
UW-Madison Lawson Assessment Project

Final Report

September 2005

Table of Contents

EXECUTIVE SUMMARY	2
PURPOSE.....	2
FINDINGS.....	2
PROJECT BACKGROUND	3
PROJECT INITIATION	3
PLANNING	3
EXECUTION	3
<i>Discovery</i>	4
<i>Solution Modeling</i>	4
CONCLUSION.....	4
<i>Solution Considerations</i>	4
<i>Assumptions</i>	5
<i>Open Items for Implementation Planning</i>	5
<i>Financial Results of Project</i>	6
APPENDICES	7
APPENDIX 1 - SOLUTIONS COST MATRIX BY GAP.....	8
APPENDIX 2 - GAP IMPACTS AND SOLUTION RECOMMENDATIONS.....	13
APPENDIX 3 - SOLUTIONS THAT SOLVE MULTIPLE GAPS	19

Executive Summary

Purpose

The Lawson Assessment Project (LAP) was initiated as one of two projects approved by the Chancellors to investigate whether, 1) given a decision to proceed with a Lawson implementation, how the gaps identified by UW-Madison could be met in the Lawson system or 2) if a PeopleSoft solution is a more viable solution than Lawson to address the appointment, benefits, and payroll needs of the University. The PeopleSoft evaluation project was conducted independently from the Lawson Assessment Project (LAP) and is not included in this report.

Findings

The project team went through a two phase process to 1) fully document UW-Madison gaps and 2) determine potential solutions for the gaps. The following is a breakdown of the findings:

- 27 gaps were confirmed by UW-Madison at the start of the project
- 191 possible solutions were identified to resolve those gaps
- 75 were rejected after further analysis
- 116 were fully modeled to determine how well they met the gap
- 54 of the 116 are recommended for implementation

Detailed descriptions of each gap and the individual cost of each solution can be found in the appendices of this document. Cost and timeline estimates were applied to each solution. The total cost to build the 54 solutions is estimated between \$4.9M and \$6.3M. This cost includes \$837,000 - \$1M for a Lawson environment upgrade from 8.0 to 8.1. Although the upgrade is generally considered to be part of the normal application maintenance process, it is included in this estimate because it also resolves specific UW-Madison gaps. Additionally, it is important to continue to expand the Kronos system for time recording to all remaining staff in order to achieve greater efficiency. The cost of this project is not included here since APBS can be implemented in parallel with work to complete the Kronos installation.

The estimates do not include expenditures for implementing the remaining tasks to go live with the Lawson solution. These remaining tasks include completion of functionality not yet available (see page 6), unit testing, system testing, parallel testing, training, procedures development, communications, go-live preparation, and others. Estimates for these remaining activities still need to be determined as part of the overall APBS go-live plan.

In conclusion, most of the gaps represent functionality that exists today in the legacy system, the loss of which would make using Lawson much more cumbersome and time-consuming. We propose that all recommended solutions be included in the new APBS project plan since these recommendations address the known UW-Madison business gaps, can provide benefits to other campuses, and still allow the University System to achieve a successful Lawson go-live.

Project Background

Project Initiation

The project was initiated using the industry standard methodology from the Project Management Institute and structured according to three process groups:

- Planning
- Execution
- Closing

The Execution process group was further divided into two phases, **Discovery** and **Solution Modeling** which is documented below.

Planning

The LAP team was composed of individuals from UW-Madison, HRIS (who formerly worked on the APBS project), and Lawson Software. This structure was chosen to provide a broader perspective within which to evaluate the gaps. The team was organized into four major areas with representation of parties participating in each area:

- Human Resource (HR) and Benefits (BN) Team – to address five HR gaps and one Benefits gap
- Payroll (PR) and Leave Processing (LP) Team – to address twelve PR gaps and four LP gaps
- Technical Team – to address five technical gaps
- Quality Assurance Team – to quality-assure the process and deliverables of each team from both a functional and Lawson technical position

Each team had a team lead that reported to the project manager. A Lawson Team Lead/Project Manager participated as a liaison to the Lawson Software organization. In addition, various individuals across campus and within the Lawson and HRIS organizations participated part-time as subject matter experts on 'satellite' teams.

Throughout the Discovery and Solution Modeling processes, the QA team reviewed and approved each gap deliverable before final sign-off. The QA team was composed of independent Lawson-experienced consultants and one UW-Madison technical resource to ensure that objective analysis was applied to evaluating the gaps for authenticity and the solutions for appropriateness.

Execution

The project was conducted using an industry standard process to determine what the gaps were and how they could be solved. This resulted in two phases of activity, Discovery and Solution Modeling, which are described below.

Discovery

The project began with 29 gaps in the current Lawson design as identified through parallel test. During the Discovery phase, gaps were validated, confirmed and agreed to by the project team and participating satellite team members. Each gap was documented and verified for the following elements:

- Business requirement
- Reason/Impact of the gap
- Gap description
- Business basis for the current design in Lawson

At the end of the Discovery phase, three of these gaps were eliminated and one was split into two, resulting in 27 total gaps that were moved forward to the Solution Modeling phase.

