

RIVERSIDE: AUDIT & ADVISORY SERVICES

December 16, 2016

To: Audit Committee

Subject: Financial Analytical Review

Ref: R2016-11

We have completed our Financial Analytical Review in accordance with the University of California, Riverside Internal Audit Plan. Our report is attached for your review. We will perform follow-up procedures in the future to review the status of management action. This follow-up may take the form of a discussion or perhaps a limited review. R2016-11 will remain open until we have evaluated the actions taken.

Gregory Moore
Director

cc: Assistant Controller Librenjak
Payroll Director Nwandu

UNIVERSITY OF CALIFORNIA AT RIVERSIDE
AUDIT & ADVISORY SERVICES
MEMBER OF ASSOCIATION OF COLLEGE & UNIVERSITY AUDITORS

REPORT R2016-11
FINANCIAL ANALYTICAL REVIEW

DECEMBER 2016

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**UC RIVERSIDE
FINANCIAL ANALYTICAL REVIEW
REPORT R2016-11
DECEMBER 2016**

I. MANAGEMENT SUMMARY

We reviewed data and selected transactions in the payroll, disbursements, and other agreed upon areas. Based upon the results of work performed within the scope of the review, we did not detect any significant variances or unusual trends in the data and transactions reviewed that could not be explained.

However, we observed several areas of opportunity to improve efficiency/effectiveness, strengthen internal controls, and/or effect compliance with University policy:

- Contract & Grant Deficits (Observation III.A)
- TEMP Budget Year-end Closing Entries (Observation III.B)
- Effective Dating of PeopleSoft Trees and ChartFields (FAUs) (Observation III.C)
- Equipment Management System (Observation III.D)
- Inventory Management System (Observation III.E)
- Shipping Address/Merchandise Pickup Analysis (Observation III.F)
- Accounts Payable Disbursements (Observation III.G)
- Payroll and Time and Attendance Reporting System (TARS) (Observation III.H)

Minor items not of the magnitude to warrant inclusion in this report were discussed verbally with management.

II. INTRODUCTION

A. PURPOSE

University of California, Riverside (UCR) Audit & Advisory Services (A&AS), as part of its Audit Plan, performed an analysis and evaluation of the UCR campus financial data. This Financial Analytical Review included procedures to study and compare relationships among data on a campus-wide basis in order to identify unexpected and the absence of expected fluctuations, trends or activities, and other unusual items.

Our objective was to broadly examine campus financial data to determine if activities in selected areas included significant errors or questionable transactions that warranted further review. General Ledger (GL), accounts payable (AP), purchasing, inventory, capital equipment, payroll, and timesheet data were extracted to evaluate high-risk transactions involving liquid resources. This review also evaluated campus department revenues and expenditures.

The specific review objectives were to:

- Identify and investigate unusual relationships in the UCR campus financial data;
- Detect, within the scope of the review, irregularities or significant variances in financial reports and source documentation;
- Provide A&AS management with information for the campus risk assessment to assist in developing future audit plans;
- Identify opportunities for improving internal controls.

B. BACKGROUND

UCR utilizes PeopleSoft's Financials and Supply Chain Management (FSCM) system, a Tier 1 Enterprise Resource Planning (ERP) solution, for General Ledger, Accounts Payable, and some Purchasing functions. The Payroll/Personnel System (PPS) is maintained by the Office of the President for all campuses and is scheduled to be replaced with PeopleSoft's Human Capital Management (HCM) system, which will also include Payroll. Reporting systems are a combination of in-house developed systems with some vendor solutions. The Equipment Management System is a legacy mainframe system that is being replaced by an in-house developed system. Other applications like: iTravel (UCR's travel planning and expense reporting system), ePay (UCR's online payment request system), and eBuy (UCR's Purchase Order and Requisition System) are in-house developed and they interface with PeopleSoft.

C. SCOPE

This review analyzed selected data from Fiscal Years (FY) 2014-2015 and in some cases FY 2013-2014 and FY 2012-2013. We designed the methodology to provide sufficient, competent, and relevant evidence to achieve the objectives of the review. Due to the extensive range of financial activities and the vast volume of financial data, not all identifiable activities were reviewed. Further, because of the nature of this review's global perspective and other limitations, the review procedures could not ensure that errors and irregularities were detected, especially minor or isolated incidents.

The review included, but was not limited to the following areas:

1. General Ledger (ACTUALS, PERM and TEMP Ledgers), Organizational Hierarchies and Chart of Accounts

- a) Prepared a Contract & Grant (C&G) deficit aging report as of April 30, 2016 and compared to past reports to determine

trends. Reviewed department and central processes for monitoring and resolving deficits.

- b) Analyzed entries to the PERM and TEMP ledgers in FY 2014-2015 to understand the process, evaluate controls and to consider opportunities to enhance efficiency.
- c) Prepared an analysis to compare FY 2013-2014 and FY 2014-2015 revenues and expenditures by department. Reviewed activities over \$1,000,000 and with at least a 20 percent change from FY 2013-2014 to FY 2014-2015. Obtained explanations for increases or decreases and determined the reasonableness of explanations with independent analyses and additional inquiries.
- d) Reviewed campus plans to implement delivered functionality in PeopleSoft (Effective Dating of Trees and ChartFields) and the impact to other current and planned systems.

2. Equipment and Inventory Management Systems

Obtained data extracts from the Equipment Management System (EMS) and UCR Financial System (UCRFS) to evaluate Equipment and Inventory trends. Reviewed features and controls over campus Equipment and Inventory Management Systems.

3. Shipping Address and Pickups

Reviewed FY 2014-2015 shipping data for unusual delivery locations and pickups. Reviewed the features and controls in eBuy (UCR's Online Purchasing application) related to shipping address and pickups.

4. Disbursements

- a) Reviewed the top 25 cumulative vendor payments from FY 2013-2014 to FY 2014-2015.
- b) Reviewed duplicate vendor addresses within AP.
- c) Evaluated multiple addresses for the same vendor.
- d) Evaluated multiple vendor identification (ID) for the same vendor name and vice versa.
- e) Searched for duplicate vendor invoices.
- f) Analyzed vendor invoices entered/modified by transactors for any unusual activity including UCR's Online Payment Request Application (ePay) check requests.
- g) Reviewed for payments to different vendors on the same Purchase Order (PO).
- h) Reviewed vouchers/invoices/Procurement Card (ProCard) for invoice splitting (Benford Law).
- i) Reviewed voucher and payment trends (count and amount).
- j) Reviewed changes to the vendor master file and procedures.
- k) Reviewed for different vendors using the same direct deposit account in and across AP and payroll.

- l) Examined ProCard payments for unusual trends and transactions.

