

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH UNIVERSITY, MS

DANIEL W. JONES, CHANCELLOR

AGENCY ADDRESS CHIEF EXECUTIVE OFFICER

	Actual Expenses FY Ending June 30, 2009	Estimate Expenses FY Ending June 30, 2010	Requested for FY Ending June 30, 2011	Requested Increase (+) or Decrease (-) FY 2011 vs. FY 2010 (Col. 3 vs. Col. 2)	
				AMOUNT	PERCENT
<b>I. A. PERSONAL SERVICES</b>					
1. Salaries, Wages & Fringe Benefits (Base)	565,622	530,807	530,807		
a. Additional Compensation					
b. Proposed Vacancy Rate (Dollar Amount)					
c. Per Diem					
<b>Total Salaries, Wages &amp; Fringe Benefits</b>	<b>565,622</b>	<b>530,807</b>	<b>530,807</b>		
2. Travel					
a. Travel & Subsistence (In-State)	3,764	6,000	6,000		
b. Travel & Subsistence (Out-of-State)	19,736	26,000	26,000		
c. Travel & Subsistence (Out-of-Country)					
<b>Total Travel</b>	<b>23,500</b>	<b>32,000</b>	<b>32,000</b>		
<b>B. CONTRACTUAL SERVICES (Schedule B):</b>					
a. Tuition, Rewards & Awards		2,200	2,200		
b. Communications, Transportation & Utilities	86	150	150		
c. Public Information	2,569	5,500	5,500		
d. Rents	500	2,000	2,000		
e. Repairs & Service	138	2,900	2,900		
f. Fees, Professional & Other Services	820				
g. Other Contractual Services	3,733	1,750	1,750		
h. Data Processing	55,763	60,500	60,500		
i. Other					
<b>Total Contractual Services</b>	<b>63,609</b>	<b>75,000</b>	<b>75,000</b>		
<b>C. COMMODITIES (Schedule C):</b>					
a. Maintenance & Construction Materials & Supplies		2,000	2,000		
b. Printing & Office Supplies & Materials	2,818	5,000	5,000		
c. Equipment, Repair Parts, Supplies & Accessories					
d. Professional & Scientific Supplies & Materials	112				
e. Other Supplies & Materials	3,291	8,000	8,000		
<b>Total Commodities</b>	<b>6,221</b>	<b>15,000</b>	<b>15,000</b>		
<b>D. CAPITAL OUTLAY:</b>					
<b>1. Total Other Than Equipment (Schedule D-1)</b>					
<b>2. Equipment (Schedule D-2):</b>					
b. Road Machinery, Farm & Other Working Equipment					
c. Office Machines, Furniture, Fixtures & Equipment					
d. IS Equipment (Data Processing & Telecommunications)	56,100	100,515	115,608	15,093	15.01%
e. Equipment - Lease Purchase					
f. Other Equipment					
<b>Total Equipment (Schedule D-2)</b>	<b>56,100</b>	<b>100,515</b>	<b>115,608</b>	<b>15,093</b>	<b>15.01%</b>
<b>3. Vehicles (Schedule D-3)</b>					
<b>4. Wireless Comm. Devices (Schedule D-4)</b>					
<b>E. SUBSIDIES, LOANS &amp; GRANTS (Schedule E):</b>	<b>88,598</b>	<b>93,354</b>	<b>95,225</b>	<b>1,871</b>	<b>2.00%</b>
<b>TOTAL EXPENDITURES</b>	<b>803,650</b>	<b>846,676</b>	<b>863,640</b>	<b>16,964</b>	<b>2.00%</b>
<b>II. BUDGET TO BE FUNDED AS FOLLOWS:</b>					
Cash Balance-Unencumbered					
General Fund Appropriation (Enter General Fund Lapse Below)	803,650	846,676	863,640	16,964	2.00%
State Support Special Funds					
Federal Funds _____ Other Special Funds (Specify) _____					
Less: Estimated Cash Available Next Fiscal Period					
<b>TOTAL FUNDS (equals Total Expenditures above)</b>	<b>803,650</b>	<b>846,676</b>	<b>863,640</b>	<b>16,964</b>	<b>2.00%</b>
GENERAL FUND LAPSE	42,297				
<b>III. PERSONNEL DATA</b>					
Number of Positions Authorized in Appropriation Bill					
a.) Full Perm	6	6	6		
b.) Full T-L					
c.) Part Perm.					
d.) Part T-L					
Average Annual Vacancy Rate (Percentage)					
a.) Full Perm					
b.) Full T-L					
c.) Part Perm.					
d.) Part T-L					

Approved by: \_\_\_\_\_  
 Official of Board or Commission  
 Budget Officer: Pamela K. Roy / proym@olemiss.edu  
 Phone Number: 662-915-5019

Submitted by: \_\_\_\_\_  
 Name  
 Title: CHANCELLOR  
 Date: \_\_\_\_\_

**REQUEST BY FUNDING SOURCE**

Name of Agency UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Specify Funding Sources As Shown Below	FY 2009 Actual Amount	% Of Line Item	% Of Total Budget	FY 2010 Estimated Amount	% Of Line Item	% Of Total Budget	FY 2011 Requested Amount	% Of Line Item	% Of Total Budget
1. General State Support Special (Specify)	565,622	100.00%		530,807	100.00%		530,807	100.00%	
2. Budget Contingency Fund									
3. Education Enhancement Fund									
4. Health Care Expendable Fund									
5. Tobacco Control Fund									
6. ARRA - Education, Disc., FMAP									
7.									
8. Federal Other Special (Specify)									
9.									
10.									
11.									
12.									
<b>Total Salaries</b>	<b>565,622</b>		<b>70.38%</b>	<b>530,807</b>		<b>62.69%</b>	<b>530,807</b>		<b>61.46%</b>
1. General State Support Special (Specify)	23,500	100.00%		32,000	100.00%		32,000	100.00%	
2. Budget Contingency Fund									
3. Education Enhancement Fund									
4. Health Care Expendable Fund									
5. Tobacco Control Fund									
6. ARRA - Education, Disc., FMAP									
7.									
8. Federal Other Special (Specify)									
9.									
10.									
11.									
12.									
<b>Total Travel</b>	<b>23,500</b>		<b>2.92%</b>	<b>32,000</b>		<b>3.77%</b>	<b>32,000</b>		<b>3.70%</b>
1. General State Support Special (Specify)	63,609	100.00%		75,000	100.00%		75,000	100.00%	
2. Budget Contingency Fund									
3. Education Enhancement Fund									
4. Health Care Expendable Fund									
5. Tobacco Control Fund									
6. ARRA - Education, Disc., FMAP									
7.									
8. Federal Other Special (Specify)									
9.									
10.									
11.									
12.									
<b>Total Contractual</b>	<b>63,609</b>		<b>7.91%</b>	<b>75,000</b>		<b>8.85%</b>	<b>75,000</b>		<b>8.68%</b>
1. General State Support Special (Specify)	6,221	100.00%		15,000	100.00%		15,000	100.00%	
2. Budget Contingency Fund									
3. Education Enhancement Fund									
4. Health Care Expendable Fund									
5. Tobacco Control Fund									
6. ARRA - Education, Disc., FMAP									
7.									
8. Federal Other Special (Specify)									
9.									
10.									
11.									
12.									
<b>Total Commodities</b>	<b>6,221</b>		<b>0.77%</b>	<b>15,000</b>		<b>1.77%</b>	<b>15,000</b>		<b>1.73%</b>