Solution Modeling

The Discovery documents were then used to model possible solutions. For each gap, the team brainstormed all potential solutions. When determining possible solutions, the team considered four categories of how to meet the gap: 1) re-configure **Lawson**, 2) develop a **workaround**, 3) create a **customization**, or 4) change a **business process**. For every gap, several solutions were identified.

After identifying the potential solutions, each solution was evaluated for reasonableness, technical feasibility, and most importantly, ability to meet the business need. If the solution did not meet these criteria, it was rejected. If it did have the potential to meet the criteria, it was further analyzed to determine how it could be implemented. For each solution, the team documented the associated value, the impact, and the risk.

Conclusion

Solution Considerations

As solutions were identified that best fit the gaps and met the business needs of UW-Madison, several considerations were weighed before final recommendations were made. Firstly, no solution was recommended if it was determined to negatively impact other campuses (e.g., workload, process change, overhead). In fact, we believe several recommendations included in this report provide benefits to one or more non-Madison campuses.

Secondly, solutions were considered that focused on the UW-Madison specific gaps to provide a workable and acceptable go-live for the Lawson system. In some cases however, a solution such as Kronos was considered to meet several gaps. Since Kronos was already deemed a strategic system-wide project prior to LAP, it was determined to be more appropriate to keep Kronos focused at this strategic level. The project team instead evaluated and recommended solutions to the gaps that could bring a Lawson solution to go-live in a more timely manner.

Assumptions

Several assumptions have been made in developing the recommendations and estimates for the proposed solutions:

- The UW-Madison gap solutions would be implemented as part of the APBS project go-live. They would not be executed as a separate project thereby saving redundant project team and equipment costs.
- The costs and timelines built into the solution estimates are based upon the assumption that the work teams would consist of a project manager, some Lawson functional and technical consultants, UW technical staff, and UW functional staff to design, build, and implement the solutions. The teams should include key functional and technical staff that will have the responsibility for the ongoing support of the solutions.
- A total duration for completing all the solutions is not included in this report. The timeline and cost estimates for the gap solutions have been developed independently of each other. It is possible that a solution may have a dependency on the completion of another solution. However, this would need to be determined during the development of the APBS project plan.
- During estimating, the assumption was made that resources to fill these needs were available to complete the required work. The reality may be however, that not all resources are available at the same time. It is expected that resource assignments and requirements will also be finalized in the project plan

Open Items for Implementation Planning

The following list represents known functionality that was either not available during parallel test or confirmed to not meet the Madison business needs at the time of this report. It is expected that these items will be validated when the APBS project resumes. The cost and time to implement these functions must be calculated when the overall plan and budget are prepared for restarting the project.

- Fiscal Year Initialization
- Summer Payroll Process
- Fiscal and Calendar Year Splits
- Individual Tax Forms (W-2, 1042-S, Scholarship/Fellowship)
- Annual Benefit Updates
- Pay Plans
- Unemployment Compensation Process
- Yearly Allocations for Leave
- Year-End Leave Options
- Budget Interface

- SFS Interface
- Data Warehouse History
- Med Foundation Process

Financial Results of LAP Project

The project was completed ahead of schedule and under budget. The project management technique of Earned Value Analysis (EVA) was applied to determine earned schedule value against planned schedule value as well as actual cost to accomplish what was earned. This analysis was reported to management on a weekly basis in order to anticipate and thereby eliminate schedule and cost variances in advance of them occurring. There were no significant negative variances at any time during the project.

A total budget of \$1.3M was expected to be spent to earn 10,700 hours of work plus associated expenses. The actual cost of the project was approximately \$750,000 including expenses. These variances were a result of completing the work more quickly than planned and spending less on expenses and consulting than budgeted. In summary, the project came in \$550,000 under budget.

Appendices

Appendix 1 - Solutions Cost Matrix by Gap

The following spreadsheet contains the listing of the 27 gaps and the 54 associated solutions with their individual costs.