5. Payroll/Time and Attendance

- a) Evaluated employees with over \$210,000 annual gross pay and/or over \$100/hour rate of pay.
- b) Reviewed employees with high payout or number of hours by Description of Service (DOS) code (i.e. overtime, compensatory time, by agreement, etc.).
- c) Reviewed payroll check analytics (i.e. number and amount of transfers, cancellations, hand drawn checks) from FY 2012-2013 to FY 2013-2014.
- d) Performed data analytic procedures on Time and Attendance Reporting System (TARS) for one bi-weekly (for non-exempt employees) and one month (for exempt employees) data in December 2014 and June 2015.

III. OBSERVATIONS, COMMENTS AND MANAGEMENT CORRECTIVE ACTION

A. Contract & Grant (C&G) Deficits

Although we noted a general improvement in this area, UCR continues to have significant aged C&G deficits totaling approximately \$331k as of April 30, 2016. In some cases, these deficits were on expired funds. The School of Medicine (SOM) had the highest C&G deficit at \$177k as of April 30, 2016. A&AS requested an updated C&G Deficit analyses for SOM on September 2, 2016, but were advised that the July and August analyses were not yet complete.

There are a number of reports and ways to get C&G deficit information: 490 report, Inception-To-Date report, Deficit Analysis report, create Totals (UCR's Financial and Budgetary Data Warehouse) queries, Enterprise Resource System, College of Natural and Agricultural Sciences (CNAS) Financial Analysis Reporting System (FARS), Ledger Reconciliation Storage System (LRSS), Principal Investigator Web Reporting System (PIWRS), etc. However, there is no consistent way the reports are used and departments in some cases struggle with the format and completeness of the information. Some create their own reports, in a largely manual way. In one case, we understand that a unit invested a significant amount of money to implement a data warehouse to produce reports, but it was abandoned.

To overcome some of the challenges with the availability of information in easy to use formats, in FY 2011-2012, CNAS created FARS to report C&G overdrafts (aging and trends), however not all units are included in this data warehouse. CNAS brings new units into the data warehouse on request.

There have been exceptional improvements in C&G deficits for units included in the CNAS FARS system since its implementation. The amounts reported

below as of December 31, 2010 were prior to the CNAS FARS system. The amounts reported as of April, 30, 2016 are after the CNAS FARS system roll out in FY 2011-2012.

Unit	December 31, 2010	April 30, 2016
CNAS	\$ 286,645	\$ 63,288
Bourns College of Engineering (BCOE)	166,390	76,102
College of Humanities Arts and Social Sciences (CHASS)	135,000	6,768
University Extension (UNEX)	74,716	-
Vice Chancellor Student Affairs (VCSA)	15,455	952
Cooperative Extension (CE)-CNAS	33,177	6,613
Other	1,387	-
SOM	-	176,946
Total UCR	\$ 712,770	\$ 330,669

**Reported not using FARS; uses an alternate reporting method*

However, not all units use the CNAS report format or are aware of the reporting system. As a result, these units rely on alternate and inconsistent manual reports they create. One of the issues is that the CNAS system reports deficits on C&G funds on an Activity/Function code level. As a result, the reports can mislead users to believe that there are more deficits than actually exist on a Fund as a whole. For example, from this system, the SOM report as of April 2016 indicates that there are approximately \$606,000 in C&G deficits. What is not identified in these reports is that the same Fund may have an offsetting surplus on another Activity code and/or Function code. For example, the actual amount of C&G deficits for SOM funds (a fund-centric calculation) is approximately \$176,000. But in other cases, these reports can under report the fund deficit if deficits sit on the Fund outside the unit's accountability structure. While the CNAS FARS level of detail is useful for housekeeping (i.e. to determine where to make Budget Entry Allocations (BEA) and/or Cost Transfers (CT) to align expenditures with budget amounts by Activity code), a higher level fund centric report may be useful for the units.

A fund-centric C&G deficit aging report, which A&AS produces (below), indicates that the C&G fund deficit as of April 2016 for UCR is approximately \$331K (7% of this balance is over 90 days past the Fund expiration date/post closeout period). Deficits at any point in time are not a best practice and should not exist over three months past Fund expiration date (when funds should be closed and finalized with the agencies). The aging schedule below as of April 30, 2016 is a tremendous improvement over past years, but it demonstrates that SOM, who is not using the best available reporting tools needs to identify the best financial tools and implement a process to resolve their aged deficits.

As of Date (ASD) - April 30, 2016			After Fund Expiration Date						
Unit	Count of C&G Funds in Overdraft	Count of Expired C&G Funds at ASD	C&G Deficit Amount at ASD						Total C&G Fund Deficit
			Fund Not Expired at ASD	0-3 Months	4-6 Months	7 Months-1 Year	1-2 Years	Over 2 Years	
BCOE	16	6	\$ 72,597	\$ 1,561	\$ 935	\$ 1,009	\$ -	\$ -	\$ 76,102
CHASS	5	2	467	19	-	-	-	6,282	6,768
CNAS	28	15	49,830	13,351	-	107	-	-	63,288
VCSA	3	3	-	-	704	228	-	20	952
SOM	11	8	120,771	42,357	2,248	1,201	10,369	-	176,946
CE-CNAS	1	0	6,613	-	-	-	-	-	6,613
Total	64	34	\$ 250,278	\$ 57,288	\$ 3,887	\$ 2,545	\$ 10,369	\$ 6,302	\$ 330,669

Drilldown detail available to Department and Fund.

Controls to prevent deficits: We note that the PeopleSoft-delivered functionality, which would prevent postings to expired Full Accounting Unit (FAU) elements (ChartFields in PeopleSoft) or invalid FAU combinations (PeopleSoft Combo Edits) and can prevent some of these overdrafts from occurring, is not currently enabled. Business & Financial Services indicated that they believe that the volume of transactions involved in some of the journal feeds would make it less than ideal to suspend journals or divert error lines to clearing accounts as it may make it difficult to research and correct. In addition, implementation of these additional edits may have unintended consequences given the software has not been updated in over 10 years; these enhancements should be evaluated when the campus decides to upgrade the financial system software. A&AS believes that the currently available functionality within PeopleSoft which suspends only the Journal Entry (JE) lines in error provide transparency and an audit trail for corrections. Business & Financial Services indicated that many of the deficits are related to Payroll Personnel System (PPS) and Student Information System (SIS) as neither of these systems have FAU combination edit checks due to system limitations, but that improvements will be made in this area with the implementation of Banner and University of California’s single payroll, benefits, human resources and academic personnel solution (UCPath). We understand however, that there are alternate controls in some feeder systems, for example, ePay will not allow departments to request payments when a fund is in overdraft or after a fund’s expiration date and eBuy checks both the fund end date and fund balance.

