DATA INTEGRITY PROJECT FINAL REPORT

Presented by:
Cambridge West Partnership, LLC

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Purpose of the Document

The purpose of this document is to present to Peralta Community College District (PCCD) the findings of the Data Integrity Project. The project was designed to assist PCCD with examining the integrity of the data currently collected for reporting and reviewing the related processes used to optimize student success and the alignment of the MIS reporting with the Student-Centered Funding Formula (SCFF). The focus was to work directly with the District and college staff to evaluate the current MIS workflow process, review current policies and procedures and to develop Data Map/Element Dictionary documents. A comprehensive look at all student information systems used and the processes used to populate these systems was conducted. An emphasis on comparing best practices at similar California Community Colleges was done throughout the project.

Executive Summary

Peralta Community College District (PCCD) engaged Cambridge West Partnership, LLC (CWP) to assist them with data integrity and the documentation of data collection processes to optimize alignment with the Student-Centered Funding Formula (SCFF). The CWP team worked with the Steering Committee to evaluate and make recommendations with regards to data collection, storage, processing, validation, and submission.

Project Overview

The project was accomplished in two phases: Discovery and Design. During the Discovery phase a document review was completed, an environmental scan of best practices was performed, Chancellor's Office data mart data for the District was reviewed and staff were interviewed across the District. From the reviews and interviews, the Process Flows and Data Map/Element Dictionaries were created to depict the current processes and data capture activities used in collecting all MIS data. These maps were organized around the MIS data groupings used by the Chancellor's Office. The Process Flows and Data Map/Element Dictionaries were then sent out to the interviewees for review and comment to verify accuracy in the depiction of current processes. The feedback from the interviewees was incorporated into the Process Flows and Data Map/Element Dictionaries.

From the Process Flows and Data Map/Element Dictionaries a Fit/Gap analysis was performed to identify those concerns that could result in loss of funding, loss of students or wasting of resources not being effectively/efficiently used. Those identified deficiencies are termed "Gaps".

During the Design phase, the process and Data Map/Element Dictionaries were analyzed, and Proposed Process Flows were developed which identify the gaps and additional "findings" which are conditions that need to be addressed to make the institution better but do not raise the level of a gap. Those Proposed Process Flows were also shared with the interviewed staff for input and reaction. Changes were incorporated when warranted. In addition, from the environmental scan and document review general findings were identified. Finally, a report of all gaps, findings and recommendations was prepared for the institution. The details of those findings and the resulting recommendations are presented in this report.

Findings

In summary, twelve (12) Gaps were identified in the Fit/Gap analysis which resulted in 30 Gap Recommendations. Those are presented in Summary of Tasks – Gap Recommendations in Priority Order (Appendix D).   In addition, twenty-eight (28) additional department specific recommendations were identified and are presented in the Summary of Tasks – Recommendations by Department (Appendix D).

Project Plan

The project was completed in three parts. The graphic below depicts the two phases of Discovery and Design accomplished during the project:
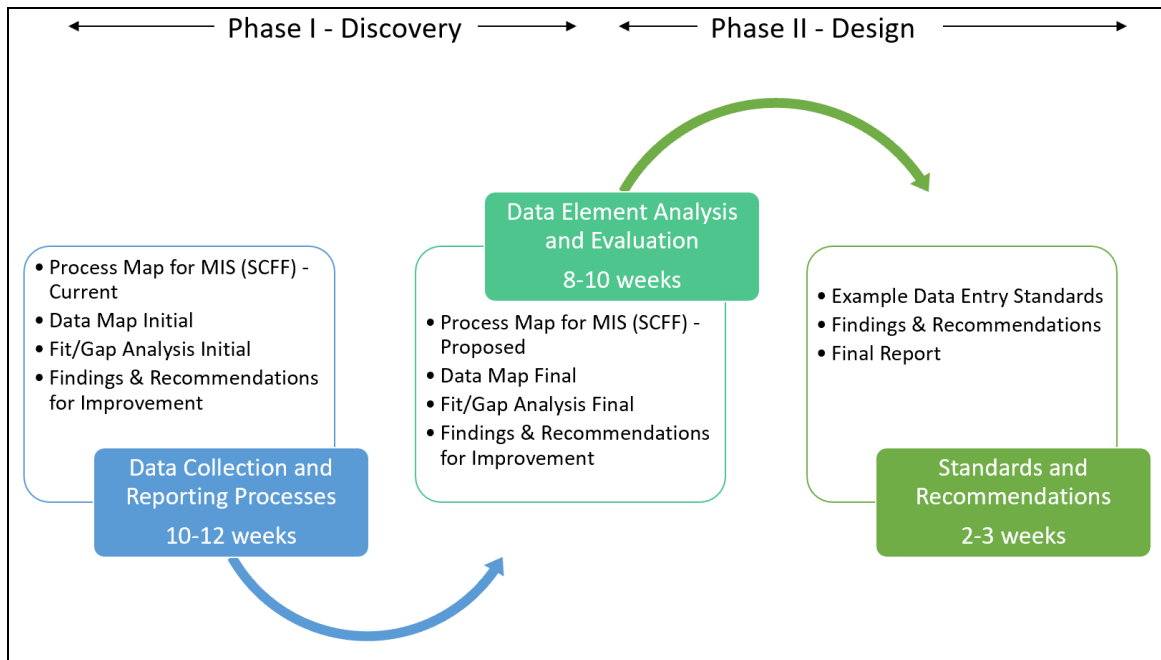
The first part of the project, Data Collection and Reporting Processes, resulted in the documentation of current Process Flows, drafts of the Data Map/Element Dictionaries for each MIS grouping of data and a Fit/Gap Analysis including findings and recommendations for improvement of existing practices in the processing of District data.

The second part of the project focused on Data Element Analysis and Evaluation. This part of the project reviewed the information collected during the Data Collection and Reporting Process analysis and resulted in proposed Process Flows and refined Data Map/Element Dictionary for each MIS element grouping as well as updated recommendations for improvement related to the Fit/Gap Analysis. These results are the action items that the District should undertake to improve processes and ensure all the necessary data is being collected and processed accurately and in a timely manner.

The third part of the project, Standards and Recommendations included a review of data governance best practices used by other educational institutions and examination of existing data governance policies and data entry standards at PCCD. The result is example Data Entry Standards for the District to evaluate, refine and adopt.

The final report also includes a Summary of Tasks (Appendix D). The Summary of Tasks includes additional columns for the institution to use in tracking the progress of implementation of the tasks including identification of a responsible party, target completion date and status. This can be used to continue the necessary work to ensure data integrity across the institution.

Project Timeline

The actual timelines for the three parts of the project are presented below.

Data Collection and Reporting Processes

The following is the final timeline for the Data Collection and Reporting Processes work:

	Peralta Community College District																
	Data Integrity Project																
	Timeline																
NOTES	Timeline projections based on initial project description																
	Timeline may change based on input from Steering Team & interview schedules																
									Timeline								
					Nov - Dec			**Holidays**		**January**				**February**			
10-12 Weeks	**Data Collection and Reporting Processes**		**Dates**	**Status**	30-4	7-11	14-18	21-25	28-1	4-8	11-15	18-22	25-29	1-5	8-12	15-19	22-26
1-6	Document review and interviews at District & campuses		Nov 30-Jan 22	Complete													
	Initial data gather to develop current process maps		Jan 4-Feb 5	Complete													
7-8	Product Development - Current process/ data maps drafts		Jan 25-Feb 5	Complete													
9	Campus & District review current process map drafts		Feb 8-12	Complete													
10	Coordinate work with IT		Feb15-19	Complete													
11	Product Development - Current process/data maps final		Feb 22-26	Complete													
Products	•Process Flow for MIS - Current																
	•Data Map/Element Dictionary -Initial																
	•Fit/Gap Analysis Initial																
	•Findings & recommendations for improvement																

Data Element Analysis and Evaluation

The following is the final timeline for the Data Element Analysis and Evaluation work:

					Timeline						
				March				**Holiday**	**April**		
8-10 Weeks	**Data Element Analysis and Evaluation**	**Dates**	**Status**	1-5	8-12	15-19	22-26	29-2	5-9	12-16	19-23
1-2	Product Development - draft proposed process/data maps	March 1-12	Complete								
3	Product Development - draft data entry standards	March 15-19	Complete								
4-5	Campus & District review draft proposed process/data maps	March 22-April 9	Complete								
6	Product Develop - update draft proposed process/data maps	April 5-16	Complete								
7	Coordinate work with IT	March 22 -26	Complete								
8	Finalize proposed process/data maps & data entry standards	April 5-23	Complete								
Products	•Process Flow for MIS - Proposed										
	•Data Map/Element Dictionary for all data elements - Proposed										
	•Data Entry Standards - Proposed										
	•Findings & recommendations for improvement										

Standards and Recommendations

The following is the final timeline for the Standards and Recommendations work:

				Timeline		
				April		
2-3 Weeks	**Standards and Recommendations**	**Dates**	**Status**	12-16	19-23	26-30
1-2	Prepare final report with findings & recommendations	April 12-23	Complete			
3	Present findings & recommendations	April 13; April 26-30	Complete			
Products	•Final Report					

Project Phases

The work to gather data and analyze the information during the Discovery and Design phases of the project is described below. The data and information produced from these efforts resulted in the recommendations for improvement which are presented in the next section of this report.

Phase I – Discovery: Current Process Flows and Fit/Gap Analysis

Current Process Flows

The process for information and data gathering, conducted during the project Phase I - Discovery, consisted of interviews with district and college personnel. Over one hundred (100) staff members were interviewed as documented in Table 1 below. The interviews were conducted in December, January, and February via Zoom meetings. Follow-up information was collected using email and additional zoom meetings. Each functional area was interviewed, with separate interview sessions for management and classified/faculty.

The interview with each functional area began with a review of the Management Information Systems (MIS) data model which is shown in Figure 1 below. This data model has been utilized by the California Community College Chancellor's Office (CCCCO) Digital Innovation and Infrastructure Division for over thirty (30) years and represents the data reported by each college and District. The integration of the data and the dependencies between files was highlighted in each interview with a focus on that functional area's place in the data model. Very few of the functional areas interviewed had seen the model prior to the meeting, but every area was interested in the extent of data integration and how their area's data fit into the overall data structure. During the remainder of the interviews, the procedures for data input and reporting were reviewed to document the systems and processes used in the collection of MIS data. Interviewees were also asked to provide their view of improvements in data integrity that should be implemented. Following the interviews, individual phone contacts and email messages were used for clarification and correction as needed.

Table 1 – PCCD Community College District Staff Interviewed

Area / Department	Focus of Interview- MIS Elements	District	Berkeley City College	College of Alameda	Laney College	Merritt College
Curriculum	CB	Amany Elmasry	Nancy Cayton	Frank Nguyen Jane Smithson	Heather Cisneros	LaShaune Fitch
Scheduling	XB, XE, XF	Amany Elmasry	Johnny Dong	Min Wu	Derek Lee	Jane Fong
Institutional Research	ALL	Steven Chan Sriram Battineni Helen Ku Bao Yang	Phoumy Sayavong	Dominique Benavides	Clifton Coleman	Nathan Pellegrin
DSPS	SD		Dolores Harshaw Brenda Johnson	Rachel Goodwin Shalamon Duke	Nate Failing Diane Chang	Francis Moy
EOPS/CalWorks/CARE	SE, SC/CW		Ramona Butler Brenda Johnson	Lydell Willis Shalamon Duke	Dingyao Huang Mai Ly Cynthia Alvarado Lynne Williams Feke Lauti Mildred Lewis	Judith Adams Rachel Ellis Margie Rubio Carmen Johnson
VTEA/Perkins	SV	Steven Chan	Karen Croley Joya Chavarin	Eva Jennings Dominique Benavides	Peter Crabtree	Marie Amboy
Veterans	SG		Jennifer Lenahan	LaShawn Brumfield	Jean Carey	Margie Rubio Stefani DeVito
Special Student Programs	SG		Ronda Johnson	Shalamon Duke	Diane Chang Gary Albury Feke Lauti	Brock Drazen Jose Salcedo Taukeeda Anderson Rosa Flores

Area / Department	Focus of Interview- MIS Elements	District	Berkeley City College	College of Alameda	Laney College	Merritt College
A&R	SX, SB, SP	Charlotte Smith Sylvia Cortez Thomas Torres-Gil	Gail Pendleton Loretta Newsom Elinor Chin Hue Hyunh Brenda Johnson	Amy Lee	Tina Tobor Angel Huang Joseph Koroma Mildred Lewis	Jamila Saleh Maryhelen Kaufman Susana De La Torre Marisol Chavez Margie Rubio Maria Spencer
Financial Aid	SF/FA	Abigail Umale Eugene Cheng Steven Chan	Loan Nguyen Nghi Dong Brenda Johnson	Angie Harris	Joseph Koroma	Ernesto Nery
Human Resources	EB, EJ	Ruby Andrews Khang Ho				
Counseling/ESL Counseling	SS		Gabriel Martinez Dana Cabello Susan Truong	Vivian Virkkila Edwin Towle Shalamon Duke	Diane Chang Kathy Ma	Lisa Webb Rosa Perez Jose Salcedo
IT	ALL	Antoine Mehouelley Teresa Chan Chiran Adusumalli Frank Chez				
Management	ALL	Siri Brown Adil Ahmed Ron McKinley Antoine Mehouelley	Angelica Garcia Stacey Shears Kuni Hay	Don Miller Tina Vasconcellos	Mark Fields Vicki Ferguson	Denise Richardson Lilia Chavez

Figure 1 – Chancellor's Office Management Information System Data Model
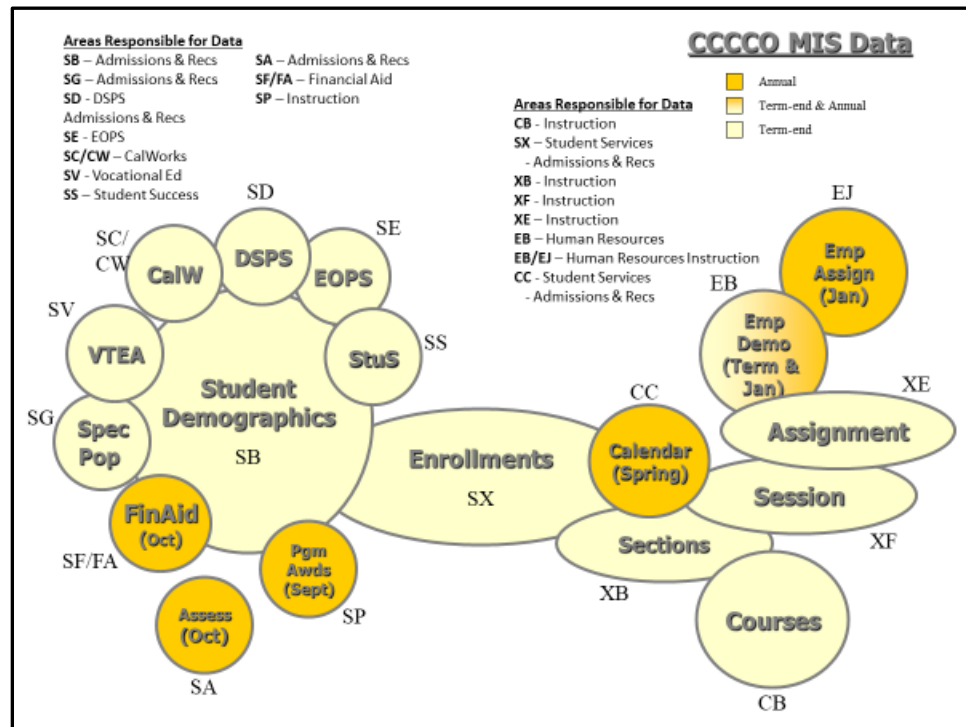
From these interviews, three deliverables were created: 1) the Fit/Gap Analysis, 2) current Process Flows, and 3) the draft Data Map/Element Dictionaries. Recommendations for improvement were identified and documented in the Fit/Gap Analysis which is presented later in this report.

Two Process Flows for each MIS data element grouping were created to document current processes and illustrate recommended process changes. The current process documents illustrate the MIS files reported to the Chancellor's office including the sequence of steps required to gather the data and create the files. The proposed Process Flows are duplicates of the current Process Flow with highlighted changes to clearly identify what process changes should be made to improve collection and reporting of District data.

The steps documented in these flows include (see Figure 2 below) the following:
- starting and stopping points for each flow represented by an oval,
- activities or tasks represented by a rectangle,
- complex processes represented by a box with internal side bars, and
- decision points represented a diamond.

In addition to process steps, data storage and reports were documented in the flows and notated in the following manner (see Figure 2 below):

- database resources were represented by cylinders, and
- reports and written documents were represented by a rectangle with a bottom curved line.

Finally, recommendations for process change were highlighted using a large red circle (see Figure 2 below).

Figure 2 - Process Flow Symbols
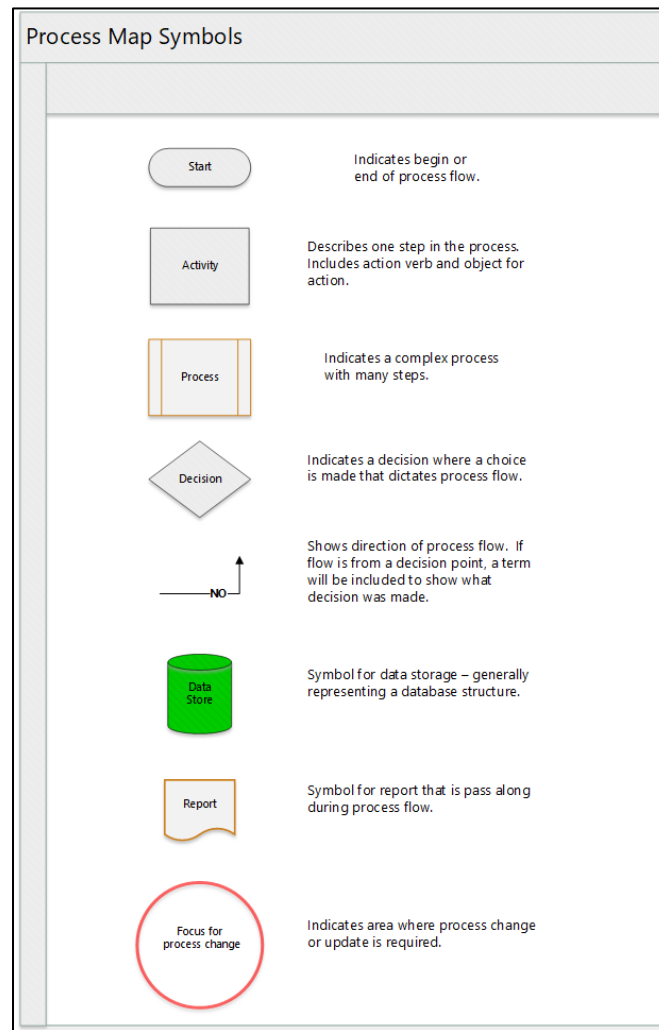
Additionally, the Process Flows were also designed to clearly show the departments that participate in each process. Each department was represented as a separate column called a "swim lane". This format shows the tasks completed by each organization as well as information, forms and data passed between departments. Each transition between departments is a critical step and represents a chance for lost information or miscommunication. Figure 3 below demonstrates how organizations are represented in Process Flows.

Figure 3 - Identification of Departments Involved in a Process

Department 1	Department 2	Department 3	Department 4

During the interviews, the systems used by the various departments were identified and documented in Figure 4 below:

Figure 4 – Systems Used Across the District
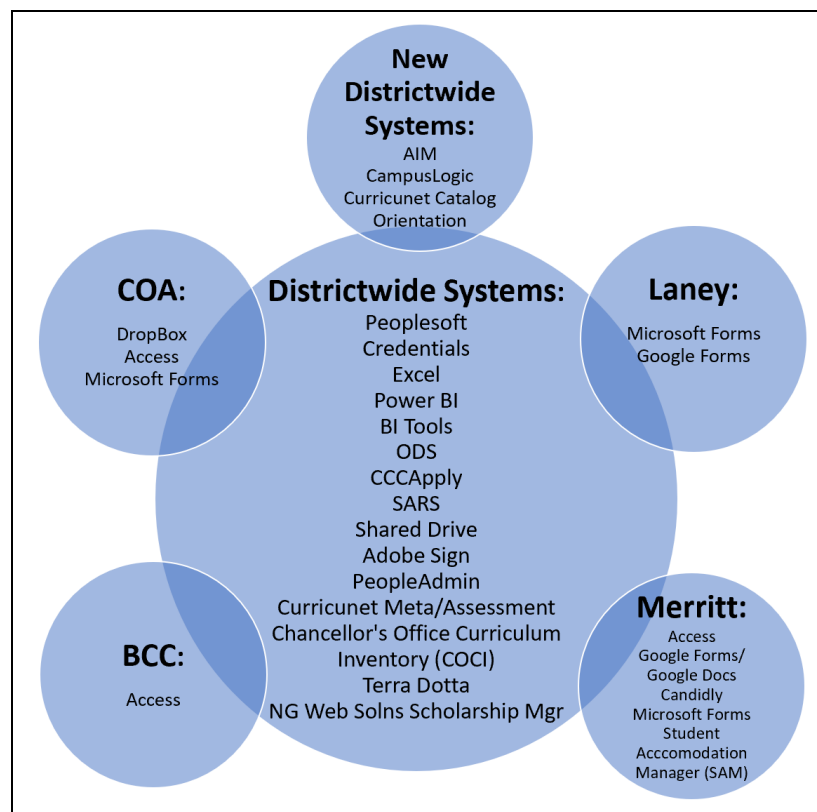
One the strengths of PCCD is the acquisition of shared systems across the District which results in consistency for students and staff in the technology used and reduces costs of maintenance and the cost of developing interfaces with other systems. CWP recommends the continuation of this practice to acquire shared systems across the system.

Fit/Gap Analysis

During the collection of data to create the Process Flows, analysis was done to assess the fit of each process and identify gaps in the processes which were causing sub-standard results in the data reporting. This analysis resulted in a table of twelve (12) items that were identified and presented to management and the Steering Committee. The Fit/Gap Analysis was presented in the table format in Figure 5 below:

Figure 5 – Fit/Gap Analysis Example

In the Fit/Gap Analysis the item number, a description of the gap, the reasoning for the gap and a recommendation to address the gap were presented. The complete Fit/Gap Analysis is presented later in this report.

	Gap Description	Reasoning	Recommendation
1	Training and Cross-training of staff inadequate	• Retirements have resulted in lost institutional knowledge regarding data quality and maintenance • Staff report that they do not understand how the system works with regards to reporting functions	Use the resulting Process Flows from this report to facilitate annual review of processes, cross-training of existing staff and training of new staff

Phase I/II – Discovery/Design: Proposed Process Flows and Data Map/Element Dictionary

Proposed Process Flows

For each MIS reporting group, a proposed Process Flow was created. The basis for the proposed Process Flows were the current Process Flows with annotations. To highlight recommended changes to the current Process Flow, the findings and recommendations were applied to each current Process Flow using a red circle notation with a brief description of the recommended change in an associated text box.

Data Map/Element Dictionary

A Data Map/Element Dictionary spreadsheet was produced for each MIS reporting group. The data for this was gathered from multiple sources including:

- Interviews conducted with PCCD staff;
- Documentation of the MIS reporting process documents from the PCCD Institutional Research Department;
- Documentation from the Management Information System of the Digital Innovation and Infrastructure Division of the Chancellor's Office;
- Student Center Funding Formula (SCFF) presentations provided by the Finance & Facilities Division of the Chancellor's Office; and
- Documentation for the Integrated Postsecondary Education Data Systems (IPEDS) reporting from the National Center for Education Statistics (NICES).

Information from each of these sources was related to each MIS element to document: 1) the element's source; 2) the processes used to analyze or derive the element for reporting; and 3) how the element is used for SCFF and IPEDS reporting. The same data in PeopleSoft and other systems is used for the CCFS-320 report but not drawn directly from MIS reported data. Theoretically, if the same data is used for both MIS and the CCFS-320 then the reporting is consistent but presented differently.

