June 1, 2017

To: Dr. Garnett Stokes, Interim Chancellor
Anna Ball, Faculty Fellow for Faculty Development
121 Gentry Hall
University of Missouri
Columbia, MO 65211
Attn: Michelle Marsden

From: Michael E. Goldschmidt, Chair
MU Campus Space Utilization Committee

Re: MU Campus Space Utilization Committee (CSUC)
Annual Report 2016 – 2017

Committee Mission/Charge: The Campus Space Utilization Committee (CSUC) is an advisory committee for the Provost and Vice Chancellor of Operations to provide recommendations concerning campus space use following MU Space Planning Principles. The charge includes evaluation of new space, repurposing space, and space assignments that cross division or college boundaries.

The committee included the following representation for the year:
Faculty: Michael Goldschmidt (chair), Andrew Clarke, Susan Lever
Staff: Christine Kintner
Student: David You (graduate), Julia May (undergraduate)
Ex-Officio: Joey Riley, Leona Rubin, James Spain, Gerald Morgan

Annual Summary:

1. This was the third year for the committee. It was formed by splitting the former Campus Planning Committee into two separate committees: one devoted to the review and recommendations for new buildings and landscapes (now called the Campus Facilities Planning Committee) and this committee, which is devoted to issues concerning space use in new and existing buildings.
2. The committee reviewed requests for space allocation throughout the campus, including:

   a. Asian Affairs Center
   b. Mizzou Creative
   c. RevaturePro
   d. Neff Hall
   e. Blackbox Theater
   f. ArchSt Extension

3. The committee updated guidelines for MU SPAM on procedures for space needs and requests for the committee. This included when voting by email is allowed for small space requests, when the director of SPAM can bypass the committee due to the small size of the request, and submission time required to the committee for large space relocation requests.

4. The committee assisted the Campus Master Planners with the updated version of the Campus Master Plan.

5. The committee met jointly in April 2017 with the MU Campus Facilities Planning Committee for a presentation by VCO Gary Ward. The meeting was held concerning budget cuts and limitations on maintenance funds and the effect that the lack of funding will have in the short and long-term future of MU buildings. As a result of this meeting, the committee took the following actions:

   a. Sent a letter to Ben Trachtenberg of Faculty Council to give him an update on the committee’s formal response to this issue. This letter is attached.
   b. Approved a written procedure for MU SPAM to use when considering building closures in the future, with the understanding that all requests will be brought to both the MU CSUC and MU CFP committees for review. This procedure is attached.

Goals for the 2017 – 2018 Academic Year:

1. Continue to advise the vice-chancellor for operations, the director of space planning and management, and the provost on space needs and space relocation requests.

2. Assist the vice-chancellor for operations, the director of space planning and management, and the provost on an overall space plan for Mizzou North so that the building can be developed less piecemeal.
3. Consider very carefully requests for building closures in response to limited available funding for building repairs and maintenance.

Respectfully submitted,

Michael E. Goldschmidt
2016 – 2017 MU CSUC Chair
goldschmidtm@missouri.edu (573) 884-0905
April 4, 2017

Ben Trachtenberg, Chair
MU Faculty Council
319 Hulston Hall
University of Missouri
Columbia MO 65211

Re: Proposal from VCO Gary Ward concerning identifying, decommissioning and razing MU Educational and General (E&G) buildings

Ben:

Per your request, the Campus Space Utilization Committee (CSUC) and the Campus Facilities Planning Committee (CFPC) met in a joint session on March 8, 2017, from 3:30 to 5:00pm, to discuss the presentation(s) and concept proposal made to Faculty Council and other entities concerning long-term replacement, closure, and repair to campus E&G buildings. This letter is to serve as the formal response to your request to have feedback from the two committees to Faculty Council concerning this issue. Please note that we believe that the presentation made to the two committees was the same as presented to Faculty Council, with the exception that some of the data has been updated concerning the current condition of E&G buildings. The situation is, in general, worse than it was when it was presented to Faculty Council.