Deficits greater than three months past fund expiration date: In the case of the College of Humanities & Social Sciences (CHASS) a deficit of \$6,282 is more than two years past the fund expiration date, the source of the transaction was the payroll system, but this erroneous posting still could be prevented by one or both types of PeopleSoft edits (inactivating the fund 90 days after the fund expiration and/or creating combination edits that do not allow other departments to post to funds that do not pertain to them). Business & Financial Services has indicated that at this time there are other unintended consequences on reporting relating to inactivating funds within a

fiscal year when there is current year activity; in the UCPATH environment this type of error would be avoided using the Plan FAU combination edit check routine. In this case, the Botany department erroneously posted payroll to a Sociology department's fund, but corrected it the following month. In the case of Bourns College of Engineering (BCOE), all deficits greater than four months past fund expiration date were resolved within three months.

Currently the burden is on the departments to detect and resolve these deficits as full preventive controls are not in place. A&AS understands that some of these features will be used when we convert to PeopleSoft Payroll and Human Resources (HR) as part of the UCPATH implementation¹.

Overdrafts (especially trending overdrafts) can imply that the University does not have proper controls in place to prevent or detect unallowed expenditures in a timely manner. The University has policies regarding ledger reconciliations (LRSS system), which requires monthly review of ledgers and certifications of review and approval by the units. These reviews should identify overdrafts and initiate action to resolve them in a timely manner. Overdrafts may inhibit Central Accounting's ability to bill or close out the contract in a timely manner as required by sponsors. Ultimately, overdrafts need to be moved to other funding sources. If costs are moved to other C&G funding sources, then they need to be moved within 120 days and require appropriate approvals and documentation. Note that agency auditors consider cost transfers to other federal funds, especially late cost transfers, to be high risk and they apply more scrutiny to these transactions. If costs are moved to unrestricted funding sources, they could potentially require utilization of departmental discretionary funding, a situation that could be avoided with proper monitoring.

RECOMMENDATION – SOM

We recommend that the SOM provide A&AS, the SOM Dean and the Campus Controller a monthly analysis of C&G deficits by the 25th of each month with reasons, plans and target dates for resolving deficits.

¹ These edits can occur on a JE save, edit, or post (or combinations of those steps). A large number of interfaced items come from PPS on a batch update so this process would edit (if edits are turned on) and attempt to post simultaneously. There are three options for edit/post in this case: 1) recycle – the JE is edited and held for corrections before posting, 2) suspend – the JE is edited and the lines that do not pass edit are sent to suspense for clearing while the other lines post, 3) post – in an environment where ChartFields are not effective dated/inactivated and combo edits are not turned on so there are effectively no edits and the JE posts. In the 3rd case, any errors need to be located and corrected in the source system and re-interfaced and because of the timing of interfaces, it is possible that error corrections do not flow through to the GL until the following month. As we plan to move to UCPATH and move off of PPS onto PeopleSoft Payroll and HR, we understand that we will be able to turn on this described functionality and have real-time edit capabilities that will prevent postings to expired funds and invalid FAU combinations. However, this will be a challenge as UCR maintains its own chart of accounts and there are synchronization issues that need to be worked out with UCPATH. How will other PeopleSoft campuses synchronize their ChartFields and Combo Edit tables? Will we all be on separate PeopleSoft SetIDs? And we will have to build and maintain these ComboEdit tables and maintain effective date ChartFields. Business & Financial Services has indicated that they have concerns with the recycle and suspend options as they may create unintended conditions such as discrepancies with source documents and difficulty in correcting errors.

MANAGEMENT CORRECTIVE ACTION – SOM

The School of Medicine significantly reduced deficits on extramural fund numbers in the latter part of fiscal year 2016 through fiscal year-end closing. To effect active management of deficits associated with contracts and grants funding, the School of Medicine will provide a monthly analysis of contracts and grants deficits by the 25th of each month with reasons, plans and target dates for resolving deficits. Analysis reports will be provided to the School of Medicine Dean, Audit & Advisory Services, and the Campus Controller through June 30, 2017 or until the School of Medicine has stabilized contracts and grants fund balances. Reports for July 2016 through November 2016 were provided on December 16, 2016.

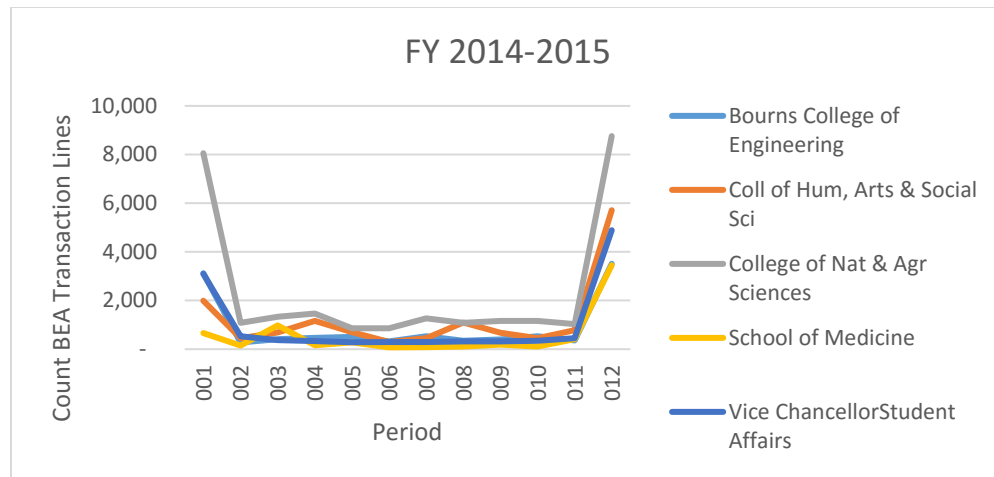
B. TEMP² Budget Year-end Closing Entries

We observed an opportunity to improve efficiency by eliminating certain year-end budget entries. There were 38,035 journal lines on 5,072 JEs by 188 individuals posted in Period 12 FY 2014-2015 to the TEMP ledger. Many of these entries are to adjust the TEMP ledger to match actual expenditures to generate a zero-dollar variance by Budget Category (BC); the offset generally goes to BC unallocated. This reduces transparency and accountability over variances by BC wherein the actual versus budget amounts are no longer visible. Normally, variances are visible, explained, and are used for planning purposes for the next year. A&AS also believes this is a non-value added activity.

In addition, this practice requires that the departments monitor the ledgers in period 12 and make these entries, which effectively only move amounts from various BCs to an unallocated BC (i.e. BC 75). If additional entries are recorded in the ACTUALS³ ledger after they make initial adjustments (which can occur due to late feeder system and other entries), then additional adjustments are required to adjust the TEMP to ACTUALS by BC (again with the difference going to BC Unallocated). This practice negates the benefit and purpose of establishing a budget, to determine where expenditures varied from the budget and to provide explanations and assist in planning going forward. Best practices are to not make these entries to the TEMP ledger and for departments to perform a proper budget variance analysis on a monthly basis.