The Data Map/Element Dictionary files were created in spreadsheets to document each element in the CCCCO MIS report files as related to PCCD. These spreadsheets include the origin of the data, the location of the data in PeopleSoft, processing performed on the data to transform it and error checking processes performed at submission to the Chancellor's Office. Also included for each element is its relationship to data used in the Student Center Funding Formula, the CCFS-320 Apportionment Report, and the Integrated Postsecondary Education Data System (IPEDS)

reports submitted by the CCCCO MIS Department on behalf each California community college using MIS reported data.

The spreadsheets can be used by the institution to track where data is stored and understand how changes to the collection or processing of the data could affect other processes. In addition, the spreadsheets provide documentation for training.   Due to their size, the Data Map/Element Dictionary files will be delivered separately. The spreadsheet layout is provided in Appendix B. Each Data Map/Element Dictionary MIS element entry contains of the following information:

Grouping	Data	Col
SCFF, 320, IPEDS	Indication of use in SCFF reporting	A
	Indication of use in CCFS-320 reporting	B
	Indication of use in IPEDS reporting	C
MIS Element	MIS Element Code	D
	MIS Element Format	E
	MIS Element Name	F
Organization Responsible for Data	District Organization	G
	Berkeley City College Organization	H
	College of Alameda Organization	I
	Laney College Organization	J
	Merritt College Organization	K
Data Entry/PeopleSoft	Method of Collection	L
	Source Field Name	M
	Table	N
Customized System/PeopleSoft Staging Database	SQL Logic	O
MIS Checks	Syntactical Checks	P
	Referential Checks	Q
	Quality Checks	R

SCFF Relation to MIS Data Elements

There are three areas of allocation in the SCFF which require data from submitted MIS files. If an element is used in calculation of the SCFF, the column titled SCFF in the spreadsheet will have an "X" displayed. The use of MIS elements in SCFF is described below:

Base Allocation

While the Base Allocation is primarily based on the CCFS-320 Apportionment Report, information is also included regarding Inmate Correctional Facilities. This data is reported in the Special Population (SG) Data File.

Supplemental Allocation

Supplemental allocations are based on financial aid awards for federal Pell Grants and for state California College Promise Grants. This data is reported in the financial aid MIS files - Student FS Demographics (FA) and Student Awards (SA).

Student Success Allocation

Student Success Allocations are based on multiple measures. The chart below relates each measure to a MIS file submission.

Area	Measure	MIS Associate File
Degrees	Associates Degrees for Transfer	Student Program Award (SP)
	Associates Degrees	
	Baccalaureate Degrees	
Certificates	Certificates of 18+ units	Student Program Award (SP)
	9+ CTE Units	Course Basic (CB) Student Enrollment (SX)
Transfer	Successful Transfer to a four yea	Student Enrollment (SX)
	Completion of transfer-level math and English courses within first academic year	Course Basic (CB) Student Enrollment (SX)
Living Wage	MIS file data not applicable	N/A

CCFS-320 Apportionment Report Relation to MIS Data Elements

While data for the CCFS-320 Apportionment Report in not drawn directly from MIS file submission, elements that are critical for MIS reporting are also critical for CCFS-320 Apportionment Reporting. Ensuring this data is correct in MIS reporting will also ensure the data is correct for CCFS-320 Apportionment Reporting. Critical MIS files that report data elements also used in CCFS-320 Apportionment Reporting include:

- Course Basic (CB)
- Section Data (XB)

- Session Data (XF)
- Student Basic (SB)
- Student Enrollment (SX)

If the CCFS-320 column in the spreadsheet has an "X" in it that indicates that the element is also used in CCFS-320 reporting.

IPEDS Report Relation to MIS Data Elements

The CCCCO MIS Department reports IPEDS data to the National Center for Educational Statistics (NCES) for all California community colleges. An "X" in the IPEDS column indicates the element is used by the CCCCO for reporting to IPEDS. The CCCCO MIS Department uses MIS data to fulfill reporting for the following IPEDS reports:

Reporting Period	Report	MIS Files
Fall	Completions	Student Basic (SB) Student Program Award (SP)s
	12-month Enrollment	Student Basic (SB) Student Enrollment (SX)
Winter	Student Financial Aid	Student Basic (SB) Financial Aid - Student FS Demographics (FA) and Student Awards (SA)
	Graduation Rates	Student Basic (SB) Student Program Award (SP)
	200% Graduation Rates	Student Basic (SB) Student Program Award (SP)
	Admissions	Student Basic (SB) Student Enrollment (SX)
	Outcomes Measures	Student Basic (SB) Student Program Award (SP) Financial Aid - Student FS Demographics (FA) and Student Awards (SA)
Spring	Fall Enrollment	Student Basic (SB) Student Enrollment (SX) Course Section File (XB) Course Session File (XE)
	Human Resources	Employee Demographic (EB) Employee Assignment (EJ)

Phase II – Design: Standards and Recommendations

Standards

During the interviews, the method of data entry into the various systems was discussed. It was noted that standard forms for students are used across the District. In addition, standard coding is used for capture of student services rendered across the District as well. Also, the District uses common course numbering for all curriculum across the District. These practices are serving students and the District well and should continue.

One area of note is the lack of a set of data entry standards used for all data captured in the various systems at the District. This can result in inconsistent data and poor sorting/searching functionality.

Findings and Recommendations

Definitions

To assist the reader in understanding the Fit/Gap Analysis, Findings and Recommendations the following are the definitions used for this report:

- **Gap** – a gap is a condition that causes concern because the result could be loss of funding, loss of students or waste of resources not effectively/efficiently used
- **Finding** – a finding is a condition is something that needs to be addressed to make the institution better but does not raise the level of a gap
- **Recommendation** – recommendations provide specific guidance on what to do to overcome a gap or finding based on best practice

Research Findings and Recommendations

CWP did research on the latest best practices in policy, processes and standards used by other educational institutions to manage, protect and use data most effectively.

A summary of current research indicates the following common realities in higher education regarding data:

- Data is the new "oil" that will fuel the economy and drive decision-making
- Data debt, much like technical debt, is requiring too much time and resources to manage the data which is resulting in fewer resources spent doing new projects
- In addition, there is an onslaught of regulation and mandatory reporting (i.e. GDPR, etc.) requiring more and more time and resources to understand, assess and implement. This is in addition to staffing challenges and uncertain funding

- Data is often siloed and not integrated causing lack of confidence in incomplete and possibly conflicting information in reports and assessments resulting in a significant amount of time reconciling any differences
- The traditional governance approach of compliance and control has left many institutions disappointed with the results
- The resulting environment is unsustainable for many institutions

At PCCD, these realities are present as evidenced by the findings in the Fit/Gap Analysis and in several of the Recommendations presented later in this document.

Best practice indicates that a data governance policy and structure can result in trust-based adaptive governance which eliminates fragmented data and decision-making regarding data. This includes having a set of operational guidelines regarding data, a formal group who regularly reviews the guidelines, and a process for continual improvement.

Fortunately, the PCCD Steering Committee used to manage this project is best equipped to drive change to improve the management, protection and use of the institutions data.

CWP has developed a continuum of Data Usage and Management based on the research and on experience in working with other higher education institutions. It is depicted below:

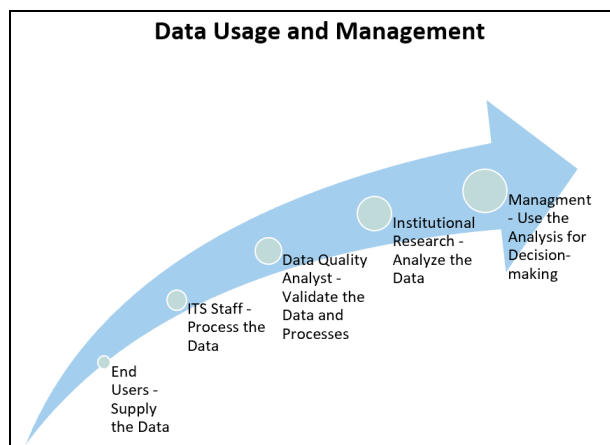**Diagram 1**

Diagram 1 depicts the various roles with regards to data usage and management that need to be present at an institution for it to effectively use and manage data over time. The roles include end users who supply the data through their daily activities, IT staff who process the data but do not have the expertise to know if the data is accurate, data quality analyst(s) who provide

validation of the data and processes, Institutional Research staff who regularly analyze the data and report out on the findings and management who uses the analysis done by institutional research for sound decision-making. If these components are present the institution will effectively manage and use data for improvement of the institution.

Based on current research and best practices presented, CWP presents the following recommendations and reasoning for consideration:

Recommendation	Reasoning
Develop a comprehensive set of data policies (Data Governance Policy) that addresses the following: • **Data Integrity** including the quality of the data expected (Data Entry Standards), ethical use of data, and terminology standards regarding institutional data • **Confidentiality** including the privacy, sensitivity, and security of data • **Availability** of the data including retention, storage locations and the timeliness of data availability An example of a foundational Data Governance Policy is presented in Appendix A.	• Data policies can reduce confusion and be a single source of truth regarding acceptable data management, security, and use • A level of trust regarding the data will develop over time because management, security and use are consistent • Decision making regarding data management, security and use will be centralized and more universally understood reducing staff time on these issues particularly for IT and Research departments
Use the Steering Committee for this project to be data stewards defined in the foundational Policy by: • developing the operational guidelines mentioned above, • tracking the implementation of the recommendations in this report. Further, consider having the person(s) filling the CWP recommended data quality analyst function as the chair of the committee. See Gap Analysis recommendation #5. The resulting Data Usage and Management organizational structure is shown in Figure 6 below.	• This committee has worked on this project from the outset and understands the importance of data stewardship • Many of the necessary members of the District community are present including Educational Services, Instruction, Student Services, Research, IT, etc. • This group can work to arbitrate any disputes about the use of data • This is not unlike the Institutional Review Board used in many institutions to study human subjects • The data quality analyst function can provide the support for the committee and be the interface between all the parties involved

Figure 6 – Data Usage and Management
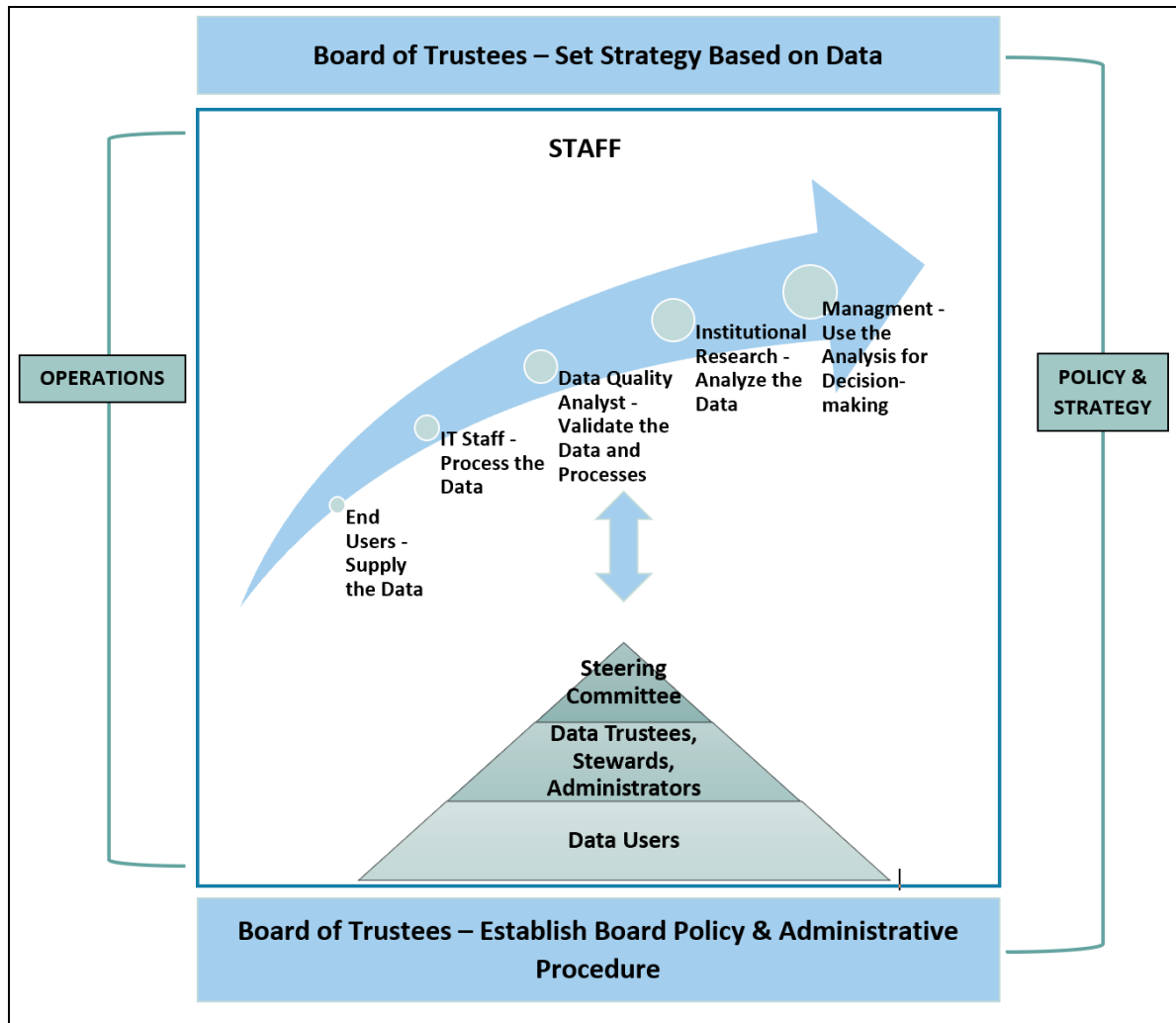
This figure uses the Data Usage and Management continuum and expands to show how the institution can be organized based on the example policy provided in Appendix A to effectively manage and use data. The Board of Trustees are responsible to set policy and strategy for data collection and usage. The Chancellor and District staff including the Steering Committee are responsible for the operations aspect of data collection, storage and management using the example Data Governance Policy presented in Appendix A.

Fit/Gap Analysis Recommendations

The Fit/Gap Analysis resulted in eleven (12) gaps identified by CWP. Table 2 below contains the gaps with the associated reasoning for the gap to be addressed and recommendations for improvement.

Table 2 – Fit / Gap Analysis

	Gap Description	Reasoning	Recommendation
1	Potential under-reporting of Financial Aid data	• Statewide average is 61.5% of students receiving Financial Aid; Peralta is at 41% which is significantly lower • Peralta is only reporting students enrolled at census for Financial Aid and not capturing students who may have attended one session of a weekly or daily attendance method course • Summer reporting may not have been captured • Mismatch of "fee waiver campus" with "attendance campus" may be causing reporting to be incomplete • Reporting of $0 promise grants of up to 7% not reported • Annual changes to financial aid are difficult to track	Involve Financial Aid staff in validation of MIS reporting to maximize funding Report all students who enroll and whose drop date is after the first class meeting Capture Federal Financial Aid reporting (Pell) as a trailer (Fall/Spring/Summer) Capture Promise Grant Financial Aid reporting (CCPG) as a header (Summer/Fall/Spring) When a student is granted a fee waiver at one of the four colleges, use a sync process to create the other three college fee waiver record – contact Los Rios CCD for advice on how to implement this change Report all $0 promise grants up to 7% of total reported students Hire a consultant twice a year (or more if needed) who is familiar with PeopleSoft to train staff on performing aid year and semester setup, review system setup and validate processing will be done properly; consider using BFAP funding

#	Gap Description	Reasoning	Recommendation
2	VTEA/Perkins funding may not be maximized	• Students who enroll walk-up (not online) are not completing the "Student Enrollment Survey" and potentially not being counted if they are taking VTEA/Perkins eligible classes • Courses that are part of the CTE Degrees/Certificates may not be coded as SAM A-D • Student Enrollment Survey contains much more data collection than just VTEA/Perkins which may be causing students to improperly answer all questions	Require all students to complete the "Student Enrollment Survey" regardless of how they register Perform a detailed analysis of all CTE Degrees/Certificates to make sure all courses and pre-requisites to those courses are coded SAM A-D Streamline the Student Enrollment Survey to ask only what is needed. For example: • Ask to verify email and phone and only update if needed • Remove educational goal/major for each semester – consider once a year • Move VTEA/Perkins to the top • Don't ask what is not necessary

	Gap Description	Reasoning	Recommendation
3	Student experience is not optimized	• Staff express concerns about student processes being cumbersome and frustrating for students • Staff express concerns regarding the lack of clarity for students regarding which District or campus department supports which functions (i.e. who do I call?) • Staff express concerns that systems are cumbersome and outdated • Student frustration may be causing students to explore other options which potentially affects funding opportunities • Registration process allows registration at all four sites yet four separate schedules are produced • Students are shared across all District sites • Educational plans are not consistently collected in the system and used to determine optimal course offerings • All campuses use shared systems and forms	Continue use of shared systems and forms across the District to minimize student confusion and frustration Develop process maps of the student experience from the student perspective and streamline processes where possible, including standardizing processes across all colleges Use educational planning capabilities and system data to optimize course offerings based on need to enhance student success Consider production of a single catalog and/or schedule of classes or online version that encompasses all four institutions

	Gap Description	Reasoning	Recommendation
4	Lack of clarity in roles & responsibilities in departments where both campus and District departments support a function	• Lack of clarity in roles and responsibilities for functions between campus and District staff in areas with both campus and District departments (i.e. Financial Aid, Admissions & Records) • Staff express concerns that students do not know who to contact for support with shared functions • Multiple departments are performing similar functions at the District and campuses	Examine current structure of departments at both District and campuses and optimize the structure to best support students and eliminate duplicate effort Clearly define roles and responsibilities of the similar departments at District and campus and clearly communicate this to students and staff

	Gap Description	Reasoning	Recommendation
5	Management and coordination of data is not formalized; no Data Governance policy Lack of trust in the data Data Quality is not a priority for the institution See Diagram 1	• End users report a lack of trust in the data because they do not have an opportunity to validate the data they produce before it is reported • Users not required to take responsibility for their own data; lack of clarity in roles and responsibilities regarding data collection and processing • There is no audit function prior to MIS submission in most departments; departments report that they do not see the MIS data until after the term is over in the form of error reports and data mart results • Users report data mart outcomes do not match department collected data resulting in possible lost funding opportunities • No formal coordination of data/processes across all departments • District IR is currently responsible for all reporting activities • Departments question the need to maintain the data if funding is not affected (i.e. SSSP) • Enrollment records often have a grade reported of "XX"	Develop and implement a Data Governance policy and structure Create district data quality analyst function for coordination of state reporting, federal reporting, and ad-hoc internal reporting Emphasize the importance of the data collection, reporting and analysis functions across the District by educating all those involved in these processes on the importance of data collection and reporting Involve users in all aspects of data collection, validation, and reporting End users should be performing data validation prior to submission of data using audit reports designed for each functional area

	Gap Description	Reasoning	Recommendation
6	PeopleSoft functionality not fully leveraged Custom SQL-based MIS reporting application developed in-house	• Staff often claim they do not understand the system functions in PeopleSoft and have not been trained in its use • Auto-awarding of degrees is not being done • Shadow systems, usually in the form of spreadsheets, are used to monitor and validate data and are more trusted than college systems • Customized system used for MIS reporting that has to be consistently maintained • Use of outside shadow systems creates a risk regarding the security of data	Complete an analysis to determine if PeopleSoft is used the fullest extent possible (i.e. Educational Planning, Degree Audit, Workflow, Absence Management, MIS etc.) Implement auto-awarding of degrees/certificates to maximize funding and service students Conduct a Cost/Benefit analysis of using consulting services versus in-house development to develop and maintain MIS reporting functionality
7	Multiple data stores are used for processing and reporting functions	• Currently there are three data stores: PeopleSoft, ODS Staging Database (MIS reporting), and Data Warehouse (BIDW) • Although all are connected the timing of the transfer processes may result in incomplete and inaccurate data reporting • IT must maintain multiple systems and data interfaces	Consolidate all data into one single source of truth using specialized consulting resources that can optimize performance and streamline maintenance

	Gap Description	Reasoning	Recommendation
8	Significant loss of institutional memory has occurred resulting in inadequate Training/Cross-training of staff with regards to functionality and reporting capabilities	• High turnover has caused a loss in institutional knowledge regarding data quality and maintenance • Staff report that they do not understand how the system works with regards to PeopleSoft functionality so they do not know how to best use the system • Departments report lack of support in the functionality and reporting capabilities of the systems • Departments report that they do not have subject matter experts in use of the PeopleSoft system	Develop subject matter experts in each department on system functions Use the resulting process and data maps from this report to provide functional training for department staff conducted by subject matter experts including: 1) facilitating an annual review of processes with end users, 2) cross-training of existing departmental staff and 3) training of new staff Provide system functionality training either in person or online
9	Lack of proper access to PeopleSoft and inadequate Training/Cross-training of staff with regards to functionality and reporting capabilities	• Staff report they do not have access to the system tools that would make them more responsive to student needs and more productive (i.e. report creation) • Staff report feeling discouraged because they do not have the tools to be effective • Departments rely on other departments who do have access to provide them information or they wait for IT to complete reports which often has a long lead time	Develop staff FERPA/security/reporting training and conduct the training with all staff who request additional access After training, grant access to system functionality and reporting capabilities that will make staff more self-reliant when it comes to reporting using PeopleSoft and help to eliminate shadow systems (i.e. outreach reports, enrollment verifications, etc.)

	Gap Description	Reasoning	Recommendation

10	Student attributes not systematically maintained	• Student groups maintained in PeopleSoft are not consistently reviewed and maintained by all departments which may affect funding
		• Home Campus is reported as an issue
		• Enrollment/Residency status is not systematically maintained in a coordinated fashion but done on a best-efforts basis in areas such as:
		    ○ Special Admit/Dual Enrollment Students
		    ○ International Students
		• Student WIA status is not collected and monitored
			Develop a methodology and assign responsibility for the maintenance of all student groups in PeopleSoft
			
			Develop standards for Home Campus designation and adhere to the standard across the District
			
			Develop a methodology and assign responsibility for Enrollment and Residency status for the maintenance of these in PeopleSoft
			
			Collect and report WIA status by creating a student group for this population

11	Dependency on manual and paper processes NOTE: specific recommendations are presented in Summary of Task – Recommendations by Department in Appendix D	• Use of manual data entry and the collection of data on paper is prevalent across all departments leading to inefficient use of resources • There is no digital imaging system in place which allows easy access to student information • Workflow capabilities are not used either within a department or across departments	Eliminate manual entry where possible – use electronic data capture such as online forms and systems which interface directly with PeopleSoft Select and implement a digital imaging system that is integrated with PeopleSoft Implement the use of workflow where possible to streamline processes and share information

	Gap Description	Reasoning	Recommendation
12	Annual MIS resubmission only by request	• Annual MIS submissions are done only by request • Data is frequently updated after initial capture to correct errors and update records which may not be captured in MIS reporting because of the very limited early audit functions in the current customized MIS system	Perform annual resubmission of MIS data to capture changes and corrections in data as a normal course of business

Training and Cross-training Recommendation

CWP feels it important to expand on Fit/Gap Analysis recommendation #8. The most important concept in this recommendation is that communication between the various departments responsible for data submission across the district as well as continuous training for staff responsible for data entry are key to ensuring that District data is accurate and consistent. Communication and training need to be institutionalized to ensure that they are inclusive of all necessary departments and continually updated based on changes to MIS reporting, PeopleSoft processes and additional data reporting needs despite changes in organizational structure and personnel.

The expanded recommendations outlined below start at the highest level of district coordination and move down to college staff members who are directly responsible for daily data collection and processing. The recommendations are:

1. District Data Quality Analyst (new)
   This is a new function recommended in Fit/Gap Recommendation #5. This function would:
   - Coordinate the development of standard operational procedures that produce accurate and timely data in support of research, evaluation, and assessment functions; and
   - Provide leadership and technical expertise to ensure district data is accurate and complete; and
   - Coordinate operational activities related to district reporting to meet state and federal reporting requirements.

