MONTANA UNIVERSITY SYSTEM
2011 BIENNIAL BUDGET PLANNING – NEW PROPOSALS (JANUARY 2008)

UNIT/CAMPUS: MUS CAMPUSES
UNIT PRIORITY: 1
NEW PROPOSAL NAME: 2% POOL FOR CRITICAL SALARY ISSUES
BOARD OF REGENT STRATEGIC GOAL: ___ACCESS ___ECON DEV ___EFFICIENCY _X_ RECRUIT/RETAIN

TOTAL BIENNIAL COST: $15,924,159
FUNDING SOURCES: State Appropriation
FY 10 TOTAL COST: $5,308,053
FY 11 TOTAL COST: $10,616,106
FY 10 BASE FUNDING REQUESTED: $5,308,053
UM - $2,521,508 MSU - $2,786,545
FY 10 OTO FUNDING REQUESTED: $0
FY 11 OTO FUNDING REQUESTED: $0
ADDITIONAL STAFF IN FY10 (FTE): 0
ADDITIONAL STAFF IN FY11 (FTE): 0

DESCRIPTION OF NEW PROPOSAL:

GOAL / STRATEGY
The Recruitment and Retention Task force assembled by the Commissioner of Higher Education found that all campuses of the University of Montana System are having difficulties in recruiting and retaining faculty and staff, with substantial negative impact. Studies of salaries at comparator institutions confirmed that average salaries across the System are less than competitive and the goal of this proposal is to address this problem.

Strategy: Request a special base adjustment in State appropriation equal to 2% of total salaries each year to provide a pool of funds to address critical salary issues such as compression, inversion, equity and market in the form of base salary increases.

IMPACT
Positive impacts will include:
  • Shorter average duration of position vacancies
  • Larger and more competitive applicant pools
  • Fewer failed searches
  • Better retention of faculty and staff

Failure to implement the plan will result in continued difficulties in recruitment, retention and ultimately overall reduced quality in instruction and campus support.

ACTION PLAN
  • The Director of HRS will implement in consultation with Executive Officers in FY2010 and FY 2011.

HOW SUCCESS IS MEASURED:

ACCOUNTABILITY
Improvement in average salaries relative to comparative and benchmark salary data
Improved retention
MONTANA UNIVERSITY SYSTEM
2011 BIENNIAL BUDGET PLANNING – NEW PROPOSALS (JANUARY 2008)

UNIT/CAMPUS: MUS AGENCIES
UNIT PRIORITY: 1
NEW PROPOSAL NAME: 2% POOL FOR CRITICAL SALARY ISSUES
BOARD OF REGENT STRATEGIC GOAL: ___ACCESS ___ECON DEV ___EFFICIENCY _X_ RECRUIT/RETAIN

<table>
<thead>
<tr>
<th>TOTAL BIENNIAL COST: $1,445,097</th>
<th>FUNDING SOURCES: State Appropriation</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 10 TOTAL COST: $481,699</td>
<td>FY 11 TOTAL COST: $963,398</td>
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<tr>
<td>FY 10 BASE FUNDING REQUESTED: $481,699</td>
<td>FY 11 BASE FUNDING REQUESTED: $481,699</td>
</tr>
<tr>
<td>UM Agencies - $88,299 MSU - $393,400</td>
<td>UM Agencies - $88,299 MSU - $393,400</td>
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<td>FY 10 OTO FUNDING REQUESTED: $0</td>
<td>FY 11 OTO FUNDING REQUESTED: $0</td>
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<tr>
<td>ADDITIONAL STAFF IN FY10 (FTE): 0</td>
<td>ADDITIONAL STAFF IN FY11 (FTE): 0</td>
</tr>
</tbody>
</table>

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GOAL / STRATEGY
The Recruitment and Retention Task force assembled by the Commissioner of Higher Education found that all campuses of the University of Montana System are having difficulties in recruiting and retaining faculty and staff, with substantial negative impact. Studies of salaries at comparator institutions confirmed that average salaries across the System are less than competitive and the goal of this proposal is to address this problem.