² The Temporary Budget (TEMP) ledger is a copy of the PERM ledger at July 1st plus or minus changes related to the current fiscal year. The Permanent Budget (PERM) ledger is the established budget on July 1st plus or minus changes that will be reflected on next year's PERM ledger.

³ The Actuals (ACTUALS) ledger represents non-budget financial transactions.



The chart above shows the number of Budget Establishment and Adjustment (BEA) transactions in Period 12, FY 2014-2015 on the TEMP ledger for five large units at UCR. The TEMP ledger is established with entries in period 1 (with entries that are mostly automated) and a small number of entries are made during the year. However, it is clear that a large number of entries are made at year end in the TEMP ledger to adjust the BC amounts to ACTUALS balances (to generate zero budget to actual variance on the main BCs with the offset to an unallocated BC). While some entries made in June 2015 are by central Budget and Accounting Offices, the majority appears to be made by the units/departments to adjust the TEMP budget to ACTUALS.

Irrespective of this practice, we noted that one unit, SOM, in particular had an unusually large number of TEMP adjustments in June 2015 (3,452 JE lines) relative to its budget establishment in July 2014 (668 JE lines). Of the 3,452 JE lines we note that 3,395 lines appear to pertain to this practice and only 57 lines appear to be from the Central Budget or Accounting Offices. SOM management indicated that the FAU structure increased in FY 2014-2015 by hundreds of FAUs, which caused the unit to have to make an unusually high number of adjustments to the TEMP ledger in June 2015 to align it with the ACTUALS expenditures. They do not expect to have this large number of entries in FY 2016-2017, and in fact would like to pursue the possibility of eliminating the TEMP year-end adjusting entries.

It is A&AS' opinion that this is not a best practice to adjust budgets to actual expenditures. However, we understand that the Financial Planning & Analysis (FP&A) and the Accounting Office (AO) believe that adjusting the TEMP budget to ACTUALS is an important process for certain funding sources at year-end, and Organizational Chief Financial Administrative Officers, through discussions at a Financial & Human Resources Officers Group (FHROG) meetings, generally agreed; this year-end exercise encourages units to review significant variances from budget to confirm the integrity of the fiscal year expenditures and identify material errors for correction in the proper fiscal year. Additionally, FP&A and AO believe that the practice suggested by A&AS is most appropriate in a replacement budget environment and in an operating revenue based operation, not the incremental

environment currently in use at UCR and for institutions with significant non-operating revenues (e.g., State Support). FP&A and AO believe that fully implementing the suggested practice would also require that no adjustments be made during the year and current UCR funding practices are not aligned with this form of budgeting. For example, a large amount of funding is allocated throughout a fiscal year based on actual expenditures. From a practical perspective, if entries are not made at fiscal year-end, they would need to be made in the new fiscal year to avoid distorting the new year's budget plan and could potentially delay the identification of material errors, negatively impacting the UC financial statements. During the FHROG meeting discussions, CFAOs generally did not want the entries to be fully automated and concerns were raised about their organization's ability to pull back funding.

C. **Effective Dating of PeopleSoft Trees and ChartFields**

UCRFS is PeopleSoft's Financials and Supply Chain Management (FSCM) system and was implemented in 1999 in response to Year 2000 (Y2K) concerns.

PeopleSoft is commonly considered a top three, Tier 1 ERP solution, that is, systems primarily used by Fortune 1000 companies. However, UCR does not currently utilize all delivered PeopleSoft functionality.

ChartFields are fields that store the financial chart of accounts, referred to as the UCR Full Accounting Unit (FAU). Trees are the hierarchical structure (generally of the ChartFields). Effective dating enables storage of ChartFields and Trees on a historical, current and future bases and can, for example, make a ChartField active or inactive at any date, even in the future.

Effective dated Trees would enable a company to, among other things, run current financial reports with comparisons to historical financial information but using the rollups/hierarchies in effect as of a specific date. Not utilizing effective dating also makes it difficult to make organizational rollup changes as the time frame when changes can be made is usually limited and often occur during the busiest time of the fiscal year (during fiscal year-end close).

Totals is based more on a flat file than a pure relational database structure. In other words, the organizational hierarchy/rollup is recorded as of the point in time the transactions are posted and makes historical comparisons more difficult when there have been reorganizations. After a reorganization, for example, when departments move from one Organization to another, running information from Totals on a target Organization will not dynamically pull in the historical financial information for departments that were formerly outside that unit or exclude activity for departments that have been moved to other units.

PeopleSoft effective dating of Trees allows us to disassociate the lowest level Department or Activity code value from the organizational hierarchy and

dynamically roll it up for reporting purposes based on a historical, current, or even future dated organizational structure (i.e. for what-if-scenarios). Effective dating is a functionality that could be used to improve reporting capabilities.

While it is a best practice to use effective dated ChartFields and Trees, we note that upstream/downstream systems would need to be remediated due to the fact that they rely on a non-effective dated Tree structure.

This is something that should be revisited perhaps as part of the PeopleSoft upgrade. The upgrade needs to be considered as a top priority as we are also at end of life/support on the current version of the software.

D. **Equipment Management System (EMS)**

We noted that the UCR EMS is a legacy green screen end-of-life mainframe system. One of the issues with the system is that there is no end-user reporting. Moreover, because of lack of integration with existing PeopleSoft modules, items are recorded into this system manually. Completeness checks (to ensure all items are entered) are manual and decentralized. We have noted errors, in some cases where items were not recorded in the subledger (which creates opportunity to misappropriate assets) and we are unable to back date the in service date when assets are subsequently entered to the EMS (in some cases months or years later). In those cases, the system is unable to perform a depreciation adjustment; the item starts depreciating only when entered to the subledger, thus some items are being depreciated incorrectly. It is important to note that an interim project is underway to address many of these issues.

Also, we note that this system does not have the ability to track nor is there a campus-wide system to track Low Value (less than \$5,000)/theft sensitive items (laptops, powered hand tools, theatre props, Arts Block art, vehicles⁴). BUS-29 states 'University locations may establish guidelines governing the control over theft-sensitive items valued at less than \$5,000.' Local guidelines suggest that such guidelines may be established at the department level. As a result, we have noted many departments recording theft sensitive items in Excel spreadsheets or not at all. The accuracy and controls over these distributed systems (i.e. Excel spreadsheets) are questionable and there is no higher level reporting capability. For example, we would not easily be able to report all Low Value vehicles or computer equipment⁵ at UCR. Also without such information, it is hard to evaluate security and insurance requirements, and comply with some agency reporting requirements⁶, or determine losses. Business & Financial Services indicated that as the campus considers plans to upgrade the financial system, implementation of an Asset Management module should be included in the project plan.