2. IR Staff
   The IR Staff have a high-level view of the reporting process for all district areas. They combine the technical knowledge of SQL report creation with the process reporting knowledge for the district.

   From this viewpoint, the IR Staff should analyze the annual MIS updates from the Chancellor's office to determine if MIS reporting is impacted. If so, the IR staff should:
   a) Coordinate testing to ensure MIS reporting processes remain effective and efficient; and
   b) Review Process Flows and incorporate any related changes.

3. <u>Data Entry Staff</u>

Data Entry Staff are the end users who, as part of their daily job, enter data in any of the systems that collect data for MIS and other reporting. Training should be conducted with this staff annually using the Process Flows to:

a) Review Process Flows in detail for each area; and

b) Review and confirm understanding of PeopleSoft translation, parameter and validation tables; and

c) Review and confirm understanding of all MIS edits - syntactical, referential, and quality – related to their department data; and

d) Review Data Entry Standards.

MIS Grouping Process Flows, Findings and Recommendations

In addition to the gaps identified for the District, CWP had findings that should be addressed to improve the institution but are not necessarily impacting funding, student retention and resource usage. In this section of the report the Process Flows (current and proposed), findings, and recommendations (both Gap and Department specific) are presented and are organized by department most responsible for the data.

Because some of the Process Flows contain detailed information that is hard to read, they will also be provided to PCCD in Visio format separately for use by the District.

Admissions and Records – SB (Student Demographics), SX (Student Enrollments) and SP (Program Awards)

SB Data File

The Student Basic (SB) Data File is reported during each term reporting period for students who meet the reporting criteria for any term or annual based student files including:
- SC/CW – Student CalWORKS Data
- SD - Student DSPS Data
- SE – Student EOPS Data
- SF/FA – Student Financial Aid
- SG – Student General Population
- SP – Student Program Awards
- SS – Student Success Data
- SV – Student VTEA Data
- SX – Student Enrollment Data

Data in this file contains student demographic information as well as academic history data.

SB Current Process Flow

Student Basic (SB) Data File – Current Process Map

SB Proposed Process Flow

Student Basic (SB) Data File – Proposed Process Map

Student	District International Students	District IT	District A&R	Campus A&R	District IR	CCCCO MIS

Start

Students (CR/NC) Complete CCCApply Application

CCCApply

Petition/ Personal Information Update Form

Petition Filed / Change of Personal Information Change of Major

Continuing Student Survey (during Registration only)

Transcripts From Other Institutions / IB/CLEP/AP Scores

Transcript / Score Report

International Student Application

CCCApply

Manage International Student Data

PeopleSoft one way feed to Terra Dotta

Terra Dotta

NOTE: International Students who use standard application may be coded as Non-resident

Upload CCCApply Application

PeopleSoft

Determine Residency & Record

PeopleSoft

Shared Drive

Evaluate and record data from transcripts / score reports

PeopleSoft

PeopleSoft

Create audit reports/query capability for early validation of data – do not wait until end of term to correct

Correct Submission Errors (District & Campus A&R)

SB MIS Error File

PeopleSoft

DB/Excel File of Challenge Forms and changes

PeopleSoft

Manage Student Basic Data in PeopleSoft

End of Term?

NO

YES

Student Files

Send Student Files to District for Storage

SB MIS Error File

ODS PeopleSoft Clone DB

Create Files for submission to CCCCO MIS using SQL Scripts

PeopleSoft

Correct Errors

SB MIS Error File

Submit file

SB MIS File

Download Error Reports

IR Can Correct Errors

YES

NO

SB MIS File

Process file

Data Errors Found?

YES

NO

CCCCO MIS

Process Data for Production

End

Red annotation callouts:

- Clearly define responsibility for maintaining student groups for priority registration
- Clearly define for students and staff which A&R department performs which functions and who to contact with issues (i.e. Residency, Transcript Evaluation, MIS corrections)
- Clearly define the determination of Home Campus
- Regularly train A&R District/ campus staff on PeopleSoft functionality
- Review access restrictions for A&R staff – train on security & provide access to be self-sufficient
- Clearly define Change of Major processing with FA involvement; implement workflow to complete approvals
- Consider collecting Change of Major annually rather than each semester to reduce workload for processing departments
- Maintain Special Admit students; automatically remove at age 21
- Eliminate need for DB/Excel to track data – use Peoplesoft for all data
- Use production data for MIS reporting; conduct Cost/ Benefit analysis of consulting services to develop and maintain MIS reporting functionality
- Create two-way sync of PeopleSoft and Terra Dotta data to avoid double entry
- Add local additional questions to CCCApply application to detect and re-route International Students
- Move to a digital imaging system for all document storage because documents are not consistently stored and security is an issue with storing on local PC's
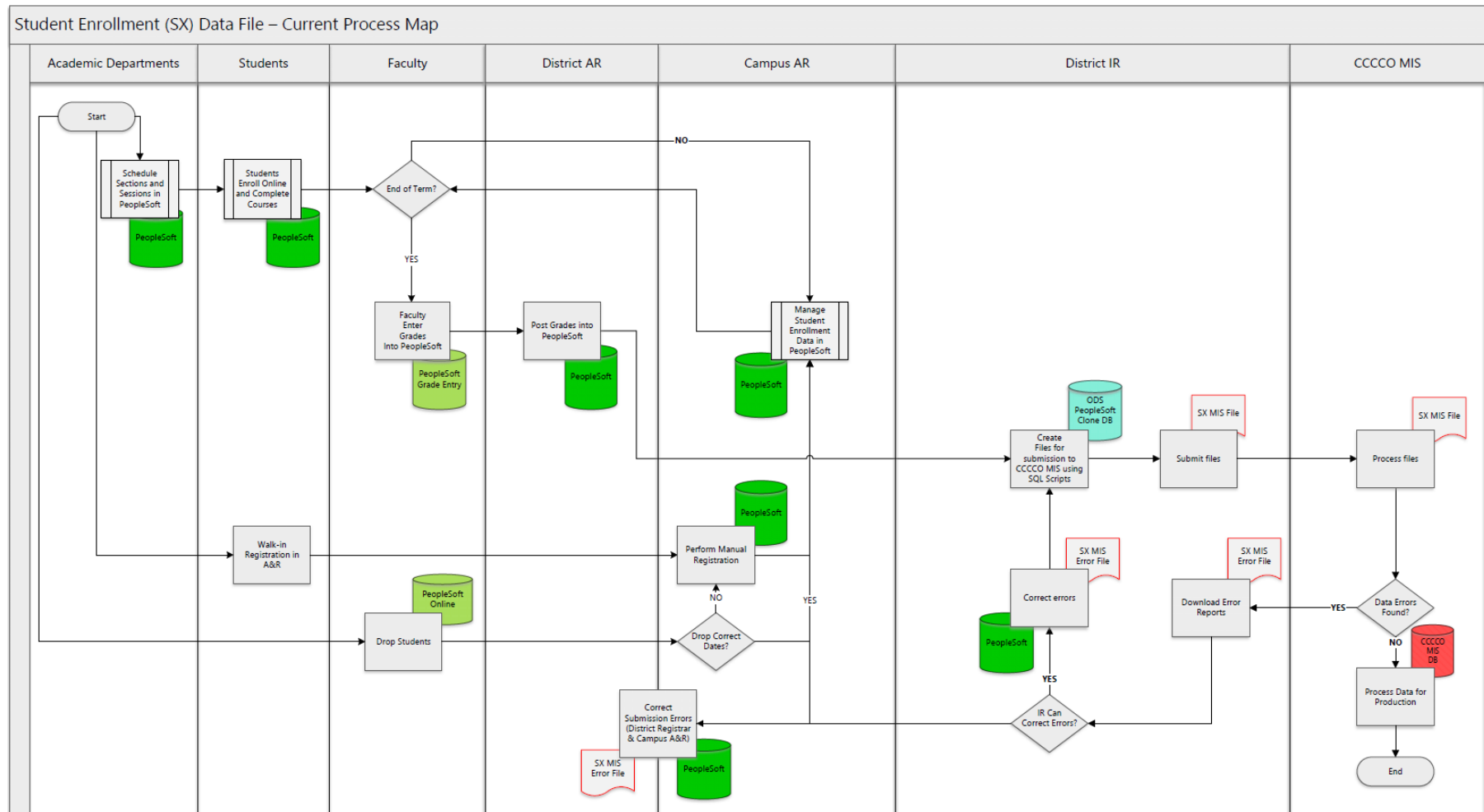
SX Data File

The Student Enrollment (SX) Data File is reported during each term reporting period for enrollments that resulted in:

- Attendance in a course as of first census for daily courses or weekly census

   OR

- Attendance in at least one meeting of a positive attendance class

   OR

- A notation on the student official record.

Data in this file includes enrollment related dates, units and grades earned, positive attendance hours and an apportionment status indicator.

SX Current Process Flow

Student Enrollment (SX) Data File – Current Process Map

SX Proposed Process Flow

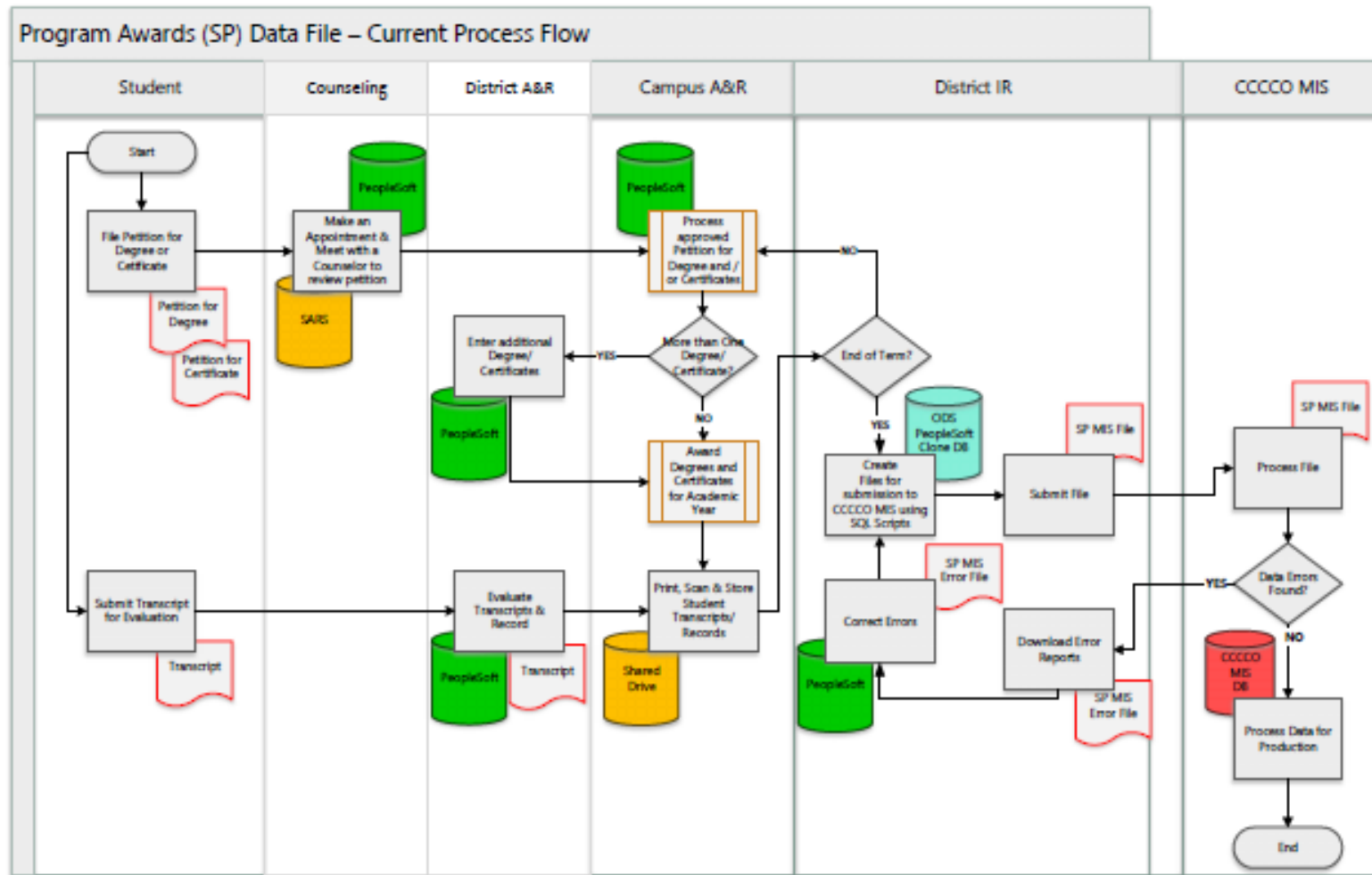Student Enrollment (SX) Data File – Proposed Process Map
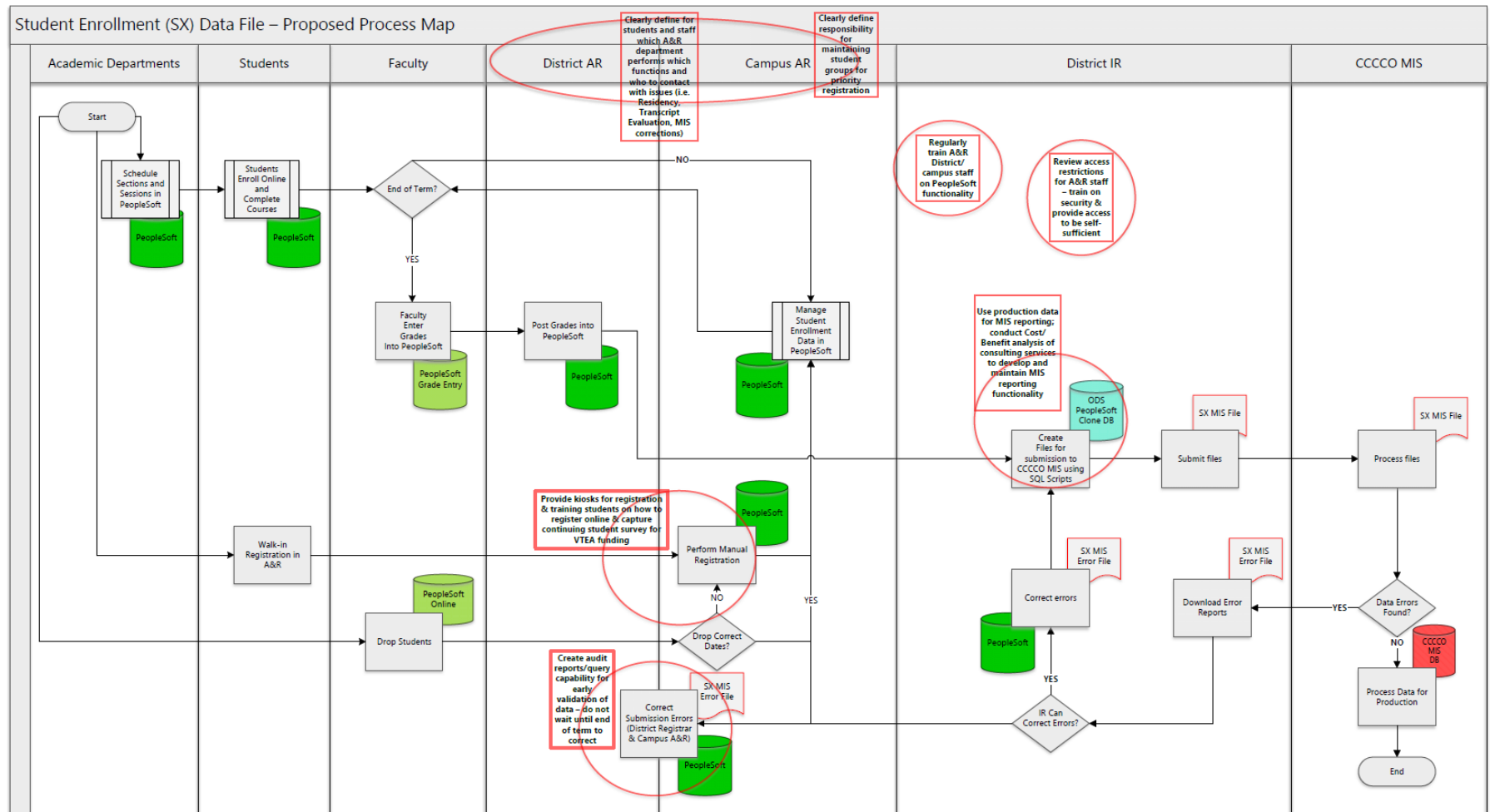
SP Data File

The **Program Awards (SP) Data File** is reported annually each September 1st and is used to report information on student program awards awarded during the prior fiscal year.

SP Current Process Flow

Program Awards (SP) Data File – Current Process Flow

SP Proposed Process Flow

Program Awards (SP) Data File – Proposed Process Flow
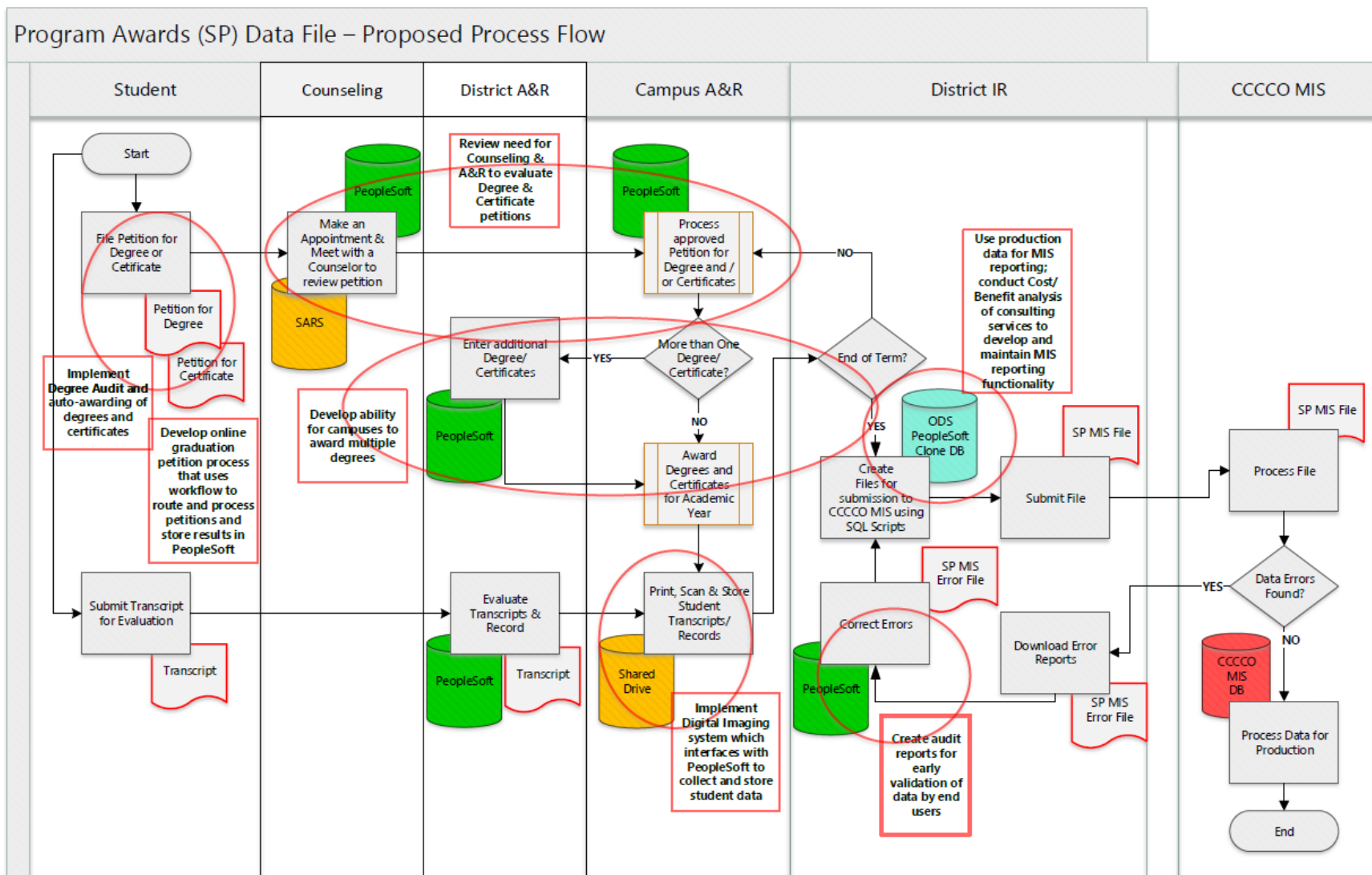
SB, SX, and SP Findings and Recommendations

The following findings and recommendations are provided for Admissions & Records which would improve department efficiency/effectiveness and provide potential cost savings (Gap Recommendations are also noted where appropriate):

Finding	Recommendation
Forms are common across all campuses	Continue to use common forms for students to minimize confusion
Campus and District Admissions & Records departments roles and responsibilities are not clearly defined (i.e., residency, transcript evaluation, MIS corrections, etc.)	Develop roles and responsibilities for each department and clearly communicate this to staff and students to avoid confusion and double work (see Gap Recommendation 4)
A&R staff perform many walk-up registrations; this does not capture information from the Continuing Student survey needed for VTEA funding and other purposes	Consider providing kiosks for registration and training of students to perform online registration under the guidance of A&R staff
Maintenance of student groups for priority registration are done both at District & campus which may be causing inaccurate lists over time	Clearly define roles for maintaining student groups to ensure lists are regularly maintained and accurate; assign specific positions to maintain the lists (see Gap Recommendation 10)
Definition of Home Campus is not clearly understood nor consistent	Clearly define the determination of Home Campus and implement (see Gap Recommendation 10)
Special Admit students may not be removed once graduated as information is not always provided	Put in place process and responsible party to make sure Special Admit students are correct each semester; automatically remove Special Admit status when student (see Gap Recommendation 10)
Staff feel that access is limited to the system based on security concerns; this puts a burden on certain staff who have access	Review access restrictions for A&R staff and train the on proper security; once training is completed grant access to make staff self-sufficient (see Gap Recommendation 9)
Degree Audit functionality is not being used; auto-awarding of degrees not in place	Implement Degree Audit and auto-awarding of degrees to better serve students (See Gap Recommendation 6)
DB/Excel are used to track challenge forms and changes	Eliminate need for DB/Excel shadow systems to be needed for tracking challenge forms and changes; implement online forms that feed into PeopleSoft where possible (see Recommendation 6 & 11)

Graduation Petitions are paper-based forms	Develop online graduation petition process that uses workflow to route and process petitions and store results in PeopleSoft (See Gap Recommendation 11)
Students must meet with a counselor to review/approve all Degree and Certificate petitions for graduation	Review need for Counseling and Admissions & Records to evaluate Degree and Certificate Petitions for Graduation to more quickly process petitions for students
Campus A&R can award one degree/certificate in PeopleSoft and District A&R must award any additional awards	Develop ability for campus Admissions & Records to award multiple Degrees and Certificates
Transcripts/records are stored on a shared drive	Select and implement a digital imaging system (See Gap Recommendation 11)
Change of Major process not clearly defined including approval by Financial Aid to avoid student loss of funding	Clearly define the Change of Major process including approval by Financial Aid and implement workflow to manage the process including student notifications
Continuing Student survey is performed each semester and includes VTEA, Athletics, change of major/goal and other questions along with validation of student information; it is lengthy and may be causing students to not complete it properly	Review the Continuing Student Survey with an eye towards streamlining (i.e. only ask change of major/goal annually; ask to verify info already on file rather than re-enter student information, move important items to top of survey) (see Gap Recommendation 2)
Student WIA status is not collected and monitored	Collect and report WIA status by creating a student group for this population (see Gap Recommendation 10)
Validation of MIS data is done at the end of the year	Create audit reports for early validation of data by the campuses (see Gap Recommendation 5)
Staff indicate that they feel that they do not understand PeopleSoft functionality well	Conduct training on PeopleSoft functionality especially when new releases of the system are implemented (see Gap Recommendation 8)
International students are not always properly identified and get classified as out of state students	Add local additional questions to the online application to detect and direct students to the proper international applications (see Gap Recommendation 10)
International student data is manually entered in Terra Dotta and PeopleSoft	Create a two-way synchronization process between Terra Dotta and PeopleSoft

Counseling and Assessment – SS (Student Success)

SS Data File

The Student Success (SS) Data File is reported during each term reporting period for student who:

- Enrolled in at least one class as of first census or later for daily or weekly census classes

    OR

- Attended at least one meeting of a positive attendance class

    OR

- Enrolled in at least one class that resulted in a notation on the student's official record

    OR

- Received pre-enrollment matriculation services.