**REQUEST BY FUNDING SOURCE**

Name of Agency UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Specify Funding Sources As Shown Below	FY 2009 Actual Amount	% Of Line Item	% Of Total Budget	FY 2010 Estimated Amount	% Of Line Item	% Of Total Budget	FY 2011 Requested Amount	% Of Line Item	% Of Total Budget
1. General _____ State Support Special (Specify) _____									
2. Budget Contingency Fund									
3. Education Enhancement Fund									
4. Health Care Expendable Fund									
5. Tobacco Control Fund									
6. ARRA - Education, Disc., FMAP									
7.									
8. Federal _____ Other Special (Specify) _____									
9.									
10.									
11.									
12.									
<b>Total Other Than Equipment</b>									
1. General _____ State Support Special (Specify) _____	56,100	100.00%		100,515	100.00%		115,608	100.00%	
2. Budget Contingency Fund									
3. Education Enhancement Fund									
4. Health Care Expendable Fund									
5. Tobacco Control Fund									
6. ARRA - Education, Disc., FMAP									
7.									
8. Federal _____ Other Special (Specify) _____									
9.									
10.									
11.									
12.									
<b>Total Equipment</b>	<b>56,100</b>		<b>6.98%</b>	<b>100,515</b>		<b>11.87%</b>	<b>115,608</b>		<b>13.38%</b>
1. General _____ State Support Special (Specify) _____									
2. Budget Contingency Fund									
3. Education Enhancement Fund									
4. Health Care Expendable Fund									
5. Tobacco Control Fund									
6. ARRA - Education, Disc., FMAP									
7.									
8. Federal _____ Other Special (Specify) _____									
9.									
10.									
11.									
12.									
<b>Total Vehicles</b>									
1. General _____ State Support Special (Specify) _____									
2. Budget Contingency Fund									
3. Education Enhancement Fund									
4. Health Care Expendable Fund									
5. Tobacco Control Fund									
6. ARRA - Education, Disc., FMAP									
7.									
8. Federal _____ Other Special (Specify) _____									
9.									
10.									
11.									
12.									
<b>Total Wireless Comm. Devices</b>									

**REQUEST BY FUNDING SOURCE**

Name of Agency UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Specify Funding Sources As Shown Below	FY 2009 Actual Amount	% Of Line Item	% Of Total Budget	FY 2010 Estimated Amount	% Of Line Item	% Of Total Budget	FY 2011 Requested Amount	% Of Line Item	% Of Total Budget
1. General _____ State Support Special (Specify) _____	88,598	100.00%		93,354	100.00%		95,225	100.00%	
2. Budget Contingency Fund									
3. Education Enhancement Fund									
4. Health Care Expendable Fund									
5. Tobacco Control Fund									
6. ARRA - Education, Disc., FMAP									
7.									
8. Federal _____ Other Special (Specify) _____									
9.									
10.									
11.									
12.									
<b>Total Subsidies, Loans &amp; Grants</b>	<b>88,598</b>		<b>11.02%</b>	<b>93,354</b>		<b>11.02%</b>	<b>95,225</b>		<b>11.02%</b>
1. General _____ State Support Special (Specify) _____	803,650	100.00%		846,676	100.00%		863,640	100.00%	
2. Budget Contingency Fund									
3. Education Enhancement Fund									
4. Health Care Expendable Fund									
5. Tobacco Control Fund									
6. ARRA - Education, Disc., FMAP									
7.									
8. Federal _____ Other Special (Specify) _____									
9.									
10.									
11.									
12.									
<b>TOTAL</b>	<b>803,650</b>		<b>100.00%</b>	<b>846,676</b>		<b>100.00%</b>	<b>863,640</b>		<b>100.00%</b>

**SPECIAL FUNDS DETAIL**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH  
Name of Agency

<b>S. STATE SUPPORT SPECIAL FUNDS</b>		(1) Actual Revenues FY 2009	(2) Estimated Revenues FY 2010	(3) Requested Revenues FY 2011
Source (Fund Number)	Detailed Description of Source			
Budget Contingency Fund	BCF - Budget Contingency Fund			
Education Enhancement Fund	EEF - Education Enhancement Fund			
Health Care Expendable Fund	HCEF - Health Care Expendable Fund			
Tobacco Control Fund	TCF - Tobacco Control Fund			
ARRA - Education, Discretionary, FMAP	ARRA - Education, Discretionary, FMAP			
<b>Section S TOTAL</b>				

A. FEDERAL FUNDS*	Source (Fund Number)	Detailed Description of Source	Percentage Match Requirement		(1) Actual Revenues FY 2009	(2) Estimated Revenues FY 2010	(3) Requested Revenues FY 2011
			FY 2010	FY 2011			
		Cash Balance-Unencumbered					
<b>Section A TOTAL</b>							

<b>B. OTHER SPECIAL FUNDS (NON-FED'L)</b>		(1) Actual Revenues FY 2009	(2) Estimated Revenues FY 2010	(3) Requested Revenues FY 2011
Source (Fund Number)	Detailed Description of Source			
	Cash Balance-Unencumbered			
<b>Section B TOTAL</b>				

<b>Section S + A + B TOTAL</b>				
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<b>C. TREASURY FUND/BANK ACCOUNTS*</b>			(1) Reconciled Balance as of 6/30/09	(2) Balance as of 6/30/10	(3) Balance as of 6/30/11
Name of Fund/Account	Fund/Account Number	Name of Bank (If Applicable)			

\* Any non-federal funds that have restricted uses must be identified and narrative of restrictions attached.

**NARRATIVE OF SPECIAL FUNDS DETAIL  
AND TREASURY FUND/BANK ACCOUNTS**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Name of Agency

**CONTINUATION AND EXPANDED REQUEST**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH  
AGENCY

Program No. \_\_\_\_\_ of \_\_\_\_1\_\_\_\_ Programs

SUMMARY OF ALL PROGRAMS

PROGRAM

	FY 2009 Actual				
	(1) General	(2) State Support Special	(3) Federal	(4) Other Special	(5) Total
Salaries, Wages, Fringe	565,622				565,622
Travel	23,500				23,500
Contractual Services	63,609				63,609
Commodities	6,221				6,221
Other Than Equipment					
Equipment	56,100				56,100
Vehicles					
Wireless Comm. Devs.					
Subsidies, Loans & Grants	88,598				88,598
<b>Total</b>	<b>803,650</b>				<b>803,650</b>
No. of Positions (FTE)	6.00				6.00

	FY 2010 Estimate				
	(6) General	(7) State Support Special	(8) Federal	(9) Other Special	(10) Total
Salaries, Wages, Fringe	530,807				530,807
Travel	32,000				32,000
Contractual Services	75,000				75,000
Commodities	15,000				15,000
Other Than Equipment					
Equipment	100,515				100,515
Vehicles					
Wireless Comm. Devs.					
Subsidies, Loans & Grants	93,354				93,354
<b>Total</b>	<b>846,676</b>				<b>846,676</b>
No. of Positions (FTE)	6.00				6.00

	FY 2011 Increase/Decrease for Continuation				
	(11) General	(12) State Support Special	(13) Federal	(14) Other Special	(15) Total
Salaries, Wages, Fringe					
Travel					
Contractual Services					
Commodities					
Other Than Equipment					
Equipment	15,093				15,093
Vehicles					
Wireless Comm. Devs.					
Subsidies, Loans & Grants	1,871				1,871
<b>Total</b>	<b>16,964</b>				<b>16,964</b>
No. of Positions (FTE)					

Note: FY2011 Total Request = FY2010 Estimated + FY2011 Incr(Decr) for Continuation + FY2011 Expansion/Reduction of Existing Activities + FY2011 New Activities.