⁴ We note some equipment sent to Equipment Management can be repurchased by other departments at market value and capitalized/or not capitalized based on the purchase price. This is not an arm's length transaction; it is essentially a transfer to another department and should retain the original cost/depreciation.

⁵ Some computer equipment may contain PHI (e.g. at SOM) or PPI and would be subject to HIPAA or SB 1386. SANS 20 Critical Controls: Control #1 states that a company should maintain an inventory of authorized and unauthorized devices.

⁶ I.e. AQMD emissions reporting requirements, etc.

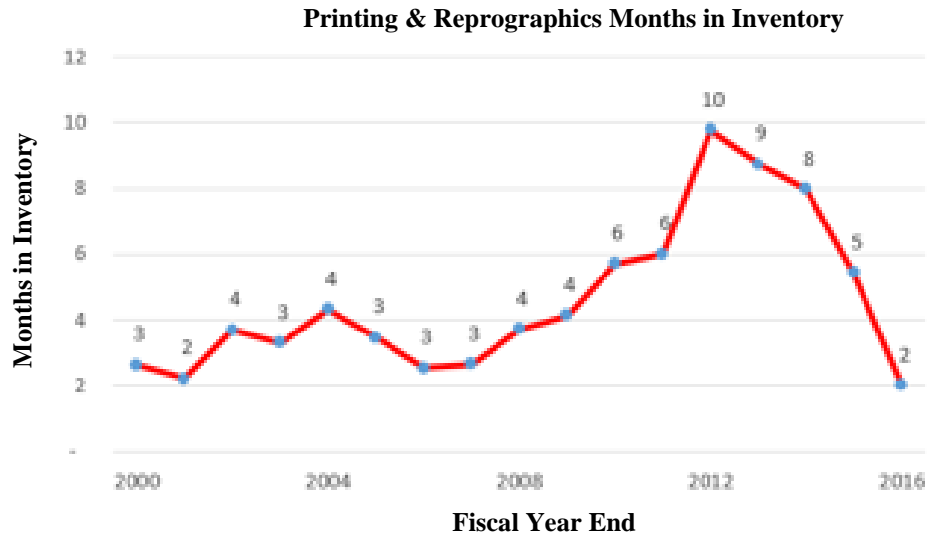
E. Inventory Management System (IMS)

Various departments on campus (i.e. Dining, Mail Services, Printing & Reprographics (P&R), etc.) run their own IMSs ranging from vendor packages to in-house developed systems to manual solutions that are periodic (not perpetual). Storehouse uses a perpetual system with barcode scanning technology, but the system is at its end-of-life and needs to be migrated off the mainframe. Conversely, the in-house developed Chemical Inventory system is a point-in-time inventory system (not perpetual), does not have some features commonly seen in ERP IMS like PeopleSoft that would track expiration dates as an example. The P&R inventory system, for example, is a year-end manual process that until this year was performed using manual count tags which were entered into Excel and manually valued. We noted that this process has been redesigned to partially automate and reduce the process time for year-end inventory from estimated 174 hours to 22 hours, but still uses Excel spreadsheets.

Lack of visibility in manual and some automated systems reduces controls and accountability. Some automated systems lack features commonly seen in best-in-class systems and most lack integration with upstream and downstream systems that are available in ERP systems. Lack of strong perpetual inventory management systems and information can contribute to stockouts, over ordering inventory (that we already have, but are unaware of), unreported shrinkage (theft, spoilage, etc.), underutilized space, etc. Below is an example of years of overstocking (and overvaluation) that eventually lead to large write-offs (over \$500K of inventory reductions/loss over two years) in one department.



Also, we noted that Key Performance Indicators (KPI) like inventory levels, Days in Inventory, Inventory Turnover, etc. are not on some Annual Business Reports examined. What is not measured cannot be improved.

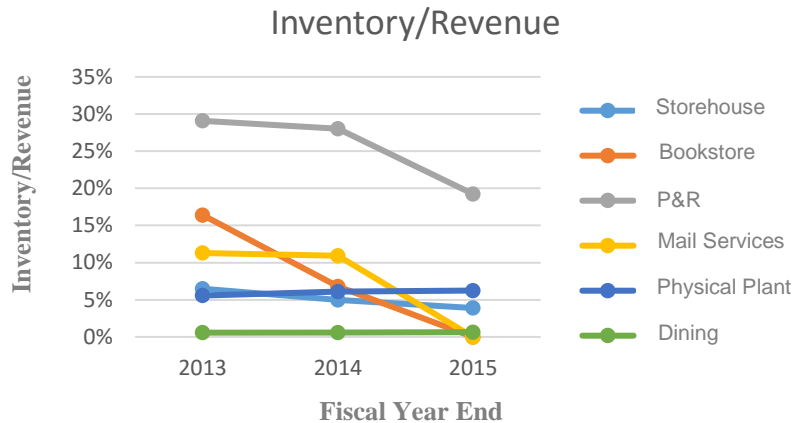


In this department example (graph shown above), industry averages suggest that two months in inventory is standard, but the department showed 10 months in inventory at its peak. After issues were identified with the manual inventory system in this one department, year-end inventory count/valuation, and Key Performance Indicators processes were changed and write-offs of inventory occurred over two years bringing the Fiscal Year-end (FYE) 2015-2016 inventory down to less than 2 months in inventory, consistent with industry averages.

Note that the deferred expense JE at year end to record inventory can also be an incentive to overproduce and/or overvalue inventory to positively affect the bottom line. Again, without transparency on these metrics, this could go unnoticed and when discovered can result in a large write-off putting downward pressure on the bottom line.

Normally, a good metric for inventory management is months in inventory. However, to calculate this figure, the cost of goods sold (COGS) needs to be known. UCR uses different methods of recording COGS than most industries. In one department for example, we record inventory and non-inventory purchases to the same GL accounts. They then do an allocation to determine the COGS. In this case, COGS is never actually posted to the COGS GL account. Other departments record all inventory purchases directly to COGS. The year-end inventory journal entry is a credit to COGS (which improves the bottom line in a period of increasing inventory) and the entry reverses in July. In the scenario where we do not record inventory purchases to COGS, but record a deferred expense JE to record inventory at fiscal year-end, a negative COGS could result in a period of decreasing inventory. As an outcome of these accounting methods, it is difficult to calculate Months in Inventory. As an alternative, we use 'Inventory as a percentage of Annual Revenue' to evaluate inventory management across several departments below.

As an alternative, we calculated year-end inventory as a percentage of Annual Revenue to identify departments that may have high trending inventory.