At the joint committee meeting, all attending members were allowed ample time to ask questions and voice concerns on this issue. The committees realize the importance and gravity of the proposal. The committees are working with two assumptions in this matter. First, we are assuming, based on the current funding trends from the state legislature and other sources, that there will not be an increase in appropriations for building repairs and maintenance. Most likely is that there may be less money per year from the legislature or other sources in future fiscal years based on historic trends. Secondly, there is not a current proposal to decommission or demolish any particular building on campus, as this proposal is in a conceptual stage. The FCNI numbers are based on solid data concerning the conditions of buildings, but there are also intangibles that should
be considered in some of these buildings before a proposal is made on their future use or not.

The over-arching concept is that if the campus does nothing or delays action, a majority of E&G buildings on campus will have a Facility Conditions Needs Index (FCNI) of greater than 0.40 by 2024. At that point, substantial funding will be required just to keep a majority of campus buildings marginally open and lack of this funding will dramatically impact the academic and research operations of the entire campus. And that might be the most optimistic scenario. To put it in terms to faculty and staff that do not have building or construction backgrounds, there will be a lot of leaky roofs and broken heating and cooling systems with no funds to repair. In essence, these buildings might have to be closed anyway due to conditions that would make them difficult to occupy, even without a plan or proposal in place.

At the full joint committee meeting and in a follow-up meeting with the two chairs, we tasked Gary to report back to the committees with two items:

1. Have a draft review process to use if this process proceeds. He has since provided us with the attached draft. It includes all of the criteria requested and it will provide both committees with a method of evaluating the feasibility of keeping certain buildings open in the future. I think it is important for all members of the Faculty Council, deans, and other parties to fully understand that no building will be proposed for closure or demolition without being reviewed by both committees using this document. Also note that the draft review document clearly looks at ways to relocate programs and other forms of consolidation, and in doing so, increase the academic and research mission of MU.

2. The possibility of hiring a consultant or use in-house resources for an in-depth survey to understand what each college needs in space allocation to meet their current and future academic and research missions, including:

   a. Standards for space utilization consistent in all programs
   b. Classroom scheduling
   c. Classroom and Lab efficiency
   d. Office space flexibilities

We believe that this space utilization survey is necessary, but will take time to complete. We understand that there may be a proposal from Gary to consider some short-term solutions (including some space consolidation proposals) before this survey is done.

If implemented with transparency and oversight, we believe this process will reduce the amount of deferred maintenance on campus and provide valuable recaptured operations dollars. These dollars can then be used to provide
necessary repairs and maintenance to the remaining buildings. The two committees believe that the proposal is sound in concept but will require some minor modifications as the draft document is accepted.

The minutes to our joint meeting is also included, attached to this letter. Please let either of us know if the Faculty Council needs additional information on this issue.

Sincerely,

Michael Goldschmidt, chair
MU Campus Space Utilization Committee

Bill Wiebold, chair
MU Campus Facilities Planning Committee

pc: VCO Gary Ward
DRAFT PROCESS FOR REVIEW
April 2017

Intent
The following is a proposed process for identifying, decommissioning and razing MU Educational and General (E&G) buildings. We believe this process will reduce the amount of deferred maintenance on campus and provide valuable recaptured operations dollars.

Proposed Process

1. Vice Chancellor of Operations to identify an E&G candidate for demolition.

2. Assess how building candidate meets one or more of the following criteria:
   a. Exhibit a Facilities Condition Needs Index (FCNI) rating of above 40%\(^1\)
   b. Cannot be renovated in an efficient or cost effective way to support contemporary learning.
   c. Have a remote location that inhibits essential cross-disciplinary learning.
   d. Does not provide a large quantity of lab space used for high-intensity research.

3. For each building demolition candidate:
   - Verify number of building occupants by role and department.
   - Inventory the types of collegiate work being conducted in the building.
   - Assess other campus buildings that could accommodate those occupants and their collegiate work.

4. For individuals and user groups currently accommodated in demolition candidates:
   - Determine any special accommodations that would be required to support the collegiate work of relocated occupants.
   - Consider new professional linkages and collegiate pollination possible with proposed relocations.

5. For each demolition candidate, estimate the cost for moving occupants and renovating the space into which they would be newly accommodated.

