



Report on Budget Review of University of Massachusetts – Boston

November 7, 2017

Executive Summary

Background and scope

KPMG LLP (KPMG) was hired by the Internal Audit Department of the University of Massachusetts (University) to conduct a review of certain operations of the University's Boston Campus (UMass Boston Campus). The initial scope of the review involved reviewing the UMass Boston Campus' budgeting processes for both fiscal year 2016 (FY16) and fiscal year 2017 (FY17), as available and identifying the key drivers of the operating deficits.

Overall findings and recommendations –

Based upon the procedure performed we offer a summary of our overall findings and recommendations:

Over the past two years - FY16 and FY17 – UMass Boston Campus has experienced significant difficulties in developing, implementing and monitoring its budget. The budget development process has not been well documented, key budget amounts have not been supported and there appears to have been little accountability for the budget figures and projections. Additionally, the budgeting process did not appear to have adequately considered all available UMass Boston Campus resources – “off budget amounts” - and did not adequately consider various practices, policies and decisions that could and did negatively impact the UMass Boston Campus' budget and its deficit.

- In FY17, there were large unusual movements in internal budget projections that should have been an indication to senior UMass Boston Campus leadership that budgetary figures and projections were not reliable. For example, the Board of Trustees (Board) approved the UMass Boston Campus budget with a \$2.3 million surplus that, internally on the UMass Boston Campus, became a projected \$30 million deficit in November – just two months later. That internal projected deficit dropped to \$20 million just two months after that (January 2017) and then in February 2017, the internal budget deficit was projected to be \$0. Additionally, in the course of this project, documentation of many of the key original budget amounts and changes to those amounts were not available.
- The impact of the capital spending and capital activities was not well understood by UMass Boston Campus personnel. Funding for capitalized interest incurred for borrowing done in advance of actual construction was not adequately planned for which led to a decrease in the UMass Boston Campus' reserves. The impact on unrestricted cash of including depreciation as an operating expense in the budget or the impact of the UMass Boston Campus' contribution to capital projects on 'reserves' does not appear to have been well understood resulting in unexpected reductions in cash and reserves at or near the end of the fiscal year. It also does not enable the UMass Boston Campus management to adequately plan and budget for locally funded capital projects.
- The ongoing monitoring of the UMass Boston Campus' financial activities versus the approved budget was not effective and the use of available technology was not employed effectively to aid in controlling, monitoring and reporting actual results against established budgets.

Finally, information pertaining to the UMass Boston Campus' budget challenges appears to have been available to senior UMass Boston Campus leadership throughout most of FY16 and FY17, but documentation regarding corrective actions/decisions taken could not be provided.

Recommendation -

The budgeting process at UMass Boston Campus will require extensive remediation efforts to make it a process that would approach comparable industry practice. Completing such remediation will require extensive process changes throughout the UMass Boston Campus. For potential corrective actions to be effective, the supporting Information Technology financial management applications need to be better

leveraged to replace or support revised manual processes surrounding the budget development, compilation, and monitoring and reporting. On the revenue side, changes are needed to help ensure that the budgetary assumptions, including student enrollment projections used in estimating tuition revenue for the UMass Boston Campus budget, are based on sound projection methodologies and changes to those assumptions are reviewed, documented and changed only after appropriate vetting. On the spending side, modifications are required to help ensure that each budgetary expense line item reflects operational reality and is viewed as a 'not to exceed' amount rather than a spending 'guideline'. Additionally, all available resources (revenues) as well as all non-discretionary and discretionary spending should be reviewed in detail by UMass Boston Campus management and validated for propriety prior to reflection in the annual operating budget. Previously allowed "Off budget spending" should no longer be permitted. Finally, correcting the budgetary processes at the UMass Boston Campus as well as dealing with the financial challenges that UMass Boston experienced in FY16 and FY17 will require changes to the culture that has evolved over time. Personnel, practices and systems supporting the budget process will all need to be reviewed and refocused back on the UMass Boston Campus' mission in order to help ensure that finances at the UMass Boston Campus are more effectively controlled.

It is important to note that many of the issues identified in this document have resulted from system/process/procedural failures that have built up over several years and will take time for the management team to resolve and remediate. As such, establishing realistic remediation plans and timelines and monitoring progress against the plans and timelines is an important part of ensuring that appropriate results are achieved.

Update as of September 28, 2017

Since beginning this review, significant personnel and procedural changes have taken and continue to take place at the UMass Boston Campus that have begun to address some of the issues identified in this report as well as other issues identified by management uncovered outside the scope of this review.

The President's Office (Office) and the Board have now installed a management team with extensive experience in the finance, budgeting and operational areas including the impact that automation can have on these areas. The Office and the Board should continue to empower this team to run the business effectively by helping ensure they have the necessary tools, staffing, and support to tackle the UMass Boston Campus' issues. The Office and the Board should continue to institute measures to enable the UMass Boston Campus to deliver on its commitments and hold them accountable for promised results.