Costs						
Gap #	Gap by Category (Shaded are recommended)	Type of Solution	Recommended Go-Live Solution (excludes everything after unit testing)	Not Recommended	Estimated Calendar Weeks to Complete	Notes
BN-01	Benefit enrollment start date and actual effective date					
1.1	Lawson provides additional benefit dates	Lawson	\$0		0	
HR-02	More detailed security classes/profiles					
1.1	Pilot Lawson Security at UW-Madison	Lawson	\$180,000 - \$220,000	\$192,000 - \$230,000	17	Requires Lawson 8.1. See TE-26 1.1 for 8.1.
1.2	Change to Lawson security	Lawson		\$181,000 - \$217,000	42	
1.3	Create additional LAUA security classes	Lawson			17	
3.1	Develop front end system	Custom				See pricing in HR03-3.1
3.2	Security to the position process level	Custom	\$105,000 - \$130,000		11	
4.1	Investigate DW security changes	Process	\$1,000 - \$2,000		1	
HR-03	Faster way to enter employee, positions, and position termination dates					
1.1	Tune HR 11 performance	Lawson	\$17,000 - \$21,000		2	
3.1	Develop front end system - Phase 1	Custom	\$1,400,000 - \$1,700,000		60	Phase 2 adds \$150,000 and 25 weeks. Excludes cost for purchase and installation of Phonetic Search and Workflow software. Staffing requirements for support is 2.5 FTE.
3.2	Consolidate Lawson position forms	Custom		\$55,000 - \$66,000	8	
HR-04	Duplicate position ID's					
3.1	Add edit to PA52.5 and unique index for position	Custom	\$13,000 - \$16,000		2	
HR-05	HR and higher education data integrations					
2.1	Develop more reports to function as after-the-fact editing	Workaround	\$45,000 - \$55,000		5	
3.1	Add additional functionality to PA52.5 and combine HR forms	Custom		\$62,000 - \$75,000	8	See pricing in HR03-3.1. Combine with HR03-3.1 and PR15-3.4
3.2	Develop front end system - Phase 1	Custom	-		-	
3.3	Batch update process to sync position assignment/dates	Custom		\$32,000 - \$38,000	5	
PR-06	Student Help integration					
3.1	Hire students in STAPS, pay them in Lawson	Custom	\$260,000 - \$315,000		32	
3.2	STAPS is system of record but ID is assigned by Lawson	Custom		\$91,000 - \$109,000	136	
3.3	Split person-related payroll data between STAPS and Lawson	Custom		\$122,000 - \$146,000	182	
3.4	All Madison students hired in Madison front-end and paid in Lawson (this gap requires that the Front End system in HR3-3.1 be completed as well)	Custom		\$1,550,000 - \$1,960,000	155	
PR-07	Fellows and pre-tax deductions					
3.1	Create report to identify pre-tax RA's	Custom		\$15,000 - \$18,000	5	
3.2	Create bolt-on to automatically change their status	Custom	\$22,000 - \$27,000		4	
PR-08	Faster, more efficient way to enter funding					
1.1	Utilize Lawson's ProcessFlow (includes initial installation of ProcessFlow software)	Lawson	\$165,000 - \$200,000		24	
1.2	Standardize/sync PR end dates on Standard Time Record	Lawson & Process	-			
3.1	Utilize Madison Funding Project	Custom		\$1,600,000 - \$1,900,000	77	Staffing requirement for support is 1 FTE. Combine with PR09-3.3 and PR18-3.1
3.2	Redesign Lawson's Standard Time Record	Custom	\$16,000 - \$20,000		2	
3.3	Kronos - include funding information	Custom		\$1,308,000 - \$1,570,000	112	
3.4	Use STAPS for funding - include an interface	Custom		\$310,000 - \$372,000	62	
3.5	Utilize Grants Mgt with an interface to Lawson	Custom		\$279,000 - \$335,000	32	

Costs						
Gap #	Gap by Category (Shaded are recommended)	Type of Solution	Recommended Go-Live Solution (excludes everything after unit testing)	Not Recommended	Estimated Calendar Weeks to Complete	Notes
3.6	Auto load of funding from MSN HR front-end	Custom	\$ 490,000 - \$ 980,000		30	
3.7	Pre-calc funding edit report	Custom	\$ 106,000 - \$ 128,000		8	
4.1	Force encumbrances for all unclassified employees	Process		\$9,000 - \$11,000	1	
PR-09	More efficient way for time entry					
1.1	Redesign security	Lawson		\$11,000 - \$13,000	4	
1.2	Utilize Lawson's ProcessFlow	Lawson		\$130,000 - \$156,000	14	
2.1	Auto-run P2131 and P2235	Workaround			-	Combined with 3.4
3.1	Utilize Kronos for all time entry and edit	Custom			121	Although Kronos was identified to meet several gaps, the implementation of Kronos is considered to be a separate project from the APBS project. Interfacing Kronos to Lawson will result in additional costs not included in LAP estimates.
3.2	Redesign P233	Custom			-	Combined with 3.4
3.3	Utilize Madison Funding Project	Custom			-	Combine with PR08-3.1 and PR18-3.2
3.4	Redesign P2235	Custom	\$55,000 - \$67,000		6	
3.5	Use STAPS for funding - include an interface	Custom		\$363,000 - \$436,000	84	
PR-10	Reduced user down-time during payroll calculations					
1.1	Run calc jobs concurrently	Lawson	\$110,000 - \$130,000		13	
1.2	Move the SFS interface to earlier in the calc process	Lawson	\$31,000 - \$37,000		3	
1.3	Eliminate 'employee detail' run of PR141 (payroll register)	Lawson	\$0		0	
1.4	Disk subsystem upgrade	Lawson	\$500,000 - \$600,000		2	
4.1	Allow read-only access to users during the calc	Process		\$71,000 - \$85,000	8	
4.2	Divide calc into three components	Workaround		\$0	0	
4.3	Start the calc process a day earlier	Workaround		\$53,000 - \$64,000	2	
HR-11	Dates associated with future actions					
2.1	Employ additional training	Workaround		\$2,000 - \$3,000	1	
3.1	Add second level to existing pending actions Drill Around	Custom	\$21,000 - \$26,000		4	
PR-12	FICA eligibility management					
3.1	Use unused field to store FICA eligibility information	Custom	\$30,000 - \$37,000		16	
PR-13	Check correction tracking					
2.1	Enter adjustments in Excel and load via MS Add-Ins to PR82	Workaround		\$11,000 - \$13,000	8	
3.1	Lawson bolt-ons to track check corrections	Custom	\$210,000 - \$250,000		18	
PR-14	Tracking of intermittently paid employees					
1.1	Utilize currently designed PR35.2	Lawson		\$0	0	
1.2	Enter time in Excel and upload to Lawson	Lawson		\$12,000 - \$14,000	2	
1.3	Utilize P2131 and P233	Lawson		\$0	0	
1.4	Utilize PR30	Lawson		\$0	0	
1.5	Combination of solutions 1.3 and 1.4 above	Lawson		\$0	0	
3.1	Utilize Kronos	Custom			0	
4.1	Eliminate weekly payments	Process		\$0	0.2	Combine with PR09-3.1 and LP20-3.4
4.2	Pay Supervisory Teachers through AP	Process		\$0	0.2	Combine with PR09-3.1 and LP20-3.4
PR-15	Merging of duplicate employees					
1.1	Correct records of employees with multiple IDs	Lawson	\$75,000 - \$90,000		6	Combine with 3.3 and 4.2
1.2	Void and extract incorrect payments and load via PR560	Custom		\$24,000 - \$29,000	3	
3.1	Automated bolt-on to extract and combine payments	Custom		\$191,000 - \$228,000	21	
3.2	Online edits upfront (EVS)	Custom		\$141,000 - \$170,000	15	