6. Demonstrate how the process of relocating occupants to new campus spaces and demolishing the vacated building(s) directly improves MU’s academic mission.

7. Campus Space Utilization Committee and Campus Facilities Planning Committee review and discuss proposed relocations, and make recommendations to the Vice Chancellor of Operations.

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\(^1\) The FCNI is a measure (in percentage) of the facility’s needs in relation to its Current Replacement Value (CRV). Example: .80 FCNI for McKee Hall indicates the identified needs are equal to 80% of the CRV of the facility.
Proposed Space Utilization Strategy (DRAFT)
Current MU E&G Funding

- FY15 Maintenance budget was $16.8M
- $16.8M budget represents 0.68% funding of current replacement value (CRV)
  - $6.9M of the $16.8M is used for Daily Service (light bulb replacement, electrical repairs, plumbing and HVAC repairs, etc.)
  - Therefore, $9.9M is available for Building M&R – Capital Repairs
  - $9.9M M&R budget represents 0.40% funding of CRV
## Funding History

### MU E&G Maintenance Funding History

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>$/GSF</th>
<th>% CRV</th>
<th>$/GSF with 2% inflation</th>
<th>Proactive</th>
<th>Reactive</th>
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<td>1998</td>
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<td>1.50%</td>
<td>$ 1.60</td>
<td>65%</td>
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<td>1999</td>
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<td>$ 1.05</td>
<td>50%</td>
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<td>38%</td>
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<td>$ 0.99</td>
<td>49%</td>
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<td>2005</td>
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<td>0.79%</td>
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<td>45%</td>
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<td>2006</td>
<td>$ 1.69</td>
<td>0.65%</td>
<td>$ 0.56</td>
<td>33%</td>
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<td>2007</td>
<td>$ 1.77</td>
<td>0.65%</td>
<td>$ 0.63</td>
<td>36%</td>
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<td>2008</td>
<td>$ 1.85</td>
<td>0.64%</td>
<td>$ 0.69</td>
<td>37%</td>
<td>$ 1.16</td>
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<td>2009</td>
<td>$ 1.86</td>
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<td>$ 0.70</td>
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<td>2012</td>
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<td>37%</td>
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<td>2013</td>
<td>$ 2.33</td>
<td>0.67%</td>
<td>$ 0.91</td>
<td>40%</td>
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<td>2014</td>
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<td>0.68%</td>
<td>$ 0.94</td>
<td>39%</td>
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<td>2015</td>
<td>$ 2.43</td>
<td>0.68%</td>
<td>$ 0.97</td>
<td>40%</td>
<td>$ 1.46</td>
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Sightlines Introduction

- Independent benchmarking and analysis consultant
- Annual Stewardship = M&R Funding
- Daily Service = Ongoing daily M&R
Sightlines Results

• MU CRV = $2.473B

• Sightlines Minimum Funding Results
  1.70% CRV, Annual Stewardship (M&R) target
  0.30% CRV, Recommended Daily Service
  2.00% CRV annually
Sightlines Funding Model
Assuming 2% annual inflation

FY15 Daily Service Funding
FY15 M&R Funding
Sightlines Proposed Daily Service Funding 0.30% of CRV
Sightlines Proposed M&R Funding 1.70% of CRV
ISES Introduction

- Independent facility auditor
- Provides a list of specific deficiencies and associated corrective costs to determine a facility condition needs index (FCNI)
- The FCNI is a measure (in percentage) of the facility’s needs in relation to it’s CRV
  - Example: .80 FCNI for McKee Hall indicates the identified needs are equal to 80% of the CRV of the facility
Historically MU has set a .30 FCNI or lower as a goal and a .40 FCNI or higher indicates facility is in need of a major building renovation.
ISES Results

- ISES CRV $2.4B
- Current backlog is $715M
- Current growth rate of $35M

- ISES Minimum Funding Results:
  2.04% of Current Replacement Value
ISES Funding Model
Assuming 2% annual inflation

Current M&R Funding $16.8M = .68% CRV

Recommended ISES M&R Funding = 2.04% CRV
Mizzou E&G Campus
Ten Year Campus FCNI Projection
Based on Current Funding