**CONTINUATION AND EXPANDED REQUEST**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH  
AGENCY

Program No. \_\_\_\_\_ of 1 Programs

SUMMARY OF ALL PROGRAMS

PROGRAM

FY 2011 Expansion/Reduction of Existing Activities					
	(16) General	(17) State Support Special	(18) Federal	(19) Other Special	(20) Total
Salaries, Wages, Fringe					
Travel					
Contractual Services					
Commodities					
Other Than Equipment					
Equipment					
Vehicles					
Wireless Comm. Devs.					
Subsidies, Loans & Grants					
<b>Total</b>					
No. of Positions (FTE)					

FY 2011 New Activities					
	(21) General	(22) State Support Special	(23) Federal	(24) Other Special	(25) Total
Salaries, Wages, Fringe					
Travel					
Contractual Services					
Commodities					
Other Than Equipment					
Equipment					
Vehicles					
Wireless Comm. Devs.					
Subsidies, Loans & Grants					
<b>Total</b>					
No. of Positions (FTE)					

FY 2011 Total Request					
	(26) General	(27) State Support Special	(28) Federal	(29) Other Special	(30) Total
Salaries, Wages, Fringe	530,807				530,807
Travel	32,000				32,000
Contractual Services	75,000				75,000
Commodities	15,000				15,000
Other Than Equipment					
Equipment	115,608				115,608
Vehicles					
Wireless Comm. Devs.					
Subsidies, Loans & Grants	95,225				95,225
<b>Total</b>	<b>863,640</b>				<b>863,640</b>
No. of Positions (FTE)	6.00				6.00

Note: FY2011 Total Request = FY2010 Estimated + FY2011 Incr(Decr) for Continuation + FY2011 Expansion/Reduction of Existing Activities + FY2011 New Activities.



**SUMMARY OF PROGRAMS  
FORM MBR-1-03sum**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Agency Name

FUNDING REQUESTED FISCAL YEAR 2011

PROGRAM	GENERAL	ST.SUPP.SPECIAL	FEDERAL	OTHER SPECIAL	TOTAL
1. ACADEMIC SUPPORT	863,640				863,640
SUMMARY OF ALL PROGRAMS	863,640				863,640

**CONTINUATION AND EXPANDED REQUEST**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Program No. 1 of 1 Programs

AGENCY

ACADEMIC SUPPORT

PROGRAM

	FY 2009 Actual				
	(1) General	(2) State Support Special	(3) Federal	(4) Other Special	(5) Total
Salaries, Wages, Fringe	565,622				565,622
Travel	23,500				23,500
Contractual Services	63,609				63,609
Commodities	6,221				6,221
Other Than Equipment					
Equipment	56,100				56,100
Vehicles					
Wireless Comm. Devs.					
Subsidies, Loans & Grants	88,598				88,598
<b>Total</b>	<b>803,650</b>				<b>803,650</b>
No. of Positions (FTE)	6.00				6.00

	FY 2010 Estimate				
	(6) General	(7) State Support Special	(8) Federal	(9) Other Special	(10) Total
Salaries, Wages, Fringe	530,807				530,807
Travel	32,000				32,000
Contractual Services	75,000				75,000
Commodities	15,000				15,000
Other Than Equipment					
Equipment	100,515				100,515
Vehicles					
Wireless Comm. Devs.					
Subsidies, Loans & Grants	93,354				93,354
<b>Total</b>	<b>846,676</b>				<b>846,676</b>
No. of Positions (FTE)	6.00				6.00

	FY 2011 Increase/Decrease for Continuation				
	(11) General	(12) State Support Special	(13) Federal	(14) Other Special	(15) Total
Salaries, Wages, Fringe					
Travel					
Contractual Services					
Commodities					
Other Than Equipment					
Equipment	15,093				15,093
Vehicles					
Wireless Comm. Devs.					
Subsidies, Loans & Grants	1,871				1,871
<b>Total</b>	<b>16,964</b>				<b>16,964</b>
No. of Positions (FTE)					

Note: FY2011 Total Request = FY2010 Estimated + FY2011 Incr(Decr) for Continuation + FY2011 Expansion/Reduction of Existing Activities + FY2011 New Activities.

CONTINUATION AND EXPANDED REQUEST

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Program No. 1 of 1 Programs

AGENCY

ACADEMIC SUPPORT

PROGRAM

FY 2011 Expansion/Reduction of Existing Activities					
	(16) General	(17) State Support Special	(18) Federal	(19) Other Special	(20) Total
Salaries, Wages, Fringe					
Travel					
Contractual Services					
Commodities					
Other Than Equipment					
Equipment					
Vehicles					
Wireless Comm. Devs.					
Subsidies, Loans & Grants					
<b>Total</b>					
No. of Positions (FTE)					

FY 2011 New Activities					
	(21) General	(22) State Support Special	(23) Federal	(24) Other Special	(25) Total
Salaries, Wages, Fringe					
Travel					
Contractual Services					
Commodities					
Other Than Equipment					
Equipment					
Vehicles					
Wireless Comm. Devs.					
Subsidies, Loans & Grants					
<b>Total</b>					
No. of Positions (FTE)					

FY 2011 Total Request					
	(26) General	(27) State Support Special	(28) Federal	(29) Other Special	(30) Total
Salaries, Wages, Fringe	530,807				530,807
Travel	32,000				32,000
Contractual Services	75,000				75,000
Commodities	15,000				15,000
Other Than Equipment					
Equipment	115,608				115,608
Vehicles					
Wireless Comm. Devs.					
Subsidies, Loans & Grants	95,225				95,225
<b>Total</b>	<b>863,640</b>				<b>863,640</b>
No. of Positions (FTE)	6.00				6.00

Note: FY2011 Total Request = FY2010 Estimated + FY2011 Incr(Decr) for Continuation + FY2011 Expansion/Reduction of Existing Activities + FY2011 New Activities.

**PROGRAM DECISION UNITS**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

1 - ACADEMIC SUPPORT

AGENCY

PROGRAM NAME

	A	B	C	D	E	F	G	H
EXPENDITURES:	FY 2010 Appropriation	Escalations By DFA	Non-Recurring Items	Core Operations	Total Funding Change	FY 2011 Total Request		
<b>SALARIES</b>	<b>530,807</b>					<b>530,807</b>		
GENERAL	530,807					530,807		
ST.SUP.SPECIAL								
FEDERAL								
OTHER								
<b>TRAVEL</b>	<b>32,000</b>					<b>32,000</b>		
GENERAL	32,000					32,000		
ST.SUP.SPECIAL								
FEDERAL								
OTHER								
<b>CONTRACTUAL</b>	<b>75,000</b>					<b>75,000</b>		
GENERAL	75,000					75,000		
ST.SUP.SPECIAL								
FEDERAL								
OTHER								
<b>COMMODITIES</b>	<b>15,000</b>					<b>15,000</b>		
GENERAL	15,000					15,000		
ST.SUP.SPECIAL								
FEDERAL								
OTHER								
<b>CAPITAL-OTE</b>								
GENERAL								
ST.SUP.SPECIAL								
FEDERAL								
OTHER								
<b>EQUIPMENT</b>	<b>100,515</b>			<b>15,093</b>	<b>15,093</b>	<b>115,608</b>		
GENERAL	100,515			15,093	15,093	115,608		
ST.SUP.SPECIAL								
FEDERAL								
OTHER								
<b>VEHICLES</b>								
GENERAL								
ST.SUP.SPECIAL								
FEDERAL								
OTHER								
<b>WIRELESS DEV</b>								
GENERAL								
ST.SUP.SPECIAL								
FEDERAL								
OTHER								
<b>SUBSIDIES</b>	<b>93,354</b>			<b>1,871</b>	<b>1,871</b>	<b>95,225</b>		
GENERAL	93,354			1,871	1,871	95,225		
ST.SUP.SPECIAL								
FEDERAL								
OTHER								
<b>TOTAL</b>	<b>846,676</b>			<b>16,964</b>	<b>16,964</b>	<b>863,640</b>		

**FUNDING:**

GENERAL FUNDS	846,676			16,964	16,964	863,640		
ST.SUP.SPCL.FUNDS								
FEDERAL FUNDS								
OTHER SP.FUNDS								
<b>TOTAL</b>	<b>846,676</b>			<b>16,964</b>	<b>16,964</b>	<b>863,640</b>		

