Current Role(s) – the “org chart” view

- **Client / Web Services**
  - Help Desk / 7x24 CTLM Lab / Printing
  - Desktop / Client Support
  - Lab Support / Classroom Support
  - Website Infrastructure Support

- **Enterprise Services**
  - Banner / Business Process Support / Business Intelligence
  - System Integration / Database Support
  - Email
  - Learning Management System (Blackboard)

- **Communications & Networking Infrastructure**
  - Telecommunications / Networking (“Voice & Data”)
  - Server Administration
  - Data Center Operations (Backups, etc)
  - Information Security

- **High Performance Computing**
### Expenditures by CCIT Team

<table>
<thead>
<tr>
<th>Service</th>
<th>General Operating</th>
<th>% of CCIT</th>
<th>Labor</th>
<th>FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>General CCIT</td>
<td>$179K</td>
<td>9.6%</td>
<td>$0.2M</td>
<td>2.0</td>
</tr>
<tr>
<td>Client / Web Services</td>
<td>$215K</td>
<td>11.5%</td>
<td>$1.8M</td>
<td>20.5</td>
</tr>
<tr>
<td>Enterprise Systems</td>
<td>$716K</td>
<td>38.3%</td>
<td>$2.2M</td>
<td>15.5</td>
</tr>
<tr>
<td>Communications &amp; Networking **</td>
<td>$610K</td>
<td>32.7%</td>
<td>$1.3M</td>
<td>20.0</td>
</tr>
<tr>
<td>High Performance Computing</td>
<td>$145K</td>
<td>7.8%</td>
<td>$0.4M</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$ 1.865M</strong></td>
<td><strong>100%</strong></td>
<td><strong>$5.9M</strong></td>
<td><strong>59.5</strong></td>
</tr>
<tr>
<td>Telecommunications (Voice) **</td>
<td>$583K</td>
<td></td>
<td>$0.3M</td>
<td>1.5</td>
</tr>
</tbody>
</table>

- **Total Operating:** $8.8M, labor ~ 70% of overall budget
- **85-90% of non-labor operating budget committed to simply “running” existing services: Maintenance, licenses, hardware, network services**
Vision for IT Services at Mines

- Create a culture of partnership, collaboration, and service with entire Mines community
- Develop IT architecture that can respond to changing conditions / new opportunities
- Consider best-in-class technology solutions to promote business efficiencies and support future agility
- Develop IT funding models to sustain core service, support innovation, facilitate growth
  - Increase proportion of budget dedicated to “Grow” & “Transform” (rather than simply “Run”)

con’t…
Vision for IT Services at Mines, con’t

- Optimize use of technology in teaching / learning in collaboration with academic leadership & CITL
- Improve student outcomes through institutional approach that strategically leverages technology
- Provide world-class cyber-infrastructure to empower research
  - Much more than High Performance Computing
- Develop strategies for support of BYOD, mobile, and cloud environments

*Evolution of IT Services: What we do, how we do it*
Intersection of Strategic Plan / Vision Examples

- **Goal 1:**
  - “Expand active-learning instruction using best-in-class pedagogical and technological practices”

- **Goal 2:**
  - “Build a student-centered campus…”

- **Goal 3:**
  - “Continually investigate new technologies and market trends…”
  - “Support research innovation…”

- **Goal 4:**
  - “Develop and support campus infrastructure and processes to match Mines’ aspirations…”
  - “Incorporate…strategy to sustain and improve capital infrastructure”
  - “Assess and reconfigure administrative processes to promote institutional efficiency…”
  - “Upgrade and enhance instructional infrastructure…”
  - “Enhance and expand research infrastructure…”
Key Strategies

- **Building / strengthening relationships**
  - Customer-centric, partnership approach
  - Listening / Engaging all constituents (faculty, staff, student)
  - Academic / Student Life / Administrative / Research

- **IT Strategic Planning / Operational Planning**
  - Project / Portfolio Management
  - Demonstrable tie to Mines Strategic Plan with key metrics for all areas
  - 3 year rolling strategic view; Annual operational priorities

- **Informed Decision Making**
  - Open to – and aware of – alternative ideas / best practices
  - Determine KPI’s, cycle of measurement & adjustment

- **Transform budget approach / view for IT**
  - Align with operation – operating / capital / innovation
  - Allow for multi-year perspective of capital investment
Key Strategies… Budgetary Perspective

- Maximize current resources – funding & personnel

- Develop IT funding models to sustain core service, facilitate growth, support innovation
  - Clear identification of infrastructure & other capital needs
    - Mandatory vs. Required vs. Transformative priorities
  - Address budgetary support for instructional technologies
  - Restructure telecommunications (voice & data services) budget
    - *Address convergence of voice and data*
    - *Supports periodic, significant capital investments*
  - Begin shift in budget model: “Run” → “Grow” / “Transform”
Key Strategies… Budgetary Perspective

- **Short Term (Coming Year)**
  - Resources for Project / Portfolio Management (Personnel, Capital)
  - Capital investments: Data networking, Storage, Servers
  - Personnel: Address dramatic increase in data networking support

- **Longer Term (Future Years)**
  - Research Support / Cyber-Infrastructure
  - Solid capital funding model for infrastructure
    - Hardware and software
    - Multi-year perspective / approach
  - Solid funding model for telecommunications
    - Inclusive of voice and data
  - Increase proportion of budget dedicated to “Transform”
    - Operating / Capital
  - Anticipated personnel needs:
    - Technology training: instructional, administrative, ...
    - Research / Cyber-Infrastructure Support
    - Instructional technologist / multi-media support
Summary

- **Vision:**
  - Co-creation of effective, innovative solutions that support all aspects of Mines’ strategic and operational goals
  - Exceed student, faculty & staff expectations regarding technology infrastructure, services, and support
  - An evolution of CCIT – what we do and how we do it

- **Strategies:**
  - Creating strong partnerships
  - Leveraging best practices
  - Evolution of budgeting / funding models

- **Results:**
  - Increased level of support for students / academic units / student life / research
  - Increased effectiveness and efficiency of business operations
  - Sustainable funding model
  - Agility and ability to evolve, grow, and transform IT services in support of Mines’ strategic plan