The data reports the matriculation services a student received.

SS Current Process Flow

Student Success (SS) Data File – Current Process Flow

SS Proposed Process Flow
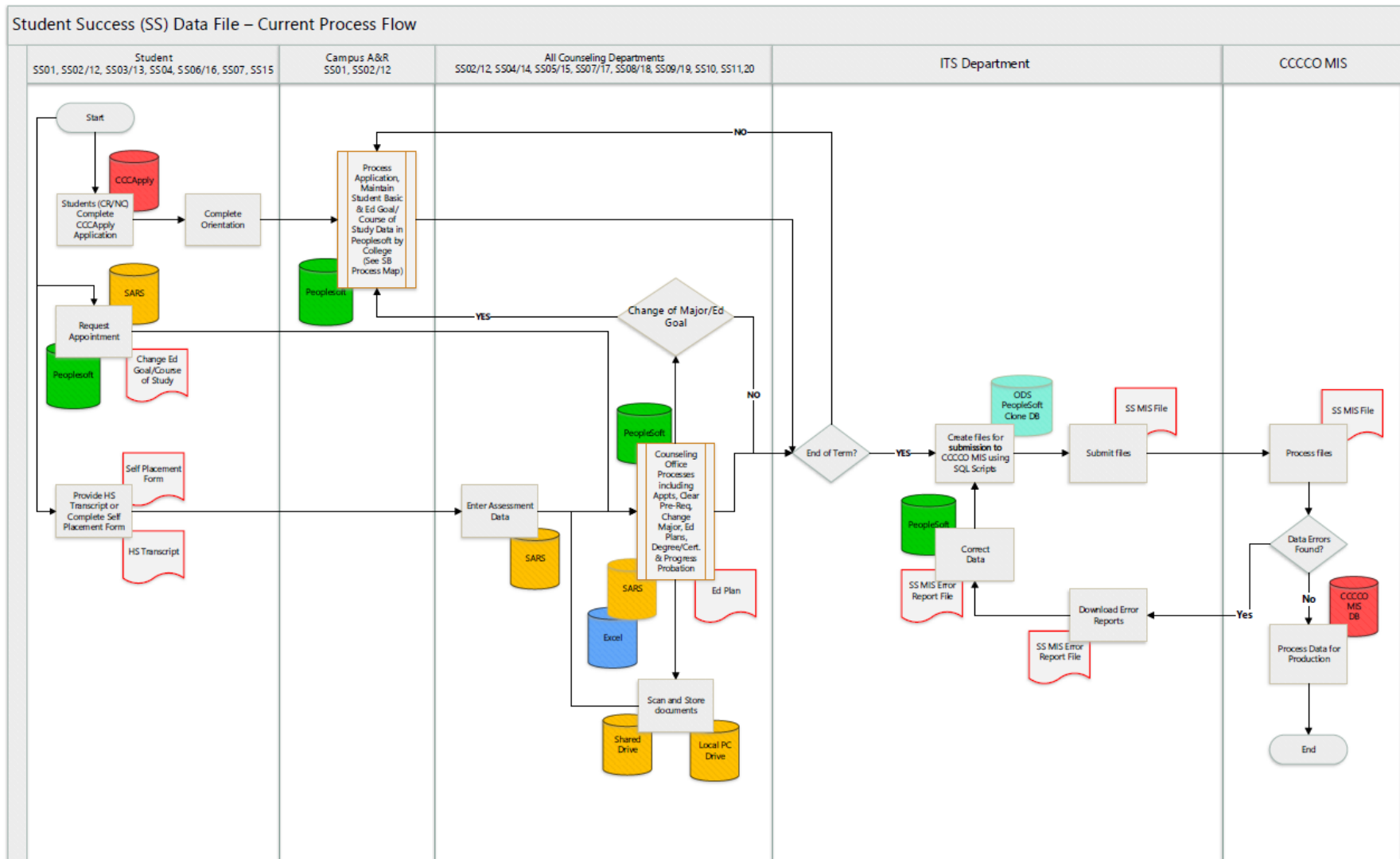
Student Success (SS) Data File – Proposed Process Flow
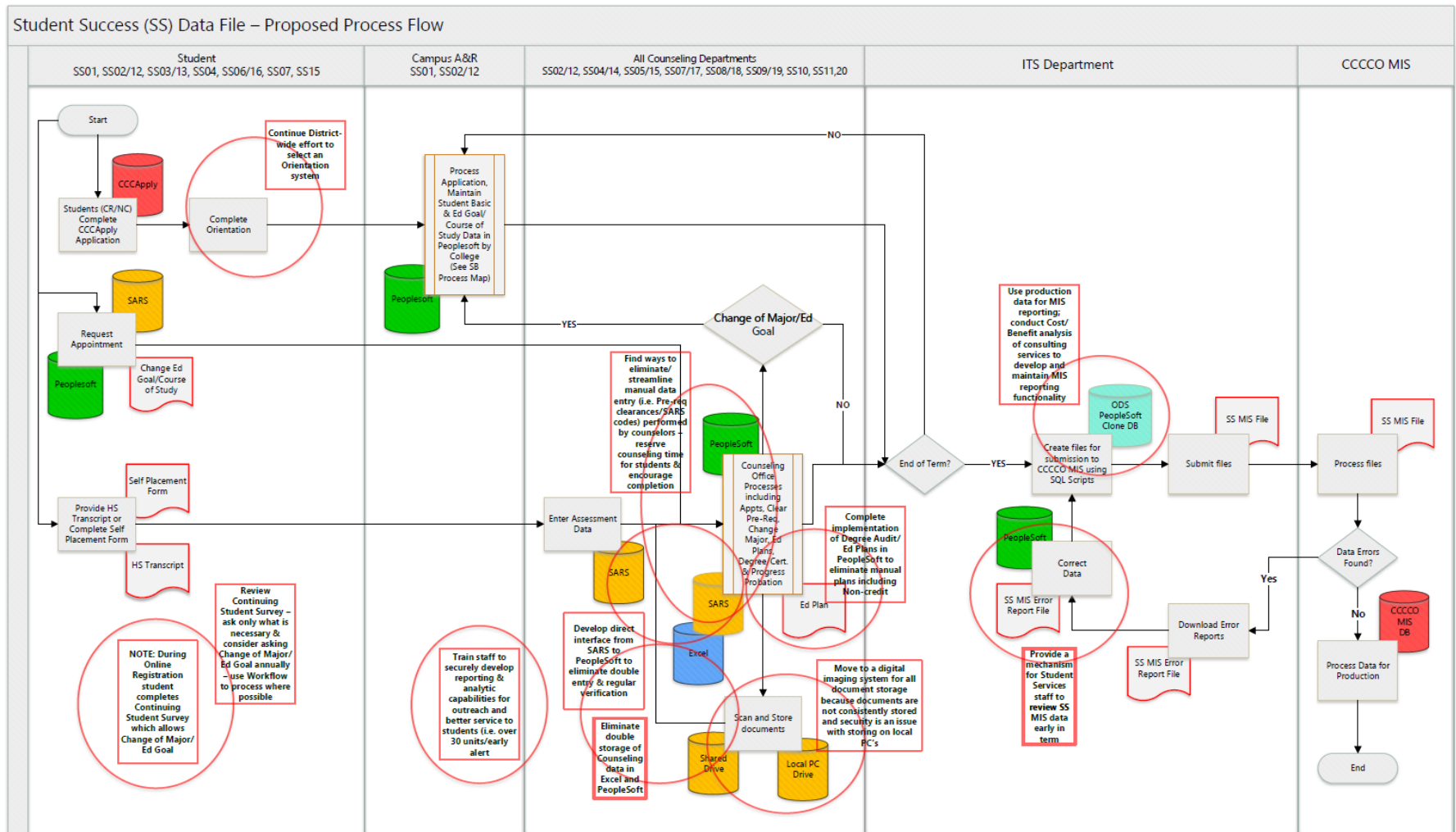
SS Findings and Recommendations

The following findings and recommendations are provided for Counseling which would improve department efficiency/effectiveness and provide potential cost savings (Gap Recommendations are also noted where appropriate):

Finding	Recommendation
District is in the process of selecting an Orientation system	Continue District-wide effort to select and implement an Orientation system that will interface with PeopleSoft
Continuing Student survey is performed each semester and includes VTEA, Athletics, change of major/goal and other questions along with validation of student information; it is lengthy and may be causing students to not complete it properly	Review the Continuing Student Survey with an eye towards streamlining (i.e. only ask change of major/goal annually; ask to verify info already on file rather than re-enter student information, move important items to top of survey); use workflow to process the changes (see Gap Recommendation 2)
Counselors and counseling staff manually enter data (i.e. Pre-requisite clearances, SARS coding, etc.)	Eliminate or streamline the manual entry of data reserving counseling time for students (see Gap Recommendation 11)
Excel is used to manage counseling information	Provide capability in PeopleSoft to capture all needed counseling data and eliminate the double entry and storage of data (see Gap Recommendation 6 & 11)
Appointment information is entered in both SARS and PeopleSoft and is regularly verified to make sure they match	Develop a direct interface from SARS to PeopleSoft to eliminate the double entry of data and regular verification
Documents are stored on the Shared Drive or local PC's which poses a security risk	Select and implement a digital imaging system (See Gap Recommendation 11)
Staff feel that access is limited to the system based on security concerns; this limits the ability for staff to detect students over 30 units, perform early alert, outreach to students at risk	Review access restrictions for Counseling staff and train the on proper security; once training is completed grant access to use reporting and analytic capabilities to allow staff to be self-sufficient and better serve students (see Gap Recommendation 9)
Validation of MIS data is done at the end of the term	Create audit reports for early validation of data by the campuses (see Gap Recommendation 5)
Degree Audit and Educational Planning tools in PeopleSoft are not fully implemented	Complete the implementation of Degree Audit and Educational Planning modules in PeopleSoft including non-credit (see Gap Recommendation 6)

Curriculum – CB (Course Basic)

<u>CB Data File</u>

The Course Basic (CB) Data File is reported during each term reporting period for each course in the college's course catalog. The course may or may not have section data associated with it during the reporting period. The file contains elements that describe the course.

CB Current Process Flow

Course Basic (CB) Data File – Current Process Map

CB Proposed Process Flow

Course Basic (CB) Data File – Proposed Process Map
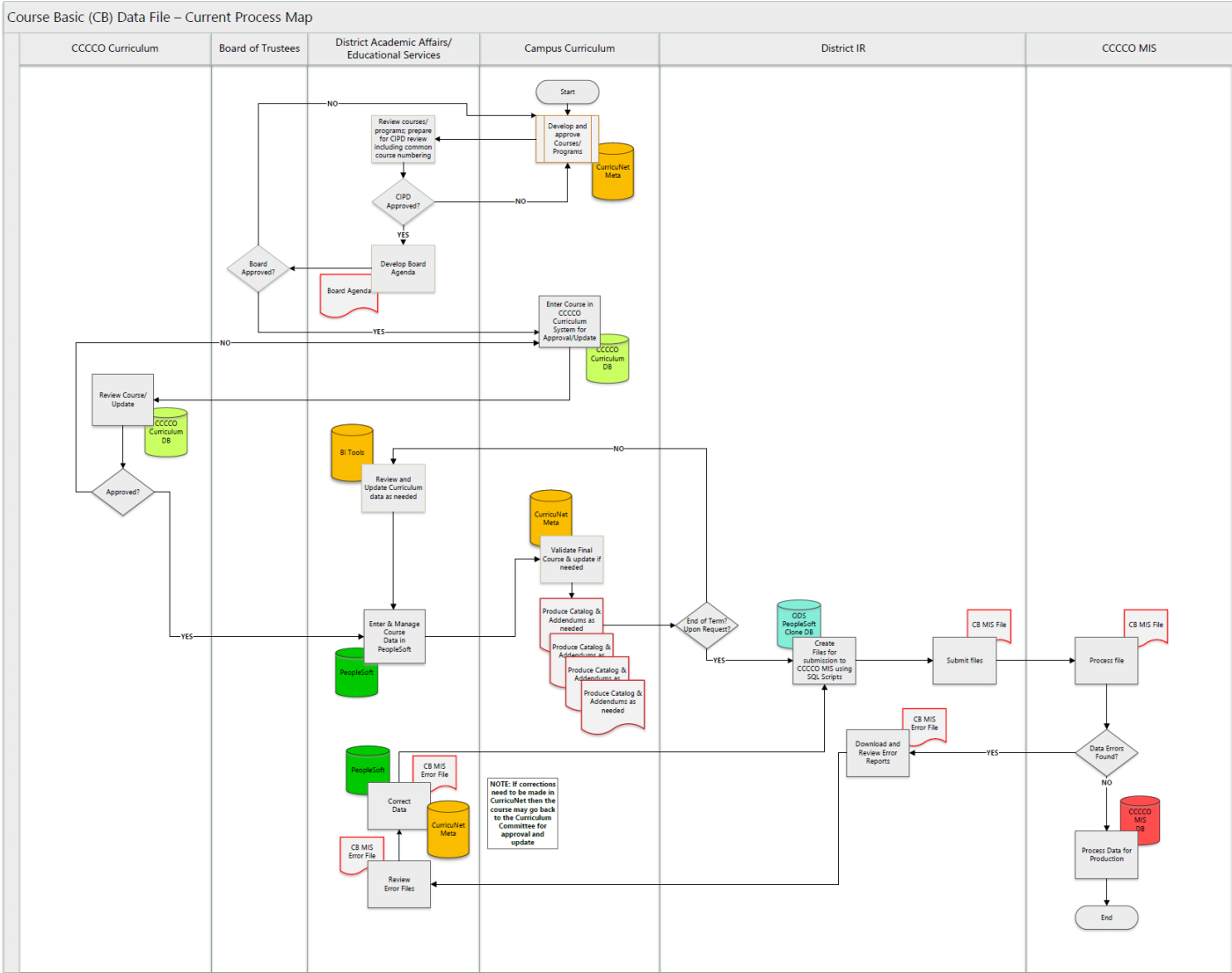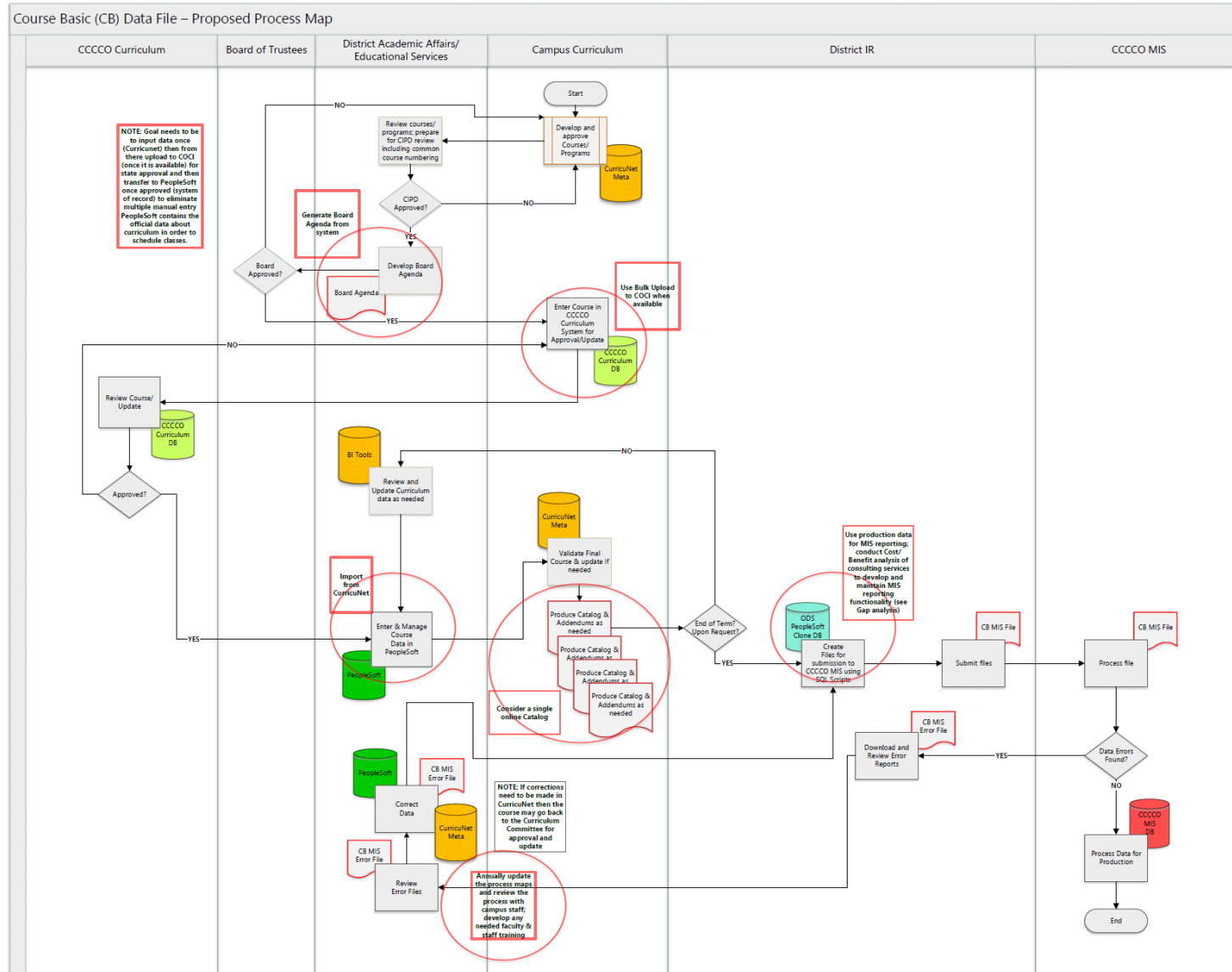
CB Findings and Recommendations

The following findings and recommendations are provided for Curriculum which would improve department efficiency/effectiveness and provide potential cost savings (Gap Recommendations are also noted where appropriate):

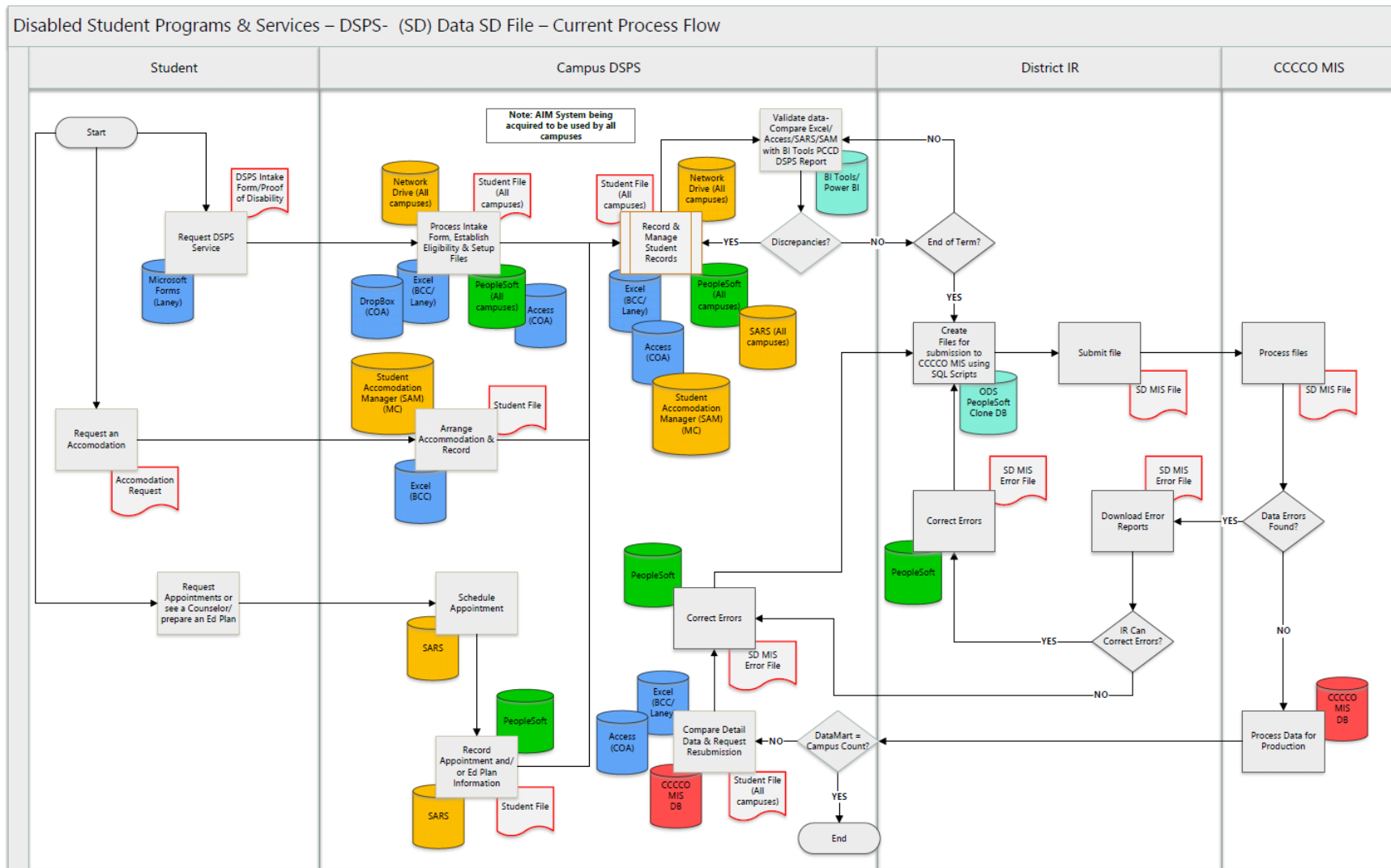| Finding	Recommendation
Data stored in three systems including PeopleSoft, CurricuNet Meta, and the Chancellor's Office Curriculum Inventory (COCI) is manually entered into each system as needed	Goal needs to be to input data once (Curricunet) then from there upload to COCI (once it is available) for state approval and then transfer to PeopleSoft once approved (system of record) to eliminate multiple manual entry PeopleSoft contains the official data about curriculum in order to schedule classes. Develop programming to allow PeopleSoft and CurricuNet to share curricular data When COCI mass upload becomes available (development is in progress) use it to upload all curriculum from CurricuNet for approval
Curriculum Board Reports are manually prepared	Use CurricuNet to generate Board agenda items for curriculum (see Gap Recommendation 11)
Four catalogs are produced: one for each college	Evaluate the costs/benefits of producing a single catalog (see Gap Recommendation 3)
Staff report that they feel inadequate in understanding curriculum processes even though online resources and annual trainings are available; likely this is the result of high turnover	Annually update the Process Flows and review the process with campus staff; develop any needed faculty and staff training (see Gap Recommendation 8)

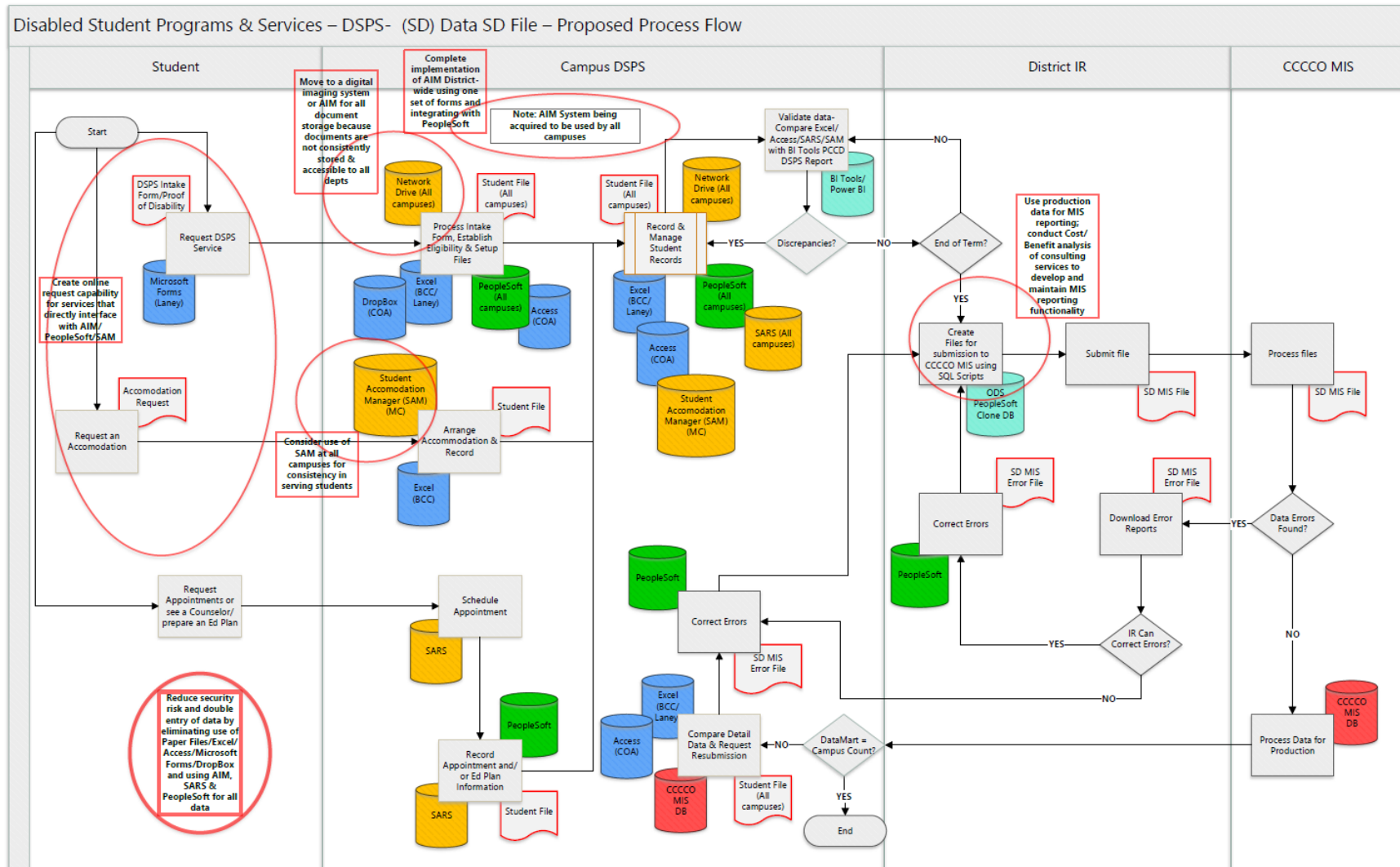## Disabled Student Programs & Services – SD (Student DSPS)

SD Data Files

The Student DSPS (SD) Data File is reported during each term reporting period for each student who had one or more contacts with the DSPS Department. Data in this file contains information regarding the student's disability.