We note the following in six departments examined:

1. Bookstore historically had a high inventory as a percentage of revenue (Ratio); it has been outsourced, thus the decline to zero.
2. Dining has a low ratio as expected; the industry average is four days in inventory.
3. Storehouse and Physical Plant appear to have relatively lean inventory.
4. P&R is historically high, but projects to bring Months in Inventory down from a high of 10 months in inventory (FYE 2011-2012) to two months in inventory (projected FYE 2015-2016).
5. Mail services may have had overstated/valued inventory in the past as we noted metered mail making up a large component of inventory. As a general practice, inventory or finished goods inventory requiring small lead times should not be held in large quantities because it increases the risk of theft, spoilage, etc.

We also noted inventory valuation practices in one department that value inventory at sales price and not using the Lower of Cost or Market principle. This valuation method is not in accordance with Generally Accepted Accounting Principles (GAAP). Implementation of a proper IMS would automatically value inventory at the selected method (i.e. FIFO, etc.) and save time spent performing manual valuations that are difficult to validate.

World Class Solution and Campus-wide Opportunity: UCR runs a tier-1 Enterprise Resource Planning (ERP) System PeopleSoft's Financials/Supply Chain Management System. PeopleSoft is commonly considered a top three system (with Oracle and SAP) and is primarily used by Fortune 1000/world class companies. This system has an IMS, where inventory can be increased or decreased automatically based on purchases and job orders. Items and locations would be barcoded or radio frequency identification (RFID) tagged for quick scanning and handling. Economic order quantities and replenishment levels would trigger automatic POs, cycle counts would occur throughout the year based on automatic selections (taking into account high value/risk items), inventory would be automatically valued based on the selected inventory method (i.e. FIFO, etc.). These systems track expiration dates (as in the case of chemicals). In a controlled environment, year-end

inventory may not be required. This IMS is fully integrated with Accounts Payable (AP), Purchase Order (PO), and other PeopleSoft modules. Business & Financial Services indicated that as the campus considers upgrading the financial system, an opportunity exists to implement a campus-wide solution that will improve efficiency and controls, and may lower overall cost.

F. Shipping Address/Merchandise Pickup Analysis

The eBuy system is an internally developed application which manages purchase orders (PO) and requisitions, and interfaces primarily with the UCR Financial System (UCRFS) – PeopleSoft Financial/Supply Chain Management PO and AP modules. We analyzed eBuy shipping addresses and terms data for FY 2014-2015 as follows:

1. UCR Receiving Addresses – We identified 59 UCR related receiving locations (approximately 62,000 POs and payments of \$89 million). There was one main receiving location (3401 Watkins Dr) and several satellite receiving locations (i.e. Chemistry department receives shipments of chemicals, etc.) on campus. Main receiving and certain other receiving locations are regarded as having proper controls (i.e. having an adequate segregation of duties and proper security/handling of items received). However, controls (i.e. segregation of duties, security over assets, etc.) over many of the lower volume receiving locations are unknown. Multiple receiving locations increase the risk of misappropriation and it becomes more difficult to implement proper segregation of duties in small departments.

We identified an additional 146 “ship to” addresses (approximately 680 POs and payments of \$1.7 million) that we were unable to identify as related to UCR addresses in our review. We noted approximately 600 POs and payments of \$1.5 million related to “ship to” addresses in cities other than Riverside. We reported this to appropriate management so they could follow-up accordingly.

The PeopleSoft PO module can establish valid receiving locations and default main receiving locations, minimize keying and data entry errors, reduce delayed shipments due to invalid “ship to” locations, and validate new “ship to” addresses real-time while the eBuy system does not currently offer these features. As a result, we have noted high variation and errors in “ship to” addresses. For example, we note that there were 76 versions of 3401 Watkins Dr. (the main receiving location), including a typo where 305 POs and payments totaling \$281,991 were “shipped to” 3701 Watkins Dr. (an address that does not exist). We also noted invalid zip code/city combinations and other address errors.

This lack of edits and controls, at a minimum creates inefficiencies, can cause shipping delays and errors, and at worse could create opportunities to misappropriate assets. Business & Financial Services indicated that as the campus considers upgrading the financial system, an opportunity exists to

implement the native purchase order functionality to minimize errors and risk associated with the receiving address.

2. **Will Call/Pickup** – We noted 2,748 POs (related payments of \$369,000) were marked for Will Call/Pickup. Most of these pertain to the following departments: Housing Dining Residential Services (HDRS), UCR Extension, Police, Center for Environmental Research & Technology (CE-CERT), and Lockshop.

Will Call/Pickup increases the risk of misappropriation. Additional work pertaining to Will Call/Pickup was reviewed for Agricultural Operations as part of the R2016-H Agricultural Operations audit report.

G. Accounts Payable Disbursements

1. **Late Payments** – UCR pays approximately 9% of invoices over two months after the respective invoice dates⁷. This is an improvement over the prior year where it was 10%. Paying invoices late could result in lost discounts; and can impact contract and grant accounting, billing and closeouts. Invoices should be sent directly to Accounting, but in some cases are submitted to the departments. Invoices over \$5K require department personnel signature. These factors can contribute to delays in processing invoices. The campus has increased the department signature threshold to \$10K (which should reduce department approvals by approximately 50%) along with an electronic approval tool in FY 2016-2017. In addition, Business & Financial Services recently hosted an eBuy/Accounts Payable User Group meeting to remind the group of proper procedures on providing vendors with valid PO numbers and invoice submission to the Accounting Office.
2. **ePay** – We noted a general increase in payment amount of ePay physical checks in FY 2014-2015 over the prior fiscal years. This is primarily due to moving payments to vendors on contracts (such as construction companies, title companies, lease payments, etc.) from a traditional central invoice input into the Accounts Payable system to a more decentralized process with input to the ePay system. One transactor in ePay had an unusual increase in ePay activity from \$22K in FY 2013-2014 to \$502K in FY 2014-2015. This was primarily due to payments on Professional Services Agreements (PSA). Further review indicated that these individuals were clinicians in the SOM. These kinds of payments should not be processed in this manner. A one-time exception to the policy was provided. However, it is our understanding that one additional exception was required in FY 2014-2015. It is also our understanding that SOM's processes have been modified to set up these payments using the appropriate mechanism.

⁷This does not take into account ePay entertainment entered late because it sets the invoice date to entered date. There is no field to enter actual expenditure date. This was noted in prior year's audit.