Costs						
Gap #	Gap by Category (Shaded are recommended)	Type of Solution	Recommended Go-Live Solution (excludes everything after unit testing)	Not Recommended	Estimated Calendar Weeks to Complete	Notes
3.3	Phonetic match report	Custom	-	-	-	Combine with 1.1 and 4.2
3.4	Front end process (this gap requires that the Front End system in HR3-3.1 be completed as well)	Custom	-	-	-	See pricing in HR03-3.1, Combine with HR03-3.1 and HR05-3.2
3.5	Advanced screen look up to prevent duplicate entry	Custom	\$110,000 - \$132,000		8	
4.1	Charge back process	Process	\$0		0	
4.2	Education of impact on corrections	Process	-		-	Combine with 1.1 and 3.3
4.3	Tie to performance review	Process	\$0		0	
PR-16	Override deduction management					
1.1	Utilize MS Add-Ins to mass load global changes	Lawson	\$5,000 - \$7,000		1	
1.2	Turn on Lawson's arrears functionality	Lawson	\$16,000 - \$19,000		2	
1.3	Utilize Lawson's ProcessFlow	Lawson	\$100,000 - \$125,000		12	Software installation cost included in PR08 - 1.1
3.1	Create bolt-on to track global deduction changes	Custom	\$53,000 - \$64,000		6	
3.2	Identify change in position class via custom report	Custom	\$17,000 - \$20,000		2	
PR-17	Sort and burst reporting options at division level					
1.1	User creates and manages employee groups	Lawson	-		-	Combined with 3.3
3.1	Deploy Cypress data mining tool	Custom	\$37,000 - \$44,000		4	\$7,425 per year fee
3.2	Use MS Add-Ins to extract data	Custom	\$23,000 - \$28,000		2	
3.3	Redesign currently developed reports	Custom	\$175,000 - \$210,000		18	
4.1	Generate both CSV file and report	Process	\$44,000 - \$53,000		4	
4.2	Create reports from Lawson tables at a campus level	Process	\$6,000 - \$8,000		1	
4.3	Publish reports to the web via Crystal Enterprise	Process	\$36,000 - \$43,000		4	
PR-18	Loading skeletal payroll records from encumbrance system					
1.1	Lawson's ProcessFlow creates standard time records	Lawson	-		14	See PR08-1.1
3.1	Utilize Madison Funding project	Custom	-		-	Combine with PR08-3.1 and PR09-3.3
3.2	Create interface between existing encumbrance system and Lawson Payroll	Custom	\$ 85,000 \$ 105,000		10	
LP-20	Positive time reporting					
1.1	Create a 'No Report' plan to track employee responses	Lawson	\$35,000 - \$42,000		3	
1.2	Enter enhancement request with Lawson for flag on LP31	Lawson	\$40,000 - \$47,000		5	
3.1	Modify P234 to add a Leave Report Submitted flag	Custom	\$63,000 - \$75,000		8	
3.2	Use Design Studio to modify LP31 to a 'No Report' field	Custom	\$63,000 - \$76,000		8	
3.3	Create a separate front end to track who turned in a report	Custom	\$98,000 - \$118,000		12	
3.4	Utilize Kronos to track, maintain, and report leave	Custom	-		-	See PR09-3.1
LP-21	Automated leave forecasting when term date is entered					
1.1	Enhancement request has already been submitted to Lawson	Lawson	\$34,000 - \$42,000		5	
3.1	Build an online calculation application	Custom	\$101,000 - \$122,000		11	
3.2	Create a report to calculate the future leave balance	Custom	\$102,000 - \$122,000		11	
LP-22	Leave limits for employees with multiple positions					
1.1	Re-evaluate current configuration for accuracy	Lawson	\$37,000 - \$45,000		4	
1.2	Submit a request to Lawson for correction	Lawson	\$22,000 - \$26,000		3	
1.3	Manually enter adjustments	Lawson	\$11,000 - \$13,000		2	
3.1	Utilize Lawson's ProcessFlow to make adjustments	Custom	\$105,000 - \$126,000		12	
3.2	Create report to identify employees who accrued over the limit	Custom	\$58,000 - \$70,000		7	