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ACCOUNTABILITY
Improvement in average salaries relative to comparative and benchmark salary data
Improved retention
MONTANA UNIVERSITY SYSTEM

2011 BIENNIAL BUDGET PLANNING – NEW PROPOSALS (JANUARY 2008)

<table>
<thead>
<tr>
<th>UNIT/CAMPUS: UM/MSU</th>
<th>UNIT PRIORITY: 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEW PROPOSAL NAME: DOCTORAL EDUCATION AND RESEARCH – ECONOMIC DEVELOPMENT</td>
<td></td>
</tr>
<tr>
<td>BOARD OF REGENT STRATEGIC GOAL: ___ ACCESS  X_ ECON DEV  ___ EFFICIENCY  ___ RECRUIT/RETAIN</td>
<td></td>
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<tr>
<td>TOTAL BIENNIAL COST: $13,975,436</td>
<td>FUNDING SOURCES: State Appropriation</td>
</tr>
<tr>
<td>FY 10 TOTAL COST: $6,987,718</td>
<td>FY 11 TOTAL COST: $6,987,718</td>
</tr>
<tr>
<td>FY 10 BASE FUNDING REQUESTED: $6,987,718</td>
<td>FY 11 BASE FUNDING REQUESTED: $0</td>
</tr>
<tr>
<td>FY 10 OTO FUNDING REQUESTED: $0</td>
<td>FY 11 OTO FUNDING REQUESTED: $0</td>
</tr>
<tr>
<td>ADDITIONAL STAFF IN FY10 (FTE): 0</td>
<td>ADDITIONAL STAFF IN FY11 (FTE): 0</td>
</tr>
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</table>

DESCRIPTION OF NEW PROPOSAL:

This initiative has been developed as a cooperative effort between the University of Montana and Montana State University and is consistent with the Board of Regents’ desire to move the two institutions further in the direction of graduate research institutions. Graduate education, especially in disciplines related to science and technology, is essential to the continued growth, leadership and economic well-being of Montana. Current policies and budget constraints at Montana’s two research universities are significantly inhibiting the ability of the institutions to attract and engage the best young minds in America, particularly at the doctoral level. This initiative is designed to give Montana a competitive edge in attracting the very best doctoral students to its two research universities. Specifically, the initiative will contribute to the state in the following ways:

- Increase the number and quality of highly skilled and globally competitive employers and employees for Montana’s rapidly expanding knowledge and technology-based economy;
- Increase the number and success of new start-up technology-based businesses that stem from research conducted at University of Montana and Montana State University through new business development by faculty and graduate students;
- Increase the national and global competitiveness of the University of Montana and Montana State University graduate programs to recruit the top tier graduate students to Montana; and
- Increase the quality of our undergraduate education experience by recruiting the best graduate teaching and research assistants who often work closely with our undergraduates in the classroom and in the laboratory.

There are three strategies necessary to move the institutions toward greater competitiveness and larger enrollments in doctoral programs.

Competitive graduate stipends: The current graduate stipends provided at the universities are highly variable and decidedly uncompetitive regionally or nationally. While in some areas, grant-funded activity permits paying a higher and more competitive stipend, state-funded assistantships must be addressed. If we are to attract increasing numbers of highly capable students, we will need to increase stipend levels to values that are competitive with other flagship institutions in the region. This proposal addresses assistantships for doctoral students only because that group of students is most directly related to economic development and it provides an ambitious, but achievable goal by itself. The regionally competitive doctoral stipends, and therefore the targets for this initiative, are: $25,000 for science and engineering areas and $18,500 for other disciplines. The budget below reflects taking current state-funded assistantships for the doctoral students on both campuses from their present levels to the indicated amounts.