Fiscal Year


FCNI

Campus FCNI > 0.40
<table>
<thead>
<tr>
<th>Building</th>
<th>FCNI</th>
<th>Bldg GSF</th>
</tr>
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<tbody>
<tr>
<td>Curtis Hall</td>
<td>1.19</td>
<td>28,979</td>
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<td>Noyes Hall</td>
<td>0.92</td>
<td>21,718</td>
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<td>Waters Hall</td>
<td>0.82</td>
<td>49,184</td>
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<td>McKee Gymnasium</td>
<td>0.79</td>
<td>30,778</td>
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<td>Veterinary Science Building</td>
<td>0.76</td>
<td>40,350</td>
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<td>McAlester Hall</td>
<td>0.74</td>
<td>41,435</td>
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<td>Old Student Health Center</td>
<td>0.72</td>
<td>22,985</td>
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<td>Allton Building</td>
<td>0.68</td>
<td>20,926</td>
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<td>Columbia Professional Building</td>
<td>0.62</td>
<td>26,877</td>
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<td>Parker Hall</td>
<td>0.59</td>
<td>27,378</td>
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<td>Arvarh E. Strickland Hall</td>
<td>0.56</td>
<td>68,961</td>
</tr>
<tr>
<td>Crowder Hall</td>
<td>0.56</td>
<td>25,181</td>
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</table>

<table>
<thead>
<tr>
<th>Building</th>
<th>FCNI</th>
<th>Bldg GSF</th>
</tr>
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<tbody>
<tr>
<td>Neff Hall - 1959 Addition</td>
<td>0.55</td>
<td>21,456</td>
</tr>
<tr>
<td>Eckles Hall</td>
<td>0.54</td>
<td>36,018</td>
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<tr>
<td>Fine Arts Annex</td>
<td>0.54</td>
<td>15,564</td>
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<tr>
<td>Mumford Hall</td>
<td>0.52</td>
<td>52,200</td>
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<td>Neff Hall</td>
<td>0.52</td>
<td>18,866</td>
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<td>MIZZOU NORTH</td>
<td>0.51</td>
<td>223,331</td>
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<td>Hill Hall</td>
<td>0.5</td>
<td>45,377</td>
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<td>Ellis Library</td>
<td>0.49</td>
<td>245,084</td>
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<td>Laboratory Animal Center</td>
<td>0.49</td>
<td>12,886</td>
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<tr>
<td>Research Park Development – EHS</td>
<td>0.49</td>
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<td>1110 S. College Avenue</td>
<td>0.48</td>
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<tr>
<td>Heinkel Building</td>
<td>0.48</td>
<td>41,257</td>
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Buildings Over .40 FCNI

<table>
<thead>
<tr>
<th>Building</th>
<th>FCNI</th>
<th>Bldg GSF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stanley Hall &amp; Stanley Hall Addition</td>
<td>0.48</td>
<td>35,406</td>
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<tr>
<td>Agriculture Lab</td>
<td>0.47</td>
<td>33,504</td>
</tr>
<tr>
<td>Read Hall</td>
<td>0.47</td>
<td>19,496</td>
</tr>
<tr>
<td>Veterinary Medicine West Building</td>
<td>0.47</td>
<td>73,497</td>
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<tr>
<td>LeFevre Hall</td>
<td>0.46</td>
<td>54,817</td>
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<td>Lewis Hall</td>
<td>0.46</td>
<td>69,168</td>
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<td>London Hall</td>
<td>0.46</td>
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<td>Whitten Hall</td>
<td>0.44</td>
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<td>Gannett Hall</td>
<td>0.43</td>
<td>22,150</td>
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<tr>
<td>Green Building</td>
<td>0.43</td>
<td>15,453</td>
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<td>Pickard Hall</td>
<td>0.43</td>
<td>24,601</td>
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<td>Veterinary Diagnostics Laboratory Building</td>
<td>0.42</td>
<td>21,144</td>
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<td>Chemistry Building</td>
<td>0.41</td>
<td>92,321</td>
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<tr>
<td>Fine Arts Building (Music &amp; Dramatic Arts)</td>
<td>0.4</td>
<td>51,458</td>
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<tr>
<td>Loeb Hall</td>
<td>0.4</td>
<td>14,680</td>
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<tr>
<td>Middlebush Hall</td>
<td>0.4</td>
<td>71,180</td>
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Total E&G Campus = 6,900,000 GSF  
Total over .40 FCNI (40 Buildings) = 1,794,474 (26% of E&G Campus)
Space by College