		Costs				
Gap #	Gap by Category (Shaded are recommended)	Type of Solution	Recommended Go-Live Solution (excludes everything after unit testing)	Not Recommended	Estimated Calendar Weeks to Complete	Notes
LP-23	Personal holidays for new hires					
1.1	Re-evaluate current configuration for accuracy	Lawson	\$36,000 - \$44,000		4	
1.2	Submit a request to Lawson for correction	Lawson		\$22,000 - \$26,000	3	
1.3	Manually enter hours for new hires	Lawson		\$11,000 - \$13,000	2	
3.1	Utilize Lawson's ProcessFlow to make adjustments	Custom		\$105,000 - \$126,000	12	
3.2	Create a report to identify new hires	Custom		\$58,000 - \$70,000	7	
TE-24	Checkpoint restart controls from bulk update failure					
2.1	Use existing restart procedures in Lawson update program	Workaround	\$0		0	
2.2	Include hot backups prior to calc process	Workaround	\$9,000 - \$11,000		3	
2.3	Investigate the feasibility of using RMAN backup within the calc process	Workaround	\$10,000 - \$13,000		4	
TE-25	Non SOA-friendly architecture					
2.1	Build web service interfaces	Workaround		\$153,000 - \$184,000	20	
2.2	No action - wait until Landmark	Workaround	\$0		0	
TE-26	User metadata storage inconsistencies					
1.1	Environment upgrade to Version 8.1.0	Lawson	\$837,000 - \$1,000,000		47	Also recommended as part of HR02-1.1. Can be phased in to meet outstanding gaps yet still allow for an earlier go-live.
1.2	Take no action	Lawson			0	
TE-27	Concurrent database updates					
1.1	Fix identified Lawson bug	Lawson	\$2,000 - \$3,000		1	Already in progress
3.1	Notify end user of a concurrent update via Design Studio	Custom		\$32,000 - \$38,000	0	
4.1	User initiated re-query	Process		\$0	0	
TE-30	Cypress Report Distribution Time					
3.1	Further disperse reporting queues	Custom	\$9,000 - \$12,000		1	
3.2	Upgrade Cypress hardware and software	Custom	\$0		0	Already in progress
3.3	Evaluate Lawson Business Intelligence (LBI)	Custom	\$4,000 - \$6,000		1	

Cost Per Column: \$4,899,000 - \$6,318,000 \$8,532,000 - \$10,219,000

Lawson Solution: 20
Workaround: 6
Custom: 24
Process: 4
Total Number of Recommended Solutions: 54

Appendix 2 - Gap Impacts and Solution Recommendations

The list below represents the impacts of each gap to UW-Madison and a detailed description of the proposed solutions. This list is cross-referenced to the recommended (shaded) solutions listed in the Cost Matrix in Appendix 1 and contains a more detailed explanation of each gap and the associated solutions.

BN-01 - Benefit enrollment start date and actual effective date: The current configuration of Lawson does not allow for easy identification of the actual benefit coverage effective/end dates vs. the benefit deduction dates. Compared to the legacy system, considerable manual effort will be required to determine actual benefit coverage periods in Lawson. In addition, date interpretation errors will be common due to the confusion between the two types of dates.

Solution: Evaluate the future Lawson release to determine if the dates are separated in that release.

HR-02 - More detailed security classes/profiles: Security is too broadly defined in the Lawson product. Granting data access to users beyond what is needed to perform their jobs is a serious business risk for the University and much more likely to result in users updating the wrong pay or position record.

Solution 1.1: The new Lawson security is role-based and can be defined at the division level for UW-Madison. Pilot this new security at UW-Madison with a gradual transition to the new product system-wide.

Solution 3.1: Implement security in the front end system (see HR-03 below) so that users do not need to have access to Lawson for data entry.

Solution 3.2: Modify Lawson security so that users are able to add and pay employees who have positions in the users' process level regardless of the employee (HR11) process level.

