

To: President Gamble Business Process Review Oversight Committee	From: BPR Budget Team Jeff Davis, Kathy Attebury, Clyde Carroll, Joe Sidley, Bobby Bear, Deby Gunter, Chris Wendland, Terrie Iverson
Date: < 19 January 2007 >	Document Number: <or revision/other identifier>

MSU Business Process Review Business Case: Planning and Budget Development

Executive Summary

The Budget Team is redesigning the Planning and Budget Development processes.

The basic flow for the planning and budget development processes within all MSU organizations is similar, with the biennial processes regulated by OCHE/OBPP deadlines. For both the annual and biennial budget processes, the same type of information is used to compile the budgets, i.e. enrollments, revenues, expenditures.

For the 2009 biennia, standard template formats and Present Law verbiage were used to build the biennial budgets for the Montana University System, providing consistency at that level.

For annual budgets, campus environments determine which constituent/committee groups participate in the development of fiscal year budgets.

The implementation or development of a common budget forecasting model would provide standardization at the MSU level. While intended for planning and development of annual budgets within the MSU organizations, this would also aid in further standardization at the biennial level. As well, this recommended implementation/development would provide system efficiencies for Budget Office staff and constituents.

The data and results are from Flow Charts, Cost/Benefit Analysis, Customer Surveys and Focus Groups.

The Cost/Benefit Analysis does not show any significant cost savings. In fact, a negative cash flow is reflected in the year that the asset is purchased and implemented. However, the long-term benefits include data consistency, improved quality of the process, system efficiencies and effectiveness across all MSU organizations, as well as improved customer/constituent satisfaction.

CASH FLOW SUMMARY (\$ in 1000s)

Cash inflows (outflows)

Incremental benefit impacts	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incremental expense item impacts	0.99	1.02	1.06	1.10	1.13	1.17	6.48
Net operating inflow (outflow)	0.99	1.02	1.06	1.10	1.13	1.17	6.48
Asset purchase (from above)	(25.00)	0.00	0.00	0.00	0.00	0.00	(25.00)
Net Incremental CASH FLOW	(24.01)	1.02	1.06	1.10	1.13	1.17	(18.52)
Cumulative Net Incremental CF	(24.01)	(22.99)	(21.93)	(20.83)	(19.70)	(18.52)	(18.52)

The Budget Team recommendation is to evaluate/develop budget forecasting model software for use by all MSU organizations. If a viable product is found commercially, possible implementation and training should be in place for the 2010/2011 biennial budget process, which is targeted to begin Fall 2007. If a viable product is not available, a standardized product will need to be developed internally using Excel and/or Access, with the same possible implementation/training period.

Table of Contents

Executive Summary	1
Table of Contents	2
A. Introduction	4
1. Business Case Subject.....	Error! Bookmark not defined.
a. <The Action>.....	Error! Bookmark not defined.
b. Business Objectives.....	4
c. Scope of This Case.....	4
2. Business Case Purpose.....	4
3. Background.....	5
a. Problems and/or Opportunities Addressed by <Case Subject>.....	5
b. Market Situation.....	Error! Bookmark not defined.
c. Connections to other Projects/Products or Programs.....	5
d. Other, Alternative Actions.....	5
e. Current Problems or Limitations.....	5
f. Other Important Historical or Situational Information.....	5
4. Disclaimer.....	Error! Bookmark not defined.
B. Methods and Assumptions	5
1. Financial Metrics.....	6
2. Business Case Scope and Boundaries.....	6
a. The Analysis Period.....	6
b. Geography or Location.....	6
c. Organizations.....	7
d. Functions and Positions.....	7
e. Technology.....	7
3. Scenario Design.....	Error! Bookmark not defined.
4. The Cost Model.....	7
5. The Benefits Rationale.....	7
6. Data Structure.....	7
7. Data Sources and Methods.....	8
a. Data Sources.....	8
b. Methods for Estimating Costs and Benefits.....	8
8. Assumptions.....	8
C. Business Impacts	Error! Bookmark not defined.
1. Financial Model and Cash Flow Statements.....	Error! Bookmark not defined.
a. Benefits and Gains.....	Error! Bookmark not defined.
b. Expenses (or “Operating Expenses”).....	Error! Bookmark not defined.
c. Assets Purchased.....	9
d. CASH FLOW SUMMARY.....	Error! Bookmark not defined.
2. Analysis of Results.....	9
3. Non-financial and Non-quantified results.....	9
D. Sensitivity, Security and Risk Analysis	9
1. Sensitivity Analysis.....	9
2. Security.....	
3. Risk Analysis.....	9