Resident status for tuition purposes: Nearly every other state provides relief from non-resident tuition for students from outside the state who are appointed as graduate assistants. A survey of land grant and research universities in 14 western states revealed that Montana’s two research universities were the only universities that did not provide tuition assistance for graduate teaching and research assistants. In Montana, non-resident graduate students are “billed” at the full non-resident rate, although in many cases grant
funds and significant university funds are used to provide tuition relief to the student. Furthermore, non-resident graduate students are currently not counted toward the state appropriation based upon FTE. This proposal is for a policy that establishes non-resident graduate assistants as residents for tuition purposes and to count them in the University’s FTE base at the time of allocation of state appropriations.

**New Ph.D. Programs:** The number of Ph.D. programs at UM and MSU needs to be deliberately and strategically increased in order to attract new students to campus and to open new research avenues. Base funding for new programs is needed to provide support for new faculty lines, and new graduate student lines. This proposal seeks to add to each university 32 new assistantships funded at the new competitive levels. The new assistantships will be placed largely into new Ph.D. programs that are approved through the normal Regental process. The objective will be to start three new Ph.D. programs on each campus during the biennium, with 10-12 assistantships per program. The programs will be in areas that have direct connections to economic development, including science, engineering, agriculture, and related technology-based disciplines.

Benchmarks for measuring the success of this initiative are straightforward: significantly increased numbers of graduate students (both incoming and graduating), higher quality students, increased numbers of students from outside of Montana, and increased research productivity.

The numbers of graduate assistants to be funded at each campus are preliminary. These data will be verified and/or refined before this proposal is final.

**RESOURCE REQUIREMENTS UM:**

**Personnel:** (Defined by category and FTE, with amount)

Graduate Assistantships:
Increase 110 state-funded doctoral assistantships to target of $25,000:
110 students X $13,000 = $1,430,000
Add 32 additional graduate assistantships for new students:
32 S&M students @ $25,000 each = $800,000
Total Graduate Assistantship annual enhancement: $2,230,000

**Expenses:** (Defined by category and amount)

Resident graduate student FTE generated from transition to 9 SCH/FTE:
77.33 X $4,676 per FTE = $361,611

Conversion of Non-resident graduate students to resident status (based on Fall 07 enrollment and calculated at 9 SCH/FTE):
117.90 non-resident FTE X $4,676 per FTE = $551,300

Operating expenses associated with new Ph.D. programs, including library collections and service enhancements:
$100,000

<table>
<thead>
<tr>
<th>Total stipend request</th>
<th>110.00</th>
<th>13,000</th>
<th>1,430,000</th>
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</thead>
<tbody>
<tr>
<td>Add 32 math &amp; science graduate assistantships</td>
<td>32.00</td>
<td>25,000</td>
<td>800,000</td>
</tr>
<tr>
<td>Total stipend request</td>
<td>2,230,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional Resident FTE (12 to 9 SCH)</td>
<td>77.33</td>
<td>4,676</td>
<td>361,611</td>
</tr>
<tr>
<td>Conversion of NR to Res</td>
<td>117.90</td>
<td>4,676</td>
<td>551,300</td>
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<tr>
<td>Operating expenses</td>
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</tr>
<tr>
<td>Total request</td>
<td>3,242,911</td>
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<td></td>
</tr>
</tbody>
</table>

**RESOURCE REQUIREMENTS MSU:**

**Personnel:** (Defined by category and FTE, with amount)

Graduate Assistantships:
Increase 160 state-funded doctoral assistantships to target of $25,000:
160 students X $13,000 = $2,080,000
Add 32 additional graduate assistantships for new students:
32 students @ $25,000 each = $800,000
Total Graduate Assistantship annual enhancement: $2,880,000
### Expenses: (Defined by category and amount)

Conversion of Non-resident graduate students to resident status (based on Fall 07 enrollment and calculated at 9 SCH/FTE):
- 101.17 additional resident (9 SCH/FTE) FTE x $4,676 per FTE = $473,071
- 62.39 non-resident FTE x $4,676 per FTE = $291,736

