hardware, Printers, Academic Software Licenses, Paper, Toner, Maintenance & Support, $541,662, 22%

FY14 IT Fee Budget
FY15 IT Fee Budget

- **Teaching Technology:** Blackboard, LMS Review, Academic Content Services, Classroom Technology, Clickers, Instructional Technology Support, Instructional Software Licenses, $922,623, 31%
- **Research:** Research Support - Equipment, Tools, Collaboration; HPC & Visualization, $779,531, 27%
- **IT Infrastructure:** Networking, Wireless, Desktop Engineering, File Storage, Servers, Web Media, System Security, $176,034, 6%
- **Tech Support:** Help Desk, Walkin Center, Desktop Support, 3D Printing, Loaner Computers, Library Renovations, $125,539, 4%
- **Other:** Strategic Planning, Data Reporting, Project Management, Misc., $211,816, 7%
- **CLC:** Hardware, Printers, Academic Software Licenses, Paper, Toner, Maintenance & Support, $556,997, 19%
- **Student Workers and Experiential Learning:** $182,398, 6%

Total Budget: $2,566,851
**Missouri S&T**
**Information Technology**
**June 6, 2018**

*The most recent version of the org chart can be found at: http://it.mst.edu/about/*
HR Report

• Turnover Rate - 25 staff since 2013

• Current Total Staff FTE – 63

• Total Student Spring 2016 - 69

• Total IT family positions not reporting to IT (net increase of 16 for FY16)
  • 4 - Communications
  • 2 - Facilities & Operations
  • 2 - Enrollment Management
  • 1 - Advancement
  • 12 - Educational Technology (IT to S&T Global FY16)

• Total IT family positions not reporting to IT funded by IT
  • $124,000 SW&B for 2 Communications positions
  • $769,230 in SW&B and $117,000 in E&E for 12 Ed Tech staff transitioned to S&T Global
FY16 Accomplishments

• Transitioned Education Technology department from IT to S&T Global Learning.
• Collaborated with UM-wide proof of concept for AWS cloud services and began active migration.
• Proof of concept completed for Crashplan endpoint backup solution.
• Proof of concept completed for wireless printing in the Library.
• Obtained funding for and initiated HPC generator project.
• New HPC cluster completed for unfunded student research.
• Working with Dr. Richard Dawes and a group of faculty computational researchers. obtained commitment from the campus for a 3 year 1.2M HPC expansion.
FY16 Accomplishments

• Developed a Big Data service using SAP HANA and Hadoop for academic coursework and funded research.
• Brought in new leadership for the IT Campus Technology Support team.
• Reorganization of IT from 4 to 3 directorates, moving Project Management under the CIO and Applications under Networks & Computing Services. Added a new Program and Compliance officer under the CIO.
• Completed a 9 month student innovation contest BeBetter.mst.edu
• Developed a new UAV service for research called MinerFly.
• Reached a collaborative agreement with the Lone Star UAS Center and TAMU Corpus Christi which will allow S&T to fly anywhere in the country.
FY16 Accomplishments

• Negotiated to move the IT department off campus consolidating staff from multiple campus buildings into one location.
• Completed upgrade of campus wireless from 802.11N to 802.11AC wireless connectivity.
• Completed implementation of network access control for the residential network.
• Completed Splunk network security logging shared service implemented for UM-Wide use.
• Completed phase 1 of upgrade and migration for Terminal Four Web CMS for campus web environment.
• Completed campus wide IT satisfaction survey.
• Completed campus VOIP migration to Freeswitch.
Active Projects

Academic

• SAP HANA for BIT coursework integration
• Big data cluster for CS coursework integration
• Private cloud computing cluster for CS course integration
• VDI solution replacement for distance students
• Migration from Blackboard to Canvas LMS.
• Wireless printing in Library
Active Projects

Administrative

- Relationship management campus department road show and IT awareness initiative
- Relocating IT staff off campus to Mercy building.
- Salesforce CRM implementation for S&T Global Corporate Relations.
- U.Achieve project management for Enrollment Management.
- IT Project Management dashboard.
- IT HelpDesk Knowledgebase solution, Live Chat and IT Blog.
- Cbord CS Access lock solution for ResLife for new University Commons and Res College 2.
- IT program and compliance management initiative
- IT consolidated billing solution.
- Rave mass notification solution.
Active Projects

Infrastructure

- Proof of concept for UM provided infrastructure services
- Upgrading campus building connectivity to redundant 10G fiber connections
- University Commons residential hall network design and construction
- Planning to relocate the secondary campus data center/network center from Parker Hall to an alternate location.
- Proof of concept for Software2 software virtualization solution
- Continue outdoor wireless expansion on southern end of campus.
- Microsoft DFS local storage migration to Google drive.
- Phase 2 of Terminal Four Web CMS upgrade and migration.
- Exchange 2016 migration.
- SecureAuth implementation.
- Endpoint security replacement
Active Projects

Research

- HPC data center generator.
- RTD 2016, research technology day conference.
- SAP HANA based Autism research.
- Hadoop based research for CS faculty.
- MinerFly UAV service flight readiness.
- UAV mission for EPSCOR funded research.
- Upgrade of existing HPC cluster for research, funded by IT.
- Construct new HPC cluster for research, funded by campus.
- HPC support collaboration with UMSL researchers.
- HPC support collaboration with UMC researchers.