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Section I – Budget Development and Updates

Overview of the Budgetary Process

The budgetary process at the UMass Boston Campus is used to plan the annual expenses to be incurred by the UMass Boston Campus and the annual revenues and other resources that will be used to fund those expenses. The revenues and expenses can be categorized by type: operating and capital and by restriction: unrestricted and restricted. Once a budget is compiled by UMass Boston Campus personnel, it is submitted to the University's System Office and then to the Board of Trustees for review and approval. In FY17, UMass Boston Campus had an operating expense budget of over \$400 million making it one of largest campuses in the University System. Of this total expense budget, approximately 75% of the expected spending was comprised of payroll and benefits. The funding for the operating budget was principally comprised of \$215 million in Net tuition (gross tuition less UMass Boston Campus funded student aid and scholarships) and \$120 million State aid.

Budget Development and Updating –

In developing an annual operating budget UMass Boston Campus, as with most public colleges and universities, tries to balance estimated operating costs (payroll, and non-payroll) against tuition revenue (which is a function of estimated enrollment and approved tuition rates and fees), state aid revenue (which is often somewhat difficult to estimate), other available funding (grants, internally available funds) and the use of reserves (often synonymous with budgeting a deficit). When tuition, state aid and other available funding are sufficient to cover operating costs, the use of reserves is not needed and may be expected to increase if an operating surplus is projected. When tuition, state aid revenues and other available funding are not sufficient to cover operating costs, reserves would be used to cover any actual deficit.

Compiling the budget is a time consuming and often complex process that requires UMass Boston Campus personnel to obtain and analyze information from several sources including, among others: estimated enrollment figures from the enrollment management and graduate studies departments, employee figures from payroll/human resources, approved tuition and fee amounts approved by the Board of Trustees, estimated aid from the State and the availability of UMass Boston Campus reserves. It also involves making informed assumptions about future events including enrollment, student retention, interest rates, State budget actions, payroll vacancies/attrition, capital commitments (depreciation and local capital funding) and others.

Once a balanced budget is compiled by the UMass Boston Campus personnel, reviewed by the System Office and approved by the Board, leading practice would suggest that the budget be recorded in the UMass Boston Campus' accounting information system (the PeopleSoft system) as a means of helping to control spending (budget limits), ensuring that revenues are being generated as expected, tracking actual results against the budget and projecting whether full year results will be above, below or on target with budgeted expectations. Additionally, after the initial budget is recorded in the system, any changes to those budgeted amounts should be made only when new information becomes available to justify a change and the change is reviewed and approved by senior UMass Boston Campus leadership.

Because the development of a budget is not scientific, leading practice suggests that documentation be created and maintained for all key assumptions that support the final budgeted amounts and any subsequent changes to those amounts. However, that was not the case in the following areas:

Tuition Revenue - For FY17, Net Tuition Revenue was the largest budgeted source of revenue for the UMass Boston Campus totaling \$205 million. This amount is comprised of the gross tuition amount (\$248 million) less the amount of waivers granted (\$43 million).

Typically, the estimated amount for Gross Tuition Revenue would be supported by an analysis with input from enrollment management or online learning that would multiply the expected student enrollment numbers for the fiscal year (developed by UMass Boston Campus Enrollment Management) by the Board approved tuition and fee rates. For the UMass Boston Campus, such an analysis would break out graduate versus undergraduate students and may include other UMass Boston Campus specific factors, but regardless of its form, the analysis developed would support the estimated amount for Gross Tuition Revenue.

Similarly, documentation supporting changes to the original estimated of Gross Tuition Revenue would be prepared by appropriate UMass Boston Campus personnel and approved by senior UMass Boston Campus leadership.

For FY 2017, the estimate of tuition revenue of \$205 million approved by the Board in September 2016 was reduced to \$189 million by November 2016 and then in February 2017 was increased to \$200 million. These changes coincided with projected budgetary surplus movements. At the time the Board approved the budget, UMass Boston Campus was predicting that a surplus of \$2.3 million would be realized in FY 17. By November, UMass Boston Campus was predicting a FY17 deficit of \$30 million and by February 2017, there was no surplus or deficit being projected for FY17.

We requested, but UMass Boston Campus personnel could not provide the analysis supporting the original estimate for tuition. Additionally, UMass Boston Campus personnel could not provide any support for the significant reduction in tuition revenue just two months after Board approval, or any support for the sudden increase in tuition revenue in February 2017. Undocumented and unsupported changes to UMass Boston Campus' largest revenue source are indicative of a failure of management to perform a robust and meaningful budgetary estimation and update process.

Operating Expenses – Similar to the changes in tuition, UMass Boston Campus personnel could not provide any support for the fluctuations in budgeted expenses. During the same period that tuition estimates were changing, budgeted expenses changed as follows: from the Board approved operating expense amount of \$419 million, operating expenses declined \$1 million in November 2016 and then declined \$14 million in February 2017. Again, undocumented and unsupported changes to UMass Boston Campus' budgeted operating expenses are indicative of a failure of management to perform a robust and meaningful budgetary estimation and updating process.