Total appropriation associated with change in FTE definition: **$764,807**

Operating expenses associated with new Ph.D. programs, including library collections and service enhancements: **$100,000**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount 1</th>
<th>Amount 2</th>
<th>Total</th>
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<tbody>
<tr>
<td>Bring existing stipends up to 25k</td>
<td>160.00</td>
<td>13,000</td>
<td>2,080,000</td>
</tr>
<tr>
<td>Add 32 math &amp; science graduate assistantships</td>
<td>32.00</td>
<td>25,000</td>
<td>800,000</td>
</tr>
<tr>
<td><strong>Total stipend request</strong></td>
<td></td>
<td></td>
<td>2,880,000</td>
</tr>
<tr>
<td>Additional Resident FTE (12 to 9 SCH)</td>
<td>101.17</td>
<td>4,676</td>
<td>473,071</td>
</tr>
<tr>
<td>Conversion of NR to Res</td>
<td>62.39</td>
<td>4,676</td>
<td>291,736</td>
</tr>
<tr>
<td>Operating expenses</td>
<td></td>
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<td>100,000</td>
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<tr>
<td><strong>Total request</strong></td>
<td></td>
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<td>3,744,807</td>
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MONTANA UNIVERSITY SYSTEM
2011 BIENNIAL BUDGET PLANNING – NEW PROPOSALS (JANUARY 2008)

UNIT/CAMPUS: UM/MSU
UNIT PRIORITY: 3

NEW PROPOSAL NAME: PBS SATELLITE UP-LINKING FUND

BOARD OF REGENT STRATEGIC GOAL: _X_ACCESS ___ECON DEV _X_EFFICIENCY ___RECRUIT/RETAIN

TOTAL BIENNIAL COST: $400,000
FUNDING SOURCES: State Appropriation

FY 10 TOTAL COST: $200,000
FY 11 TOTAL COST: $200,000

FY 10 BASE FUNDING REQUESTED: $200,000
FY 11 BASE FUNDING REQUESTED: $0

FY 10 OTO FUNDING REQUESTED: $0
FY 11 OTO FUNDING REQUESTED: $0

ADDITIONAL STAFF IN FY10 (FTE): 0
ADDITIONAL STAFF IN FY11 (FTE): 0

DESCRIPTION OF NEW PROPOSAL:
Goal: To extend the impact of The University of Montana into the public realm through public service and distance learning through satellite-delivered Montana PBS service.

Strategy: To acquire transponder bandwidth and uplink the Montana PBS service to statewide cable system head-ends and Montana PBS transmitter and translator facilities.

Need: Montana PBS, the statewide public television service of the Montana University System, has tremendous public relations and public service value to the MUS and is a visible extension of the Universities’ role in distance education, and promotion of learning, citizenship and culture. In 2003, after the sudden loss of a primary microwave distribution provider, Montana PBS was forced to move to satellite distribution. Montana PBS was able to secure the necessary capital and transitional funding necessary to quickly establish a suitable distribution system. That funding, provided by federal grants, will end in 2008. Without satellite uplinking, the service will cease for more than 130,000 households in the state.

The 2007 Montana Legislature, at the request of the Friends of Montana PBS, passed $400K in funding support for the FY 08/09 biennium for this interconnection system. This funding request was made with the stated understanding and request from lawmakers that further funding would be requested and provided through the normal MUS funding process, beginning with the FY 2010/11 biennium.

At the request of the Commissioner of Higher Education, Montana PBS is pursuing this request in a collaborated effort through the established budgeting processes at both the University of Montana and Montana State University. The two institutions have agreed to place one half of the requested funding in their respective budget request processes. Montana PBS is seeking a total of $400k in increased base funding per biennium.

HOW SUCCESS IS MEASURED:
Benchmarks for success: On-going delivery of Montana PBS signal to cable head-ends and Montana PBS transmitter and translator installations and measured continued growth in statewide membership.