**POSITIONS:**

GENERAL FTE	6.00					6.00		
ST.SUP.SPCL.FTE								
FEDERAL FTE								
OTHER SP FTE								
<b>TOTAL FTE</b>	<b>6.00</b>					<b>6.00</b>		

**PRIORITY LEVEL:**

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**PROGRAM NARRATIVE**

Program Data Collected in Accordance with the  
Mississippi Performance Budget and Strategic Planning Act of 1994  
(To Accompany Form MBR-1-03)

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING

1 - ACADEMIC SUPPORT

AGENCY NAME

PROGRAM NAME

**I. Program Description:**

The MCSR (Supercomputer) provides to all faculty, students, and staff at all state-supported institutions of governed by the Board of Trustees of Institutions of Higher Learning the following:

- (1) Access to high performance shared memory supercomputers, distributed memory computers, and hybrid systems
- (2) Access to appropriate software, including scientific/applications software, compilers, and utilities
- (3) Access to technical assistance and instruction as required by students and faculty

**II. Program Objective:**

The MCSR objective is to provide a computational resource for research and instruction, to run that resource as effectively, efficiently, and securely as possible, to provide a level of technical assistance to facilitate the winning of highly competitive research grants, the completion of graduate thesis and dissertation research, and the graduation of students who are prepared to be productive in professions that require high-performance computing expertise.

**III. Current program activities as supported by the funding in Columns 6-15 (FY 10 Estimated & FY 11 Increase/Decrease for continuations) of MBR-1-03 and designated Budget Unit Decisions columns of MBR-1-03-A:****(D) Core Operations:**

The request reflects a total increase of \$16,964 which includes an additional \$15,093 for replacement of desktop and laptop computers to be used by staff in working with researchers, and an additional \$1,871 for increased utility costs.

**PROGRAM PERFORMANCE INDICATORS AND MEASURES**  
Program Data Collected in Accordance with the Mississippi Performance Budget and Strategic  
Planning Act of 1994

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING

1 - ACADEMIC SUPPORT

AGENCY NAME

PROGRAM NAME

**PROGRAM OUTPUTS:** (This is the measure of the process necessary to carry out the goals and objectives of this program. This is the volume produced, i.e., how many people served, how many documents generated.)

	FY 2009 <u>ACTUAL</u>	FY 2010 <u>ESTIMATED</u>	FY 2011 <u>PROJECTED</u>
1 Central Processing Unit Hours Generated, All Systems (Shared Memory, Cluster, Hybrid)	3,646,210.00	3,800,000.00	10,000,000.00
2 Batch Jobs Processed, All Systems	32,269.00	34,000.00	36,000.00
3 Number of New Research Accounts Added	318.00	75.00	75.00
4 MCSR Funded Research Supported (\$'s)	30,735,000.00	31,000,000.00	32,000,000.00
5 Number of University Courses Supported with Accounts on MCSR Systems	9.00	9.00	10.00
6 Number of Students & Faculty Trained at MCSR Workshops	250.00	265.00	275.00
7 Total Amount of Federal Grants, Contracts, & Allocations Requested for MCSR by IHLs in Collaborative Proposals Submitted	2,980,000.00	1,000,000.00	1,000,000.00
8 Total Amount of Federal Grants, Contracts, & Allocations Released to MCSR from Collaborative Grant Awards to IHLs	0.00	80,000.00	25,000.00

**PROGRAM EFFICIENCIES:** (This is the measure of the cost, unit cost or productivity associated with a given outcome or output. This measure indicates linkage between services and funding, i.e., cost per investigation, cost per student or number of days to complete investigation.)

	FY 2009 <u>ACTUAL</u>	FY 2010 <u>ESTIMATED</u>	FY 2011 <u>PROJECTED</u>
1 Cost Per CPU Hour - All Systems	0.22	0.22	0.21
2 Return of Investment to Mississippi (\$'s Research/\$'s MCSR Budget)	38.25	39.00	40.00

**PROGRAM OUTCOMES:** (This is the measure of the quality or effectiveness of the services provided by this program. This measure provides an assessment of the actual impact or public benefit of your agency's actions. This is the results produced, i.e., increased customer satisfaction by x% within a 12-month period, reduce the number of traffic fatalities due to drunk drivers within a 12-month period.)

	FY 2009 <u>ACTUAL</u>	FY 2010 <u>ESTIMATED</u>	FY 2011 <u>PROJECTED</u>
1 To continue to provide access to well-maintained high performance computing systems (xx%)	100.00	100.00	100.00
2 To continue to provide the applications software and compilers requested by MCSR users (xx%)	100.00	100.00	100.00
3 To continue to provide access to highly-qualified technical staff for assistance and instruction	100.00	100.00	100.00

**PROGRAM 3% GENERAL FUND REDUCTION AND NARRATIVE EXPLANATION**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

	Fiscal Year 2010 Funding			FY 2010 PERCENT REDUCED
	Total Funds	Reduced Amount	Reduced Funding Amount	
<b>Program Name:</b> (1) ACADEMIC SUPPORT				
GENERAL	846,676	( 25,400)	821,276	( 2.99%)
ST.SUPPORT SPECIAL				
FEDERAL				
OTHER SPECIAL				
<b>TOTAL</b>	<b>846,676</b>	<b>( 25,400)</b>	<b>821,276</b>	
<p><b>Narrative Explanation:</b>                      Reductions:                       Out of State Travel - \$4,000                      Equipment --\$18,600 (will reduce size of planned modest upgrade to Altix XE Computer Cluster)                      Subsidies --Utility costs--\$2,800                       Total = \$25,400 (3% of \$846,676)</p>				
<b>SUMMARY OF ALL PROGRAMS</b>				
GENERAL	846,676	( 25,400)	821,276	( 2.99%)
ST.SUPPORT SPECIAL				
FEDERAL				
OTHER SPECIAL				
<b>TOTAL</b>	<b>846,676</b>	<b>( 25,400)</b>	<b>821,276</b>	

## Board of Trustees of Institutions of Higher Learning MEMBERS

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING

Agency

A. Explain Rate and manner in which board members are reimbursed:

Board members are reimbursed through the Institutions of Higher Learning System Administration budget with a per diem of \$40 plus expenses.

B. Estimated number of meetings FY2010

12 (twelve)

C.	Names of Members	City, Town, Residence	Appointed By	Date of Appointment	Length of Term
1.	<u>Dr. L. Stacy Davidson, Jr.</u>	<u>Cleveland, MS</u>	<u>Musgrove</u>	<u>May 2000</u>	<u>12 years</u>
2.	<u>Dr. Bettye Neely</u>	<u>Grenada, MS</u>	<u>Musgrove</u>	<u>June 2000</u>	<u>12 years</u>
3.	<u>Mr. Scott Ross</u>	<u>West Point, MS</u>	<u>Musgrove</u>	<u>May 2000</u>	<u>12 years</u>
4.	<u>Ms. Amy Whitten</u>	<u>Oxford, MS</u>	<u>Musgrove</u>	<u>May 2000</u>	<u>12 years</u>
5.	<u>Mr. Ed Blakeslee</u>	<u>Gulfport, MS</u>	<u>Barbour</u>	<u>May 2004</u>	<u>11 years</u>
6.	<u>Mr. Bob Owens</u>	<u>Terry, MS</u>	<u>Barbour</u>	<u>May 2004</u>	<u>11 years</u>
7.	<u>Mr. Aubrey Patterson</u>	<u>Tupelo, MS</u>	<u>Barbour</u>	<u>May 2004</u>	<u>11 years</u>
8.	<u>Ms. Robin Robinson</u>	<u>Laurel, MS</u>	<u>Barbour</u>	<u>May 2004</u>	<u>11 years</u>
9.	<u>Mr. Alan W. Perry</u>	<u>Jackson, MS</u>	<u>Barbour</u>	<u>May 2008</u>	<u>10 years</u>
10.	<u>Ms. Christine L. Pickering</u>	<u>Biloxi, MS</u>	<u>Barbour</u>	<u>May 2008</u>	<u>10 years</u>
11.	<u>Mr. C.D. Smith, Jr.</u>	<u>Meridian, MS</u>	<u>Barbour</u>	<u>May 2008</u>	<u>10 years</u>
12.	<u>Dr. Douglas W. Rouse</u>	<u>Hattiesburg, MS</u>	<u>Barbour</u>	<u>May 2008</u>	<u>10 years</u>

Identify Statutory Authority (Code Section or Executive Order Number)\*

Constitutional Amendment 213A of the Constitution of the State of Mississippi

\*If Executive Order, please attach copy.