E. Conclusions and Recommendations 9
 1. Conclusions..... 10
 2. Recommendations 10
F. Appendixes and References Error! Bookmark not defined.

A. Introduction

1. MSU Business Process Review

The basic flow for the planning and budget development processes within all MSU organizations is similar. The biennial processes are regulated by OCHE/OBPP deadlines. For the 2009 biennia, standard template formats and Present Law verbiage were used to build the biennial budgets at the MUS level. The annual budget processes include the same types of activities to compile the budget, i.e. revise enrollments, revenues, expenditures. The campus environments determine which constituent/committee groups participate in the development of the fiscal year budgets. During Phase I of BPR, the team determined that a common budget-forecasting model would provide further standardization.

a. Summary of Processes to be Redesigned or Modified.

Process Title	June 28 th 2006 Recommendations
Planning & Budget Development	Redesign

The Budget Team is redesigning the Planning and Budget Development processes. The recommendation is to analyze, purchase/develop, and implement a common budget-forecasting model to provide standardization, improve quality of the process, improve constituent satisfaction, and provide system efficiencies and effectiveness.

b. Business Process Review Objectives

Implementing a common forecasting model will:

- Improve institutional and systems efficiencies and effectiveness;
 - Single process across all MSU organizations,
 - Data consistency,
 - Quality process, and
 - High level of customer/constituent satisfaction, and.
-

c. Scope of This Case

Plan and develop budgets using a common forecasting model. Any cost savings would be realized by each campus Budget Office, and any benefits would be realized by all of our constituents, as well as the Budget Office staff. This analysis will be factored over a 5-year time period (FY08-FY12) in the Cost/Benefit Analysis.

2. Business Process Review Business Case Purpose

This business case is to provide an overall project perspective and high-level recommendation to the Oversight Committee, and seek approval for Phase II recommendations. Approval of recommendations would include analysis, purchase/development, and implementation of a common budget-forecasting model to complete budget processes that will provide system efficiencies for Budget Office staff and constituents.

3. Background

Forecasting model software will be analyzed for possible purchase and implementation. Such software would provide standardization across the campuses, as well as greater system efficiencies for campus constituents and Budget Office staff.

a. Problems and/or Opportunities Addressed by Business Process Review

- Opportunities presented by BPR to address problems identified through the Pappas Review process include:
 - Single process across all MSU organizations to promote efficiency, training, and improved ability to meet peak demands.
 - Data consistency to improve the reliability of management reports from both an individual campus perspective and a comparative, cross-campus perspective.
 - Process to improve quality and improve the targeting of training and development of reference materials,
 - Providing a higher level of customer/constituent satisfaction

b. Connections to other Projects/Products or Programs

The BPR project has ongoing links to the

- Business Continuity Planning
- Disaster Recovery Planning
- Pre-Disaster Mitigation Planning
- National Industry Benchmarking

c. Other, Alternative Actions

Continue to use current methodology (multiple and complex Excel spreadsheets)

d. Current Problems or Limitations

Current problems or limitations include:

- Different cultures across the MSU organizations

e. Other Important Historical or Situational Information

None

B. Methods and Assumptions

The data and results are from the Flow Chart simulation, Cost/Benefit Analysis, Customer surveys, and Focus Groups.

The assumption is to analyze/develop forecasting software to provide data consistency in the planning and budget development processes.

