

Budget Model Redesign Guidebook: FY 2016-2018

July 1, 2017

Introduction

Budget Model Redesign (“Redesign”) supports effective and efficient resource management at the University of Maryland. Redesign and the development of a Cost of Education Model are essential to the long-term strategy of resource allocation and future planning resulting in reinvestment in the core missions of the University. Led by Senior Vice President & Provost Rankin, the Redesign is a collaborative, multi-year effort that involves and affects the entire UM community. Our goal is to transform our business operations to become equal to the best national practices.

When fully implemented, our new budget model will provide a comprehensive picture in the system of record that accurately reflects and classifies all assets, liabilities, revenues, expenditures, and transfers of funds associated with each University unit’s operations. Integral to Redesign are more robust financial reporting and projection tools that improve financial forecasting capabilities and enhance the user experience. Standardization of data analytics tools will strengthen the capacity of decision makers and financial managers.

The Redesign process has just completed its second working budget cycle, continuing movement to a more transparent and effective budget model for the University. Each phase has built upon the last by expanding user preparation and adding detail to the budget that allows greater accuracy and flexibility in the tools available for decision makers at all levels of the campus. Better information on the true cost of operation translates into a more robust capacity to strategically identify the best use of available funds in order to provide the best student experience possible while maximizing our economic impact to the State of Maryland. Four major areas of enhanced efficiencies are outlined below:

- Broadening budget scope for greater forward-looking detail – The campus budget has traditionally centered on State funding. The new model includes all non-contract/grant related activity, which has added over \$75 million in annual spending detail that improves forecasting and fund balance management.
- Build transparency to reflect actual use of funds – Given the large, decentralized nature of campus, fund transfers across units are numerous and frequent. The new model documents the movement of funds comprehensively by fund type and by division to properly identify the end use of all university resources.
- Account for true personnel costs through the benefit pilot – Benefits for State activity have long been managed centrally, thus hiring decisions did not include a concrete link to benefit costs. Following national best practices, the campus first transparently posted these costs to all accounts and is now piloting the development of a unified benefit rates that promotes responsible resource allocation by capturing the full cost of activity.

- Improve user experience – To provide more and better information to campus business officers and bolster buy-in of the many changes, we expanded reporting capability in the accounting and budget systems, added tracking features to the budget system, based measures on findings borne out of collaborative campus-wide work groups, and provided training opportunities to assist users.

The following sections present an overview of progress to date, current status and planned activities in these areas:

- **Full budgeting across all fund sources**
- **Non-mandatory transfers**
- **Full budgeting of benefits**
- **Improved reporting tools and training**

Each section describes the initiative's importance and its implementation plan. Color-coded links to additional documentation are provided that include:

- **Mandatory budgeting practices.**
- **Supporting information about each initiative.**
- **Tools developed to support Redesign budgeting and analysis.**

Clicking on a colored link opens a new window. As Redesign progresses, this guide will be updated with additional information.

As the opening memo from Provost Rankin notes, this guide represents campus policy for how users are to approach the various budget topics described within. Any member of campus with a question or suggestion for improvement should contact the Redesign group at budget.redesign@umd.edu

Full budgeting across all fund sources

Why this initiative is important

A major Redesign focus is fully budgeting revenue and expenditure associated with all University fund sources. Ledger 2 activity (also known as non-state support) represents significant financial activity, but it had previously primarily been budgeted in aggregate at the overall university level. In order to better reflect each unit's activities, budgeting revenue and expenditure at the detailed account level was initiated, beginning with Education and General (E&G) accounts. In cases where planned revenue exceeds expenditures, units are asked to budget for the growth of fund balance (object code 0966). In cases where expenditures exceed revenues and sufficient fund balance is available, units are asked to budget for the use of fund balance (object code 0968). The change not only improves the campus' ability to manage each activity and to project changes in fund balance, but also engages the individual units in projections and analysis of these funds in the system of record. As a result of these changes, we now have detailed budgets, revenue, and expenditure for all university accounts. This initiative added approximately \$75M in detailed accounting information to the system of record.

Phase I (FY 2016) - Voluntary E&G and Fund Balance Budgeting

Beginning in FY 2016, the University encouraged voluntary budgeting of E&G accounts and growth/use of fund balance. BPM was modified to allow fiscal officers to budget E&G revenues and expenditures by account. Through this practice, campus fiscal and academic officers gained experience in budgeting these accounts. Supporting information is available [here](#).