Solution 4.1: Evaluate data warehouse security to see if it is possible and advisable to allow data warehouse users to request and be authorized for a data warehouse data view that is different than the Lawson default data view. This will meet the requirements of users who have different needs from each system.

HR-03 - Faster way to enter employees, positions, and position termination dates: It takes multiple forms (up to seven) to enter new employee and position information into Lawson, which results in a time-consuming position entry process. With the volume of new positions during peak work months, it will be impossible to enter all new position data with existing staffing levels.

Solution 1.1: Optimize HR11 performance by reviewing how the database tables and indices utilized by this form are distributed.

Solution 3.1: Build a front-end system that collects employee, position, funding, and Higher Ed data with a minimum number of forms and loads the data into Lawson.

HR-04 - Duplicate position ID's: The Lawson system allows position IDs to be reused. Systems that interface with Lawson (e.g., SFS and Budget) require a unique position ID. It will require significant manual effort to identify and fix records with duplicate position IDs in these downstream systems.

Solution 3.1: Add an online edit to PA52.5 to prevent duplicate position IDs from being assigned on position personnel actions. Add a unique index to the employee position table that forces 'position' to be unique within the database.

HR-05 - HR and higher education data integrations: Compared to the legacy system, the Lawson system does not include as many data integrity edits and no "cross-edits" between fields. This could result in bad data being entered into Lawson and will require the development of additional data

monitoring reports as well as additional staff to clean up the bad data. Bad data from Lawson will migrate to other systems (e.g., IAA, Budget, and SFS), which adds to the data cleanup effort.

Solution 2.1: Create reports that identify bad data in the Lawson database as defined by UW-Madison edit rules.

Solution 3.2: Build a front-end system that collects employee, position, funding, and Higher Ed data with a minimum number of forms and loads the data into Lawson. The front end system includes UW-Madison edits and automatically syncs position and position-related (e.g. probation/tenure) dates.

PR-06 - Student help integration: There are more than 8,000 student hourly appointments and 6,000 graduate appointees at UW-Madison. Employees are transitory between these two groups and were to be maintained in two separate systems in Lawson. This would require the hiring of additional staff in order to handle the amount of manual effort required to keep data synchronized and in compliance with federal regulations, as well as the efforts in correcting errors arising in related systems caused by employees having multiple identification numbers (e.g. foreign nationals).

Solution 3.1: Continue hiring students in STAPS but use an assigned employee and position ID from Lawson. STAPS would continue to use Kronos for time capture that is loaded into Lawson via an interface. STAPS would also be used for Work Study functionality. Students would be paid in Lawson with wages interfaced back to Work Study for maintenance of funding and balances.

PR-07 - Fellows/Research Assistants and pre-tax deductions: Fellows and Research Assistants, totaling 3,400, are not eligible for pre-tax deductions. Allowing the pre-tax deductions would violate being in compliance with the tax regulations and would increase the workload associated with payroll reconciliations.

Solution 3.2: Create a bolt-on that identifies individuals ineligible for pre-tax deductions and automatically changes their deduction to after-tax. This will also limit the amount of pre-tax deduction to the amount of taxable wages.

PR-08 - Faster, more efficient way to enter funding: A good percentage of payments made to faculty and staff are made from multiple funding sources having various expiration dates. For example, the Medical School has approximately 1,300 funding changes to process each month. Managing these transactions in the currently configured Lawson system may require the hiring of additional staff at the divisional level.

Solution 1.1: Utilize Lawson's ProcessFlow capabilities to identify partial month requirements and create the appropriate Standard Time Record.

Solution 1.2: Standardize/synchronize payroll end dates to a monthly period on Standard Time Records regardless of campus affiliation and pay basis to a monthly period.

Solution 3.2: Redesign Lawson's Standard Time Record form to move the corresponding funding fields and pay cycles to each time record line.

Solution 3.6: Edit and interface funding entered into the HR Front End into Lawson for use during the payroll calc.

Solution 3.7: Modify P2235 to call the SFS combo edits and other edits in order to alert payroll end users of possible funding problems.

PR-09 - More efficient way for time entry: Compliance with the FLSA regulations in Lawson requires that the entry of hours is done on a weekly basis, at a minimum. In addition, tasks previously done centrally would have been delegated to hundreds of users. Both of these processes require additional staff and equipment resources.

Solution 2.1: Set up a process for HRIS to run regularly scheduled P2131 and P2235 jobs sorted by Time Entry Group so that campuses don't have to create their own Time Entry Group. Users will still have the ability to run these ad hoc if they need to.

Solution 3.2: Redesign the P233 Time Entry Employee Positions screen to make data entry more efficient and facilitate easier validation.

Solution 3.4: Redesign the P2235 Payroll Entry and Edit Source screen to more closely resemble the current edit report and make balancing easier.

PR-10 - Reduced user downtime during the payroll calculations: If the payroll calculation process began at noon, locking all users out of the system, the result is a loss of 3,000 work hours for users on the Madison campus per month.