1. Financial Metrics

Assumptions used in Cost/Benefit Analysis:

Table of Assumptions		Name
Assumption 1	3.5	Annual Salary Increase
Assumption 2	3.0	Inflation
Assumption 3	417.0	Avg Process Hrs Central
Assumption 4	23.7	Wght Avg Hrly Sal Central
PROCESS IMPROVEMENT ASSUMPTIONS		
Assumption 5	23.7	Wght Avg Hrly Sal Central
Assumption 6	375.3	Avg Process Hrs Central
Assumption 6	5,000	Software Purchase Cost
Assumption 7	20,000	Software implementation and training costs

Financial metrics includes:

- Central process costs
- Software purchase
- Implementation and training costs

2. Business Case Scope and Boundaries

Each campus Budget Office would realize any cost savings, and our constituents, as well as Budget Office staff would realize any benefits. This analysis will be factored over a 5-year time period (FY08-FY12) in the Cost/Benefit Analysis. The analysis period will take place during the fall of each fiscal year. This will include an annual customer survey. Once the results are compiled, it will be shared with the administration and our constituent group.

a. The Analysis Period

The analysis period for the Planning and Budget Development processes will be evaluated over a 5-year (FY08-FY12) timeframe from the date of completed implementation of a forecasting model software.

The Cost Benefit Analysis will be completed in the fall of each fiscal year.

b. Geography or Location

Any implementation of forecasting model software will occur across all MSU organizations. This will provide efficiency and effectiveness as well as constituent satisfaction.

c. Organizations

The organizations covered by this business case include the administrative and finance processes across the following:

Montana State University

- Billings campus
- Bozeman campus
- Agricultural Experiment Station
- Extension Service (FSTS)
- Great Falls campus
- Northern campus

d. Functions and Positions

The recommendation made in this business case will affect the Budget Office staff across all MSU organizations.

e. Technology

Software costs are included in the analysis. Current PC hardware should be sufficient for this software.

3. Scenario Design

Any forecasting model software would initially be implemented at the Bozeman campus and developed for other campus use and implementation. Possible implementation and training should be in place for the 2010/2011 biennial budgeting process.

The implementation of forecasting model software would provide data consistency, improve quality of the process, improve constituent satisfaction, and provide system efficiencies and effectiveness.

4. The Cost Model

Identified all relevant costs—central process costs, software purchase, implementation and training costs.

5. The Benefits Rationale

The benefits of common forecasting model software:

- *Service Objectives*
 - Improved institutional and systems efficiencies and effectiveness;
 - Single process across MSU organizations,
 - Data consistency,
 - Quality process, and
 - High level of customer/constituent satisfaction.

6. Data Structure

The business case reflects the Cost/Benefit Analysis comparing the Business As Usual vs. forecasting software that provides standardization.

7. Data Sources and Methods

Workload Distribution Charts, Detailed Flow Charts, Customer Surveys, Focus Groups, and Cost/Benefit Analyses.

a. Data Sources

- Workload Distribution Charts
- Flow Chart
- Customer Survey
- Focus Groups
- Cost/Benefit Analysis

b. Methods for Estimating Costs and Benefits

See Appendix

8. Assumptions

Assumptions used in Cost/Benefit Analysis:

Table of Assumptions		Name
Assumption 1	3.5	Annual Salary Increase
Assumption 2	3.0	Inflation
Assumption 3	417.0	Avg Process Hrs Central
Assumption 4	23.7	Wght Avg Hrly Sal Central
PROCESS IMPROVEMENT ASSUMPTIONS		
Assumption 5	23.7	Wght Avg Hrly Sal Central
Assumption 6	375.3	Avg Process Hrs Central
Assumption 6	5,000	Software Purchase Cost
Assumption 7	20,000	Software implementation and training costs

C. Business Impacts

The Cost/Benefit Analysis does not show any significant cost savings. However, the long-term benefits include data consistency, improved quality of the process, system efficiencies and effectiveness across all MSU organizations, as well as increased customer/constituent satisfaction.