Findings

Our review indicated that the budgeting processes in place at UMass Boston Campus during FY16 and FY 17 were significantly inadequate and will require extensive remediation efforts. Not only was the budget development and compilation process not well documented, it was not well understood by the individuals we spoke with and documentation could not be provided for key budgetary amounts including tuition.

In addition, UMass Boston Campus personnel could not provide support for original budget amounts or changes to budgetary amounts and evidence could not be provided to demonstrate that the Board approved budget was recorded in the UMass Boston Campus' accounting system.

Recommendation

Institute stronger budgetary controls to better enable analysis of actual to budget figures and provide more reliable projections of expected results thereby potentially decreasing the probability of unexpected events or outcomes.

Management Response

UMass Boston Campus is building a new budget process that incorporates and documents information from all areas of the UMass Boston Campus. The UMass Boston Campus' budget office will work closely with departments to ensure that consistent analytics are used to both form the budget and monitor its implementation throughout the year.

UMass Boston Campus is preparing a new capital budget and increasing coordination and information sharing with UMBA and DCAMM on building projects as well as internally with the UMass Boston Campus Controller and departments with capitalized equipment and local building projects.

UMass Boston Campus is building the FY18 personnel budget based on a funded position basis and is participating with other campuses in efforts to create a common method for budgeting positions and reporting FTE's.

UMass Boston Campus recognizes the need for regular budget to actual reporting throughout the fiscal year and plans to develop the capacity to do so along with other budget control processes such as position management (funded position quotas, estimates of salary savings from vacancies and attrition), a budget amendment process, more complete encumbrance process, and better and more frequent revenue forecasting. In addition, supporting details to budgeted expenses and revenues will be noted and tracked. Reporting associated with generally accepted accounting principles such as depreciation and accrued liabilities will also be improved to better monitor results in these areas throughout the year.

Past reliance on a multi-year forecasting tool will be changed to focus on building bottom up models for tuition and fee revenue and personnel (benefitted, temp, etc.).

The UMass Boston Campus will be filling some vacant positions in the budget area and will be proceeding with a consolidation of administration and finance staff across the university to improve processes and practices around financial administration and in particular, budgeting. Efforts will be refocused on analysis and forecasting by transferring accounting duties back to the controller's office and regaining budget functions appropriate to build and manage the budget.

The UMass Boston Campus will also be exploring what role technology can assist in this process through leveraging the use of existing systems and exploring enhanced budgeting tools.

Section II - Other Budget Development and Updating Considerations

As part of having a well-documented budget development and updating process senior UMass Boston Campus leadership has a fiduciary responsibility to ensure the efficient and effective spending of tuition dollars as well as State funding and other available resources. As such, during the budgeting process, senior UMass Boston Campus leadership needs to consider all available funding sources and uses when making decisions about how best to balance the budget. Additionally, processes and procedures need to be in place to help ensure that adequate controls are in place over the proper management of all UMass Boston Campus sources and uses.

As part of the UMass Boston Campus' annual budgeting process, senior UMass Boston Campus leadership needs to weigh many important items. Our review identified three areas where additional focus should be considered: (a) other resources are available to support UMass Boston Campus operations; (b) whether to use reserves and, if so, how much to use; and (c) how certain capital activities could impact the budget.

1. Other Resources available -

In addition to tuition and State aid, other certain financial resources generated by the UMass Boston Campus, including Educational Sales and Services, Research Trust Fund (RTF) Accumulated Fringe/Overhead Recovery and Development funds, according to internal correspondence have been spent "traditionally outside the budget protocols and system controls".

Some of the other resources that the UMass Boston Campus has available to support budgetary spending have accumulated in various ways:

1. Fees – It is our understanding that 100% of certain program fees and differential fees collected from students are available to be spent by the individual colleges (within the UMass Boston Campus). While actual spending is subject to the purchasing systems and controls established by the UMass Boston Campus, timing and amount of resources spent is at the direction of the individual colleges and is not limited to the amount included in the Board approved budget.
2. Accumulated Fringe/Overhead Recovery– Fringe and overhead expenses are included in the UMass Boston Campus operating budget and paid for out of operating cash. These costs are then allocated to Federal, State and private grants that allow such expenses to be reimbursed. Often these reimbursements would be used to reduce the operating budget accounts against which these amounts were charged thus replenishing operating cash. While not uncommon in the Higher Education Industry, the recoveries are not used to replenish the operating budget but are retained and used for additional future spending by the Provost and college deans. At the end of 2016, the accumulated recoveries available for spending was \$14 million. As with the fees, the timing and amount of resources spent is at the direction of the Provost and individual colleges and is not limited to the amount included in the Board approved budget.
3. Projects – Project funds provide multi-year funding for various initiatives within the colleges on the UMass Boston Campus. A large portion of the Projects is comprised of Faculty Start-up packages. While the operating budget contains a line item for Project spending, as with the fees, the timing and amount of Project funds spent is at the direction of the Provost and individual colleges and is not limited to the amount included in the Board approved budget.