Solution 1.1: Run Lawson calc jobs concurrently to balance smaller versus larger populations of groups so that the calc could complete faster.

Solution 1.2: Move the SFS interface to an earlier point in the calc process.

Solution 1.3: Eliminate the 'Employee Detail' run of the PR141 (Payroll Register) to speed up processing. Use the Company totals version of the report instead and other calc reports for employee detail.

HR-11 - Dates associated with future actions: Complete information about present and past-dated individual and job actions can be accessed using Lawson Drill Around. However, that is not possible for future-dated actions. Finding complete information about future-dated individual and job actions is a multi-step process that adds to the user's workload and increases the likelihood that the user may not notice that a future-dated action exists. If that happens, the user may make an incorrect business decision on behalf of the affected employee, because the user does not have the complete information.

Solution 3.1: Add a second level to existing 'Pending Individual Actions' Drill Around to retrieve detailed information about the pending action.

PR-12 - FICA eligibility management: This gap risks compliance with FICA regulations and introduces manual efforts in managing FICA eligibility changes for 3,000 monthly graduate students at the beginning and end of the summer.

Solution 3.1: Store a FICA eligibility indicator in an unused field on the employee position record in Lawson (PA13). Using the Pay Code Swap program, swap the pay code on the position's time record to the appropriate FICA-exempt pay code.

PR-13 - Check correction tracking: Thousands of adjustments are made each year, modifying previously calculated pay checks. Not resolving this gap may increase the likelihood of duplicate entry of corrections and adjustments and could result in being out of compliance with tax regulations without substantial manual intervention. In addition, it increases the possibility of providing misinformation to employees by several hundred points of contact on the UW-Madison campus.

Solution 3.1: Track check corrections through Lawson bolt-on's and enhancements, enabling a link between the correction and the original payment. Enhance Pay Stub Inquiry (PR51) to include adjustments and account for one-time deductions.

PR-14 - Tracking of intermittently paid employees: UW-Madison has at any one point in time approximately 500 to 1000 employees who are paid on an intermittent basis. Not resolving this gap results in a loss of current functionality and would require the establishment of a manual shadow system.

Solution 1.5: Use PR35.2 and PR2131 to enter time records for intermittently paid employees. Create a separate time entry group from that of non-intermittent employees to store them all in one place.

Solution 4.1: Convert all weekly paid employees to bi-weekly.

Solution 4.2: Pay Supervisory Teachers through AP.

PR-15 - Merging of duplicate employees: Occasionally employees will get multiple person records created under different identification numbers which require the cross-referencing of these records to make withholding, reporting and reconciliation processes under the correct ID number. This gap is a loss of functionality from the currently legacy system. For employees who have been paid using multiple employee numbers, the Lawson system was estimated to require an additional four hours of work per error to correct this situation.

Solution 1.1: Correct records of employees with multiple IDs using enhanced procedures.

Solution 3.3: Create a phonetic match report to aid in the identification of duplicate employees.

Solution 3.4: Use the Front End system to enhance edit checking to reduce the entry of duplicate employees.

Solution 4.2: Conduct education sessions regarding compliance issues and the labor intensive nature of correcting duplicate entry errors, emphasizing the integrated nature of a comprehensive HRIS.

PR-16 - Override deduction management: UW-Madison has a large amount of movement among its various groups of employees which could involve different pay basis, program eligibility rules, etc. The Lawson system necessitates manual intervention and could result in incorrect deductions for a substantial number of employees.

Solution 1.1: Utilize MS-Add Ins to mass load changes and/or exceptions when global changes are necessary. Provide an after-the-load edit report to verify entry.

Solution 1.3: Use Lawson's ProcessFlow to send notification of a new or dropped position when an individual has both a classified and an unclassified position.

PR-17 - Sort and burst reporting options at the divisional level: Within the Madison's Payroll and HR distributive model, there are different reporting and administrative structures among the Divisions and Schools within UW-Madison. There was a loss of functionality as Madison's distributive model and multiple sort option business requirements were not accommodated.

Solution 1.1: Utilize Lawson's Employee Group functionality to create Time Entry Group populations to sort reports by this defined group.

Solution 3.3: Modify existing reports to include sort parameters. Allow users to create and maintain their own Employee Groups.

PR-18 - Loading skeletal payroll records from the encumbrance system: UW-Madison at its peak period could have 3,000 to 4,000 new employees which include the monthly graduate stipends as well as funding department changes within different payroll groupings. This process was not replicated which created a loss of functionality requiring an increased resource level to handle the thousands of transaction updates necessary on a monthly basis.

Solution 1.1: Use ProcessFlow to pull the appropriate field values from the position record of an unclassified position to create a standard time record on PR30 for the appropriate amount and date.

Solution 3.2: Create an interface between the existing Encumbrance system and Lawson Payroll for unclassified employees.

LP-20 - Positive time reporting: The lack of positive time reporting capabilities is a loss of functionality which breaks the legislative requirement which could result in the UW losing the sick leave conversion program in which certified sick leave dollars pay for health insurance premiums upon retirement, death, etc.