Phase II (FY 2017-18) - Mandatory E&G and Fund Balance Budgeting

Beginning in FY 2017, the University implemented mandatory budgeting of E&G accounts. To accommodate the change in practice, BPM was opened in two stages to allow unit users adequate time to prepare and review budgets. Academic Affairs conducted several workshops that focused on effective Ledger 2 budgeting practices. A description of the new requirements and key technical details is available [here](#).

Academic Affairs also hosted a mid-year review session with business officers to review Ledger 2 budgeting practices. Several academic units collaboratively held training sessions on tools for review as well as discussion of lessons learned. As part of this review, [instructions for an Excel-based tool](#) were created that allows users to analyze Ledger 2 accounts and compare budgeted funding to actual expenditure and revenue activity.

The focus moving forward will be on:

- Progressively improving budget accuracy by including information on the flow of funds across accounts and ledgers (see **Transfers** below);
- Using the budget to forecast and manage campus fund balance usage; and

- Using the Program indicator (Higher Education Function) in KFS accounts to consistently categorize all expenses for reporting purposes.
- Using Sub-fund indicator in KFS as a training tool for understanding types of funding in Higher Education.

Non-mandatory transfers

Why this initiative is important

Given the large, decentralized nature of campus, fund transfers across units are numerous and frequent. Historically these transfers were not fully recorded in the Working Budget and it was determined that many of the non-mandatory transfers processed in KFS either used an incorrect non-mandatory transfer object code or were made to provide funds for General Purposes.

Phase I (FY 2017- FY 2018 Working Budget) – Update and define object codes

As part of the University's effort to continue movement towards a more transparent and effective budgeting model, allowing individual units as well as campus to reflect their true budget and expenditures in the system of record, in FY 2017 a workgroup was established consisting of key financial personnel from within Academic Affairs and the Offices of the Vice President for Administration and Finance. The three main focuses of this group were to: 1) review and cleanup of existing object code 9926 transfers that were incorrectly coded in KFS, 2) review and update non-mandatory transfer object codes as well as define the appropriate use of non-mandatory transfer object codes within BPM and KFS, and 3) encourage the budgeting of non-mandatory transfers in the Working Budget. A copy of the Non-Mandatory Transfer Workgroup Recommendations is available [here](#).

A thorough review of the use of non-mandatory transfer object codes was completed and the workgroup provided recommendations on the consolidation and deletion of some non-mandatory transfer object codes. Additionally, the determination was made that if funds are being transferred for General Purposes then a revenue code should be utilized to move the funds and that if the funds are being moved for a Specific Purpose then a non-mandatory transfer object code should be utilized to move the funds. As such, the non-mandatory transfer object codes for DRIF, UGRAD Diff Pricing, Summer Term, Winter Term, and Freshman Connection were moved to revenue object codes. The review completed by the workgroup identified approximately \$20M in Revenues that were previously classified as transfers.

A set of definitions and rules for usage were developed to provide guidance on the proper usage on non-mandatory transfer object codes, the rules on usage in KFS, and how the object codes should be handled in the Working Budget. These rules and guidelines were provided with other Working Budget instructions and are available [here](#) (Non-Mandatory Transfer Definitions and Rules) and [here](#) (Budgeting Internal Funding Sources Overview).

In addition to providing definitions and instructions on budgeting Non-Mandatory transfers, working sessions were held to help users develop their budgets and to specifically address E&G Budgeting and Transfer Budgeting. At these working sessions various tools were shared to help users manage and track their budgeted transfers at both the Department and Unit level.

Available Excel tools are as follows:

- [**FY18 Department Budget Projection Template**](#)
- [**FY 18 Unit Tracking Spreadsheet**](#)
- [**Sample FY 18 WB Transfers**](#)

Detailed procedures for the budgeting of Non-Mandatory Transfers and the use of the Schedule H Tracking Sheet are available [here](#) (Non Mandatory Transfer Procedures). Divisions were provided with a checklist to ensure that changes to budgeting non-mandatory object codes were balanced and that no budget was included in object codes that were being moved to revenue. The Division checklist is available [here](#) (Example of Checks at Division Level with Subcode Summary).

Phase I, initiated during the second phase of Redesign, of the Non-Mandatory Transfer initiative not only helped the campus move towards a more transparent and effective budget model; it had the added benefit of both Divisions and Units within Divisions working in a more collaborative manner and significantly increasing communication across campus. Budget Officers maintained regular contact with one another to discuss and align planned Non-Mandatory Transfers resulting in a more comprehensive and thorough budget process and increased collaboration.