While the actual spending of these resources is subject to the purchasing systems and controls established by the UMass Boston Campus personnel, the process for reviewing and deploying these resource in the budgetary process is not as robust as it should be. Although a certain amount of these funds are included in the annual operating budget, the actual spending of these funds is generally at the

direction of the individual colleges (or Provost) and, as such, there is no limitation on how much or when the funds can be spent. Accordingly, any amounts spent in excess of the amount budgeted would reduce a surplus or increase a deficit. A July 2016 memo from the Vice Chancellor of Administration and Finance to the Chancellor cited this overspending as one of the two principal reasons the \$8 million target deficit was not achieved.

Recommendation

UMass Boston Campus needs to establish, implement and enforce policies surrounding these and other available resources to ensure that all resources generated by the UMass Boston Campus are used in the UMass Boston Campus' budgeting process in a prudent and transparent fashion including enforcing the 'budget protocols and system controls'.

Management Response

Information on these three areas is being discussed with stakeholders and documented. Additionally, spending plans for such funds are being developed and incorporated into the overall budget process.

2. Reserves

Some of the more common uses of the term 'reserve' in the Higher Education industry include:

1. *Equity reserve* - is often a segregation of an entity's equity for a specific purpose. Some examples may be 'reserve for encumbrances'; 'reserve for future spending'. In one communication by the UMass Boston Campus' finance personnel, reserves were characterized as the 'unrestricted net position' included in the UMass Boston Campus' audited financial statements.
2. *Cash reserve* - is often a cash account listed on the general ledger and supported by a bank account containing cash and or investments. Some examples may be 'debt service reserve'; 'construction reserve'; 'capital maintenance reserve' and others. Reserves that are supported by a bank account are often referred to as 'funded' reserves and the use of the reserve involves spending available cash from the bank account. If a reserve is not funded, it is considered 'unfunded' thus if an unfunded reserve is used, there is no corresponding bank account from which cash can be drawn resulting in the expenditure of general operating cash.

Depending on how reserves are defined generally dictates how the annual operating budget and operating cash are impacted. Thus it is key for senior UMass Boston Campus leadership, when developing/updating/reviewing the operating budget to have a clear understanding how the use of reserves impacts the financed and cash position of the UMass Boston Campus. During our review, the definition of 'reserves' was inconsistent among various UMass Boston Campus personnel and the personnel we spoke with were unable to adequately explain what constituted 'reserves', how or whether those reserves were funded and what the policies were for use of those reserves. The 'reserves' that were referred to in documentation provided included:

"Master plan" reserve – this reserve (also referred to as the capital project reserve) appears to be unfunded and is established by accounting entries, according to one e-mail, to "acknowledge[d] the board-approved projects & amounts specifically related to "Local Funding" that had not yet been spent. It also served to reduce the basis upon which a transfer to quasi-endowment was calculated".

We noted that a \$13 million local contribution to a capital project (University Hall) in April 2016 was charged to this reserve. Since the reserve was unfunded, existing unrestricted cash balances

were used to fund this contribution and this reserve was reduced. The UMass Boston Campus was not able to generate sufficient operating cash in FY17 to cover this payment, so the payment was made from existing cash balances generated in prior years.

It also appears that accounting entries netting to \$39 million (additions of \$54 million and reductions of \$15 million) were recorded to the Master Plan reserve by UMass Boston Campus personnel at the end of FY13, FY14, FY15 and FY16 that increased the balance in this reserve from \$2 million at the end of FY12 to \$41 million at the end of FY17. Recording these entries may have reduced the basis upon which the University System's quasi-endowment assessment process is calculated.

"Unrestricted Net Position" reserve - this reserve is the portion of the UMass Boston Campus' net position (i.e., net equity) determined in accordance with generally accepted accounting principles (GAAP) and is the amount presented in the UMass Boston Campus' audited financial statements as unrestricted net position. At June 30, 2016, total net position amounted to \$424 million with \$40 million categorized as unrestricted – a decrease from the June 30, 2015 amount of \$72 million. The \$32 million decline is due principally to the FY16 operating deficit of \$5.3 million and the negative impact of capital project costs being funded from operating activities totaling \$27 million. The amount funded from operating activities is comprised of the \$13 million local contribution to the University Hall project noted above and \$14 million of debt interest that had to be paid as capitalized interest. The university had borrowed funds for planned capital projects that had yet to be spent. There were interest payments required on this borrowing, but no depreciation expense to generate the cash necessary to pay for such interest payments because the assets had yet to be built. According to internal correspondence was "not fully reflected in the current years' operating margin deficit" but was included as part of a capital project.

"Debt service" reserve – we noted the existence of this reserve with a balance of \$4.5 million, but have not been provided with any additional information regarding its purpose or funding.