Resource Requirements:
Personnel: (Defined by category and FTE, with amount) None
Expenses: (Defined by category and amount)
Lease, $200,000
## MONTANA UNIVERSITY SYSTEM

### 2011 BIENNIAL BUDGET PLANNING – NEW PROPOSALS (JANUARY 2008)

<table>
<thead>
<tr>
<th>UNIT/CAMPUS: MUS</th>
<th>UNIT PRIORITY: 4</th>
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<tbody>
<tr>
<td>NEW PROPOSAL NAME: TARGETED FINANCIAL AID</td>
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<tr>
<td>BOARD OF REGENT STRATEGIC GOAL: <em>X_ACCESS</em>__ ECON DEV ___ EFFICIENCY <em>X</em> RECRUIT/RETAIN</td>
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<table>
<thead>
<tr>
<th>TOTAL BIENNIAL COST: $4,050,000</th>
<th>FUNDING SOURCES: State Appropriation</th>
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<tbody>
<tr>
<td>FY 10 TOTAL COST: $1,350,000</td>
<td>FY 11 TOTAL COST: $2,700,000</td>
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<tr>
<td>FY 10 BASE FUNDING REQUESTED: $1,350,000</td>
<td>FY 11 BASE FUNDING REQUESTED: $1,350,000</td>
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<tr>
<td>FY 10 OTO FUNDING REQUESTED: $0</td>
<td>FY 11 OTO FUNDING REQUESTED: $0</td>
</tr>
<tr>
<td>ADDITIONAL STAFF IN FY10 (FTE): 0</td>
<td>ADDITIONAL STAFF IN FY11 (FTE): 0</td>
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</table>

**DESCRIPTION OF NEW PROPOSAL:**

**GOAL / STRATEGY:**
Fund a Targeted Financial Aid Initiative which would provide need-based grant aid for Montana residents. This grant aid will serve as an incentive for Montana residents to attend one of the 2 year or 4 year institutions in the state (excluding the flagship campuses at UM and MSU).

**IMPLEMENTATION RESPONSIBILITY:**
Financial Aid Directors at one of the following units:
- 2 year (including Community Colleges)
- 4 year (Northern, Western, Tech, Billings)

**IMPACT:**
Base funding of the Targeted Financial Aid Initiative will:
- Enhance affordability and assist low-income Montana residents with the cost of education;
- Encourage residents to attend one of the campuses listed above;
- Increase the participation rate among resident students who have traditionally been less likely to attend college;
- Clearly delineate the two doctoral research Universities within the state and allow for a more differentiated model of higher education.

<table>
<thead>
<tr>
<th>Target award amount</th>
<th>Target number of awards</th>
<th>Total allocation per cohort</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 year campuses</td>
<td>2,500</td>
<td>300</td>
</tr>
<tr>
<td>4 year campuses</td>
<td>3,000</td>
<td>200</td>
</tr>
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<td></td>
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</table>

**ACTION PLAN:**
Base fund the Targeted Financial Aid pool to levels that allow for:
- Modest expansion;
- Cohort renewal in the next biennium;
- Federal financial aid would be determined prior to awarding the grant aid.
- The following campus allocation model:
  - 2 year campuses – 300 awards in the amount of $2,500
- 4 year campuses – 200 awards in the amount of $3,000
  - Re-issuance of unused funds would be handled in the same manner as other state financial aid allocations.

**HOW SUCCESS IS MEASURED:**

**ACCOUNTABILITY:**

Targeted Financial Aid would ensure continued participation of Montana residents and develop measurable growth in the participation rate. Funding would involve $1.35 million base funding in both FY10 and FY11 per cohort, which would provide funding for four years per cohort.
DESCRIPTION OF NEW PROPOSAL:

Background:

For years, the MUS has struggled with providing high-cost services to certain students with disabilities. Both deaf students and blind students generally require very expensive services and auxiliary aids to access their educational programs and physical facilities. When disability services directors are setting budgets for the coming fiscal year, it is often very difficult to gauge upcoming costs because of unanticipated enrollment of students in this category, who must be served by the university system by law. According to the current data, the smaller schools are seeing a larger percentage of their institutional budgets go to serve these students. The proposed funding structure would allow the individual disability departments to request funds that have been approved and set aside to help defray these high-cost services.