1. Financial Model and Cash Flow Statements

The Incremental Approach was used to analyze the Planning and Budget Development processes (see appendix).

a. Benefits and Gains

The benefits of common forecasting model software across all MSU organizations would provide data consistency, improved quality of the process, improved constituent/customer satisfaction, and system efficiencies and effectiveness.

b. Expenses (or” Operating Expenses”)

Expenses include Central Processing, Software, Implementation and Training Costs.

c. Assets Purchased

A viable forecasting model software. It is possible that a model could be developed internally using Excel and/or Access.

d. Cash Flow Summary

See Appendix.

2. Analysis of Results

The Cost/Benefit Analysis does not show any significant cost savings. However, standardization would be achieved and provide back office opportunities.

3. Non-financial and Non-quantified results

The benefits gained are data consistency, improved quality of the Planning and Budget Development processes, improved customer/constituent satisfaction, system efficiencies and effectiveness, as well as back office opportunities.

D. Sensitivity, Security and Risk Analysis

1. Sensitivity Analysis

Cash flow estimate assumptions:

- Average Salary levels
- The rate of inflation
- Software purchase costs
- Implementation and staff training costs

2. Security

Planning and Budget Development is comprised of financial data from Banner Finance. Thus, no personal information is utilized in the planning and budget development processes.

3. Risk Analysis

Worst Case Scenario—continue to do Business as Usual, i.e. Excel spreadsheets containing financial data from Banner.

E. Conclusions and Recommendations

The Budget Team recommendation is to evaluate/develop budget forecasting model software for use by all MSU organizations. If a viable product is found commercially, possible implementation and training should be in place for the 2010/2011 biennial budget process. If a viable product is not available, develop a product internally using Excel and/or Access, with the same possible implementation/training period.

1. Conclusions

Using a common forecasting model software to complete all Planning and Budget projections would provide standardization across all MSU organizations. This would create system efficiencies and increase customer/constituent satisfaction.

2. Recommendations

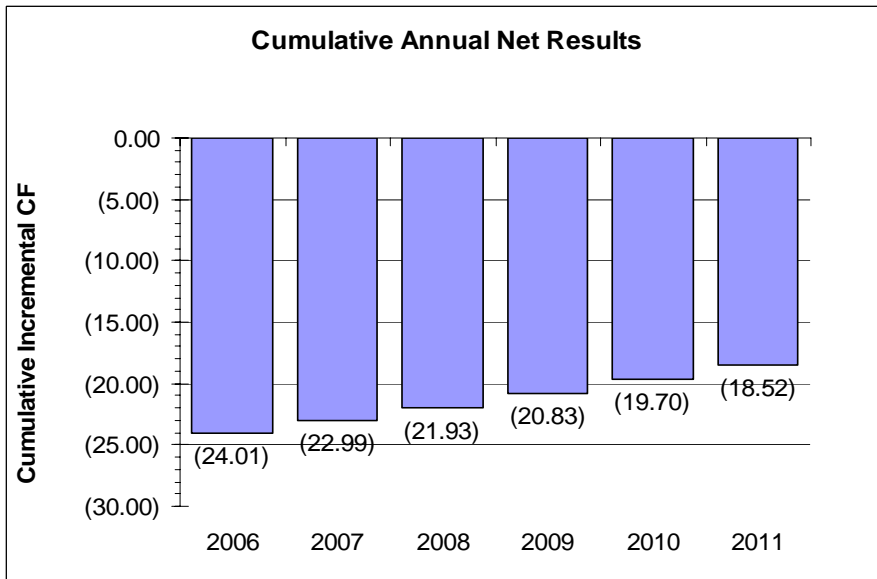
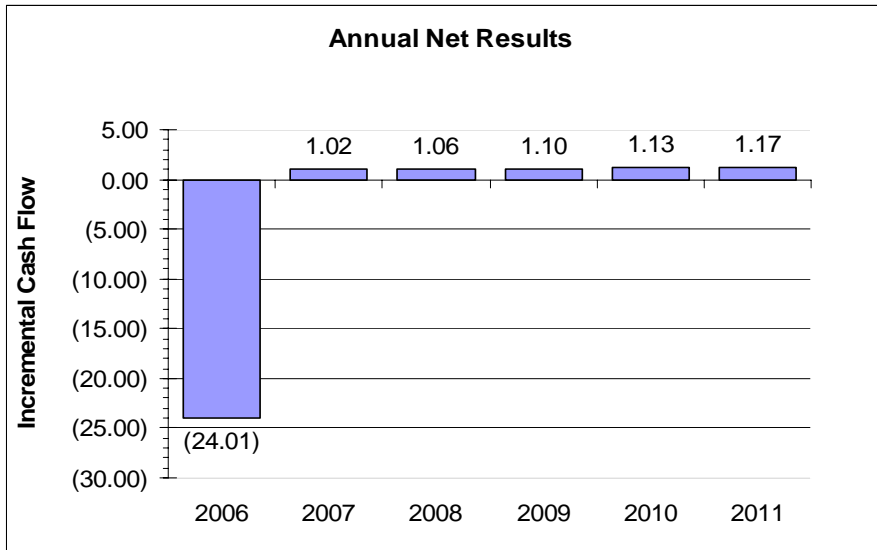
The Budget Team recommendation is to evaluate budget-forecasting software to provide data consistency across all MSU organizations.