Recommendation

UMass Boston Campus management should establish a uniform definition of the term 'reserve' so that communication around this very important area is clear and consistent. Any UMass Boston Campus reserve practices should be reviewed to determine if they conform to the updated definition and any existing and new reserve policies should address several key items including defining:

1. what reserves are necessary and the purpose of each reserve
2. whether and how the reserve is to be funded
3. the circumstances under which the reserve is to be used
4. the acceptable minimum and maximum amounts in the reserve
5. key metrics to measure the reserve in relation to other UMass Boston Campus measures (e.g., operating reserve should be at least 10% of total budgeted operating expenses)

Approaching the reserve area in a systematic and rational fashion should help ensure that there is a common understanding when communications occur and that the relevant issues surrounding the administration of reserves are properly documented and addressed.

Management Response

The UMass Boston Campus management is reviewing its reserves as recommended and working with the President's Office to operate within the system-wide reserve policy. Borrowing will also be timed to

more closely align with the operational needs of the construction projects in order to decrease the amount of capitalized interest.

3. Capital and related activities

Construction projects on the UMass Boston Campus are often managed by either the Commonwealth of Massachusetts' Division of Capital Asset Management and Maintenance (DCAMM) or the University of Massachusetts Building Authority (UMBA) rather than UMass Boston Campus personnel directly. Although the UMass Boston Campus borrows funds or has state capital appropriations that fund such projects, the annual operating budget can be and is often impacted by certain capital activities including depreciation and local funding obligations for various capital projects. A comprehensive annual budget process for the UMass Boston Campus should also consider the capital contributions requirements for locally funded capital investment in facilities, technology and equipment. The establishment of this budget would help provide for more transparent planning and monitoring of smaller capital activities on the UMass Boston Campus.

The monitoring, funding and accounting for these local cash contributions is not well understood by UMass Boston Campus personnel and the establishment of cash (funded) reserves for such amounts was not observed in the documentation reviewed. Accordingly, local contributions that need to augment a capital project being funded from bond proceeds, like the contribution for University Hall, are funded 'from reserves' using operating cash resulting in a reduction in cash and a corresponding reduction a capital reserve. Additionally, adequate processes and internal controls over the UMass Boston Campus' local funding of capital projects have not been implemented and planning for local funding commitments does not appear to be integrated with other areas of capital planning and spending.

Recommendation

The UMass Boston Campus needs to establish, implement and enforce policies surrounding the timing and extent of local funding commitments for capital projects so proper budgeting and planning can occur. Ensuring these commitments are budgeted and executed in a prudent and transparent fashion is important to help ensure that unexpected events do not occur.

Management Response

Management is implementing a local funds capital budget for FY18. The local funds capital budget, as a subset of the UMass Boston Campus-wide multi-year capital plan, will be developed annually alongside the operating budget where projects can be identified as operating or capital and capital projects tracked throughout the year similar to operating expenses. As projects are completed, delayed or abandoned, spending projections will be updated in real time avoiding large annual accruals for capitalized local projects at the end of the fiscal year.

4. Depreciation

In developing its annual budget, the UMass Boston Campus personnel includes an estimate for the depreciation associated with its capital assets as part of its operating expense budget. Including depreciation expense in a budget is often viewed as a surrogate for annual debt principal amounts and estimated annual maintenance costs of capital assets. While budgeting depreciation is an acceptable practice in the higher education industry and has been followed historically on the UMass Boston Campus and throughout the University of Massachusetts system, it is not clear that the cash impact of this budgeting technique was completely understood or adequately analyzed and considered by the UMass Boston Campus personnel.

Because depreciation is a non-cash expense while debt payments and maintenance costs are cash expenses, the budgeting of depreciation has a direct impact on cash. In situations where depreciation exceeds debt principal and maintenance costs, the UMass Boston Campus would be generating a cash surplus; when depreciation is less than the cash expenses, a cash deficit is generated. We requested but were not provided with any historical analysis of the impact on cash of the budgeting of depreciation. Additionally, we were not able to determine how the cash surplus in one year, if any, was reserved or earmarked for capital or debt purposes as prudent business practices would suggest.

The ability of the UMass Boston Campus to generate sufficient cash through the budgeting process to pay its debt service and maintain its capital assets is an important long term goal. Going forward, as new infrastructure is put in service and new debt is incurred, it becomes more important that the UMass Boston Campus properly analyze and understand the impact of budgeting depreciation on operating cash. This includes projecting the future cash impact of this budget policy considering how the differences in the estimated useful lives of the assets and the life of the related debt will generate/use cash.

Recommendation

The UMass Boston Campus needs to establish, implement and enforce policies surrounding its annual budgeting of depreciation expense to help ensure that the cash impact and any associated impact on surplus/deficit is completely understood and properly planned for. With the significant and ongoing increase in capital spending on the UMass Boston Campus, it is very important to be able to properly project the future cash and budgetary impact of the depreciation practice.