Phase II (FY 2018) – BPM/Reporting upgrades and continued collaboration

During FY 2018, the workgroup will continue to make enhancements to the budgeting of non-mandatory transfers and will facilitate more effective financial management across campus. Meetings will be held to discuss lessons learned during the FY2018 Working Budget process, to address concerns that arose during the Working Budget, and to identify training needs for future Working Budgets. Future sessions will address the desired starting point for the FY2019 Working Budget as it pertains to the transfers booked and the object codes that were adjusted. The workgroup will also work with the Division of Administration and Finance to identify and implement future upgrades to BPM and financial reporting. During FY2018, the workgroup is committed to increasing communication across campus and encouraging and fostering communication and collaboration between Divisions.

Full budgeting of benefits

Why this initiative is important

Benefit costs are a **significant and growing** share of university expenditures. Benefit costs include the University's contributions to retirement, Social Security, Medicare, health insurance, post-retirement health insurance, unemployment, and worker's compensation. For FY 2016, benefit costs alone totaled over \$260M (34 % of salaries). By way of comparison, total University expenditures in the same year for all campus building utilities, equipment, supplies, and vehicles totaled approximately \$204M.

Benefit costs associated with state-supported positions are budgeted and reimbursed centrally, but salaries are budgeted and reimbursed within each hiring unit. This practice obscures the total cost of employment and, consequently, the total cost of state-supported operations for each unit. Salary and benefit costs for all other funding sources are already budgeted and reimbursed by the same fund source. Accurately representing the State-supported figure to the end user and consistently approaching this expense across fund sources are major goals of the Redesign.

The ultimate goal of the benefit initiative is to transition to full budgeting and reimbursement of benefit costs using campus-wide rates at the account level for all fund sources. Because this change significantly affects existing budget practices, this portion of the Redesign is being implemented in phases.

Phase I (FY 2017) - Increase awareness of benefit costs

As a first step, the campus modified its account-level, financial reporting to display benefit expenditures for each State-supported account. The reporting change accounts for the total cost of employment of each campus employee and provides a better picture of total financial activity to unit academic and financial leaders. Although benefit expenditures are now reported at the account level, the costs continue to be budgeted and funded from central university accounts. Detailed information about this change is available [here](#).

During FY 2017, a benefit workgroup began to review the university's benefit charging practices. Currently, benefit costs are charged at actual cost per employee. This practice results in a wide range of benefit costs per employee due to differences in the benefits selected by individuals for health insurance and retirement. The variation makes projection of costs particularly difficult at the account level. So, the workgroup surveyed other major research universities including all of our Big Ten peer campuses to assess national best practices. A standardized campus benefit rate stands out as the most efficient means of simplifying budgeting and cost projections. A summary of the peer campus survey results are available [here](#).

After the fact finding process and collaborative discussions concluded, the work group recommended:

- Adopting campus-wide benefit rates, consistent with Big Ten peer campuses and the University of Maryland Baltimore, our MPower partner institution.
- Including other benefit costs in the rate, notably terminal leave payout and faculty parental leave (BOR II-2.25 (A)).
- Conducting a rate-based pilot program during FY 2018 (see below).

The work group's recommendations are available [here](#).

Phase II (FY 2018) - Pilot Program/Analysis of Impact and Program Refinement

Four divisions are participating in the pilot program, the College of Agriculture and Natural Resources (AGNR), the College of Behavioral and Social Sciences (BSOS), the School of Public Policy (PLCY), and the Vice President for Administration and Finance (VPAF). The divisions represent a mix of academic and non-academic units. The objective for the pilot program is to assess the impact of the following:

- Providing budget based on rates
- Comparing budgeted rates to actual costs
- Determine proper employment classification grouping for rate determination
- Evaluate any anomalies discovered

Participating divisions will gain valuable information about how total personnel costs that include benefits affect their state-supported budgets. During the pilot phase, all divisions will be “held harmless” with no impact on ongoing operations.

Benefit rates were calculated by computing the average benefit percentage (relative to salary) for these faculty and staff appointment categories:

- Faculty – Academic Year
- Faculty – 12 month
- Exempt Staff
- Non-Exempt Staff
- Graduate Assistants
- Contingent Employees

Rates include FICA, Health, Retirees Health, Pension, Optional Retirement, Workers Compensation and other payroll taxes as well as the terminal leave payout and faculty parental leave applicable to the appointment category.

