### FY2019 Global Proposal

<table>
<thead>
<tr>
<th>New Funding Request</th>
<th>Total Amount Requested</th>
<th>Co-share</th>
<th>Net New Funding Requested</th>
<th>% Total Fund 100</th>
<th>No. of FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1st Priority:</strong></td>
<td></td>
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</tr>
<tr>
<td>University wide</td>
<td>$500,000</td>
<td></td>
<td>$500,000</td>
<td></td>
<td>0</td>
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<tr>
<td>Directory Service</td>
<td></td>
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<tr>
<td><strong>2nd Priority:</strong></td>
<td>$260,000</td>
<td></td>
<td>$260,000</td>
<td></td>
<td>0</td>
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<tr>
<td>University Wide</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Security Infrastructure</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$760,000</td>
<td>$0</td>
<td>$760,000</td>
<td>0.3%</td>
<td>0</td>
</tr>
</tbody>
</table>
1st Priority: University Wide IT Directory Service
Engage Outside Consulting Services

• Identify cost, time & service efficiency options for all URI IT
  • Directory Services
    – Single Authentication
  • Licensing Options:
    – Required or optimize cost/efficiency.

• $330,000 – one time only costs
Required Licensing Costs

• Estimated licensing for current Microsoft suite.

• $170,000 annually
Pros:

• IMMEDIATE (~ within 1st year) IMPACT
  – Make URI compliant with Licensing obligations.

• FUTURE IMPACT: Provide Plans for:
  – Merge & centralize authenticating Directory Svc
  – Faster and better integration of IT services
  – Identify time, service and cost efficiencies
  – Enhanced security
  – Other potential Advantages listed in proposal.
Concerns / Questions Regarding Three Phase, 5 year Project

• Budget pays for *only* Phase 1, *not* Phases 2-3 of five year project.

  – Budget pays for *Recommendations* made by Consultants, *not* Implementation.
• **Phase 1:** - Hire Consultant to:
  – Review and make recommendations regarding Licensing, Directory Structure, IT security modifications

• **Phase 2:** Enterprise Directory Rollout
  – Consolidate ITS Supported Services to single Authentication Directory & set-up re-engineering processes.
  – Implement IT Security enhancements

• **Phase 3:** Implement One login/ one password and Portal Services
Concerns / Questions re: Multi-phase Project

*Sole request vs. first of several requests?*

– Does approving budget request for Phase 1 commit (obligate?) SBPC to approve proposals for any new, added funding to base budget to implement Phases 2 & 3?

– OR - If Phases 2 & 3 are not fully funded (in a timely fashion), will proposed benefits decrease significantly (disappear)?
Concerns / Questions – re: Multi-Phase Project

- Significant and unknown overall cost for all 3 Phases.
- Comps provided by ITS after proposal:

<table>
<thead>
<tr>
<th>School</th>
<th>Operation</th>
<th>Cost</th>
<th>Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>URI</td>
<td>3 Central ITS and 9+ non-ITS Directories</td>
<td>$760k</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>???</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>???</td>
<td>3</td>
</tr>
<tr>
<td>Hartford Healthcare</td>
<td>18 Active Directories</td>
<td>$2.4 M</td>
<td></td>
</tr>
<tr>
<td>U. Nevada Las Vegas</td>
<td></td>
<td>$1 M</td>
<td>(incomplete)</td>
</tr>
</tbody>
</table>
• “Central IT” Benchmark data from Hanover Research (May 2017) may be comparing “Apples vs. Oranges”.

  > 40% of URI IT FTE are outside Central ITS.

• Single Sign-on vs. one login/one password
  – “Single Sign-on” frequently cited justification, but only an option requiring additional cost after Phase 3.
• **Hire Consultant vs. new URI employee?**
  – Rather than spending money on consultants, hire new employee(s) with needed qualifications so that expertise needed for Implementation (Phases 2, 3) would remain in house after first Phase over.

• **Concerns regarding Totally Centralized IT**
  – How will URI ensure that 9+ distributed IT units (non-ITS) can maintain flexibility and autonomy when needed (e.g. non-Microsoft Operating Systems or software, special purpose computers…)?
2nd Priority:
University Wide IT Security Infrastructure
URI IT Security Infrastructure

• Develop Information Security Program with Central depository of Policies & Procedures

• Risk Management Assessments

• Improve Vulnerability Assessment and Remediation Program
## One Time Only Costs in Budget
(updated itemized info)

<table>
<thead>
<tr>
<th>Item</th>
<th>$ Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patch Management</strong></td>
<td>$39,400</td>
</tr>
<tr>
<td>- IBM Big Fix Compliance MVS Unit Licenses for Servers + SW Subscription &amp; Support 12 mos.</td>
<td></td>
</tr>
<tr>
<td><strong>IBM Big Fix Compliance Client License</strong></td>
<td>$59,360</td>
</tr>
<tr>
<td>- SW Subscription and Support 12 months</td>
<td></td>
</tr>
<tr>
<td><strong>Big Fix Professional Services</strong></td>
<td>$14,000</td>
</tr>
<tr>
<td><strong>Vulnerability Tenable Security Center</strong></td>
<td>$134,876</td>
</tr>
<tr>
<td>- Tenable Security Center Continuous Vulnerability Mgmt</td>
<td></td>
</tr>
<tr>
<td><strong>Professional Services</strong></td>
<td>$11,124</td>
</tr>
<tr>
<td>- Vulnerability Management</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$258,760</td>
</tr>
</tbody>
</table>
### Additional Annual Costs*
(updated info – not in original budget)

<table>
<thead>
<tr>
<th>Item</th>
<th>$ Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>* IBM Big Fix Service/Support</td>
<td>$20,000 / yr.</td>
</tr>
<tr>
<td>* Vulnerability Tenable Security</td>
<td>$109,000 / yr.</td>
</tr>
</tbody>
</table>

**TOTAL**  
$129,000 / yr

* for years after FY19
Pros

• Protect against breaches or intrusions on URI data and infrastructure
  – Respond more easily/efficiently to increases in number and complexity of:
    • cyber threats
    • Regulations
  – Protect URI against large fines, e.g. HIPAA $400/record fine.
Concerns / Questions

• Original Budget needed clarification

$260k

vs.

$258.7k (one time only) + $129k (annually >FY19)
Overall Cons of both proposals

• Need clarification of Budget Information
  – Expenditures: which are one-time-only vs. annual?
  – Original $260k Security budget lacked detail

• “Cost & Service efficiencies” or ROI: Unclear what is “Net” cost vs. savings
  – Some listed “efficiencies” would require expense of purchasing additional software, e.g. single sign-on.
    • No $ estimate given for potential cost or savings.
Overall Pros of both proposals

- Enhances IT efficiencies, effectiveness & security.
- Delaying start of 5 yr project could incur significant security risks, damage to data/infrastructure, & fines.
- Several campus groups approve Improvements to Directory Services and Security.
  - URI UTN (Univ. Technology Network)
  - URI ITGov (Strategic Governance Comm.), …
- All things being equal, reviewers rate IT Security proposal higher than Directory Service.
  * Unclear “facilitate/strengthen” vs. “required”
• Thanks!
  – Rich Kubica, Mike Motta and Mike Khalfayan for quick response to additional information requested by Review Team.

• Questions?