Management Response

Management is reviewing the impact of budgeting depreciation expense in the operating budget for FY18. The UMass Boston Campus is improving its reporting and analysis of cash flow and a result will be able to understand and react to projected changes in cash balances resulting from changing interest, depreciation, and maintenance costs.

Section III – Budget Monitoring

Monitoring progress

Leading practices suggest that once the budget has been developed, approved and recorded in the UMass Boston Campus' information system, actual spending should then be recorded in the information system and monitoring and reporting of budget vs actual results should be required to help provide senior UMass Boston Campus leadership a real time indication of whether actual results are being realized as predicted by the budget. Effectively monitoring actual results against the budgetary estimates is a critical management function that can help improve the predictability of results and provide management the information needed to critically analyze actual variances from the budget. Such a level of support seeks to afford informed decision-making so that needed corrections can be implemented to minimize the impact of unexpected variances on the budget and deficit.

From at least January 2016 through January 2017, UMass Boston Campus personnel did monitor and memorialize the UMass Boston Campus' monthly financial activities and circulate those analyses to senior UMass Boston Campus leadership. The Vice Chancellor of Administration and Finance during this period produced numerous memos and briefing documents addressed to the Chancellor with copies to the Chancellor's Chief of Staff and the Assistant Chancellor that communicate, among other things, the financial status of the UMass Boston Campus' operating deficit and capital activities, suggestions for changes/potential savings initiatives and requests for advice on certain issues.

The content of these documents suggested the existence of FY16 and FY17 budgetary problems as early as January 2016 where one memo indicates "We must address the financially unsustainable position we are currently in..." to a February 2016 memo stating that (with regard to the FY 16 projected deficit of \$18 million and potential deficit reduction options identified of between \$6.6 and \$7.4 million), "Chancellor, I am deeply concerned that we will not get much more than this [referring to the potential deficit reduction amount] and that we thus will not be near the system office number [of \$8 million]..." The July 2016 memo indicates that "[t]he operating target of \$8 million will not be met" and cited two principal reasons – an average 5% increase in non-compensation spending over FY15 and overspending in 'areas traditionally outside the budget protocols and system controls, like ESS, RTF and Development funds.'" UMass Boston Campus ended FY16 with an operating deficit of \$5.3 million.

By March 2016, the memos began to focus on the projected deficit for FY17 which was identified, at that time, to be \$25 million against System Office expectations in January 2016 of \$3 million. Ensuing memos discussed various aspects of the FY17 budgetary deficit seeking responses, guidance or advice from the addressees. Continued communications outlining the status of the deficit and the reduction options were reviewed with the December 2016 memo indicating the "shortfall estimate may be upwards of \$27 million" and that "[t]he deficit could rise by between \$2 to \$3 million in these offices (Provost, Research/Graduate Studies, and College of Management), due to commitments made for which resources are not available to fund within their current budget." Finally the December 2016 memo indicated that, "It is now increasingly likely that there will be insufficient cash in the UMass Boston Campus coffers to cover payrolls and other operating expenses in June or early July [of 2017]." The last memo we were provided with was dated January 20, 2017. We requested any written responses, advice or guidance from senior UMass Boston Campus leadership responding to the inquiries in the communications from January 2016 to January 2017, but none was provided.

Although the FY16 and FY17 budget deficits discussed in the memos appeared to be structural in nature, several of the deficit reduction options proposed would generally be considered 'one-time' revenue gains or deferrals of expenses to future years rather than structural changes that would result in long term process solutions. As such, the reduction of the deficit in FY16 had little impact on FY17. Additionally, while the identification of deficit reduction options was needed, there was no analysis provided to

demonstrate that the proposed options had in fact been implemented and whether the implementation resulted in savings actually accruing to the UMass Boston Campus.

Revenues and expenses not pertaining to that fiscal year should not impact the budget or the deficit. Budget managers need to have certainty over the budget period being managed. Current practice at the UMass Boston Campus allowed expenses from one year to be paid from the budget of the succeeding year, rather than have the budget fund goods purchased and services provided within a specific fiscal year. Allowing costs from one year to be charged to the following year's budget is not transparent, is not consistent with good financial control or good fiscal policy and potentially results in the understatement of the budget deficit. It also erodes the ability of budget managers to be accountable for their budgets, since they had no control over the exact timing of specific invoices.

Recommendation

To help facilitate the budget build up and improve monitoring and reporting financial results, UMass Boston Campus management needs to consider how currently available technology (mainly the PeopleSoft system) can be leveraged to automate activities, and associated processes and controls to help facilitate more effective and efficient operations. In addition, senior UMass Boston Campus leadership should regularly review the UMass Boston Campus budget and document any decisions related to budget adjustments.

Management Response

The UMass Boston Campus implemented a change in budget policy and practice at the end of FY17 so that budget expenses are now in alignment with fiscal year expenses. Moving forward, managers will have increased certainty around the amount of their budget, increasing accountability. As part of improving the budget process, the UMass Boston Campus will seek to utilize available PeopleSoft reporting and control features. For example, the UMass Boston Campus, as part of the Position Management and FTE Reporting Business Process Improvement (BPI) teams across the University, will be seeking to leverage PeopleSoft for its position management capabilities and for improved reporting on FTE's.