Definition of high-cost services:

Typically the highest cost services are tied to deaf students and blind students. Therefore the costs that the institution should consider when calculating the overall percentage of costs to the institutional budget should include the following expenses: in-house and freelance interpreters; captionists, contracted remote interpreting services; contracted captionist services; expenses related to the technical requirements for remote interpreting; note takers and other supplemental expenses related to deaf students; substitute interpreters when the staff interpreter is not available; and training and professional development for the disability services staff. In addition, the higher expenses that relate to blind students such as Braille textbooks and in-house equipment such as a Braille embosser should be considered. With regard to serving students who are blind or deaf, technology is constantly being developed, so this list should not be read as exhaustive. Any expenses that the campus incurs that are defrayed by Vocational Rehabilitation or other outside funding sources should not be included in the overall calculation of expenses.

Who Can Request Funds:

Any of the campuses within the MUS should be allowed to request money from the funds that have been set aside for this purpose. The institution must be able to demonstrate that it has experienced within the last fiscal year, or anticipates within the next fiscal year, that costs related to these specific expenses will exceed .25% of the overall institutional budget.

Process for Requesting Funds:
The request for disbursement of approved funds must be made through the Office of the Commissioner of Higher Education. A committee of experts in disability services from the various campuses no fewer than five in number shall convene quarterly when requests have been made to review the requests. A BOR representative should also be present and should be a voting member. Priority will be given to the smaller campuses and to those who demonstrate the greatest financial need. Once approval is made regarding requests, funding shall be made available as soon as possible to the individual campus. Funds approved for a certain biennium must be spent or they will be returned.

We request that this initiative be funded beyond just this biennium so that commitments campuses make to students can be backed up financially for the students’ full terms of attendance.

HOW SUCCESS IS MEASURED:

Success of this initiative will be measured in several ways:

Academic success of the students with disabilities served by these funds
- Students continue on to their next semester
- Students complete a credential or degree

Access to higher education
- Trends of increased numbers of deaf, hard of hearing, and blind students being served in the MUS
- Increased numbers of institutions serving deaf, hard of hearing, and blind students within the MUS
- Students with these disabilities participation in campus activities and other student life such that they experience their campuses as fully as other students do.
MONTANA UNIVERSITY SYSTEM
2011 BIENNIAL BUDGET PLANNING – NEW PROPOSALS (JANUARY 2008)

UNIT/CAMPUS: MUS CAMPUSES

UNIT PRIORITY:

NEW PROPOSAL NAME: NETWORK BANDWIDTH AND INFRASTRUCTURE – MUS CORE

BOARD OF REGENT STRATEGIC GOAL: _X_ACCESS __X_ECON DEV ___EFFICIENCY __RECRUIT/RETAIN

TOTAL BIENNIAL COST: $406,000 BASE $6,200,000 OTO

FUNDING SOURCES: State Appropriation

FY 10 TOTAL COST: $200,000 BASE $6,200,000 OTO

FY 11 TOTAL COST: $206,000

FY 10 BASE FUNDING REQUESTED: $200,000

FY 10 OTO FUNDING REQUESTED: $6,200,000

FY 11 BASE FUNDING REQUESTED: $6,000

FY 11 OTO FUNDING REQUESTED: $0

ADDITIONAL STAFF IN FY10 (FTE): 0

ADDITIONAL STAFF IN FY11 (FTE): 0

DESCRIPTION OF NEW PROPOSAL

This initiative will allow the MUS campuses to continue to systematically upgrade its network facilities to assure that they continue to be competitive in national research and education efforts. The initiative is extends from national R&E network connections, to each MUS campus, and all the way to the user desktop. It will build on earlier projects, particularly the MSU Lariat Project and MUS “Northern Tier” effort. It will build a base from which the MUS could extend networking benefits to a wide range of educational entities within the state -- an option is also included to initiate that activity through network outreach to the community colleges and tribal colleges.