3. **Voided Checks and Stop Payments** – 476 of 54,491 payments (.9%) related to over 125,000 vouchers in FY 2014-2015 were voids/stops. This is an increase from prior year (298 voids/stops on 54,312 payments or .5% stop/void rate). Voids/stops generally represent invoice processing errors and can result in delays in paying vendors. Following are some examples noted:
- a) We noted a duplicate invoice paid on a vendor. The payment was voided and a credit memo was entered. This is unusual because there are controls in PeopleSoft to detect duplicate invoice numbers.
 - b) We noted a duplicate payment. Both payments were subsequently voided. This is unusual as PeopleSoft should have prevented this error from occurring; however, the operator utilized an invalid wire payment method combination that resulted in the duplicate that was immediately identified through other internal controls.
 - c) We noted a number of voids which appear to be related to vendor maintenance (see below).
4. **Vendor Maintenance**
- a) **Review of Changes to Vendor Master (VM) File**– While the number of manual additions to the VM has been low (e.g. 109 in FY 2014-2015), vendor modifications⁸ were high (2,024) in FY 2014-2015. Best practices suggest that all changes to the VM should be reviewed. The number of changes to the VM averages out to approximately eight changes per day. Accounting has indicated that the number of changes is high for current staffing levels to perform a meaningful review of each change made, so they rely on internal controls related to single accountability (vendor maintenance is the primary responsibility of an individual who does not enter/edit invoices) and audit trails (requests for vendor additions and address changes are processed via the vendor request system). Also, Accounting has pointed to additional controls where payments are reviewed against invoices before issuance. There were no instances of fraud reported or detected in FY 2014-2015 related to vendor maintenance.
 - b) **Standardization of Vendor Naming Conventions** - We noted a high number of minor name changes to vendors (i.e. ‘Corporation’ to ‘Corp’, etc.). Generally, companies have naming standards to increase standardization and minimize changes to the vendor master record.

⁸ This is counted as greater than one day after the create date on interfaced vendors, because some minor manual changes are required for interfaced vendors. Those are usually handled the same day they are created, but changes related to the minor maintenance on interfaced vendors cannot be differentiated from other vendor master changes.

- c) **Segregation of Duties** - As a general practice, an individual who can make changes to the VM should not also be able to make changes to or enter invoices. Accounting has indicated that they do not have sufficient staffing levels to maintain this segregation of duties. The only individual who has both maintained the VM and entered/modified invoices in FY 2014-2015 is the Accounts Payable Supervisor. This person served in a backup capacity to both the individual who maintains the VM and to staff that enter/modify invoices. This individual modified 58 vendors in the VM and 14 vouchers during FY 2014-2015. In prior years, the Accounting Office reviewed changes by individuals that made both changes to the VM and invoices. However, because of the volume of changes, Accounting has not been able to complete the review. They have requested reporting of the specific instances where the individual may have made a change to a vendor record and entered/modified a related invoice. A payment was made for \$45K to this vendor, but it was subsequently voided. We reported this to Accounting for their review. The Accounts Payable Supervisor ensured the Controller was aware of this unusual situation related to a voided wire payment.
- d) **Inactivate/Consolidate vendors** - On our test of same POs on multiple vendors, we noted that in seven of nine instances examined, where the vendor should be inactivated due to the acquisition by another company, the vendor was not inactivated. On another test of the same address with different vendors, we noted three pairs of vendors where a new vendor (name and number) was established at the same address, but the old vendor was not inactivated. In some cases, payments were generated to these vendors and they were subsequently voided and reissued to the correct vendor. Not inactivating vendors can increase the risk of paying the wrong vendor (loss) and delays in paying the correct vendor. In another test of the same vendor name with different vendor numbers, we noted vendors that should be combined (merged), or one inactivated. While in this case they appear to be the same vendor, it is possible that addresses are not updated in both vendor records simultaneously, and could result in payments mailed to an incorrect address (loss and/or delay in paying the vendor). In cases where an individual is converted from a non-employee vendor to an employee vendor (or vice versa), paying invoices to the wrong vendor can generate a physical check when Electronic Funds Transfers (EFT) should have been the default option. This could cause confusion in the case of issuing W-9s, on vendor inquiries and could even result in paying an invoice twice (if entered on two different vendor numbers for the same vendor), and inconvenience to the payee.

H. Payroll/TARS

Positive Observations – We noted that the number of Cancellations, Overpays, Hand Drawn and Rush Checks decreased in FY 2014-2015 over the prior year. We also noted an increase in the number of direct deposit payments and a decrease in physical payroll checks (see chart below). This decreases the risk associated with physical checks and is more cost effective. We understand that the increase in the number of direct deposit checks and decrease in the number of physical checks is partly due to a request by the Vice Chancellor of Business and Administrative Services (BAS) in the Fall of 2014. Another contributing factor is at student orientations, Student Business Services (SBS) encourages direct deposit and direct deposit information is shared from SIS with PPS for student employees. However, this sharing of information will discontinue with the implementation of Banner and CashNet.

PC_CD=85 REG	Fiscal Year 2013-2014	Fiscal Year 2014-2015	Increase (Decrease)	% Increase (Decrease)
Direct Deposit	136,912	144,618	7,706	6%
Physical Checks	17,096	15,003	(2,093)	-12%

1. **Expense Transfers** (ET) – We noted a high number of payroll ETs associated with one unit, SOM (table below). SOM expense transferred 41% of their payroll activity and accounts for 49% of the university volume of expense transfers. On average, 5% of the payroll transactions are expense/cost transfers. Expense transfers if pertaining to C&G funds is an area of high risk and scrutiny by outside agencies. Exceptions in this area can put the University at risk of disallowed expenditures, penalties and fines and debarment. SOM management was notified and they indicated that the reason for the high number of transfers was due to a change in FAU structure in FY15, which precipitated many reclassification entries. They believe that these high volumes are much reduced in Fiscal Year 2015-2016. We verified that the Fiscal Year 2015-2016 volume of SOM payroll ETs to be 2,771 (a 70% reduction in volume).

Fiscal Year 2014-2015			
Unit	Count Payroll ET	Count Payroll Transactions	Count Payroll ET/Count Payroll Transactions
SOM	9,186	22,558	41%
School of Business Administration	400	4,102	10%
BCOE	1,568	19,138	8%
CHASS	1,445	23,507	6%
Computing & Communications	555	10,455	5%
Planning & Budget	79	1,659	5%
School of Public Policy	33	1,112	3%
Intercollegiate Athletics	100	3,455	3%
CNAS	1,410	48,873	3%
VCSA	2,724	98,321	3%
UNEX	321	11,713	3%
Chancellor/EVC	58	2,240	3%
CE-CNAS	71	2,899	2%
Graduate Division	34	1,445	2%
University Library	158	7,734	2%
Graduate School of Education	40	2,190	2%
Vice Chancellor - Research	34	1,954	2%
Vice Chancellor - University Advancement	50	4,721	1%
BAS	446	50,762	1%
Undergraduate Education	38	8,460	0%
Palm Desert Graduate Center	2	833	0%
Control Functions (ORG23)	51	27,393	0%
UC Institute for Mexico and the United States (MEXUS)	-	555	0%
Academic Senate	-	241	0%
International Affairs	-	2	0%
	18,803	356,322	5%

2. TARS

- a) **Average Number of Timesheets submitted by Departmental Time & Attendance Administrator (DTAA), by Unit** – A review of a bi-weekly and monthly timesheet cycle in December 2014 indicates that BAS Shared Services (SS) processed 17% of timesheets with 3% of campus DTAA's and averaged 247 submissions per DTAA (see chart below). As of December 2014, BAS SS was processing Library payroll so transactions pertaining to Library are included in the BAS SS figures. Since this analysis, BAS SS has expanded its client base (e.g. CHASS, etc.). A&AS has requested additional access to data next year to try to determine payroll accuracy for SS and units that continue to process in a decentralized fashion.