**SCHEDULE B  
CONTRACTUAL SERVICES**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Name of Agency

MINOR OBJECT OF EXPENDITURE	(1) Actual Expenses FY Ending June 30, 2009	(2) Estimated Expenses FY Ending June 30, 2010	(3) Requested for FY Ending June 30, 2011
<b>A. TUITION, REWARDS &amp; AWARDS (61010-61099)</b>			
61010 Tuition		1,700	1,700
61020 Employee Training		500	500
<b>TOTAL (A)</b>		<b>2,200</b>	<b>2,200</b>
<b>B. TRANSPORTATION &amp; UTILITIES (61100-61299)</b>			
61110 Postage, Box Rent, etc.	5	100	100
611XX Transportation of Goods (61180-61190)	81	50	50
61210 Electricity			
61220 Gas			
61230 Water & Sewage			
<b>TOTAL (B)</b>	<b>86</b>	<b>150</b>	<b>150</b>
<b>C. PUBLIC INFORMATION ((61300-61399)</b>			
61310 Advertising & Public Information	2,569	5,500	5,500
61340 Signs & Billboards			
61350 Exhibits & Displays			
<b>TOTAL (C)</b>	<b>2,569</b>	<b>5,500</b>	<b>5,500</b>
<b>D. RENTS (61400-61499)</b>			
61420 Building & Floor Space			
61430 Land			
61440 Office Equipment			
61460 Other Equipment			
61470 Capitol Facilities - Rental			
61480 Exhibits, Displays & Conference Rooms	500	2,000	2,000
<b>TOTAL (D)</b>	<b>500</b>	<b>2,000</b>	<b>2,000</b>
<b>E. REPAIRS &amp; SERVICES (61500-61599)</b>			
61500 Grounds, Walks, Fences & Lots			
61520 Buildings	138	2,900	2,900
61530 Machinery & Field Equipment			
61540 Motor Vehicles			
61550 Office Equipment & Furniture			
61580 Shop Equipment			
61590 Miscellaneous Items of Equipment			
<b>TOTAL (E)</b>	<b>138</b>	<b>2,900</b>	<b>2,900</b>
<b>F. FEES, PROFESSIONAL &amp; OTHER SERVICES (61600-61699)</b>			
61610 Engineering			
61615 SAAS Fees - DFA			
61616 MMRS Fees			
61620 Department of Audit			
6162X Accounting (61621-61624)			
61632 Legal (61630-61636)	820		
6164X Medical Services (61640-61646)			
61650 State Personnel Board			
6165X Personnel Services Contracts (61651-61653)			
61658 Personnel Services Contracts - SPAHRS			
6166X Court Costs & Reporters (61661-61666)			
61670 Laboratory & Testing Fees			
6168X Contract Worker (61682-61688)			
61690 Other Fees & Services			

**SCHEDULE B  
CONTRACTUAL SERVICES CONTINUED**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Name of Agency

MINOR OBJECT OF EXPENDITURE	(1) Actual Expenses FY Ending June 30, 2009	(2) Estimated Expenses FY Ending June 30, 2010	(3) Requested for FY Ending June 30, 2011
<b>TOTAL (F)</b>	<b>820</b>		
<b>G. OTHER CONTRACTUAL SERVICES (61700-61899)</b>			
61700 Liability Insurance Pool Contributions (Tort Claims)			
61710 Insurance & Fidelity Bonds			
61715 Insurance Computer Equipment	983	1,000	1,000
61720 Membership Dues	750	750	750
61721 Subscriptions			
55865 Employee Moving Expenses	2,000		
<b>TOTAL (G)</b>	<b>3,733</b>	<b>1,750</b>	<b>1,750</b>
<b>H. INFORMATION TECHNOLOGY (61900-61990)</b>			
61902 IS Professional Fees - Outside Vendor			
61905 IS Professional Fees - ITS			
6191X IS Training/Education (61914-61915)			
61917 Service Charges to State Data Center			
61918 Data Entry			
61921 Software Acquisition and Installation	391	6,888	6,888
61922 Basic Telephone Monthly - Outside Vendor	2,981	3,000	3,000
61923 Basic Telephone Monthly - ITS			
61924 Long Distance Charges - Outside Vendor	62	100	100
61925 Long Distance Charges - ITS			
61926 Private Data Line Monthly Charges - Outside Vendor			
61927 Private Data Line Monthly Charges - ITS			
61928 Public Network Access Charges - Outside Vendor			
61929 Public Network Access Charges - ITS			
6193X IS Related Rentals (61932-61933)			
61938 Pager Usage Time - Outside Vendor			
61939 Cellular Usage Time - Outside Vendor			
61961 Maintenance/Repair of IS Equipment	478	3,500	3,500
61962 Maintenance/Repair of Telephone Systems (ITS)			
61980 IS Software Maintenance - Outside Vendor	51,851	47,012	47,012
<b>TOTAL (H)</b>	<b>55,763</b>	<b>60,500</b>	<b>60,500</b>
<b>I. OTHER (61991-61999)</b>			
6199X Prior Year Expense (61996-61998)			
61999 Contractual Services - No PO Required			
<b>TOTAL (I)</b>			
<b>GRAND TOTAL</b> <i>(Enter on Line I-B of Form MBR-1)</i>	<b>63,609</b>	<b>75,000</b>	<b>75,000</b>
<b>FUNDING SUMMARY:</b>			
GENERAL FUNDS	63,609	75,000	75,000
STATE SUPPORT SPECIAL FUNDS			
FEDERAL FUNDS			
OTHER SPECIAL FUNDS			
<b>TOTAL FUNDS</b>	<b>63,609</b>	<b>75,000</b>	<b>75,000</b>

**SCHEDULE C  
COMMODITIES**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH  
Name of Agency

MINOR OBJECT OF EXPENDITURE	(1) Actual Expenses FY Ending June 30, 2009	(2) Estimated Expenses FY Ending June 30, 2010	(3) Requested for FY Ending June 30, 2011
<b>A. MAINTENANCE &amp; CONSTR. MATERIALS &amp; SUPPLIES (62010-62099)</b>			
62040 Lumber Parts		2,000	2,000
62050 Steel & Other Metals			
62060 Paints			
<b>Total (A)</b>		<b>2,000</b>	<b>2,000</b>
<b>B. PRINTING &amp; OFFICE SUPPLIES &amp; MATERIALS (62100-62199)</b>			
62110 Printing Binding	2,818	5,000	5,000
62120 Duplication & Reproduction Supplies			
62130 Office Supplies & Materials			
62140 Paper Supplies			
62150 Maps, Manuals, Library Books			
62160 Office Equipment (not capital outlay)			
<b>Total (B)</b>	<b>2,818</b>	<b>5,000</b>	<b>5,000</b>
<b>C. EQUIPMENT REPAIR PARTS, SUPPLIES &amp; ACCES. (62200-62299)</b>			
62210 Fuels - Gasoline			
62251 Repair Vehicle			
62270 Radio & TV Supply & Repair			
62271 Repair of Comm Systems, Parts			
62290 Other Equipment Repair Parts			
<b>Total (C)</b>			
<b>D. PROFESSIONAL &amp; SCI. SUPPLIES AND MATERIALS (62300-62399)</b>			
62330 Photographic Supplies	112		
62340 Drugs & Chemicals - Medical & Lab Use			
62390 Other Professional Scientific			
<b>Total (D)</b>	<b>112</b>		
<b>E. OTHER SUPPLIES &amp; MATERIALS (62400-62999)</b>			
62420 Hardware, Plumbing & Electrical			
62450 Janitor Supplies & Cleaning			
62460 Wearing Material			
62470 Food	826	2,000	2,000
62520 Decal Signs			
62530 Uniforms & Wearing Apparel	1,306	1,200	1,200
62560 Eating Utensils			
62590 Other Supplies & Materials	1,159	4,800	4,800
62595 Other Equipment (less than \$1,000)			
62998 Prior year expense			
<b>Total (E)</b>	<b>3,291</b>	<b>8,000</b>	<b>8,000</b>
<b>GRAND TOTAL (A, B, C, D &amp; E)</b> <i>(Enter on Line I-C of Form MBR-1)</i>	<b>6,221</b>	<b>15,000</b>	<b>15,000</b>
<b>FUNDING SUMMARY:</b>			
GENERAL FUNDS	6,221	15,000	15,000
STATE SUPPORT SPECIAL FUNDS			
FEDERAL FUNDS			
OTHER SPECIAL FUNDS			
<b>TOTAL FUNDS</b>	<b>6,221</b>	<b>15,000</b>	<b>15,000</b>