MUS Core

1. **On-campus infrastructure.** On-campus networks must be upgraded significantly to translate enhanced external connectivity all the way to the user’s “desktop”. The initiative would allocate **$4M in one time funds** to the MUS for on-campus network upgrades, allocated proportionally to UM and MSU campuses.

2. **External connectivity/infrastructure.** During FY08 the MUS will have “fronted” approximately $2M for onetime costs of a 10 year commitment to create the MUREN. This initiative would provide **$1.6M in one time funds** to allow this commitment to be retired early.

3. **Enhanced multi-campus connectivity.** Although a new state network contract is expected to lower costs for current levels of campus connectivity, increased demand is inevitable and will result an increase in operating costs plus significant onetime costs for equipment upgrades. The initiative would provide **$200K in additional base funding** for increased bandwidth plus **$600K in one time funds** for these equipment upgrades (roughly $150K for each of Missoula and Bozeman, plus $50K for each of the other six MUS campuses).

HOW SUCCESS IS MEASURED:

The success of the core MUS network upgrade component will be measured by improved levels of network connectivity on each of the eight campuses and between the eight campuses.

Outreach Option

4. **Community college outreach.** Extending the benefits of the upgraded MUS network to the three community colleges (Miles City, Dawson, and Flathead) requires both onetime setup costs and additional operational costs. The initiative would provide **$1M in one time funds** for the setup costs – additional operational costs are outlined in #6.

5. **Tribal college outreach.** Extending the benefits of the MUREN to the state’s tribal colleges requires both onetime setup costs and additional operational costs. The initiative would provide **$2M in one time funds** for the setup costs – additional operational costs are outlined in #6.
6. Community and tribal college support. The plan to extend MUREN capabilities to the six smaller MUS campuses assumes that we can rely on staff at those sites to handle the increased network complexity; an assumption which we think is valid. However, a comparable assumption about staff at the community and tribal college level is not valid – the staff at those institutions is already stretched too thin to handle the additional load implied by a faster and much more complex network. Modern network facilities allow much of this burden to be centralized at UM and MSU sites. The initiative would provide **$200K in new base funding**, to support 2 new FTE (1 in Missoula, 1 in Bozeman) to provide the central support for the community and tribal colleges.

**HOW SUCCESS IS MEASURED:**

The success of the outreach network upgrade component will be measured by improved levels of network connectivity on each of the community college campuses and on the campus of any tribal college that chooses to participate, and between the participating community tribal college campuses and other higher education facilities.

**RESOURCE REQUIREMENTS:**

- **MUS Core**
  - OTO: $6.2M  
  - BASE: $406K
- **Outreach Option**
  - OTO: $3.0M  
  - BASE: $200K
- **Combined Total**
  - OTO: $9.2M  
  - BASE: $606K

**Cost for Biennium**

<table>
<thead>
<tr>
<th></th>
<th>Optional Outreach</th>
<th>Combined</th>
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</thead>
<tbody>
<tr>
<td><strong>MUS Core</strong></td>
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</tr>
<tr>
<td>FY 2010</td>
<td>$6.4M (OTO + base)</td>
<td>$6.4M</td>
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<tr>
<td>FY 2011</td>
<td>$206K (2010 base + 3%)</td>
<td>$3.2M (OTO + base)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$6.606M</td>
<td>$3.2M</td>
</tr>
</tbody>
</table>

**Personnel:** (Defined by category and FTE, with amount)

2 FTE at $60K salary each plus estimated 30% benefits for a total of $156K.

**Expenses:** (Defined by category and amount)

- **MUS – Eight Campuses**
  1. On-campus infrastructure $4M OTO (FY10)
  2. External connectivity/infrastructure $1.8M OTO (FY10)
  3. Enhanced multi-campus connectivity $600K OTO (FY10) for equipment upgrades  
     $200K base (start FY10) for increased bandwidth

- **MUS Outreach**
  4. Community college outreach $1M OTO (FY11)
  5. Tribal college outreach $2M OTO (FY11)
  6. Community/tribal college support $200K base (start FY11) for personnel plus additional operational expenses
**DESCRIPTION OF NEW PROPOSAL**

This initiative will allow the MUS campuses to continue to systematically upgrade its network facilities to assure that they continue to be competitive in national research and education efforts. The initiative is extends from national R&E network connections, to each MUS campus, and all the way to the user desktop. It will build on earlier projects, particularly the MSU Lariat Project and MUS “Northern Tier” effort. It will build a base from which the MUS could extend networking benefits to a wide range of educational entities within the state -- an option is also included to initiate that activity through network outreach to the community colleges and tribal colleges.