Solution 1.2: Submit an enhancement request to Lawson to add a flag on LP31 Employee Absence Plan Master.

Solution 3.1: Use Design Studio to add a 'No Report' field on LP31 and populate the field for reporting purposes using ProcessFlow.

LP-21 - Automated leave forecasting when term date is entered: An automated forecasting "modeling" tool currently exists that assists users in responding to queries from employees and supervisors, as well as the management of sick leave and other leave during leave of absences, etc. The increased manual effort due to this loss of functionality in Lawson would require the user to invest an additional amount of time and be more prone to errors.

Solution 1.1: Submit an enhancement request to Lawson to provide an online form that would provide this functionality (already submitted as of this writing).

Solution 1.2: Create an online form to calculate future leave balances for an employee based on termination date, leave of absence date, changes in FTE, appointment status, pay basis, and other position attributes.

LP-22 - Leave limits for employees with multiple positions: The current configuration allows employees having multiple appointments to exceed their leave allocation. This gap requires the user to manually identify and correct leave records.

Solution 1.1: Re-evaluate the current Lawson configuration to ensure that this delivered functionality has been configured correctly.

LP-23 - Personal holidays for new hires: The Lawson set-up does not have an automatic process to grant all new 'eligible' employees personal holidays. Manually adding personal holiday records for each new hire would be an increased work load.

Solution 1.1: Re-evaluate the current Lawson configuration to ensure that this delivered functionality has not been configured incorrectly.

TE-24 - Restarting and Rerunning Calc Programs: Ensure that all payroll calc programs delivered by Lawson and developed by APBS are re-startable and re-runnable. Without the ability to restart the calc from a failure point, updated data must be restored to its pre-calc state and the entire jobstream must be re-executed. All applications and processes 'downstream' of the calc (SFS, Cypress, DOA funding, etc.) would therefore be delayed by at least one day.

Solution 2.1: Use existing logic in Lawson update programs to restart from a failure.

Solution 2.2: Include hot backups prior to the calc process to allow the database to be rolled back to its pre-calc state.

Solution 2.3: Include backups at strategic points within the calc process to allow the database to be restored to a specific point in the calc jobstream.

TE-25 - SOA Incompatibility: Service Oriented Architecture defines the use of independent services accessed in a standardized way to support business requirements. In the spirit of SOA, Web Services provide a homogeneous approach to integrating web-based applications, allowing organizations to share data without needing to know the details (hardware platforms, software languages, user interfaces, etc.) of each system. Not addressing this gap does not support UW System's strategic direction for interoperability architecture.

Solution 2.2: Wait until Lawson's Landmark product is available to satisfy this gap.

TE-26 - Metadata Fragmentation: Metadata is data that describes other data. Information about product lines, system codes, data elements, index definitions, file relationships and reserved words are examples of IT system metadata. In Lawson, metadata is stored in sequential (i.e., 'flat') files and in multiple locations, making technical management of the data more cumbersome and time consuming. Not addressing this gap increases the complexity and time required to backup and recover these files. Non-relational files also present a greater risk of corruption and severely limit content browse and search capabilities.

Solution 1.1: Upgrade to Lawson version 8.1.0 environment when the APBS project resumes.

TE-27 - Concurrent Updates: When adding a transaction with "immediate" functionality in PA52.5 (Position and Job Action), multiple users can unknowingly access and update the same record at the same time. Not addressing this gap results in the possibility of lost, inconsistent or incorrect data without user notification..

Solution 1.1: Submit a defect fix to Lawson to repair the error (already submitted as of this writing).

TE-30 - Cypress Report Distribution: Post-calc reports must be delivered to Cypress inboxes by 6:30am the day following the calc. Departments begin processing these reports at start of business the following day. A delay in the arrival of calc reports protracts analysis and corrections activities based on the reports.

Solution 3.1: Create additional reporting queues including dedicated and discrete queues for large reports such as the voucher or leave reports.

Solution 3.2: Upgrade the Cypress server with a faster machine and install the latest version of the software (already in process)

Solution 3.3: Evaluate the Lawson Reporting Suite (LRS), when it becomes available, as an alternative solution for bursting and distributing reports.

Appendix 3 - Solutions that Solve Multiple Gaps

The following list represents single solutions that when implemented can wholly or partially resolve several gaps.

The **Process Flow** solution contributes to solving the following gaps:

- PR08 – Faster, more efficient way to enter funding
- PR16 – Override deduction management
- PR18 – Loading skeletal payroll records from encumbrance system

The **Front End** solution contributes to solving the following gaps:

- HR02 – More detailed security classes
- HR03 – Faster way to enter employee, positions, and position termination dates
- HR05 – HR and higher education data integration
- PR08 – Faster more efficient way to enter funding
- PR15 – Merging of duplicate employees

The **8.1 Upgrade** solution contributes to solving the following gaps:

- HR02 – More detailed security classes
- TE26 – User metadata storage inconsistencies