SD Current Process Flow

Disabled Student Programs & Services – DSPS- (SD) Data SD File – Current Process Flow

SD Proposed Process Flow

Disabled Student Programs & Services – DSPS- (SD) Data SD File – Proposed Process Flow

| Student | | Campus DSPS | District IR | CCCCO MIS |

Start

Move to a digital imaging system or AIM for all document storage because documents are not consistently stored & accessible to all depts

Complete implementation of AIM District-wide using one set of forms and integrating with PeopleSoft

Note: AIM System being acquired to be used by all campuses

Validate data- Compare Excel/ Access/SARS/SAM with BI Tools PCCD DSPS Report

DSPS Intake Form/Proof of Disability

Network Drive (All campuses)

Student File (All campuses)

Student File (All campuses)

Network Drive (All campuses)

BI Tools/ Power BI

Request DSPS Service

Process Intake Form, Establish Eligibility & Setup Files

Record & Manage Student Records

Use production data for MIS reporting; conduct Cost/ Benefit analysis of consulting services to develop and maintain MIS reporting functionality

Create online request capability for services that directly interface with AIM/ PeopleSoft/SAM

Microsoft Forms (Laney)

DropBox (COA)

Excel (BCC/ Laney)

PeopleSoft (All campuses)

Access (COA)

Excel (BCC/ Laney)

PeopleSoft (All campuses)

Access (COA)

SARS (All campuses)

Discrepancies? — YES / NO

End of Term? — NO

YES

Create Files for submission to CCCCO MIS using SQL Scripts

Submit file

Process files

SD MIS File

SD MIS File

ODS PeopleSoft Clone DB

Accomodation Request

Student Accomodation Manager (SAM) (MC)

Student Accomodation Manager (SAM) (MC)

Request an Accomodation

Consider use of SAM at all campuses for consistency in serving students

Arrange Accomodation & Record

Student File

Excel (BCC)

SD MIS Error File

SD MIS Error File

Correct Errors

Download Error Reports

Data Errors Found? — YES / NO

PeopleSoft

PeopleSoft

Request Appointments or see a Counselor/ prepare an Ed Plan

Schedule Appointment

Correct Errors

IR Can Correct Errors? — YES / NO

SARS

Reduce security risk and double entry of data by eliminating use of Paper Files/Excel/ Access/Microsoft Forms/DropBox and using AIM, SARS & PeopleSoft for all data

PeopleSoft

Record Appointment and/ or Ed Plan Information

Excel (BCC/ Laney)

Access (COA)

Compare Detail Data & Request Resubmission

SD MIS Error File

DataMart = Campus Count? — NO / YES

Process Data for Production

CCCCO MIS DB

SARS

Student File

CCCCO MIS DB

Student File (All campuses)

End

SD Findings and Recommendations

The following findings and recommendations are provided for DSPS which would improve department efficiency/effectiveness and provide potential cost savings (Gap Recommendations are also noted where appropriate):

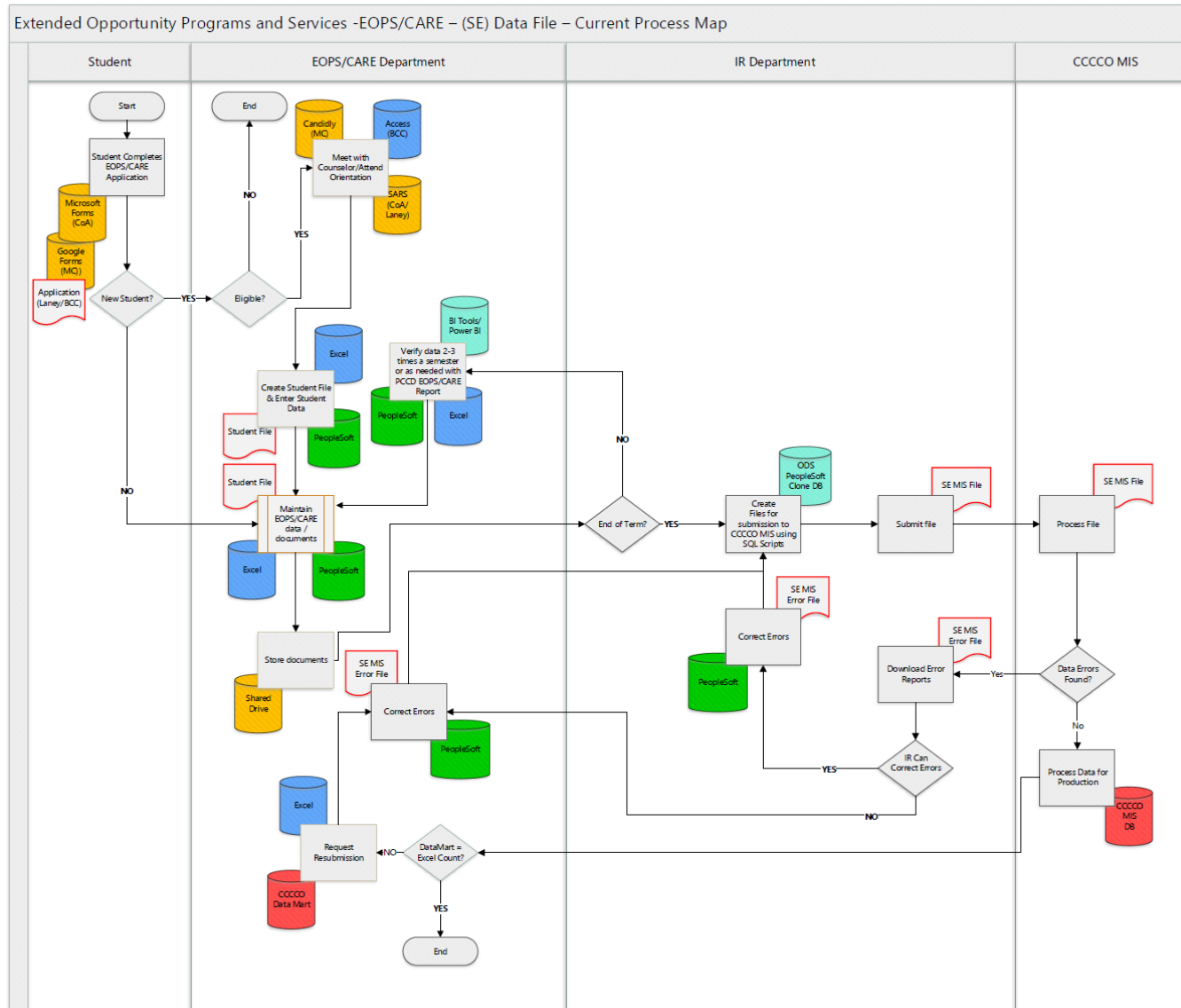| Finding	Recommendation
AIM is being acquired and implemented at all sites Campuses use of paper files/Excel /Access/Microsoft Forms/DropBox and other tools pose a security issue for student data and cause the same data to be entered multiple times in multiple systems Students are often shared across the campuses	Complete the implementation of AIM District-wide in a consistent manner to eliminate the use of Paper Files/Excel/Access/Microsoft Forms/Dropbox and other tools using a common set of forms and integrating directly with PeopleSoft. Fully leverage the functions of AIM. (see Gap Recommendation 6 & 11)
DSPS documents are stored in multiple systems	Select and implement a digital imaging system or use AIM to store DSPS documents (See Gap Recommendation 11)
SAM (Student Accommodation Manager) is used by one campus	Consider use of SAM District-wide for accommodation requests (if AIM does not provide this functionality)

Extended Opportunity Programs and Services and CalWorks – SE (Student EOPS) and SC/CW (CalWorks Data and Activity)

SE – Student EOPS

<u>SE Data File</u>

The Student EOPS (SE) Data File is reported during each term reporting period for each student who received services from EOPS. Data in this file contains student demographic and financial information related to the EOPS program as well as EOPS eligibility factors and status.

SE Current Process Flow

Extended Opportunity Programs and Services -EOPS/CARE – (SE) Data File – Current Process Map

SE Proposed Process Flow

Extended Opportunity Programs and Services -EOPS/CARE – (SE) Data File – Proposed Process Map
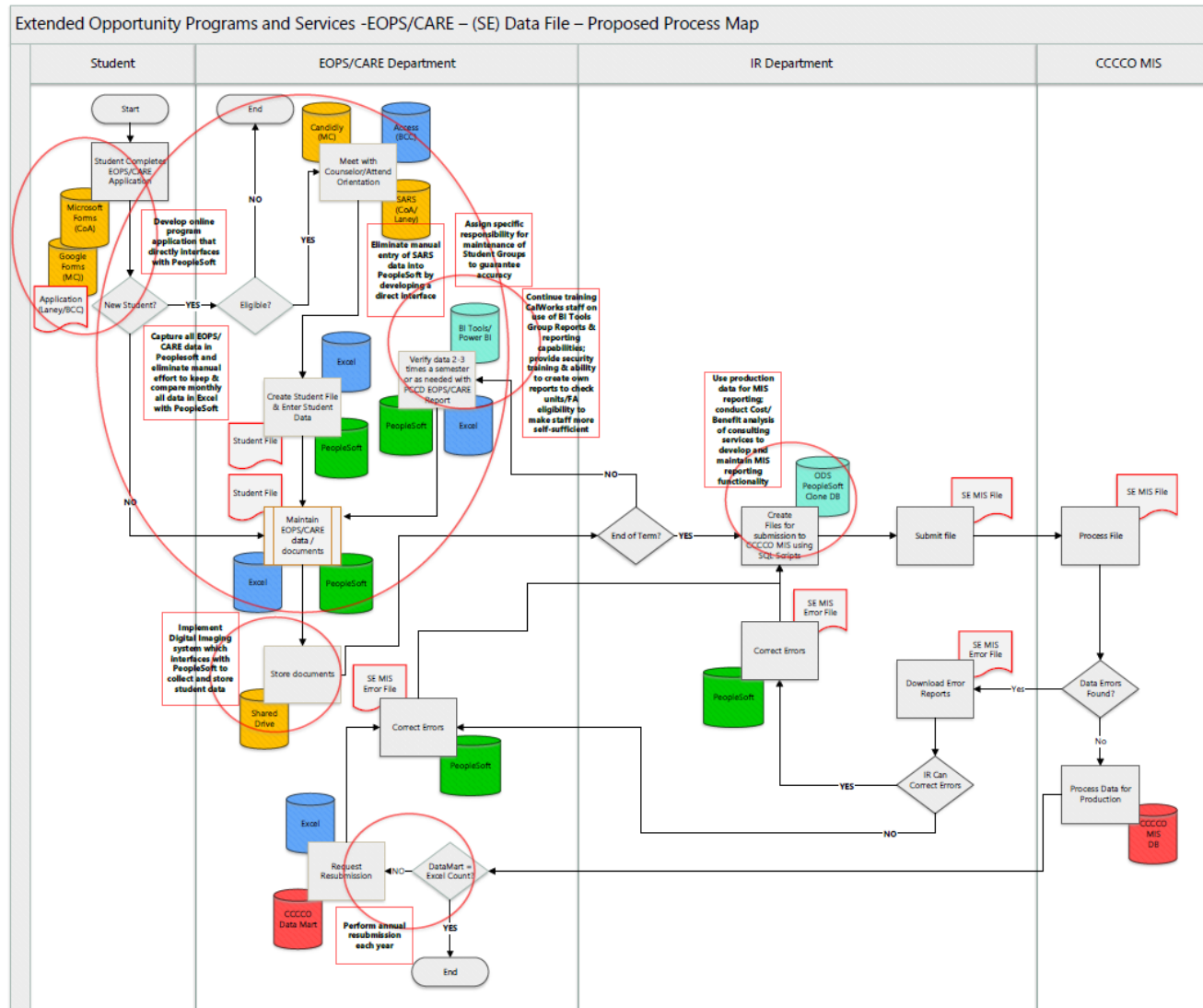
<u>SC/CW Data File</u>

The CalWORKS data files - Student Data (SC) and Student Activity (CW) - are reported during each term reporting period for each student who is CalWORKS eligible and attends at least one class meeting during each term reporting period. The data documents the student's requirements for meeting the eligibility for the CalWORKS program and related work activity the student participated in.

SC/CW Current Process Flow

CalWORKS Data Files – CalWORKS Student Data (SC) & CalWORKS Student Activity (CW) Data – Current Process Flow

SC/CW Proposed Process Flow
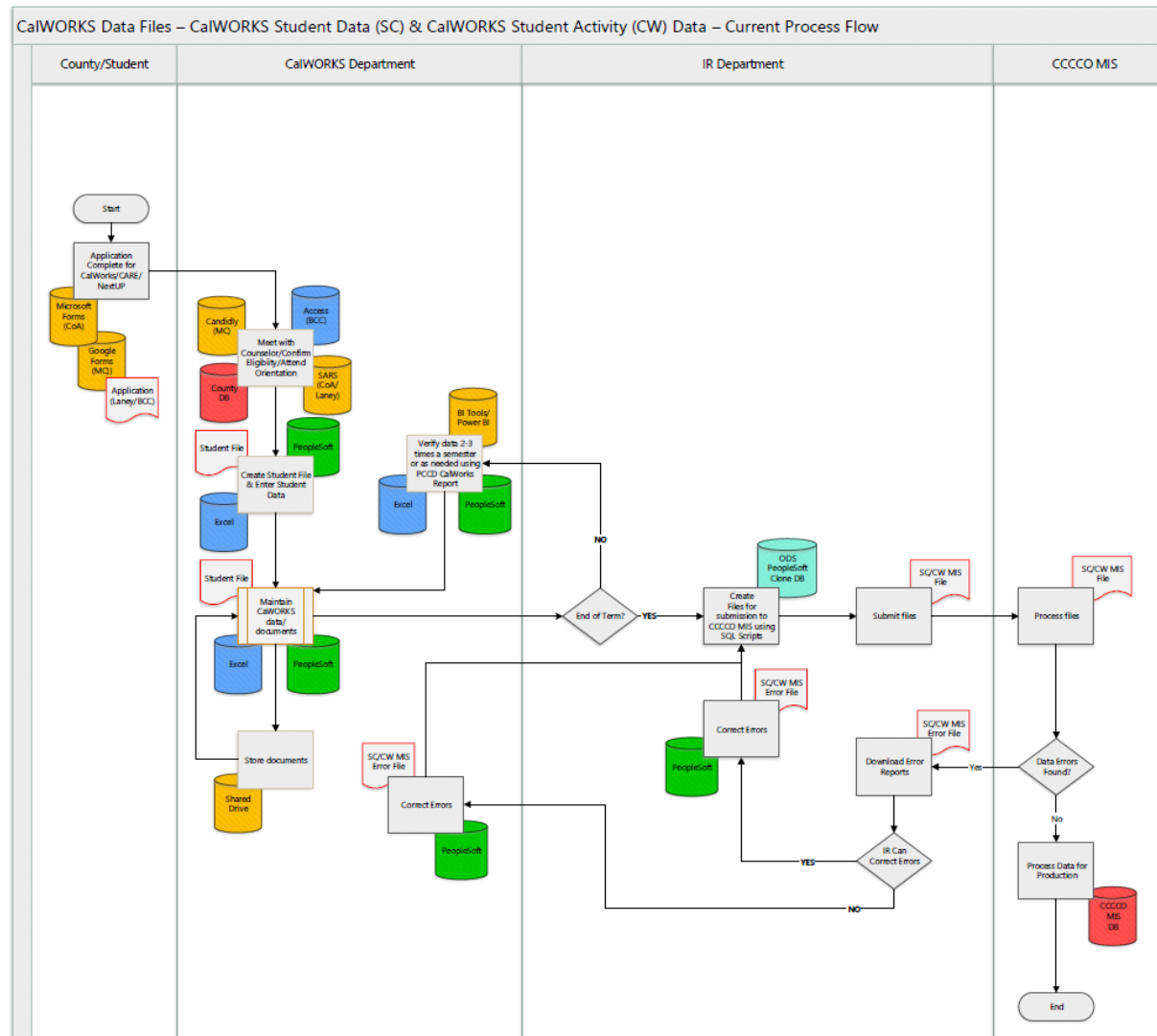
CalWORKS Data Files – CalWORKS Student Data (SC) & CalWORKS Student Activity (CW) Data – Proposed Process Flow
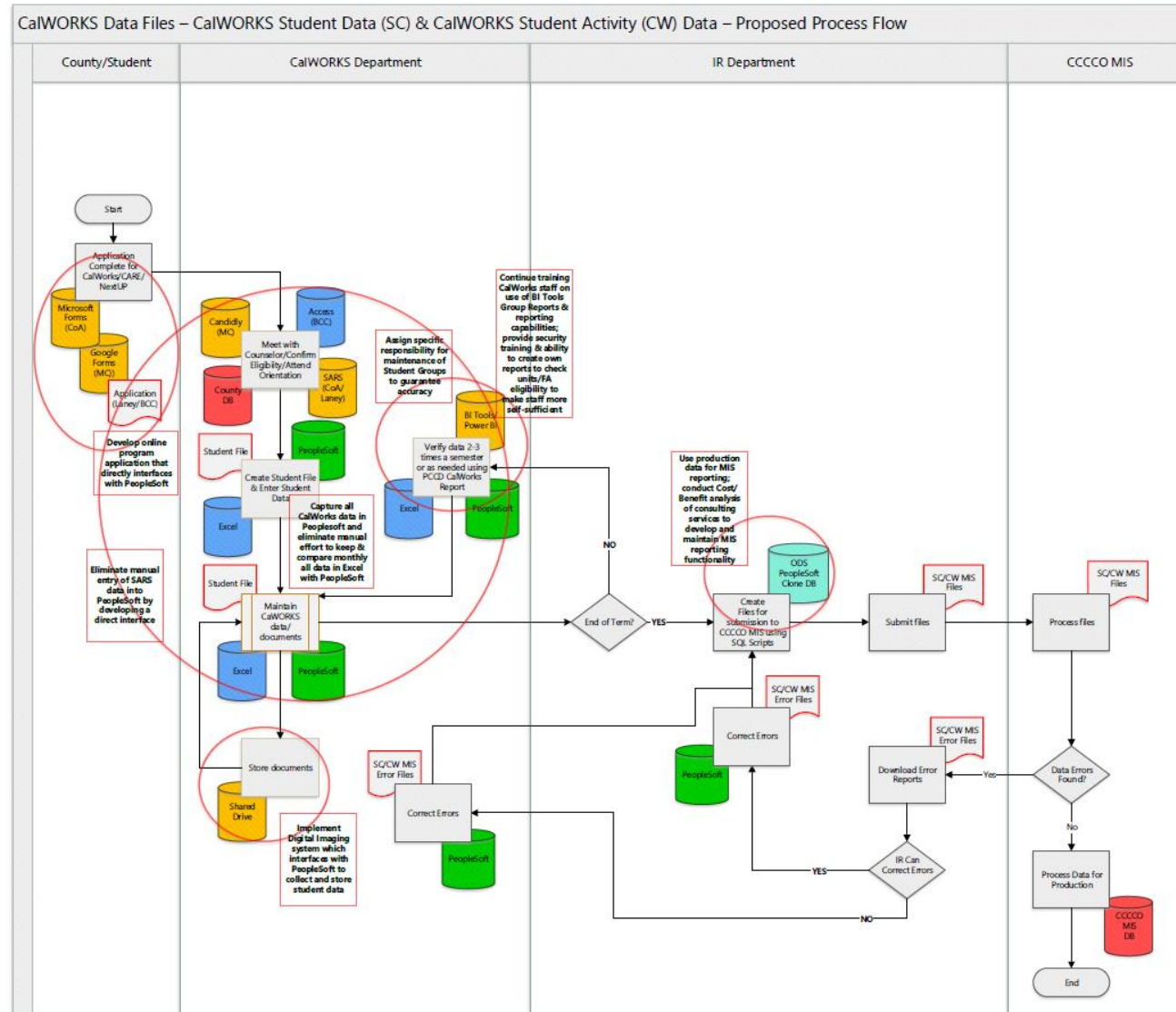
SE and SC/CW Findings and Recommendations

The following findings and recommendations are provided for EOPS/CalWorks/CARE which would improve department efficiency/effectiveness and provide potential cost savings (Gap Recommendations are also noted where appropriate):