**MUS Core**

1. **On-campus infrastructure.** On-campus networks must be upgraded significantly to translate enhanced external connectivity all the way to the user’s “desktop”. The initiative would allocate **$4M in one time funds** to the MUS for on-campus network upgrades, allocated proportionally to UM and MSU campuses.

2. **External connectivity/infrastructure.** During FY08 the MUS will have “fronted” approximately $2M for onetime costs of 10 year commitment to create the MUREN. This initiative would provide **$1.6M in one time funds** to allow this commitment to be retired early.

3. **Enhanced multi-campus connectivity.** Although a new state network contract is expected to lower costs for current levels of campus connectivity, increased demand is inevitable and will result an increase in operating costs plus significant onetime costs for equipment upgrades. The initiative would provide **$200K in additional base funding** for increased bandwidth plus **$600K in one time funds** for these equipment upgrades (roughly $150K for each of Missoula and Bozeman, plus $50K for each of the other six MUS campuses).

**HOW SUCCESS IS MEASURED:**

The success of the core MUS network upgrade component will be measured by improved levels of network connectivity on each of the eight campuses and between the eight campuses.

**Outreach Option**

4. **Community college outreach.** Extending the benefits of the upgraded MUS network to the three community colleges (Miles City, Dawson, and Flathead) requires both onetime setup costs and additional operational costs. The initiative would provide **$1M in one time funds** for the setup costs – additional operational costs are outlined in #6.

5. **Tribal college outreach.** Extending the benefits of the MUREN to the state’s tribal colleges requires both onetime setup costs and additional operational costs. The initiative would provide **$2M in one time funds** for the setup costs – additional operational costs are outlined in #6.
6. Community and tribal college support. The plan to extend MUREN capabilities to the six smaller MUS campuses assumes that we can rely on staff at those sites to handle the increased network complexity; an assumption which we think is valid. However, a comparable assumption about staff at the community and tribal college level is not valid – the staff at those institutions is already stretched too thin to handle the additional load implied by a faster and much more complex network. Modern network facilities allow much of this burden to be centralized at UM and MSU sites. The initiative would provide **$200K in new base funding**, to support 2 new FTE (1 in Missoula, 1 in Bozeman) to provide the central support for the community and tribal colleges.

HOW SUCCESS IS MEASURED:

The success of the outreach network upgrade component will be measured by improved levels of network connectivity on each of the community college campuses and on the campus of any tribal college that chooses to participate, and between the participating community tribal college campuses and other higher education facilities.

RESOURCE REQUIREMENTS:

<table>
<thead>
<tr>
<th>MUS Core</th>
<th>OTO: $6.2M</th>
<th>BASE: $406K</th>
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<tbody>
<tr>
<td>Outreach Option</td>
<td>OTO: $3.0M</td>
<td>BASE: $200K</td>
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<tr>
<td>Combined Total</td>
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<td>BASE: $606K</td>
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Cost for Biennium

<table>
<thead>
<tr>
<th>MUS Core</th>
<th>Optional Outreach</th>
<th>Combined</th>
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</thead>
<tbody>
<tr>
<td>FY 2010</td>
<td>$6.4M (OTO + base)</td>
<td>$6.4M</td>
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<tr>
<td>FY 2011</td>
<td>$206K (2010 base + 3%)</td>
<td>$3.2M (OTO + base)</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$6.606M</td>
<td>$3.2M</td>
</tr>
</tbody>
</table>

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