**SCHEDULE D-1  
CAPITAL OUTLAY  
OTHER THAN EQUIPMENT**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH  
Name of Agency

MINOR OBJECT OF EXPENDITURE	(1) Actual Expenses FY Ending June 30, 2009	(2) Estimated Expenses FY Ending June 30, 2010	(3) Requested for FY Ending June 30, 2011
<b>A. LANDS (63100-63199)</b>			
63110 Land for Buildings			
63120 Land for Right-of-Way			
63130 Land for Aggregates			
63170 Land Purchased for Other Purposes			
<b>TOTAL (A)</b>			
<b>B. BUILDINGS &amp; IMPROVEMENTS (63200-63299)</b>			
63250 Buildings - Purchased, Constructed, Remodeled			
<b>TOTAL (B)</b>			
<b>C. INFRASTRUCTURE &amp; OTHER (63500-63999)</b>			
635XX Other			
<b>TOTAL (C)</b>			
<b>GRAND TOTAL</b> <i>(Enter on Line I-D-1 of Form MBR-1)</i>			
<b>FUNDING SUMMARY:</b>			
GENERAL FUNDS			
STATE SUPPORT SPECIAL FUNDS			
FEDERAL FUNDS			
OTHER SPECIAL FUNDS			
<b>TOTAL FUNDS</b>			

**SCHEDULE D-2  
CAPITAL OUTLAY EQUIPMENT**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Name of Agency

EQUIPMENT BY ITEM	Act. FY Ending June 30, 2009		Est. FY Ending June 30, 2010		Req. FY Ending June 30, 2011		
	No. of Units	Total Cost	No. of Units	Total Cost	No. of Units	Cost Per Unit	Total Cost
<b>A. VEHICLES (see form MBR-1-D-3)</b>							
<b>B. ROAD MACHINERY, FARM &amp; OTHER EQUIPMENT</b>							
63320 Road Machinery							
<b>TOTAL (B)</b>							
<b>C. OFFICE MACHINES, FURNITURE, FIXTURES, EQUIP.</b>							
63330 Office Equipment, Furniture							
<b>TOTAL (C)</b>							
<b>D. IS EQUIPMENT (DP &amp; TELECOMMUNICATIONS)</b>							
63421 IT/IS Equipment							
Data Processing Equipment (N)							
Staff Desktop PC's (R)			1	2,000	1	2,000	2,000
Staff Laptop PC's (R)	4	7,610	1	2,500	1	2,500	2,500
PC Monitors (R)							
SGI Altix XE Cluster Upgrade (N)	1	46,859	1	96,015	1	111,108	111,108
Supercomputer Replacement Upgrade (R)							
Sun Backup Server Upgrade (N)	1	1,631					
Equipment for Online Research Training (N)							
Mass Data Storage Equipment (N)							
<b>TOTAL (D)</b>		<b>56,100</b>		<b>100,515</b>			<b>115,608</b>
<b>E. EQUIPMENT - LEASE PURCHASE (63460-63476)</b>							
63462 Lease-Purchase - Information Systems Equipment							
63463 Lease-Purchase - Telecom. Infrastructure / Equipment							
63468 Lease-Purchase - Telephone Equipment							
63469 Lease-Purchase - Two-way Radio Equipment							
63476 Lease-Purchase - Other Equipment							
<b>TOTAL (E)</b>							
<b>F. OTHER EQUIPMENT</b>							
63490 Other Equipment							
63396 Betterments or Accessories for Vehicles							
63495 Betterments or Accessories for Other than Vehicles							
<b>TOTAL (F)</b>							
<b>GRAND TOTAL</b> <i>(Enter on Line I-D-2 of Form MBR-1)</i>		<b>56,100</b>		<b>100,515</b>			<b>115,608</b>
<b>FUNDING SUMMARY:</b>							
GENERAL FUNDS		56,100		100,515			115,608
STATE SUPPORT SPECIAL FUNDS							
FEDERAL FUNDS							
OTHER SPECIAL FUNDS							
<b>TOTAL FUNDS</b>		<b>56,100</b>		<b>100,515</b>			<b>115,608</b>

**SCHEDULE D-3  
PASSENGER/WORK VEHICLES**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Name of Agency

MINOR OBJECT OF EXPENDITURE	Vehicle Inventory	FY Ending	June 30, 2009	FY Ending	June 30, 2010	FY Ending	June 30, 2011
	June 30, 2009	No. of Vehicles	Actual Cost	No. of Vehicles	Estimated Cost	No. of Vehicles	Requested Cost
<b>A. PASSENGER &amp; WORK VEHICLES (63310, 63390-63400)</b>							
63310 Automobile, Compact Sedan (AU CS)							
63310 Automobile, Full Size Sedan (AU FS)							
63310 Automobile, Mid Size Sedan (AU MS)							
63310 Automobile, Mid Size Station Wagon (AU MW)							
63310 Automobile Utility (AU UT)							
63390 Truck, Carry-All (TK CA)							
63390 Truck, Compact Pickup (TK CU)							
63390 Truck, Dump Bed (TK DU)							
63390 Truck, Medium Duty 2.5 Ton (TK MD)							
63390 Truck, Mid Size Pickup (TK MU)							
63391 Truck, Heavy Duty 5 Ton (TK HD)							
63391 Truck, Heavy Duty Pickup (TK HU)							
63392 Sport Utility Vehicle (TK SU)							
63393 Van, Cargo (VN CD)							
63393 Van, Full Size (VN FV)							
63393 Van, Mid Size (VN MV)							
63400 Other Vehicles							
<b>TOTAL (A)</b>							
<b>B. BETTERMENTS OR ACCESSORIES FOR VEHICLES (63395)</b>							
63395 Betterments or Accessories for Vehicles							
<b>TOTAL (B)</b>							
<b>GRAND TOTAL</b> <i>(Enter on Line I-D-3 of Form MBR-1)</i>							
<b>FUNDING SUMMARY:</b>							
GENERAL FUNDS							
STATE SUPPORT SPECIAL FUNDS							
FEDERAL FUNDS							
OTHER SPECIAL FUNDS							
<b>TOTAL FUNDS</b>							