Section IV - Oversight and Accountability

President's Office Oversight

To assess the performance of the University System and the related performance as well as the financial accountability of each campus, President Meehan, in early 2016, instituted a policy requiring each campus to report their budgetary and actual results to the President's Office on a quarterly basis with the first reporting period being July 1, 2016 through September 30, 2016 (FY2017). The first quarterly report provided by UMass Boston Campus included, as the budgetary amounts showing a \$2.3 million surplus, which was the amount presented to and approved by the Board. The second quarterly report as of December 31, 2016 and received at the President's office around January 19, 2017 included a new column of numbers labeled, "Internal" in which a deficit of \$21 million was presented and resulted from a decrease in tuition of \$12 million and an increase in expenses of \$11 million. This change to the reporting appears consistent with information included in an e-mail from UMass Boston Campus personnel that indicated "at the Chancellor's direction, through October, there was no commitment to met [sp] the \$2.2 million surplus approved by the Board". We were not able to determine why the "Internal" column was added to the December 31, 2016 quarterly report, but did review a February 3, 2017 communication from President Meehan to the Chancellor looking for information and explanations regarding the changes in budget amounts.

It is unclear why the UMass Boston Campus presented an operating budget in the second quarter report that was different than the one approved by the Board and being monitored by the President's Office, but it is clear that the UMass Boston Campus' "Internal" FY17 budget which projected a \$21 million deficit at December 31, 2016 and projected a deficit of \$20 million in January 2016 showed no deficit or surplus in February 2017. The movement of the projected deficit again indicates the failure of senior UMass Boston Campus leadership to develop and report a credible budget against which actual results could be compared.

Recommendation

The President's Office and the Board should continue to support the highly qualified team of professionals with extensive experience in budgeting in the Higher Education Industry now in place at UMass Boston Campus to help ensure that the issues on the UMass Boston Campus will be addressed. The new UMass Boston Campus management team should continue to be provided with the necessary tools and staffing to adequately support operations and should be empowered to run the business effectively while being held accountable for promised results.

Management Response

The actual Board-approved budget is being used in the FY18 quarterly reports and additional financial monitoring activities are currently being developed.

Section V – Contributors to the Deficit

In addition to the monitoring of the UMass Boston Campus' activities, it is incumbent upon all members of the senior UMass Boston Campus leadership to ensure that the financial impact of decisions made during the budget development process and throughout the year are clearly understood, vetted, and documented to help ensure prudent, affordable and transparent decisions are made. This process requires input, analysis and communication among all the UMass Boston Campus leaders on the financial as well as the academic sides. Such a process is critical to helping ensure that all key decisions can be made with a specific focus on how decisions impact the projected budget surplus or deficit. Without an adequate understanding of the budgetary impact of decisions made on the UMass Boston Campus, making projections about budgetary results and managing to the budget become far more difficult tasks.

We noted several areas that may have been contributors to the budgetary deficits or impacted the UMass Boston Campus' ability to stay on budget and achieve projected results that management should consider analyzing as part of their budget process transformation. For example:

a. Institutes/Centers – In FY16, the UMass Boston Campus had identified 37 activities as institutes or centers (groups). While many of these groups operate almost exclusively on external funding (grants, etc.) or non-operating budget funds (RTF and ESS), in FY16, 45% of the funding for twenty (20) of these groups came from the operating revenue (tuition and state aid revenue) of UMass Boston Campus. Six (6) of these groups received 90% or more of their funding from operating revenues and ten (10) groups received over 50% of their funding from operating revenues. Overall in FY16, \$4.3 million of tuition and state aid revenues was used to support these groups.

Recommendation - While these groups may have tremendous value to the UMass Boston Campus, the size of the FY16 subsidy warrants a review of these groups to assess whether the purpose of each group and the corresponding level of funding is consistent with the future mission of the UMass Boston Campus.

Management Response - Centers and institutes are being reviewed as part of the FY18 budget process.

b. Faculty Start-up packages – Attracting leading academicians to UMass Boston Campus is an important goal for senior UMass Boston Campus leadership. Accordingly, providing certain benefits to help recruit such individuals is a common practice in the Higher Education Industry. For UMass Boston Campus, \$1.7 million was spent on Faculty start-up packages of which \$936,000 was funded by operating revenues, \$158,000 was funded by the sponsoring department's budget (unknown whether the funding source was operations or grants) and the remainder about \$800,000 was funded by RTF. Similar to the spending on institutes /centers, the size of the FY16 subsidy warrants a review of the funding split to assess whether the purpose of each package and the corresponding level of funding is consistent with the future mission of the individual college and the UMass Boston Campus.