F. Appendixes and References

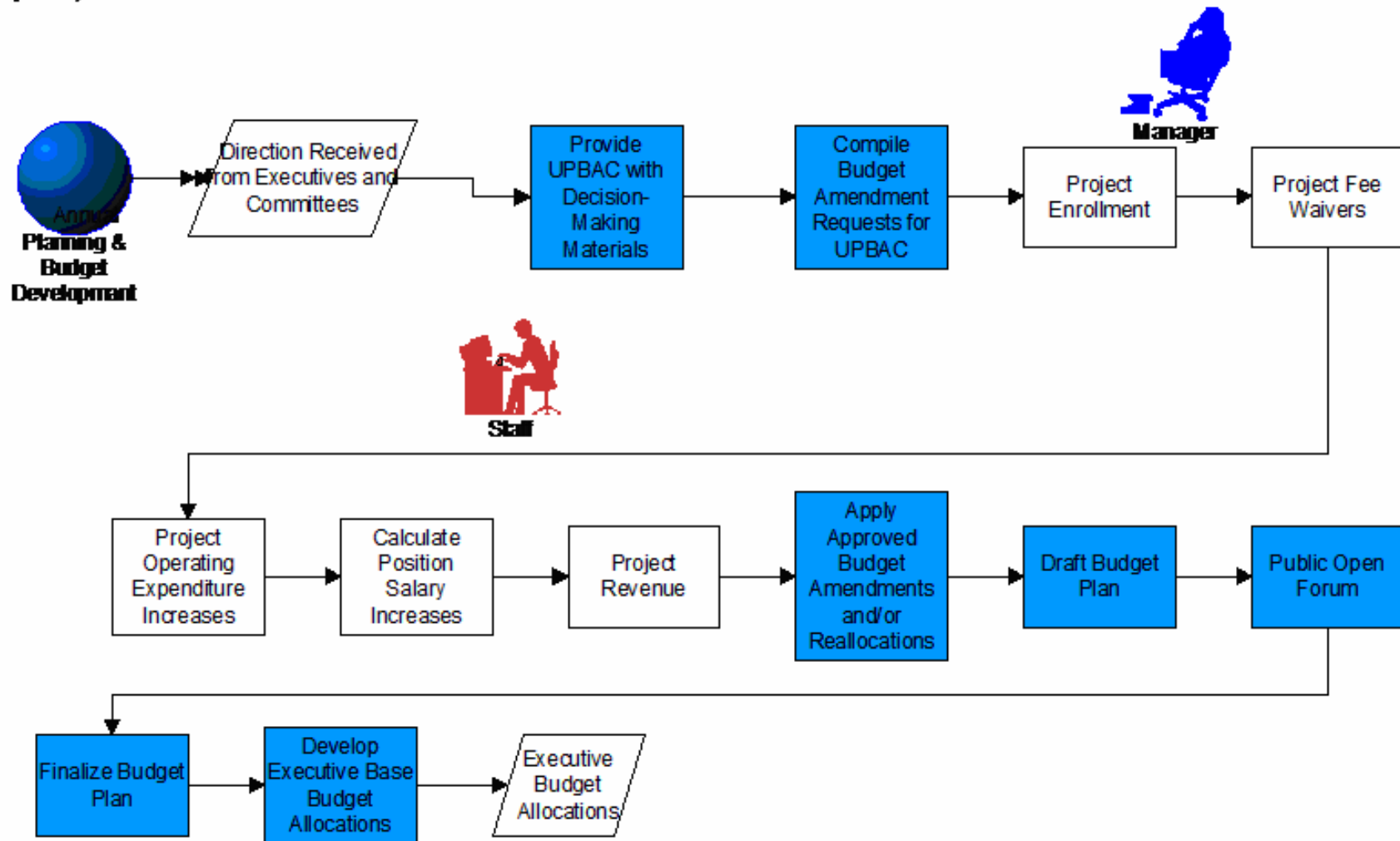
Average Hrly Salary Central

Activity Number	Resource Type	Resource No.	Resource Cost	Activity	Description	(Touch) Time to Complete (mins)			HRS	COST	W/AVG
						Short	Avg	Long			
BU_APBD 1	Manager	1	34.828	Input	Direction received from executives and committees						
BU_APBD 2	Worker	2	18.33	Process	Provide UPBAC with decision-making materials (Budget Overviews, KPIs, Delaware data)	840	1040	1290	17.33	317.72	
BU_APBD 3	Worker	1	20.297	Process	Compile budget amendment requests for UPBAC	420	520	645	8.67	176	
BU_APBD 4	Manger	1	34.828	Process	Revise Enrollment	240	480	960	8	279	
BU_APBD 5	Manager	1	34.828	Process	Revise Fee Waivers	480	720	960	12	418	
BU_APBD 6	Manager	1	34.828	Process	Revise operating expenditure increases	960	1920	2400	32	1,114	
BU_APBD 7	Worker	2	17.22	Process	Calculate position salary increases	9600	14400	28800	240	4,133	
BU_APBD 8	Manager	1	34.828	Process	Revise revenue	960	1920	2400	32	1,114	
BU_APBD 9	Manager	1	34.828	Process	Apply approved budget amendments and/or reallocations	480	960	1440	16	557	
BU_APBD 10	Manager	1	34.828	Process	Draft Budget Plan	480	960	1440	16	557	
BU_APBD 11	Manager	1	34.828	Process	Public Open Forum	60	90	120	1.5	52	
BU_APBD 12	Manager	1	34.828	Process	Finalize Budget plan	60	90	120	1.5	52	
BU_APBD 13	Manager	1	34.828	Process	Develop Executive base budget allocations	960	1920	2880	32	1,114	
BU_APBD 14				Output	Executive budget allocations				417	9,885	23.71