**SCHEDULE D-4  
WIRELESS COMMUNICATION DEVICES**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH  
Name of Agency

MINOR OBJECT OF EXPENDITURE	Device Inventory June 30, 2009	Act FY Ending June 30, 2009		Est FY Ending June 30, 2010		Req FY Ending June 30, 2011	
		No. of Devices	Actual Cost	No. of Devices	Estimated Cost	No. of Devices	Requested Cost
<b>A. CELLULAR PHONES (63435)</b>							
63435 Cellular Phones							
<b>Total (A)</b>							
<b>B. PAGERS (63434)</b>							
63434 Pagers, Paging Equipment							
<b>Total (B)</b>							
<b>C. WIRELESS PERSONAL DIGITAL ASSISTANTS (63435)</b>							
63435 Wireless PDAs, Blackberry, etc							
<b>Total (C)</b>							
<b>GRAND TOTAL</b> <i>(Enter on Line 1-D-4 of Form MBR-1)</i>							
<b>FUNDING SUMMARY:</b>							
GENERAL FUNDS							
STATE SUPPORT SPECIAL FUNDS							
FEDERAL FUNDS							
OTHER SPECIAL FUNDS							
<b>TOTAL FUNDS</b>							

**SCHEDULE E  
SUBSIDIES, LOANS & GRANT**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Name of Agency

MINOR OBJECT OF EXPENDITURE	(1) Actual Expenses FY Ending June 30, 2009	(2) Estimated Expenses FY Ending June 30, 2010	(3) Requested for FY Ending June 30, 2011
<b>A. SCHOOL GRANTS TO COUNTIES &amp; MUNICIPALITIES (64000-64599)</b>			
<b>TOTAL (A)</b>			
<b>B. GRANTS TO I.H.L. &amp; OTHER POLITICAL SUBDIVISIONS (64600-64699)</b>			
<b>TOTAL (B)</b>			
<b>C. GRANTS TO NON-GOVERNMENT INSTNS &amp; INDS (64700-64999)</b>			
<b>TOTAL (C)</b>			
<b>D. DEBT SERVICE &amp; JUDGEMENTS (65000-65399)</b>			
65040 Interest on Lease Purchases			
<b>TOTAL (D)</b>			
<b>E. OTHER (66000-89999)</b>			
Utility Costs	88,598	93,354	95,225
<b>TOTAL (E)</b>	<b>88,598</b>	<b>93,354</b>	<b>95,225</b>
<b>GRAND TOTAL</b> <i>(Enter on Line I-E of Form MBR-1)</i>	88,598	93,354	95,225
<b>FUNDING SUMMARY:</b>			
GENERAL FUNDS	88,598	93,354	95,225
STATE SUPPORT SPECIAL FUNDS			
FEDERAL FUNDS			
OTHER SPECIAL FUNDS			
<b>TOTAL FUNDS</b>	<b>88,598</b>	<b>93,354</b>	<b>95,225</b>



## NARRATIVE 2011 BUDGET REQUEST

### UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING

Name of Agency

#### MCSR Mission

The primary mission of the Mississippi Center for Supercomputing Research (MCSR) is to provide excellent high performance computing (HPC) facilities and services to all of the Mississippi Institutions of Higher Learning (IHLs) in support of academic instruction and research. It is also the goal of MCSR to improve state-wide awareness of this project through outreach programs and enhanced communication with the user community.

#### Description of MCSR Resources & Services

The MCSR currently supports Silicon Graphics Origin 2800 and Altix 3700 supercomputers, a 240-core SGI Altix XE Xeon Linux Cluster, a Web server, and a 226-processor Intel P4-based Linux Cluster. The supercomputers and clusters host a variety of mathematics, scientific, engineering applications, and sequential and parallel software development environments (MPI, C, C++, FORTRAN 90) for students and researchers. Any student of faculty at any Mississippi's IHL may have access to these systems at no charge for research or instructional use, and there are over 1,400 research accounts currently active.

#### Value of MCSR Project to Mississippi

The centralization of personnel and equipment resources also avoids duplicating these expenses at the individual campus level and gives an equality of access to any individual faculty member at the smaller institutions. A secondary benefit to Mississippi from the MCSR is the presence of a centralized technical staff, which is available to all of the institutions for matters including, and in addition to, high-performance computing. In particular, assistance has been provided to the smaller campuses in meeting many diverse needs: campus network strategic planning and installation, system administration of server/workstations, e-mail services prior to campus e-mail server installation, and many other needs pertaining to UNIX system administration, e-mail issues, user instruction, and network issues. The neutral position of the MCSR has made possible the winning of national grants, which placed networked personal computer laboratories at both Alcorn State University and Mississippi Valley State University. MCSR has also played a critical role in developing the Ph.D. program in Chemistry and the multidisciplinary Ph.D. program in Environmental Science at Jackson State University, and helped the JSU College of Science, Engineering, and Technology to meet the federal matching funds requirements for several key grants.

The MCSR has made major contributions to the implementation of Internet2 at many of the state's IHLs and has assisted UM specifically in the development of successful grant proposals to the NSF and the Navy High Performance Visualization Initiative (HPVCI) that provided most of the initial funding for the UM connection. UM and the MCSR joined MSU, JSU, and USM in connecting to the Louisiana Optical Network Initiative (LONI) 10 Gbs fiber optic network on 6/30/2007. All network services including the Commodity Internet, Internet2, and the National Lambda Rail (NLR) are now accessed through LONI. MCSR is currently assisting the CIOs of the major research universities in Mississippi in shaping a shared vision for a next-generation regional fiber network to enable the data-intensive research of tomorrow.

#### Impact of Reduced or Increased Funding on MCSR

The MCSR has continued during each fiscal year to attempt to enable major hardware upgrades with the general goal of doubling the computing power each year within the existing budget levels. This is necessary to meet Mississippi researchers' demands for more comprehensive studies and greater physical realism in computer models, as they compete against researchers from other states for limited federal grants and contracts. However, the result of 8 straight years of decreasing or flat funding has been a 7 year decline in the competitiveness of supercomputing capacity that MCSR is able to offer to Mississippi researchers, compared to similar centers in other states, and has compromised the ability of the diminished support staff to invest the emerging technologies (e.g., computational GRIDs, graphical processing units, high capacity data storage, etc.) that will make Mississippi computational

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researchers nationally competitive in the upcoming years. The \$30 million in IHL research grants and contracts directly supported by MCSR resources, while still offering an impressive \$38 return of investment to Mississippi for every \$1 spent on the project, is unsustainable without a major supercomputer replacement and regular upgrades in ensuing years, and additional support staff and maintenance funds to support existing equipment, new purchases, or pre-owned supercomputers that might be donated by larger sites to MCSR, as was common when the project was fully funded.

#### What MCSR is Doing to Leverage Existing Funding While Mitigating Funding Reductions

The MCSR will accelerate efforts already underway to augment state funding for supercomputing replacements by pursuing federal grants, contracts, and or allocations, in collaboration with the research faculty and offices of the IHL's. MCSR is uniquely positioned to facilitate such collaborations, since the Center is institution-neutral, and has a great track record of operating shared equipment with great utilization and broad impact to institutions, researchers and students who are historically underserved by this type of resource. While these types federal programs provide a possible alternative funding source for MCSR during lean budget years, funding through this venue is by no means a certainty. To be help make these proposals competitive, MCSR must demonstrate stable funding that will assure reviewers that sufficient technical staff and infrastructure will be available to support the proposed equipment through and beyond the grant period; MCSR cannot reasonably apply to many of the most attractive of these programs because their often leading-edge nature suggests a support burden that is not compatible with MCSR's current staffing levels, or because they require cost sharing of anywhere from 20 to 50% of total project fund. Therefore, the more state funds MCSR receives, the greater leverage the Center will have to secure additional funding to maximize resources offered to Mississippi faculty and students.

#### Success in Achieving Goals

The MCSR supported over \$30 million in research contracts and grants during FY2009. This represents the eighth consecutive fiscal year with over \$30 million in research reported. The total number of research user accounts (over 1,400) continues to grow each year, reflecting a continued demand for supercomputing cycles across the state.

All specific requests from the user community were met, in terms of hardware resources and consulting services, although wait times for CPU cycles continued to be high (often days) on MCSR's newer systems. Some software licenses were downgraded, and donations had to be collected from individual researchers at JSU and UM to meet some of the software needs of researchers.