Each pilot division will receive benefit budgets based on the rates applied to estimated FY 2018 salaries. The three academic pilot divisions (AGNR, BSOS, PLCY) will budget benefits at the division level and be charged actual benefit expenditures at the account level. The variance between budget and expenditure will be analyzed at the division level. The VPAF pilot will budget benefits at the account level by applying the relevant rate to budgeted salaries for that category

and VPAF units will be charged at the budgeted rate during FY 2018. VPAF units will be responsible for managing the budget including fringe benefits.

The workgroup will continue to meet and engage with the larger campus community. Specific plans include:

- Ongoing analysis of pilot project data
- Reviewing the benefit rate categories and assignment of employment classification to relevant categories
- Expand representation on the workgroup to include the Division of Research and Student Affairs , when appropriate
- Planning for Phase III of the project in FY 2019 with a goal of moving to campus-standard rates for all fund sources beginning in FY 2020.

Improved reporting tools and training

Why this initiative is important

Redesign's success relies on enhancing the ability of decision makers and financial managers to access and analyze appropriate financial information. Before the project began, the University had used the same reporting tools for over a decade, and campus needs and technology have changed. New tools that provide more and better information in a variety of formats are critically needed as well as training to enable campus users to productively use new tools. Standardization of business tools will continue to create cost efficiencies and effectiveness.

Phase I (FY 2016)-Improving KFS Web Functionality

The Office of Financial Reporting and Analysis ("Reporting and Analysis") developed and released the **KFS 090 Account Overview** during FY 2016. The KFS 090 significantly upgrades the University's financial reporting toolkit by replacing multiple KFS Web reports with an inquiry that allows multiple financial views from a single interface (accessing reports requires login and appropriate security access). KFS 090 inquiries are available for the current (active month) or prior (closed months) and support on-screen display, print or download functions.

- The **Income Statement** tab presents summary (with drill-down), object code or object level views as well as displaying data in graphic and tabular format.
- The **Balance Sheet** tabs displays balance sheet values at the summary or detail level
- The **Encumbrance** tabs provides summary with drill-down to specific encumbrance detail
- The **Ledger Details** includes ledger balances or ledger detail for various balance types
- The **Trend** tab presents cross-fiscal year financial statement information in charts and tables
- The **Labor** tab provides detailed salary and benefit information by employee.
- The **Optix Images** tab provides links to Optix images of purchase orders, disbursement vouchers, and payment requests.

Reporting and Analysis also added the **Beginning Fiscal Year Fund Balance** to all Income Statement Reports on KFS Web.

Phase II (FY 2017)-Augmenting KFS Web Functionality and Improving BPM Reporting

During FY 2017, additional reports in this series were developed. Each has the same functionality as the KFS 090 but the reports aggregate information above the account level. Users can also filter results by single/multiple subfund groups and/or open/closed accounts.

- **KFS 190-Sub Department Overview**
- **KFS 290-Department Overview**
- **KFS 490-Division Overview**
- **KFS 590-Executive Overview**
- **KFS 690-School Overview**

Upon request, Reporting and Analysis trained department business staff about the use of this tool and other reports as well as the use of Excel Pivot Tables.

Based on feedback from the workgroup, a number of enhancements were implemented in the Budget Preparation and Maintenance (BPM) system. The additions provide users with greater reporting functionality, identification of gaps in budgeting, and improved planning and tracking. These enhancements include:

- Sub-fund Group Filter – this filter was added to the report menu and allows the user to run reports for specific Sub-fund groups such as State Operating, DRIF, E&G, etc.
- Lecturer reports – two new reports were added to the report menu: 1) Lecturer Details and 2) Lecturer Summary. These reports show a comparison of the actual lecturer salary costs compared to the budget in object code 1018 – Faculty Non-Tenured Lecturer.
- Associate a name with a vacant position – this functionality was added to the vacant positions section within the account’s budget summary page. It allows for a name to be associated with a vacant position in order to help track positions that have a planned named hire in the next fiscal year.

Phase III (FY 2018)-New Reports to Support Redesign Initiatives

During FY 2018, Reporting and Analysis, along with the Budget Model Redesign team will develop new reports to support Redesign initiatives including:

- The Benefit Pilot Project
- The Transfer Initiative

Fiscal Year 2018 will also include the testing of a new KFS document to record commitments in the official financial records prior to actual costing or transfer. This enhancement will allow the University to capture data for future fund balance projections.