Because the timing and amount of resources spent is at the direction of the Provost and the individual colleges and is not limited to the amount included in the Board approved budget, unexpected deficits could occur as a result of the 'outside the budget' spending.

Recommendation - The Provost, deans and others academic faculty should work closely with the Budget Office and others in Finance to help ensure that the faculty start-up packages are properly included in the annual operating budget and that actual spending is aligned with the mission of the UMass Boston Campus and is closely monitored.

Management Response - Improved budget planning for faculty start-up packages is presently under review by the UMass Boston Campus.

c. Graduate Student Tuition Waivers – In FY16 and FY17, UMass Boston Campus, on average, granted about \$11 million per year in graduate student waivers funded entirely from the operating budget of the UMass Boston Campus. This total includes statutory waivers, contractually-defined waivers for UMass employees, and contractually-defined graduate assistantship waivers. Waivers were provided to over 1,000 students each year and ranged from a few hundred dollars to over \$17,000.

Recommendation - While the value of waivers being provided to graduate students may be important to help attract and retain high caliber students, the criteria for granting waivers need to include, among other things, the financial impact of those waivers on the operating budget.

Management Response - Last year the UMass Boston Campus instituted a system for the FY18 budget cycle by which an agreed-upon number of tuition waivers for graduate employees, the terms of which are collectively bargained, would be budgeted for each year and built into revenue projections as foregone revenue. During FY18, UMass Boston Campus management will undertake an academic program review designed to assure that the academic and reputational benefits of its master's and PhD programs are realized within a feasible financial model.

d. Delayed employee hiring – The UMass Boston Campus currently has a practice that allows employees to begin working without undergoing the formal process of being hired.

From evidence provided, about 50 employees appear to have been working for the UMass Boston Campus for over 100 days (two employees for over one year) prior to them undergoing the process of being added to the UMass Boston Campus' payroll. That is, the payroll 'action date' recorded in the payroll system – the date the employee is added to the UMass Boston Campus' payroll - was far later than the 'effective date' – the date the employee began earning compensation.

This data indicates that employees may have been working on UMass Boston Campus for months prior to them becoming active employees in the payroll system. This timing gap resulted in many employees being 'retroactively' added to the payroll and getting paid currently for time previously worked. This practice of delayed hires makes managing payroll budgets and projecting the related impact on the deficit not possible.

Recommendation - The UMass Boston Campus should review its current hiring practices to ensure that all employees are subject to the UMass Boston Campus' hiring process including applicable background checks before beginning work.

Management Response - Although the UMass Boston Campus hiring policies and procedures are readily available to all managers on the Human Resources website, there have been a significant number of instances in the last two years in which non-compliance with these policies has resulted in employees working for 30 days or more without being appointed and placed on the payroll. The majority of these cases have occurred in the same departments on the UMass Boston Campus, which suggests that additional training and communication is required to ensure that managers in these areas understand the importance of initiating hiring processes in a timely way. The UMass Boston Campus intends to make this training a priority moving forward and to take other appropriate steps to improve performance in the critical area of timeliness of pay.

e. Ad-Comp – Additional Compensation (Ad-Comp) is a contractual compensation provision that allows employees (faculty and administrative) to receive compensation in addition to their normal compensation if certain conditions in the contract have been met. In FY16, a total of 923 employees received Ad-Comp worth \$7.8 million while through April 2017, a total of 796 employees received \$5.4 million. Many of the same employees received this compensation in both years with one employee receiving over \$30,000 in FY16 and over \$23,000 in FY17.

Recommendation - While Ad-Comp is a contractual provision, the controls over its administration are not well documented and could not be well articulated by the UMass Boston Campus personnel. Leading practice would suggest that strict procedures be put in place to ensure that projected Ad-Comp be included in the annual budget and that variances from the budget which would impact the deficit be approved, explained and documented.

Management Response - Requirements for the accrual and use of additional compensation are defined by applicable Board of Trustees policies and by applicable collective bargaining agreements. Board of Trustees policy T01-012 governs faculty additional compensation; this policy also is incorporated by reference in the collective bargaining agreement entered into between the university and the Faculty Staff Union for the UMass Amherst and UMass Boston Campuses. Additional compensation for all University of Massachusetts non-unit professional staff is governed by Board of Trustees policy T94-023. Unionized professional staff at the UMass Amherst and UMass Boston Campuses earn additional compensation in accordance with the collective bargaining agreement between the university and the Professional Staff Union.

The UMass Boston Campus implements the pre-authorization and approval requirements of these policies and agreements by way of the instructions and forms posted on the UMass Boston Campus Human Resources website, which have been in place for some years. These require, among other things, that requests for additional compensation be approved in accordance with the applicable policies and agreements. Additional compensation in all academic areas is approved by the provost's office; this too is a longstanding UMass Boston Campus practice. Within the last six months, the UMass Boston Campus also instituted a requirement that additional compensation for staff be approved by Human Resources. The UMass Boston Campus has incorporated ad-comp into its budgeting process beginning in FY18.