MCSR education, outreach, and collaboration initiatives were conducted to raise awareness of, improve understanding of, and broaden demand for MCSR services on the UM campus and around the state. MCSR supported class accounts for 72 students in 9 courses spanning 4 IHLs in Fall 08 and Spring 09. MCSR employees conducted extracurricular computational research training in the form of 50 one-hour workshops from Fall 08 - Spring 09, with an average attendance of 5 or 6 students per workshop. About 10 of these workshops were developed and taught for the first time this year. In June, MCSR conducted a series of 6 research training workshops for 15 summer research students from the UM Department of Chemistry and Biochemistry, and the UM Department of Medicinal Chemistry. These workshops were repeated and elaborated when MCSR conducted a 3-day Computational Mini-Camp for 14 graduate, undergraduate, and high school participants of the Summer Institute at Jackson State's Center for Interdisciplinary Nanotoxicity.

#### FY2009 Additions to Facilities

Sequoia, MCSR's modest and newest SGI Altix XE Cluster, which had been purchased at the end of FY08 with lapsed salary funds, was installed, configured, tested, and brought online for the MCSR research community in November of FY2009. In June, further MCSR lapsed salary funds were used to add 8 compute nodes (64 Intel Xeon

**NARRATIVE  
2011 BUDGET REQUEST**

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2.5 GHz CPU cores) to the Sequoia Cluster.

Justification for FY2011 Funding Request

Academic Support

The specific request for a FY2011 funding increase includes one Program Decision Unit:

1) Core Operations--This request reflects a total increase of \$16,964, which includes \$15,093 for replacement of desktop and laptop computers to be used by staff in working with researchers, plus an increase of \$1,871 to cover increased utility costs.

**OUT-OF-STATE TRAVEL  
FISCAL YEAR 2009**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Agency Name

Note: All expenditures recorded on this form must be totaled and said total must agree with the out-of-state travel amount indicated for FY 2009 on Form Mbr-1, line I.A.2.b.

<b>Employee's Name</b>	<b>Destination</b>	<b>Purpose</b>	<b>Travel Cost</b>	<b>Funding Source</b>
Hale, Jason	Orlando, FL	Educause Conference	1,689	General Fund
Hale, Jason	Austin, TX	Supercomputing 08 Conference	2,498	General Fund
Henry, Rachel	Austin, TX	Supercomputing 08 Conference	2,188	General Fund
Henry, Rachel	Las Vegas, NV	Networld/Interop Conference	1,186	General Fund
Hopkins, Brian	Pittsburgh, PA	Hybrid Programming Workshop	1,105	General Fund
Hopkins, Brian	Austin, TX	Supercomputing 08 Conference	1,986	General Fund
Roach, David	Las Vegas, NV	Networld/Interop Conference	1,929	General Fund
Roach, David	New Orleans, LA	Internet 2 Fall Conference	2,139	General Fund
Roach, David	Orlando, FL	Educause Conference	2,537	General Fund
Roach, David	Austin, TX	Supercomputing 08 Conference	2,479	General Fund
<b>Total Out of State Travel Cost</b>			<b>\$19,736</b>	

**FEES, PROFESSIONAL AND OTHER SERVICES**  
**(EXPENDITURE CODES 61600-61699)**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Name of Agency

TYPE OF FEE AND NAME OF VENDOR	Retired w/ PERS	(1) Actual Expenses FY Ending June 30, 2009	(2) Estimated Expenses FY Ending June 30, 2010	(3) Requested for FY Ending June 30, 2011	Fund Num.
61610 Engineering					
<b>TOTAL 61610 Engineering</b>					
61615 SAAS Fees - DFA					
<b>TOTAL 61615 SAAS Fees - DFA</b>					
61616 MMRS Fees					
<b>TOTAL 61616 MMRS Fees</b>					
61620 Department of Audit					
<b>TOTAL 61620 Department of Audit</b>					
6162X Accounting (61621-61624)					
<b>TOTAL 6162X Accounting (61621-61624)</b>					
61632 Legal (61630-61636)					
61682 Legal Expenses / H1B filing & anti-fraud fees		820			
<i>Comp. Rate: 820</i>					
<b>TOTAL 61632 Legal (61630-61636)</b>		<b>820</b>			
6164X Medical Services (61640-61646)					
<b>TOTAL 6164X Medical Services (61640-61646)</b>					
61650 State Personnel Board					
<b>TOTAL 61650 State Personnel Board</b>					
6165X Personnel Services Contracts (61651-61653)					
<b>TOTAL 6165X Personnel Services Contracts (61651-61653)</b>					
61658 Personnel Services Contracts - SPAHRS					
<b>TOTAL 61658 Personnel Services Contracts - SPAHRS</b>					
6166X Court Costs & Reporters (61661-61666)					
<b>TOTAL 6166X Court Costs &amp; Reporters (61661-61666)</b>					
61670 Laboratory & Testing Fees					
<b>TOTAL 61670 Laboratory &amp; Testing Fees</b>					
6168X Contract Worker (61682-61688)					
<b>TOTAL 6168X Contract Worker (61682-61688)</b>					
61690 Other Fees & Services					
<b>TOTAL 61690 Other Fees &amp; Services</b>					
<b>GRAND TOTAL (61600-61699)</b>		<b>820</b>			

**VEHICLE PURCHASE DETAILS**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING

Name of Agency

<b>Year</b>	<b>Model</b>	<b>Person(s) Assigned To</b>	<b>Vehicle Purpose/Use</b>	<b>FY2011 Req. Cost</b>
				0
				<b>0</b>
			<b>TOTAL VEHICLE REQUEST</b>	<b>0</b>

**VEHICLE INVENTORY  
AS OF JUNE 30, 2009**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING \_\_\_\_\_

Name of Agency

Veh. Type	Vehicle Descript.	Model Year	Model	Person(s) Assigned To	Purpose/Use	Tag Number	Mileage On 6-30-09	Average Miles per Year	Replacement Proposed	
									FY 2010	FY 2011

Vehicle Type = Passenger/Work

**PRIORITY OF DECISION UNITS  
FISCAL YEAR 2011**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Agency Name

<b>Program</b>	<b>Decision Unit</b>	<b>Object</b>	<b>Amount</b>
<b>Priority # 0</b>			
Program # 1 : ACADEMIC SUPPORT			
	Core Operations		
		Equipment	15,093
		Subsidies	1,871
		<b>Total</b>	<b>16,964</b>
		General Funds	16,964



### CAPITAL LEASES

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Name of Agency

Vendor/ Item Leased	Original Date of Lease	Original Number of Months of Lease	Number of Months Remaining on 6-30-09	Last Payment Date	Interest Rate	Amount of Each Monthly/Yearly Payment			Total of Payments to be Made						
									Principal	Interest	Total	Actual FY 2009	Estimated FY 2010		
						Principal	Interest	Total					Principal	Interest	Total
/	/ /	0	0	/ /	.000										

## Summary of 3% General Fund Program Reduction to FY2010 Appropriated Funding by Major Object

### UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING

Major Object	FY2010 GENERAL FUND REDUCTION	AFFECT ON FY2010 STATE SUPPORT SPECIAL FUNDS	AFFECT ON FY2010 FEDERAL FUNDS	AFFECT ON FY2010 OTHER SPECIAL FUNDS	TOTAL 3% REDUCTIONS
PERSONAL SERVICES					
TRAVEL	( 4,000)				( 4,000)
CONTRACTUAL SERVICES					
COMMODITIES					
OTHER THAN EQUIPMENT					
EQUIPMENT	( 18,600)				( 18,600)
VEHICLES					
WIRELESS COMM. DEVICES					
SUBSIDIES, LOANS, ETC	( 2,800)				( 2,800)
<b>TOTALS</b>	<b>( 25,400)</b>				<b>( 25,400)</b>