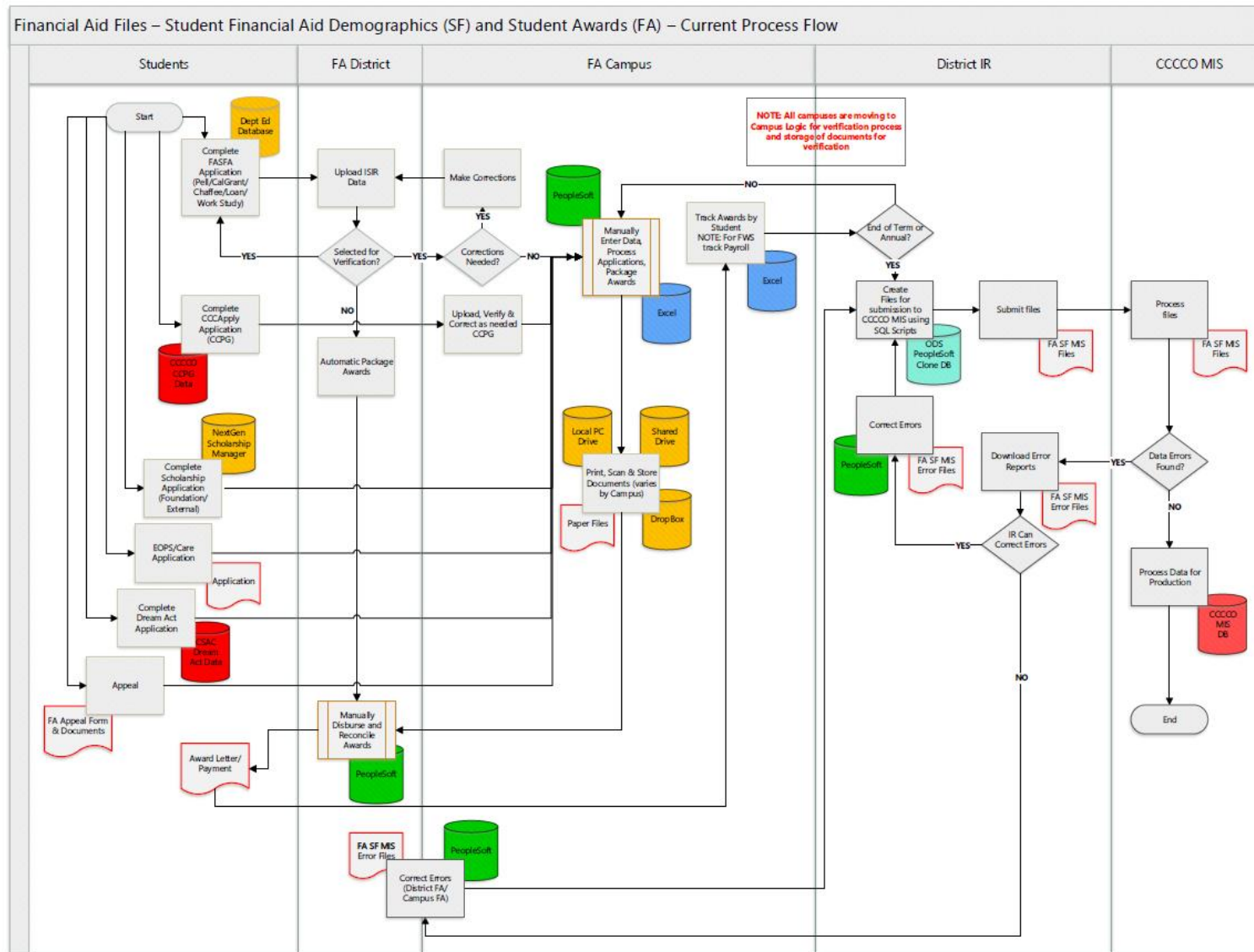| Finding	Recommendation
EOPS/CalWorks/CARE application is collected differently at each campus	Develop an online EOPS/CalWorks/CARE application that directly interfaces with PeopleSoft to store the data (see Gap Recommendation 11)
Maintenance of EOPS/CalWorks/CARE student groups for priority registration are done both at District & campus which may be causing inaccurate lists over time	Clearly define roles for maintaining student groups to ensure lists are regularly maintained and accurate; assign specific positions to maintain the lists (see Gap Recommendation 10)
EOPS/CalWorks/CARE data is entered manually in Peoplesoft & Excel; reconciliation between the two systems is ongoing	Capture all data from application directly into PeopleSoft and eliminate the need for Excel to track data eliminating the need to manually input data and reconcile PeopleSoft & Excel data (see Gap Recommendation 6 & 11)
SARS data is manually entered into PeopleSoft	Develop an interface to import SARS data into PeopleSoft
BI Tools Group Reports have been developed to track EOPS/Calworks/CARE data; training on the use of this tool to validate data early in the semester has begun	Continue training EOPS/CalWorks/CARE staff on the use of BI Tools Group Reports; provide security training & training on ability to create reports to check units enrolled/Financial Aid information to validate eligibility (see Gap Recommendation 5)
EOPS/CalWorks/CARE documents are stored on shared drive	Select and implement a digital imaging system (See Gap Recommendation 11)

Financial Aid SF/FA (Student Demographics and Student Awards)

<u>SF/FA Data Files</u>

The financial aid files - Student Demographics (SF) and Student Awards (FA) - are produced in an annual report for each student who applied for financial aid. If the student received financial aid, a Student Basic (SB) record must be reported for each term financial aid was received. The (SF) Data File contains general financial information about the student and the (FA) Data file contains one record for each award the student received.

SF/FA Current Process Flow

Financial Aid Files – Student Financial Aid Demographics (SF) and Student Awards (FA) – Current Process Flow

SF/FA Proposed Process Flow

Financial Aid Files – Student Financial Aid Demographics (SF) and Student Awards (FA) – Proposed Process Flow
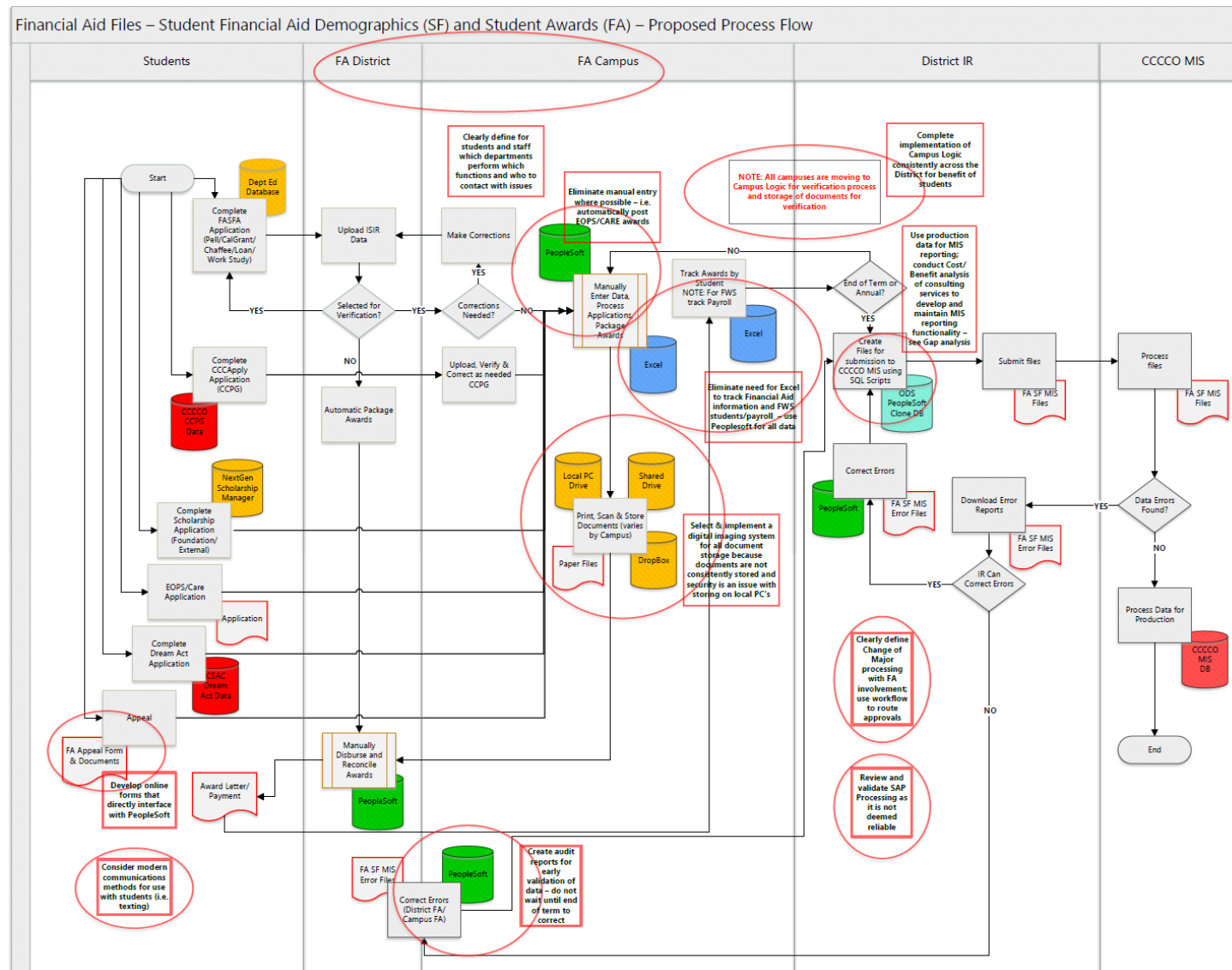
SF/FA Findings and Recommendations

The following findings and recommendations are provided for Financial Aid which would improve department efficiency/effectiveness and provide potential cost savings (Gap Recommendations are also noted where appropriate):

| Finding	Recommendation
Potential under-reporting of Financial Aid data due to: • Definition of attendance • Summer reporting • Mismatch of "fee waiver campus" with "attendance campus" • Removing all $0 promise grant reporting	Report all student who enroll and whose drop date if after the first class meeting For Pell, report Summer as a trailer For Promise, report Summer as a header Implement sync process for creation of fee waiver at each campus; consult Los Rios CCD for their process Report all $0 promise grants up to 7% of total reported. (see Gap Recommendation 1)
District is moving to CampusLogic for verification processing	Continue the implementation of CampusLogic consistently District-wide with the ability to share information; setup the storage of documents uniformly for easy access by all Financial Aid departments to better and more consistently serve students
Financial Aid changes annually	Hire a consultant twice a year (or more if needed) who is familiar with PeopleSoft to train staff on performing aid year and semester setup, review system setup and validate processing will be done properly; consider using BFAP funding (see Gap Recommendation 1)
Campus and District Financial Aid departments roles and responsibilities are not clearly defined	Develop roles and responsibilities for each department and clearly communicate this to staff and students to avoid confusion and double work (see Gap Recommendation 4)

Forms are largely paper based (i.e. Appeals, applications, etc.)	Develop online forms that directly interface with PeopleSoft (see Recommendation 11)
Paper files are used for student information	Select and implement a digital imaging system for all document storage (See Gap Recommendation 6 & 11)
Validation of MIS data is done at the end of the term	Create audit reports for early validation of data by the campuses (see Gap Recommendation 1 & 5)
Students respond better to texting than email	Investigate the use of texting tools to communicate with students using texting in addition to email (i.e. QLess, etc) to better serve students
Manual input of awards including EOPS/Care	Work with IT to develop logic to import awards where possible from funding sources and to post EOPS/Care awards when awarded (see Gap Recommendation 11)
Excel used to track awards and FWS; may be stored on local computers which introduces a security risk	Eliminate the need for Excel to track awards and FWS students by using PeopleSoft functionality; develop ability to import FWS pay information into Financial Aid (see Gap Recommendation 6 & 11)
Change of Major process not clearly defined including approval by Financial Aid to avoid student loss of funding	Clearly define the Change of Major process including approval by Financial Aid and implement workflow to manage the process including student notifications
SAP Processing is not deemed reliable	Review and document the SAP process and validate that it is working properly

## Human Resources – EB (Employee Demographics) and EJ (Employee Assignment)

<u>EB Data File</u>

The Employee Demographic (EB) Data File is reported during each term reporting as well as annually for all employees who had an assignment associated with teaching a section reported in the Section (XB) Data file. The EB Data File contains information related to the assignment including assignment type, accounting code, weekly hours, hourly rate and FTE associated with the assignment.

EB Current Process Flow

Employee Demographic (EB) Data File – Current Process Flow

EB Proposed Process Flow
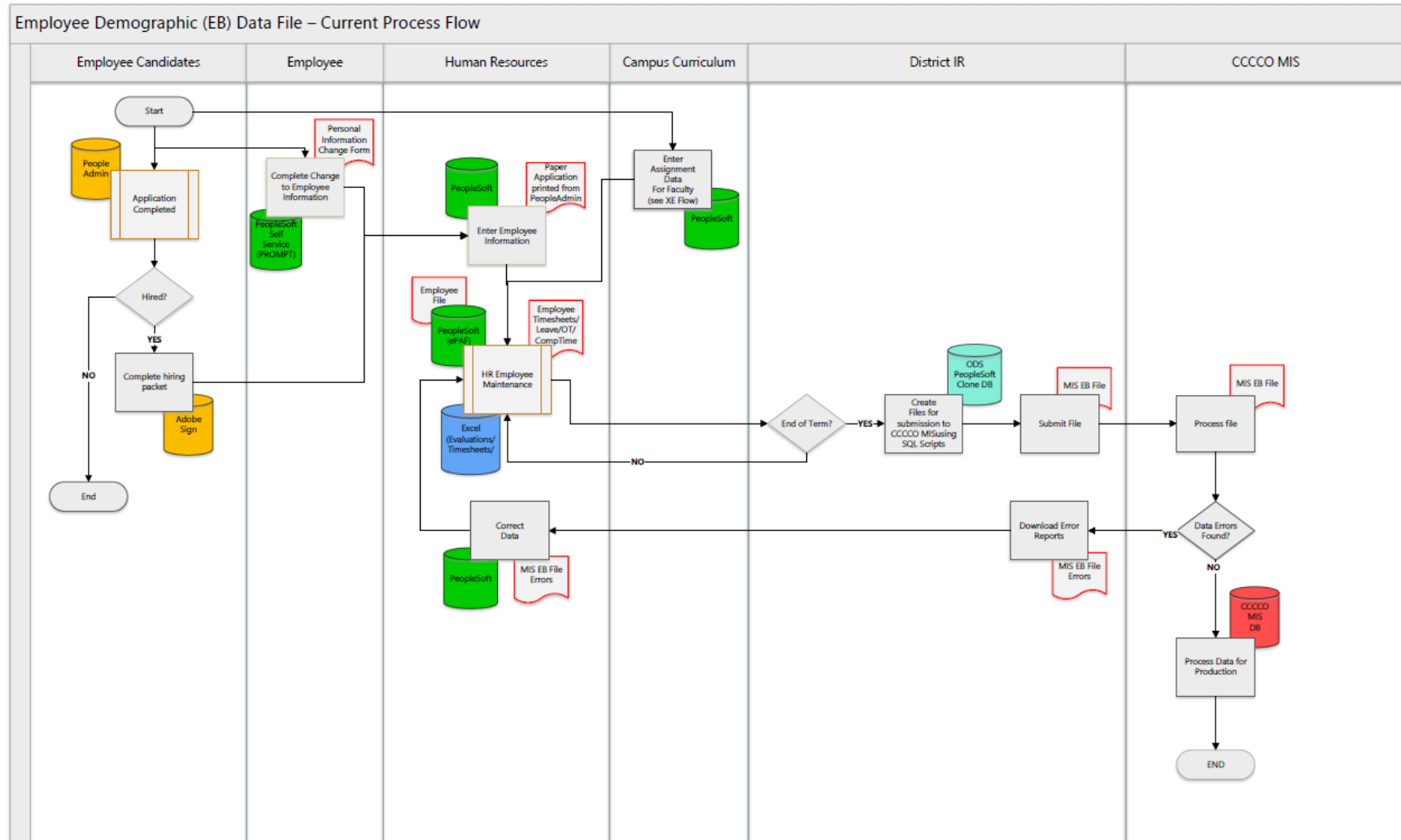

Employee Demographic (EB) Data File – Proposed Process Flow
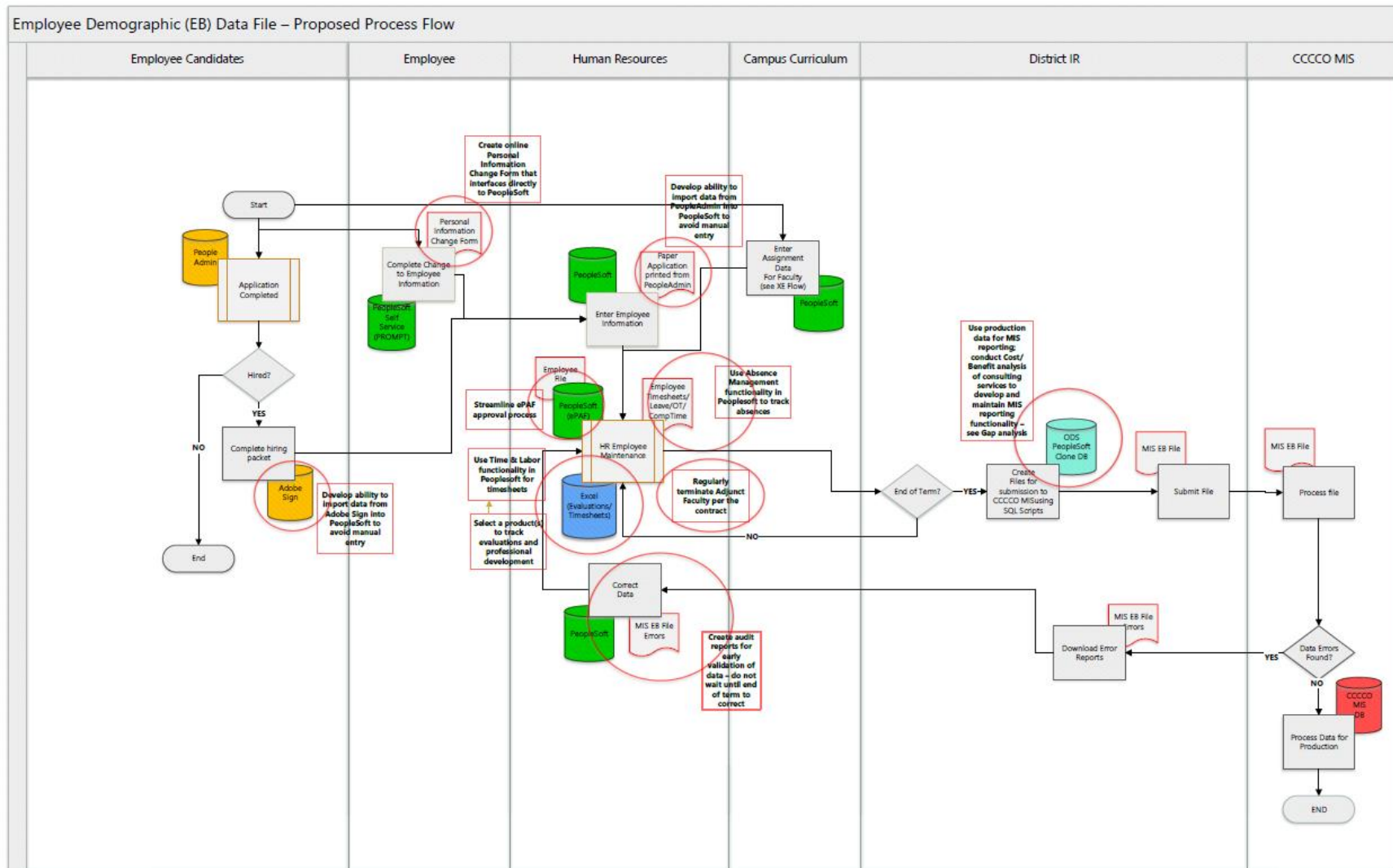
EJ Data File

The Employee Assignment (EJ) Data File reports the assignment records of every employee who has an Employee Demographic (EB) during the year. Every EB record must have at least one EJ record but is limited to 25 EJ records. The EJ record contains FTE, pay, leave, and hours worked information. Submissions of the Employee Assignment data records are due once a year, during January, reflecting the employee activity during the Fall term.