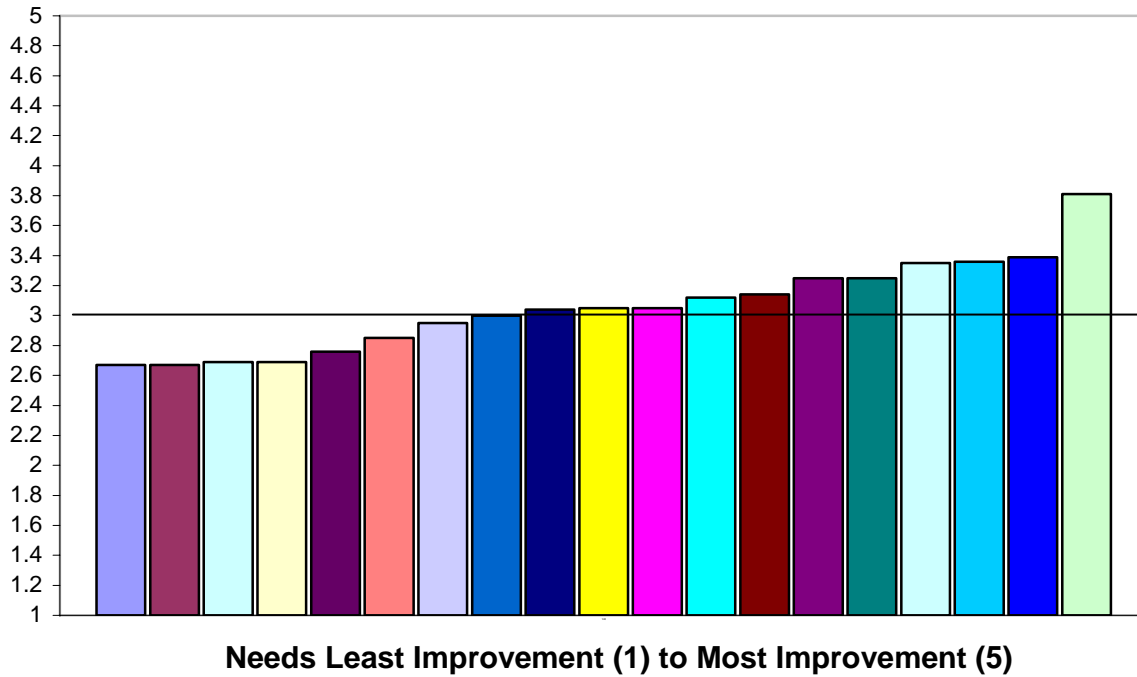
Incremental Cost/Benefit Results (\$ in 1000s)



Annual Planning & Budget Development



**Which Budget areas need improvement the most?
MSU**



- Timely adjustments
- Useful budget office response
- Accuracy of budget data
- Timely budget office response
- Budget office communication
- Timely budget data
- Easy correction
- Convenient budget training
- Understandable budget adjustment
- Quality of budget training
- Easy use of NWAATYP
- Understandable budget data
- Accuracy of budget reports
- Easy changes to NWAATYP
- Sufficiency of reports
- Usefulness of PR encumbrances
- Understandable budget instructions
- Adequate time for NWAATYP
- Accuracy of PR encumbrances

BPR Budget Focus Group Responses
Montana State University-Northern
May 12, 2006

Only two individuals participated!

1. Do you understand the budget process?

Responses:

- Yes
- No, not completely, as there are some nuances on this campus that remain a mystery.

2. Are adequate training opportunities available?

Responses:

- Yes
- Every request has received the proper attention

3. Are your budget documents presented in a clear and understandable format?

Responses:

- Yes
- They have been clear once I figured them out

4. Is the information useful?

Responses:

- Yes
- Most of the time

5. Is the budget data accurate?

Responses:

- No. After a couple of months, the data could be inaccurate because of departments delaying the charges. Payroll is also behind by 1 month.
- Only if I ask the correct questions. I think my budget might be one of the, if not the most complex of any budget on campus. Intelligent questions will only come after I become more intelligent about the budget.

6. Do you understand the budget adjustment process?

Responses:

- Yes
- Not sure that I know what you are referring to.

7. Are there sufficient reports to monitor budget balances?

Responses:

- Yes
- Yes

8. What could the Budget Office do that would make your financial responsibilities easier or more efficient?

Responses:

- Require that all billings have to be done monthly.
- Continue to be available so when I am ready to ask a question the process is expedient.