One Bi-Weekly and the Monthly TARS Timesheets in December 2014			
Unit	Count of DTAA	TARS Timesheets Processed (TS)	TS/DTAA
BAS SS (including Library)	3	740	247
Computing & Communications	1	187	187
Intercollegiate Athletics	1	136	136
SOM	1	117	117
UNEX	2	169	85
CNAS	7	583	83
Vice Chancellor - University Advancement	2	140	70
SOBA	1	60	60
Undergraduate Education	6	218	36
Graduate School of Education	1	36	36
Planning & Budget	1	35	35
VCSA	33	1,125	34
Chancellor/EVC	2	66	33
BCOE	11	247	22
CHASS	18	352	20
Palm Desert Graduate Center	1	13	13
Vice Chancellor - Research	5	47	9
Graduate Division	2	18	9
School of Public Policy	2	15	8
Academic Senate	1	7	7
CE-CNAS	1	5	5
UC MEXUS	2	7	4
University Library	-	-	-
Total Campus	104	4,323	42
Campus excluding BAS SS	101	3,583	35
BAS as a Percentage of Total Campus	3%	17%	

- b) **Overprovisioning DTAA role in Enterprise Access Control System (EACS)** – We noted in two units examined that there was an overprovisioning of the DTAA role in EACS. For example, even though only seven individuals processed transactions as DTAA's in CNAS Non-Academic and Academic Payroll Service Unit (NAPSU/APSU) shared service center for the month and payroll cycles examined, we counted 18 individuals across the unit with such access. It is our understanding that NAPSU/APSU is the central service center that performs payroll/HR functions for CNAS including DTAA functions. CNAS has coordinated with the various departments to remove the extraneous access.

- c) **User and Supervisor Timesheet Approval (negative confirmations)** – A review of one bi-weekly and one month of timesheets in June of 2015, indicates that 1% of timesheets were not approved by employees and 3% of timesheets were not approved by supervisors in the time specified. A lack of supervisory approval by the required date creates a negative confirmation. BCOE had the highest count of negative confirmations at 27 (11% of timesheets). The onus is on the departments to follow-up with the supervisors to indicate their subsequent approval in TARS. However, there is no reporting mechanism to verify compliance.

University Policy IA-101, states: *“Daily attendance and job time records, including sick leave and vacation accrual records, shall be maintained on a formal and current basis. Individual attendance and job time records shall be approved by the employee’s supervisor ...”* and *“...payroll control standards are presented in terms of the most desirable operating conditions. There may be situations ... when existing conditions may provide adequate control within the intent of the standards. In such situations, variance from these control standards must have the written approval of the Chancellor...”*

Business & Financial Services has indicated in response to an observation in the R2012-21 Leave Accounting audit report that if the supervisor does not approve the timesheet, and once the negative confirmation notification process is generated, that they are by default approving the timesheet. They acknowledge that although it may be a best practice for the supervisor to positively indicate their concurrence with the timesheet, management believes that the negative confirmation approval process within TARS is within policy, and an exception from the Chancellor is not required.

- d) **Compensatory Time** – We noted several individuals in the Department of Theatre with high levels of Compensatory Time Accrued and taken in FY 2014-2015. Additionally, several of these individuals surpassed the 240-hour cap on compensatory time and were not paid out per policy PPSM-30. The department has indicated that they reviewed staffing and are now in compliance with the payout policy.
- e) **Edits** – We noted that there were no automated controls to prevent individuals from exceeding 24 hours in a day. In one case, the individual had over 500 hours in a biweekly pay period. In another case, one individual had 195.50 hours in a biweekly pay period. The departments corrected these errors and Computing & Communications has indicated that they will put hard stops on hours/day.
- f) **4 a.m. Clock-in Times for Interfaced Timeclock Systems** – We noted that some interfacing time clock systems were bringing over 4 a.m. clock-in times (regardless of actual clock-in time) and computing clock-out times according to the number of hours interfaced. TARS is intended to calculate pay based on canonical rules that rely on accurate

clock-in and out times, in particular for collective bargaining units. C&C indicated that the correct clock-in and out times will be interfaced into TARS going forward.

- g) **Number of manual adjustments to Timeclock entries** – In our review of the June 2015 Timeclock hours, we noted one department in the Library with a high number of timesheet edits (74 edits for 15 individuals). The unit indicated that there were occasional issues with the availability of the Timeclock, which required a high number of manual edits. They indicated that they kept records of the hours worked in these cases for audit purposes and that the system has been more stable since these occurrences.
- h) **Overnight Hours** – We noted one instance where an individual was paid for hours overnight (including sleeping time), while at a multi-day off-campus event. The department indicated that this was standard practice as the employee was a chaperone, ‘on-call’ and needed to be available for any issues with the attendees. This appeared to be inconsistent with policy PPSM-30, which says:
- *Activities Before or After the Work Schedule - When the University requires an employee to change into or out of uniform, engage in special washing or cleaning procedures, or perform other activities on or at a University facility before or after the work period, the time spent in such activities is considered time worked.*
 - *On-call –*
 - *An employee is considered to be in on-call status only when assigned by the University. On-call will be considered time worked when it is restricted, i.e. an employee is required to restrict personal activities so that the employee cannot use his/her time effectively for the employee’s own purposes*
 - *On-call will not be considered time worked when it is unrestricted, i.e. an employee is free to engage in activities for his/her own purposes, but is required to inform the University how he/she can be reached or to carry a University owned mobile device.*

Information provided by the department indicated that this was addressed with Labor Relations (note that this individual is not represented). Labor Relations provided information that this was an employee supervising kids at an away camp and referenced FSLA regulations which states:

“Sleeping Time and Certain Other Activities: An employee required to be on duty for 24 hours or more may agree with the employer to exclude from hours worked bona fide regularly scheduled sleeping periods of not more than 8 hours, provided adequate sleeping facilities are furnished by the employer and the employee can

usually enjoy an uninterrupted night's sleep. No reduction is permitted unless at least 5 hours of sleep is taken.”

Labor Relations indicated that they consulted with the Office of General Counsel who indicated that if the University did not have an agreement to not count the hours as hours worked, then they need to pay for that time.

It is not unusual for employees to act as chaperones at camps and other events. Labor Relations indicated that they could develop language to use for such assignments to clarify the policy.