EJ Current Process Flow

Employee Assignment (EJ) Data File – Current Process Flow

EJ Proposed Process Flow
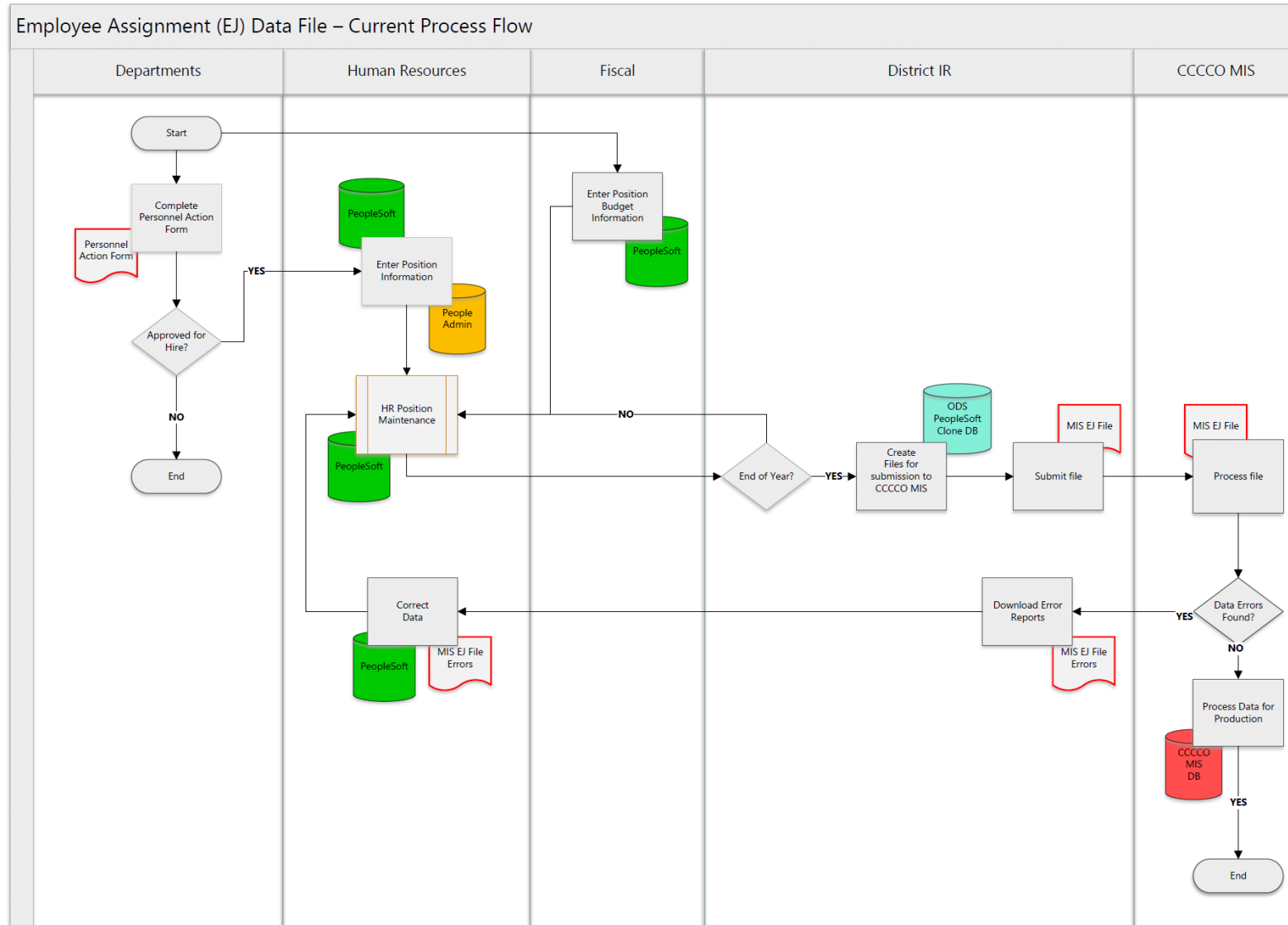
Employee Assignment (EJ) Data File – Proposed Process Flow
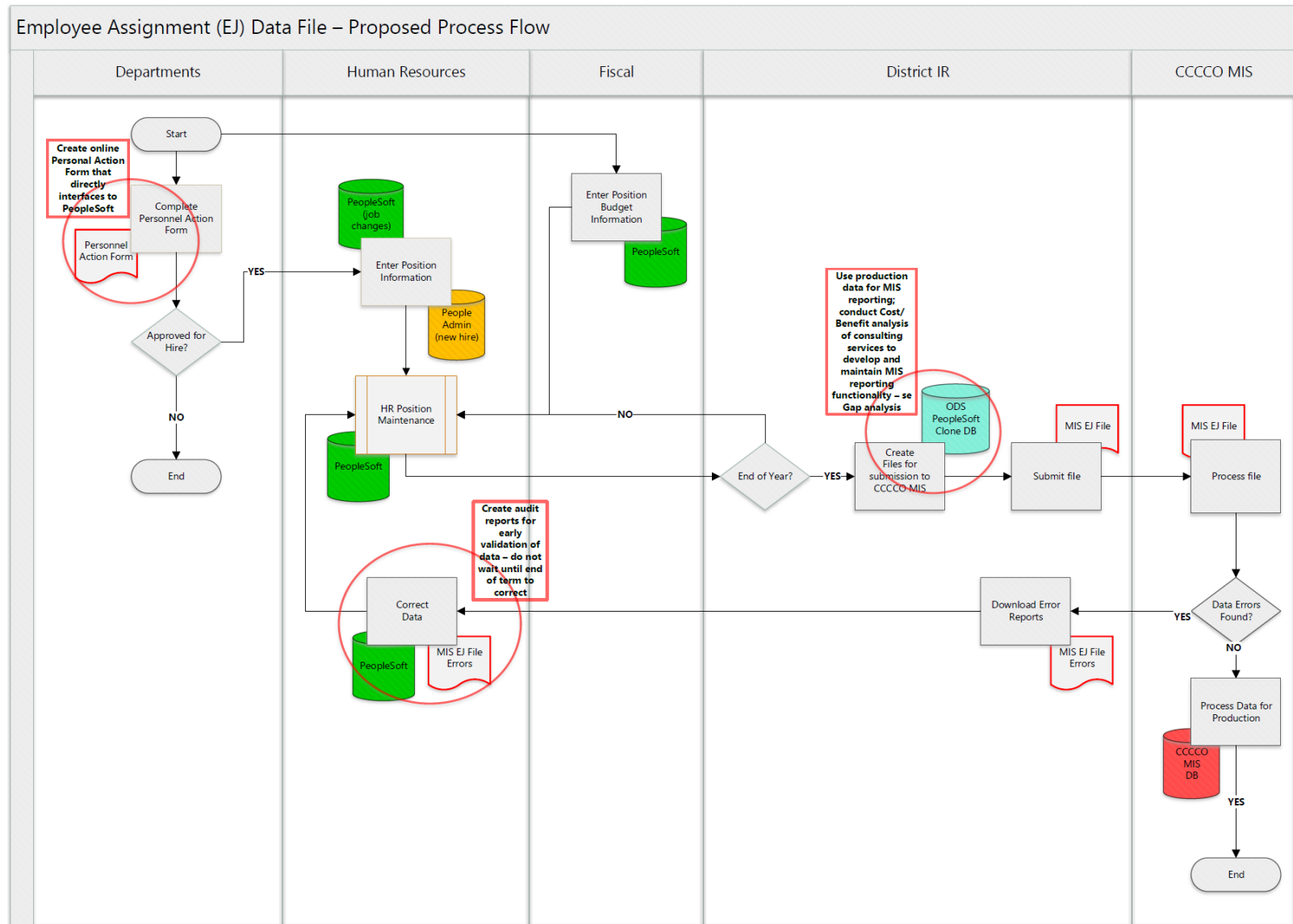
EB and EJ Findings and Recommendations

The following findings and recommendations are provided for Human Resources which would improve department efficiency/effectiveness and provide potential cost savings (Gap Recommendations are also noted where appropriate):

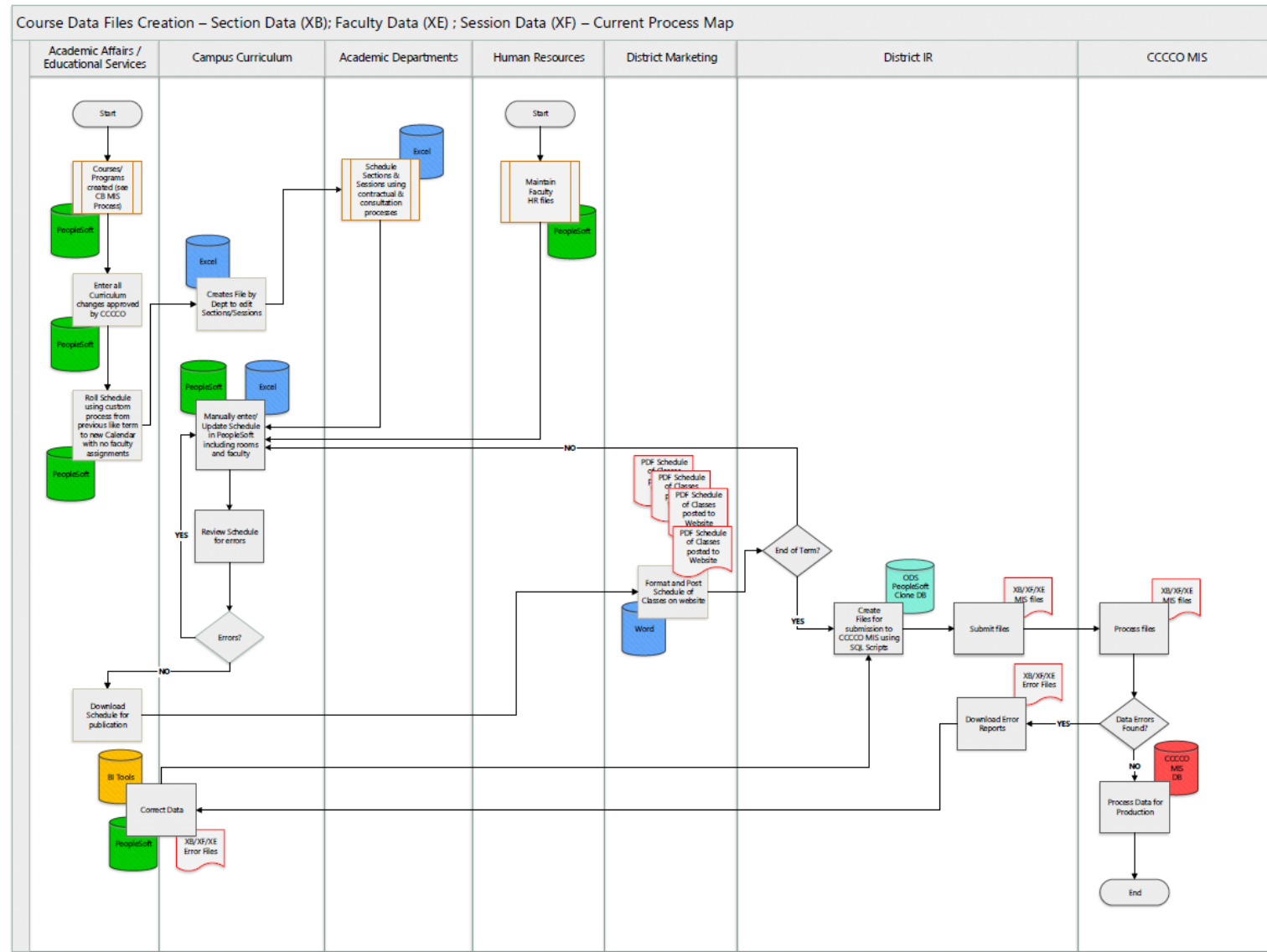| Finding	Recommendation
Employment application is entered by applicant into PeopleAdmin and then once hired manually entered into the PeopleSoft system	Develop ability to import data from PeopleAdmin into PeopleSoft
Forms for information changes and personnel actions are manual	Create online Personal Information Change Form and Personnel Action Form with ability to directly interface data to PeopleSoft see Gap Recommendation 11)
Hiring packet is administered through Adobe Sign but is then manually entered into PeopleSoft	Develop ability to import data from Adobe Sign into PeopleSoft
ePAF (Electronic Personnel Action Form) is cumbersome and requires multiple clicks to approve	Streamline ePAF approvals in PeopleSoft (see Gap Recommendation 6)
Time & Labor functionality in PeopleSoft is not used; timesheets are manual	Implement Time & Labor functionality in PeopleSoft (see Gap Recommendation 6)
Absences are manually tracked	Implement Absence Management functionality in PeopleSoft (see Gap Recommendation 6)
Evaluations and Professional Development is tracked manually	Select a product to track evaluations and professional development and implement
Adjunct Faculty are not regularly terminated in the system per the contract	Regularly terminate Adjunct Faculty per the contract
MIS data is not validated early in the semester/year; processing and correction only occur at end of term or annually	Create audit reports for on-demand early validation of data (se Gap Recommendation 5)

Schedule – XB (Section Data), XE (Faculty Data) and XF (Session Data)

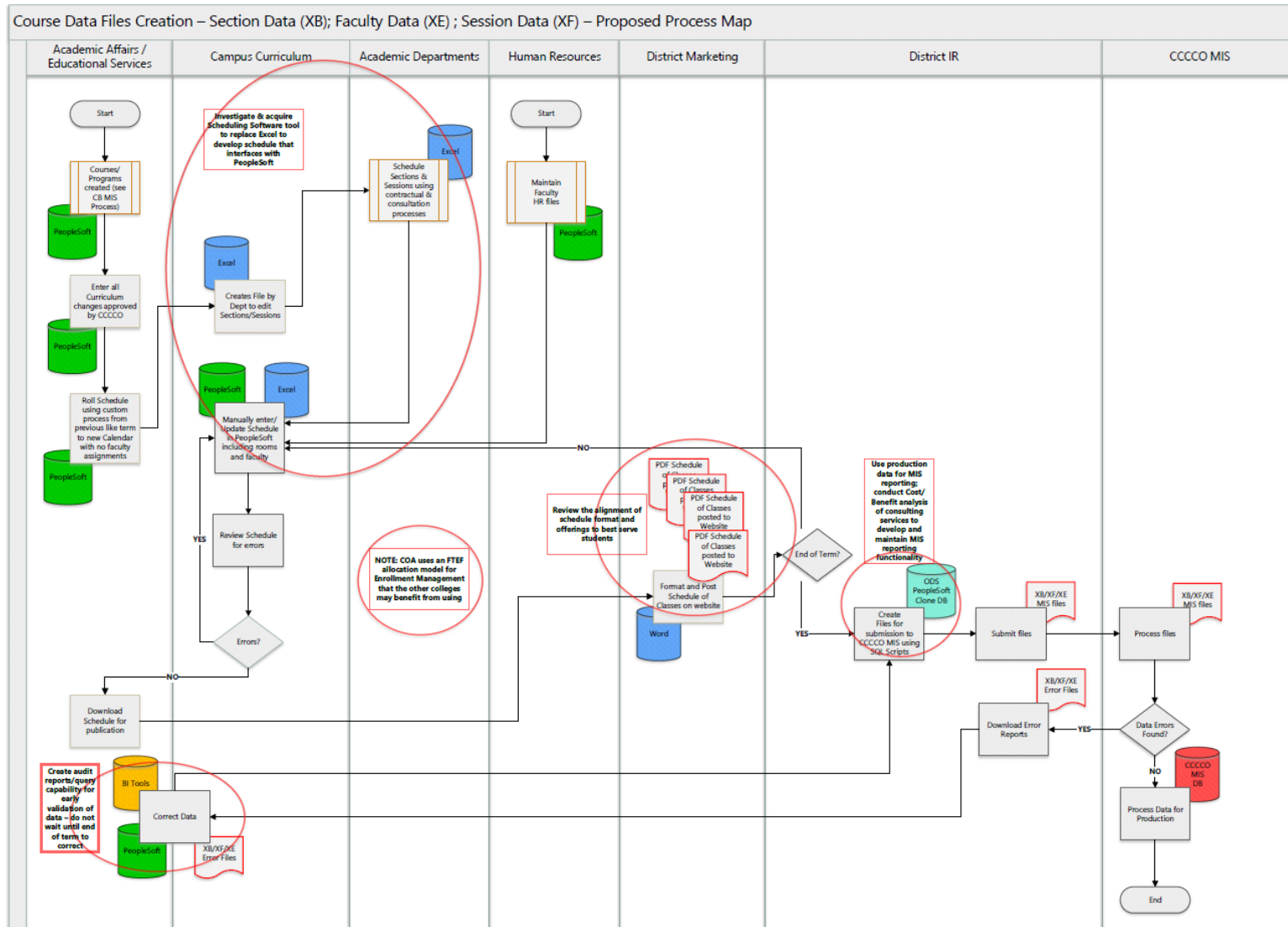XB, XE, & XF – Section, Faculty and Session Data Files

The course files consist of three files that document the courses taught during a term. These files are:

- Section (XB) Data – Data that describes each section taught during the reporting term. This file describes the accounting method of the course (weekly, daily, positive attendance or independent study) and section characteristics such as number of units, student contact hours and special course status.
- Session (XF) Data – Data that describes each session taught within an associated section. This file describes instructional method, meeting times and days, and session hours.
- Faculty (XE) Data – Data that describes the faculty assignment for each session including assignment type, percent of load, FTE associate with the session and an hourly rate.

XB, XE & SF Current Process Flow

Course Data Files Creation – Section Data (XB); Faculty Data (XE) ; Session Data (XF) – Current Process Map

XB, XE & SF Proposed Process Flow

Course Data Files Creation – Section Data (XB); Faculty Data (XE) ; Session Data (XF) – Proposed Process Map

XB, XE & SF Findings and Recommendations

The following findings and recommendations are provided for Scheduling which would improve department efficiency/effectiveness and provide potential cost savings (Gap Recommendations are also noted where appropriate):

Finding	Recommendation
The schedule is developed using spreadsheets and then manually entered in the PeopleSoft system	Evaluate and acquire scheduling software to develop the schedule, review the schedule and load the schedule into Peoplesoft eliminating double entry and manual processes
College of Alameda has developed an Enrollment Management process for FTEF allocation to manage costs	Explore the use of the College of Alameda Enrollment Management process Districtwide
Four schedules are produced: one for each college	Review the alignment of schedule format and offerings to best serve students; consider consistent format across the four schedules or one schedule for all colleges (see Gap Recommendation 3)
Validation of MIS data is done at the end of the term	Create audit reports for early validation of data by the campuses (see Gap Recommendation 5)

Special Populations – SG (Veteran, Mesa, Dual Enrollment, Puente, Umoja, Trio)

SG Data File – Special General Population

The Student General Population (SG) Data File is reported during each term reporting period for each student who:

- Enrolled in at least one class as of first census for daily or weekly census classes,

OR

- Attended at least one meeting of a positive attendance class,

OR

- Enrolled in at least one class that resulted in a notation on the student's official record,

OR

- Received a service from one the college's categorical programs;

AND

- Had a "positive" status for one or more of the data elements included in the Special Populations data record.

The SG Data File contains information regarding multiple special population indicators including:

|		
Military Service-Veterans	UMOJA Program	Homeless Status
Foster Youth Status	Career Advancement Academy	Long Term Unemployment Status
Incarcerated Status	Baccalaureate Program	Cultural Barrier Status
MESA Program	College and Career Pathways	Seasonal Farm Worker Status
PUENTE Program	Economically Disadvantaged Status	Literacy Status
MSCH Program	Ex- Offender Status	Work Based Learning Status

Information is reported for a student when it is applied to the student group.

SG Current Process Flow

Student Special Populations (SG) File – Current Process Flow
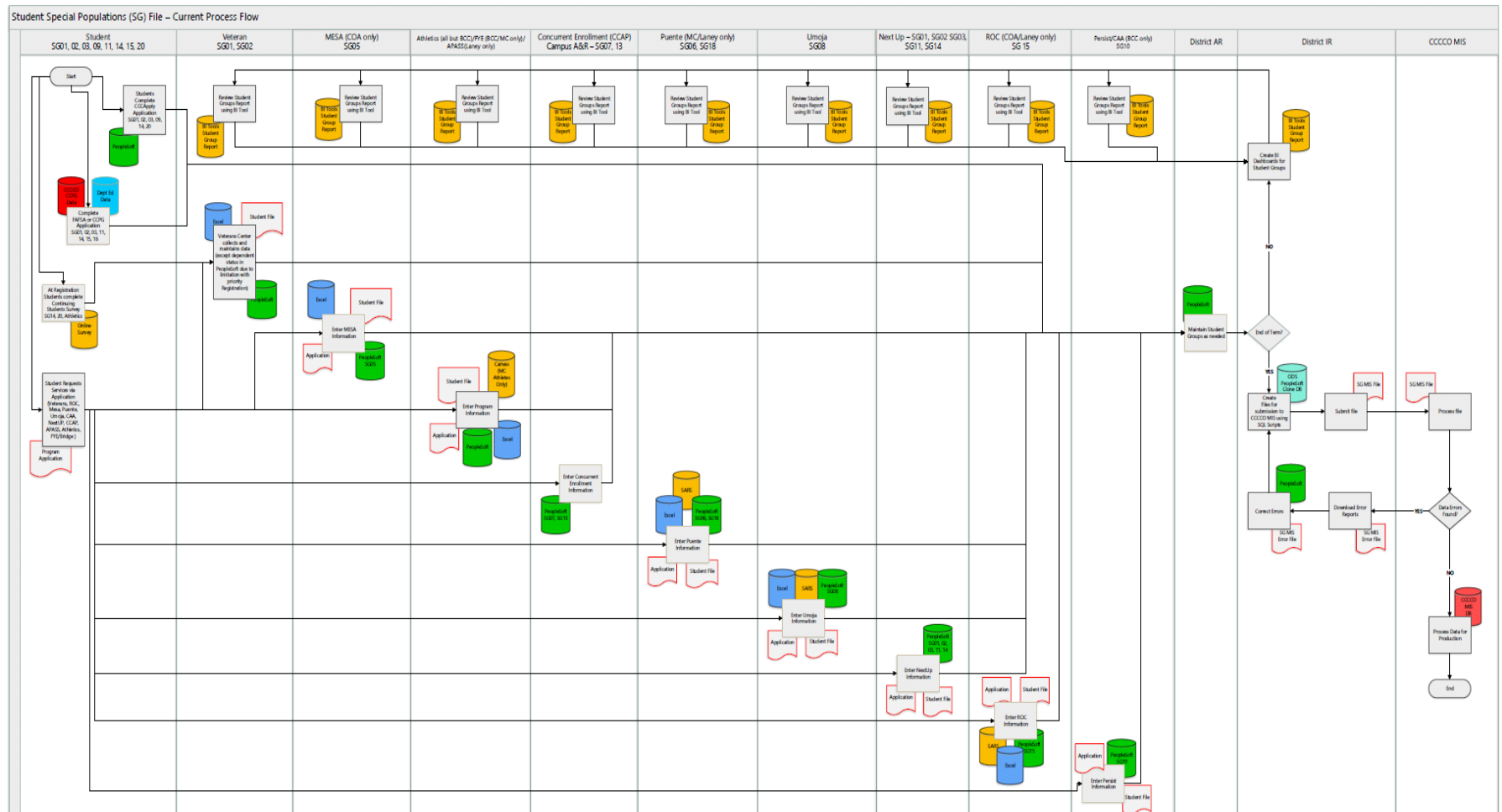
SG Proposed Process Flow
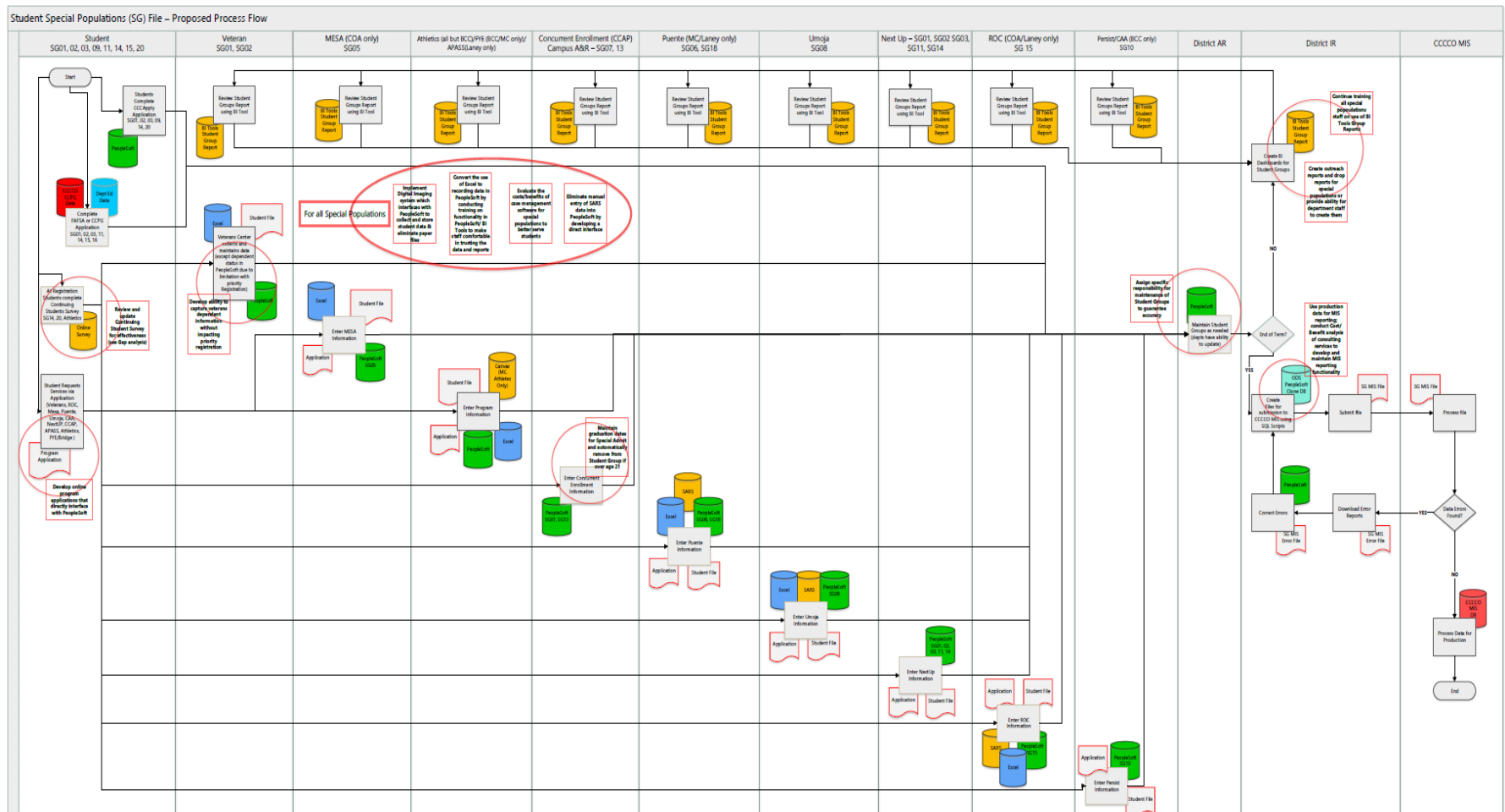
SG Findings and Recommendations

The following findings and recommendations are provided for Special Populations (Veterans, MESA, Athletics, CCAP, Puente, Umoja, NextUp, ROC & Persist) which would improve department efficiency/effectiveness and provide potential cost savings (Gap Recommendationsare also noted where appropriate):

Finding	Recommendation
Excel is used to capture and track special population data	Convert the use of Excel to recording data in PeopleSoft which is currently stored in Excel by leveraging capabilities for data collection in PeopleSoft (see Gap Recommendation 6 & 11), conducting training on functionality in PeopleSoft/BI Tools which will make staff more comfortable using PeopleSoft and more trusting of the data captured and reported

Evaluate the costs/benefits of case management software for special populations that will integrate with PeopleSoft |
Paper files are used for student information	Select and implement a digital imaging system (See Gap Recommendation 6 & 11)
Data is entered in both SARS and PeopleSoft for special populations	Eliminate the entry of SARS data into PeopleSoft by developing a direct interface
Student Groups in PeopleSoft are maintained by multiple departments at District and the campuses which may lead to confusion and inaccurate groups	Assign specific responsibility for maintenance of Student Groups to guarantee accuracy (see Gap Recommendation 10)
Special Admit graduation dates may not be regularly maintained	Assign specific responsibility for maintenance of Special Admit students to guarantee accuracy; automatically remove Special Admit status of those over age 21 and maintain graduation dates (see Gap Recommendation 10)
Special Groups reports are available in BI Tools	Continue training of special populations staff on the use of BI Tools Group Reports to validate MIS data early in the semester (see Gap Recommendation 5)
Unable to track student progress and identify students who might need additional services (i.e. Outreach, Class Drop Reports etc.)	Use the supplemental data feature of CCCApply to capture additional information about students to help identify those who may need or be eligible for additional special population services.