1. Do you understand the budget process?

Responses:

- I believe I do understand it, in general. I try to keep good track of my budget, relying heavily on the ‘% used’ information on the monthly sheets. This is my best guide since I am not always aware of the charges against my budget. It has not worked for me to work with the budget here at the college like budgets I have worked with elsewhere where you have a beginning dollar amount and keep track of your expenditures through time.
- For the most part, yes.
- Yes.
- Yes.
- For the most part, yes, but I believe that is only because of my interaction at the Dean’s Cabinet level as we have talked through the budget process. Prior to that, I would have said no. And my understanding of the process is still cloudy, especially in areas of what happens in terms of timeline, who and where the budget goes to, etc.

2. Are adequate training opportunities available?

Responses:

- a. I think so. I am not sure what I would recommend.
- b. Although Mary Ellen provided us with an education session in the Fall that was somewhat helpful, I now think that a peer presentation may have been helpful, too. It is difficult to know what to ask if you are new to the job. A peer presentation for program directors, department administrative assistants, and department chairs might be useful.
- c. I don’t know of any group training opportunities, but it has been offered to me individually.
- d. Yes.
- e. For what? Budgeting? I would say no as far as what I am aware of, but there may be training opportunities I am unaware of or perhaps these are arranged when requested,

3. Are your budget documents presented in a clear and understandable format?

Responses:

- a. Yes, except that it is not possible to anticipate costs for maintenance, printing, postage, etc- especially in an area where various centers use the account number.
- b. That was the greatest challenge for me this past year. Although it was understandable once it was explained, I was wondering if there are alternative formats.
- c. Yes.
- d. Yes.
- e. For the most part, yes, but there was certainly a learning curve to understanding how to read them. The simplified one sent out by the Associate Dean of Admin and Finance each month is the one I most use unless there is a discrepancy. It would be nice though to have more consistency in when the reports are provided.

4. Is the information useful?

Responses:

- a. Yes-especially % used as I stated above.
- b. Sometimes when I ask questions occurred about specific cost, I always felt I had to ask Mary Ellen for explanations. I suppose it would be more helpful and a better use of everyone’s time if that rationale for the cost were better defined.

- c. Yes.
 - d. Yes.
 - e. Yes, I use it to check on expenditures that may be in question, to see how the programs are sitting in terms of meeting budget projections, and to be aware of expenses to the programs/departments that are not readily evident through the budgeting process (i.e. computer network maintenance fee).
5. Is the budget data accurate?
Responses:
- a. I think it is.
 - b. Not always. But if errors were identified, the corrections were made.
 - c. Yes-there have been very few occasions of the wrong department being charged.
 - d. Yes.
 - e. I always think there are discrepancies, but when I look into them, they are usually accurate.
6. Do you understand the budget adjustment process?
Responses:
- a. Not always, but I have always been able to do what I need to do.
 - b. I think so.
 - c. Yes.
 - d. Yes.
 - e. I don't think I know what the budget adjustment process is. So unless I know it as something else, I would have to say no.
7. Are there sufficient reports to monitor budget balances?
Responses:
- a. I am not sure how to answer this. I believe there are.
 - b. Yes.
 - c. Yes.
 - d. Yes.
 - e. As mentioned above, for the most part, yes, the reports provided are sufficient and useful. However, it would be a much timelier and useful service if we could use some form of Banner Web to look at budget balances and reports online. This would allow us to access it when we needed the information or had time to review it. As I mentioned the infrequency of getting the reports makes it hard to plan for review.
8. What could the Budget Office do that would make your financial responsibilities easier or more efficient?
Responses:
- a. Provide a list of accounting numbers within my departmental account so that I can assign them to our costs.
 - b. My greatest concern regarding the budget is inadequate time to monitor the budget and review concerns with program directors.
 - c. Uncertain as of now.
 - d. I think the current process works efficiently and don't see a need for change.
 - e. Three things. (1) make the reports provided come out on scheduled dates and keep the campus aware of those dates, (2) provide some form of web viewing of the budget expenditures and balances, and (3) provide training or information about the entire budget process.