Space by College in Facilities with 0.40 FCNI or Greater

% of Space Occupied

College

- College of Arts & Sciences: 35.16%
- General Classroom: 12.09%
- College of Veterinary Medicine: 9.92%
- School of Education: 8.33%
- School of Veterinary Medicine: 5.58%
- College of Engineering: 5.40%
- College of Journalism: 4.74%
- College of Environmental Sciences: 4.58%
- Extension: 3.75%
- School of Medicine: 3.54%
- Hospital Space: 1.65%
- School of Public Affairs: 1.62%
- Non-MU Tenant: 1.43%
- School of Veterinary Medicine: 1.01%
- School of Nursing: 0.61%
- School of Nursing: 0.59%
• MU Current
  • 0.68% of CRV

• Sightlines
  • 2.00% of CRV

• ISES
  • 2.04% of CRV

• APPA, higher education facilities management organization:
  • “Acknowledging variances for age and type of facilities, a recommended range for annual capital renewal funding is 1.5 to 3 percent of total replacement value of plant; some recommend even higher amounts.”
A concept....

• Eliminate 250,000 GSF (or more) of campus building area through demolition.

• Every GSF reduced lessens the load on the Power Plant, allowing current capacity to be sufficient longer.

• A smaller campus will allow M&R service to be maintained, even after the FY17 budget cut.
M&R Reduced E&G Space Funding Scenario

$7.46/GSF recommended

- FY16 Funding: $2.45
- FY17 Funding 5% Reduction: $2.33
- Funding w/ 250K GSF Space Reduction: $2.77
- Funding w/500K GSF Space Reduction: $3.23
- Funding w/750K GSF Space Reduction: $3.74

M&R Funding P/GSF
Reduced E&G Space Funding Analysis

- FY17 Current Replacement Value (CRV) - $2.491B
- FY17 Funding - $16,096,367
- Current GSF Maintained – 6,900,000

<table>
<thead>
<tr>
<th>GSF Reduced</th>
<th>Increased Funding</th>
<th>Total GSF Maintained</th>
<th>M&amp;R Funding Scenarios</th>
<th>M&amp;R Funding p/GSF</th>
<th>Funding % based on CRV</th>
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<tr>
<td>0</td>
<td>$</td>
<td>6,900,000</td>
<td>16,096,367.00</td>
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<td>0.6460%</td>
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<tr>
<td>250,000</td>
<td>$ 2,300,000.00</td>
<td>6,650,000</td>
<td>18,396,367.00</td>
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<td>500,000</td>
<td>$ 4,600,000.00</td>
<td>6,400,000</td>
<td>20,696,367.00</td>
<td>$ 3.23</td>
<td>0.8306%</td>
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<td>750,000</td>
<td>$ 6,900,000.00</td>
<td>6,150,000</td>
<td>22,996,367.00</td>
<td>$ 3.74</td>
<td>0.9229%</td>
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Goals

1. Always!! - Further the academic mission
2. Reduce deferred maintenance and FCNI growth
3. Improve or maintain Level of Service
State Appropriations plus Net Tuition & Fees Compared to Peers

Revenue Type
- Net Tuition and Fees
- State appropriations
ISES Funding Model
Assuming 2% annual inflation

Current M&R Funding: $16.8M = 0.68% CRV

Recommended ISES M&R Funding: 2.04% CRV
Change in General Operating Funding Sources

- **Tuition**
  - 27% in 1990
  - 36% in 2016

- **State Support**
  - 58% in 1990
  - 3% in 2016

- **Indirect Cost**
  - 6% in 1990
  - 58% in 2016