	Provide access and training for special populations staff (see Gap Recommendation 9) to be able to perform ad-hoc reporting for special populations such as: • Outreach reports • Class Drop reports • Tracking special population student progress • Other needs as identified
Veteran dependents not captured in PeopleSoft due to priority registration restrictions	Develop and implement ability to capture veteran dependent information without impacting priority registration and to properly report this information in MIS
Continuing Students Survey, administered each semester for online registration, collects much more data than may be needed causing students to improperly answer the questions just to get finished and register	Review and streamline the Continuing Students Survey to ask only what is needed (see Gap Recommendation 2)
Applications for special population programs are largely paper based	Develop and implement online applications for special population programs that directly interface with PeopleSoft (see Gap Recommendation 11)

VTEA/Perkins – SV (Student VTEA)

<u>SV - Student VTEA Data File</u>

The Student VTEA (SV) Data File is reported during each term reporting period for each student who:
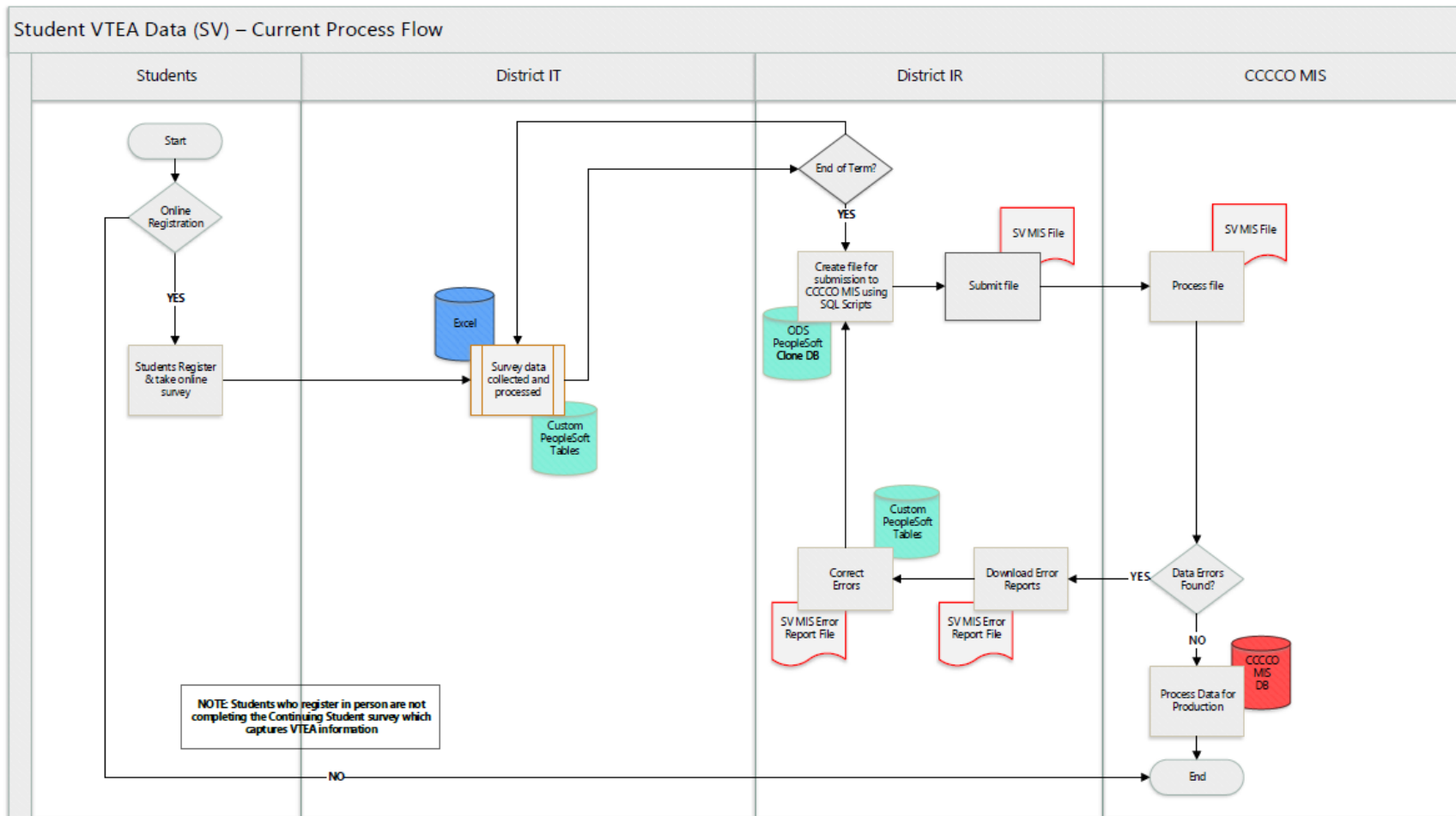
- Enrolled in at least one class during 1st or 2nd census for daily or weekly census classes

  OR

- Attended at least one meeting of a positive attendance class

  OR

- Enrolled in at least one class that resulted in a notation on the student's official record

AND who meet the following specific criteria:

- Has been enrolled in one or more courses having a SAM level designation of A, B, C, or D

  OR

- Has been accepted into a specific occupational program or have a certified intent to enroll in a vocational program and has a "positive" status for one or more of the data elements included in the VTEA data record.

The data record contains information related to the student's eligibility for VTEA.

SV Current Process Flow

Student VTEA Data (SV) – Current Process Flow

NOTE: Students who register in person are not completing the Continuing Student survey which captures VTEA information

SV Proposed Process Flow

Student VTEA Data (SV) – Proposed Process Flow

Students	District IT	District IR	CCCCO MIS

Start

Online Registration

YES

Students Register & take online survey

Eliminate double storage of VTEA data in Excel and PeopleSoft

Excel

Survey data collected and processed nightly

Custom PeopleSoft Tables

Perform a review of all courses used as requirements in CTE degrees and certificates to make sure SAM coding is correct

Provide kiosks for registration & training students on how to register online & capture continuing student survey for VTEA funding

NOTE: Students who register in person are not completing the Continuing Student survey which captures VTEA information

NO

End of Term?

YES

Use production data for MIS reporting; conduct Cost/ Benefit analysis of consulting services to develop and maintain MIS reporting functionality

Create file for submission to CCCCO MIS using SQL Scripts

ODS PeopleSoft Clone DB

Submit file

SV MIS File

Process file

SV MIS File

Custom PeopleSoft Tables

Provide a mechanism for VTEA staff to review VTEA MIS data early in term

Correct Errors

SV MIS Error Report File

Download Error Reports

SV MIS Error Report File

YES

Data Errors Found?

NO

Process Data for Production

CCCCO MIS DB

End

SV Findings and Recommendations

The following findings and recommendations are provided for VTEA/Perkins which would improve department efficiency/effectiveness and provide potential cost savings (Gap Recommendations are also noted where appropriate):

Finding	Recommendation
Excel and PeopleSoft are both used to track VTEA/Perkins data with regular reconciling between the two systems	Eliminate the need to store data in two systems by determining where to store the data in PeopleSoft (see Gap Recommendations 6 & 11)
SAM coding may not be correct	Complete a review of all courses which are requirements or pre-requisite courses for CTE degrees and certificates; make sure all those courses are coded SAM A-D as appropriate (see Gap Recommendation 2)
A&R staff perform a large number of walk-up registrations; this does not capture information from the Continuing Student survey needed for VTEA funding and other purposes	Consider providing kiosks for registration and training of students to perform online registration under the guidance of A&R staff (see Gap Recommendation 2)
Validation of MIS data is done at the end of the term	Create audit reports for early validation of data by the campuses (see Gap Recommendation 5)

Data Entry Standards Recommendation

CWP found no evidence of the use of data entry standards during the review. Data entry standards not only provide guidelines for detailed data entry procedures to ensure data quality and consistency, but also document governance structures that establish measures for the access, use and protection of data. In addition, the standards define the responsibilities of the users who input and access that data. Recommendations related to data governance address the following issues:

- Data must be fit for the intended institutional use.
- Data should be obtained from the authoritative and appropriate source.
- Data should have a different steward responsible for defining the data, identifying, and enforcing the business rules, reconciling the data to the benchmark source, assuring completeness, and managing data quality.
- Data should be captured and stored as informational values, not codes.
- Common data elements must have a single documented definition and be supported by documented business rules.
- Institutional standards must be consulted and reviewed before a new data element is created.
- Data must be readily available to all appropriate users and protected against inappropriate access and use.
- Data users will use agreed upon common tools and platforms throughout the enterprise.

Data should be input only once and edited, validated, and corrected at the point of entry. Guidelines for detailed data entry procedures provide consistency which is essential to:

- Reduce duplicate personal identification records through reliable search for existing records
- Promote search capability through uniform data entry
- Promote reporting efforts based on presentation, retrieval and joins of the data

In addition to general formatting rules, data standards typically include guidelines for:

Names – First, Last, Middle, Prefix, Suffix

Address – Number, Street, City, Country, Zip Codes

1. Generally based on the United States Postal Service Standards
2. Covering multiple address types

Telephone Numbers – including multiple phone number types

CWP therefore recommends the adoption of a set of data entry standards. Several possible example data entry standards are provided in Appendix C for consideration.

Audit and Error Reports Associated with MIS Reporting

Audit and data error reports provide a method to catch data errors early in the MIS reporting process.

The PCCD IR Department provides some audit reports. An example is the BI Tools Group report.

In addition to these existing audit reports, CWP recommends that smaller, focused reports be developed to catch errors in MIS submissions that can be run throughout the semester to detect errors early. Most MIS groupings have edit criteria that can be checked early to prevent errors at submission.

Two types of error reports can be created. This first type checks for errors that may be made at the time of entry for data related to MIS reports. This type of data is generally descriptive data such as codes or values assigned to programs and courses. Examples of this type of reporting are:

Course Basis (CB) Data File

Even one error in the CB file can prevent the file from being accepted for CCCCO MIS reporting. Generally, errors in the CB file are related to key elements that are designated as substantive changes to course files requiring a new CCCCO Control Number to be assigned. These elements include:

CB03 TOPS Code	CB09 SAM Code
CD04 Course Credit Status	CB21 Prior to College Level
CB06 Maximum Units of Credit	CB22 Course Non-Credit Category
CB07 Minimum Units of Credit	CB23 Funding Agency Category
CB08 Basic Skills Category	

The CCCO curriculum file data can be compared to the data from courses selected for the CB file reporting at the time the academic schedule is created to detect and correct any of these errors.

Faculty Assignment (XE) Data File

The percent that an individual assignment is credited to a faculty member is often entered incorrectly for sections or sessions that are split between multiple faculty members.

This data can be audited, and error reports created at the time that the schedule is being developed, long before reporting for MIS is needed. Any sections or sessions that do not have 100 percent covered reported need to be reviewed for correctness.

Student Program (SP) Award Files
Student award identification data must match the data in the program and certificate definitions at the Chancellor's Office. These elements include:

SP01 Program TOPS Code
SP02 Program Award Type
SP04 Program Control Number – also known as the Unique Code.

If any of these elements do not match, the reported record will be rejected. This is especially important as the student program award data is critical for the Student-Centered Funding Formula. The definition data for degrees and certificates from the Chancellor's office should be compared to the same elements in the campus curriculum database to ensure data is accurate. This comparison can be done annually prior to the creation of the SP MIS file.

The second type of error checking looks for errors that require a relationship between two MIS files. These error reports compare data that will be reported in separate MIS reports but is required to be consistent between the two reports. Examples of this type of reporting are:

Student DSPS (SD) and Student (SE) Data Files
While students who receive service in these departments do not need to be enrolled in a course during the term of reporting, their student basic data needs to be included in the Student Basic (SB) Data File. Prior to submission of the SD or SE file, these files should be compared to the SB file to ensure that a student SB record is being reported.

Finally, CWP recommends that the data errors reported by the CCCCO MIS Department at the time of MIS file submission be corrected not only in the working files submitted to the CCCCO MIS Department, but also in PeopleSoft. While this correction is occurring for some MIS files, such as the Course Basic (CB) File, this procedure may not be consistently applied to all data.

Another alternative is the ability to run the MIS file creation reports several times during the semester to detect errors and correct them before submission. This works best if staff are provided the ability to run them at will when they have the time to review and correct.

Appendices

Appendix A – Example Data Governance Policy

A foundational Data Governance Policy from which PCCD can develop a policy.

Appendix B – Data Map/Element Dictionary

Format for the Data Map/Element Dictionaries is presented. The Data Map/Element Dictionaries are provided in Spreadsheet format in separate files due to the size of the documents.

Appendix C – Data Entry Standards Examples

Example data entry standards for adoption. The resulting Data Entry Standards will be used by staff who input data into the system.

Appendix D – Data Integrity Project Summary of Tasks

Provides a table of all recommendations to use for tracking progress.

Appendix A – Example Data Governance Policy

Purpose

The purpose of this policy is to identify the different types of data and to establish a framework for classifying institutional data based on its level of sensitivity, value, and criticality to the District.

Scope

This policy applies to all faculty, staff, and third-party agents of the District as well as any other affiliates who are authorized to access Institutional Data.

Data Governance

Data governance focuses on improving data quality, protecting access to data, establishing business definitions, maintaining metadata, and documenting data policies. The District's institutional information is an asset and must be maintained and protected as such. It is vital to have accurate, trusted data to make sound decisions at all levels of an organization. Data governance helps to provide data transparency and results in confidence among District faculty, staff and management to trust and rely on data for information and decision support.

Governing Institutional Data

The following principles are set forth as minimum standards to govern the appropriate use and management of institutional data:

- Institutional data is the property of the District and shall be managed as a key asset
- Unnecessary duplication of institutional data is discouraged
- Institutional data shall be protected
- Institutional data shall be accessible according to defined needs and roles
- Institutional representatives will be held accountable to their roles and responsibilities
- Necessary maintenance of institutional data shall be defined
- Resolution of issues related to institutional data shall follow consistent processes
- Data stewards are responsible for the subset of data in their charge

Data Governance: Roles and Responsibilities

Several roles and responsibilities govern the management of, access to, and accountability for institutional data. The diagram below depicts the usage of the data and the underlying governance:
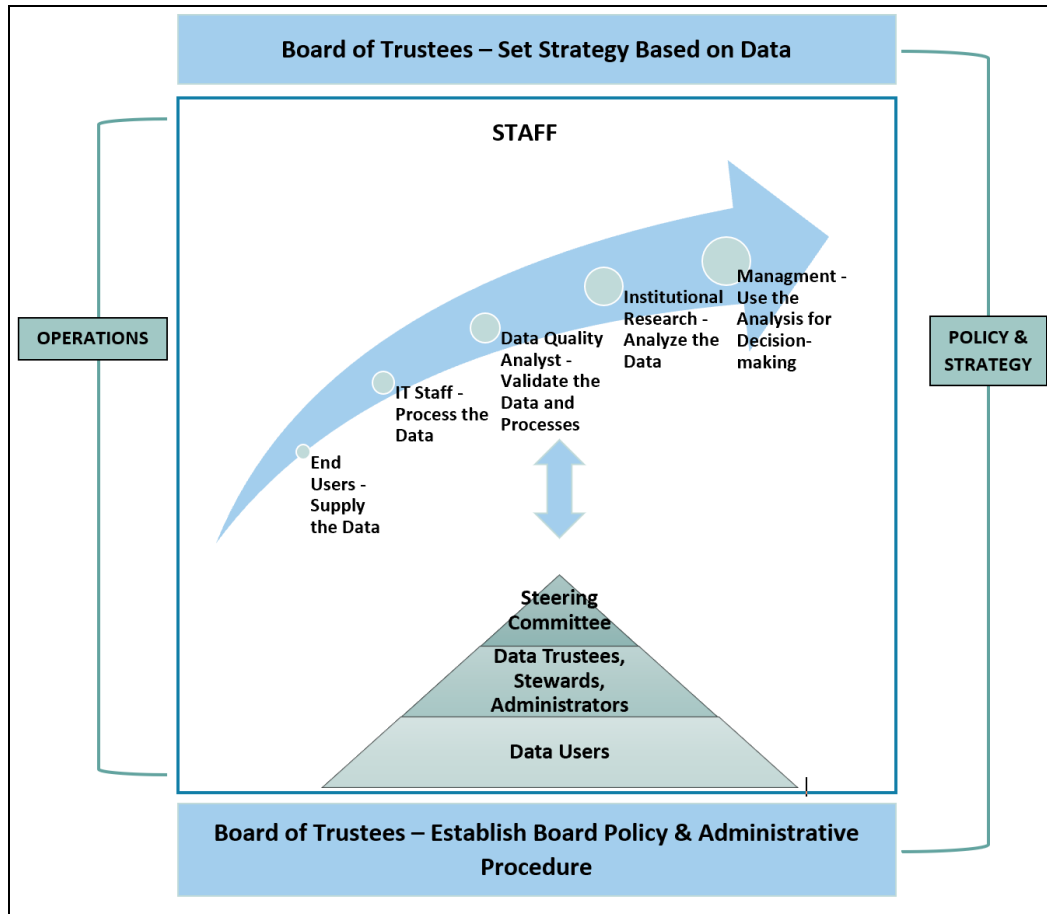
The various role and responsibilities are defined as:

Steering Committee
This committee is comprised of functional data stewards from across all functions and departments of the District.

Data Trustees
Data Trustees are senior college officials (e.g., vice presidents) or their designees who have planning, policy-level, and management responsibility for data within their functional areas.

Data Stewards
Data Stewards are college officials who have direct operational-level responsibility for the management of one or more types of institutional data. Data Stewards are assigned by the Data Trustee and are generally associate vice presidents, directors, or managers.

Data Administrators

Data Administrators are individuals who are responsible for data collection and management and who have been granted authority to grant internal access to data from their functional area by the Data Steward and/or Data Trustees.

Data Users

Data Users are college units or individual college community members who have been granted access to institutional data in order to perform assigned duties or in fulfillment of assigned roles or functions within the college; this access is granted solely for the conduct of college business.

Below is the organizational scheme for trustees and stewards by administrative area. See contact list designated data administrators.

Note the chart below is an example. PCCD would need to complete it based on District titles and departments.

Administrative Data Area	Data Trustee	Data Steward
Admission & Records	Dean, Admissions & Record	Registrar
Advancement & Alumni		
Finance		
Financial Aid		
Human Resources (Faculty/Staff)		
Information Services		
Institutional Statistics & Analytical		
Student Affairs		
Instruction		

Data Governance: Classification of College Data

All College data are classified into levels of sensitivity to provide a basis for understanding and managing college data. Accurate classification provides the basis to apply an appropriate level of security to college data. These classifications consider the legal protections (by statute, regulation, or by the data subject's choice), contractual agreements, ethical considerations, or strategic or proprietary worth. They also consider the application of "prudent stewardship,"

where there is no reason to protect the data other than to reduce the possibility of harm or embarrassment to individuals or to the institution. The classifications are determined by the Steering Committee.

The classification level assigned to data will guide Data Trustees, Data Stewards, Data Administrators, and Data Users in the security protections and access authorization mechanisms appropriate for those data. Such categorization encourages the discussion and subsequent full understanding of the nature of the data being displayed or manipulated. By default, all institutional data will be designated as "Internal." College employees will have access to the data for use in the conduct of college business.

Classification Levels

Public Data *(low level of sensitivity)*
Access to "Public" institutional data may be granted to any requester. Public data are not considered confidential. The integrity of Public data must be protected, and the appropriate owner must authorize replication of the data. Examples include: institutional statistics that appear in publications, academic course descriptions, directory information, public information request data.

Internal Data *(moderate level of sensitivity)*
This classification applies to information protected due to proprietary, ethical, or privacy considerations, even though there may not be a direct statutory, regulatory, or common-law basis for requiring this protection. Internal data is restricted to personnel designated by the College who have a legitimate business purpose for accessing such data. Examples include: institutional survey data and enrollment projection data.

Restricted Data *(highest level of sensitivity)*
Data should be classified as Restricted when the unauthorized disclosure, alteration or destruction of that data could cause a significant level of risk to the College or its affiliates. The highest level of security controls should be applied to Restricted data. Restricted data is any data that contains personally identifiable information (PII) concerning any individual, as well as any data that contains PII that is regulated by local, state, or Federal privacy regulations. These regulations may include, but are not limited to:

- Family Educational Rights and Privacy Act (FERPA)
- Gramm-Leach-Bliley Act (GLBA)

- Health Insurance Portability and Accountability Act (HIPAA)
- Payment Card Industry Data Security Standards (PCI DSS)

Listed below are examples of types of personally identifiable information protected by local, state, or Federal privacy regulations. These examples do not constitute an exhaustive list of all types of information that are protected by local, state, or Federal privacy regulations.

Examples (note that any of the items below deemed to be Directory Information is not restricted)**:**

- Address
- Telephone number
- College e-mail address
- Social security number
- Credit card and debit card numbers
- Bank account numbers and routing information
- Driver's license numbers and state identification card numbers
- Student education records
- Student account files
- Academic advising records
- Admission files
- Transcripts (College, High School)
- Financial Aid applications, student federal work study information, loan information
- Intercollegiate Athletics reports
- Residential Life information
- Personal health information

Privacy Regulations Referenced
FERPA

FERPA is a Federal law that protects the privacy of student education records. This law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA provides students with the right to inspect and review certain education records maintained by the school and to request corrections if the records are inaccurate or misleading. It requires that schools obtain written permission before releasing information from a student's education record. It also allows schools to publish certain "directory"

information about students, unless the student has requested that the school not do so. The penalty for failing to comply with FERPA is loss of all federal funding, including grants and financial aid.

Additional information is available at

http://www.ed.gov/policy/gen/guid/fpco/ferpa/index.html

GLBA

GLBA protects consumers' personal financial information held by financial institutions. It requires that financial institutions provide customers with a privacy notice explaining what information is collected, how it is used, and how it is protected. The penalty for failing to comply with GLBA is a fine of up to $100,000 for the institution and of up to $10,000 for the officers and directors of the institution.

Additional information can be found at

http://www.ftc.gov/privacy/privacyinitiatives/glbact.html

HIPAA

HIPAA protects the privacy of Protected Health Information (PHI). It establishes regulations for the use and disclosure of PHI, including a patient's health status, provision of health care, medical records or payment history. Penalties for wrongfully disclosing PHI range from a $50,000 to a $250,000 fine and a one year to a ten-year prison term, depending on the circumstances. These fines are for the individual, not the institution.

Additional information can be found at http://www.hhs.gov/ocr/hipaa/

Payment Card Industry Data Security Standards (PCI DSS)

PCI DSS is an industry standard which protects credit card customer account data. The PCI DSS standard requires organizations that accept credit cards for payment to utilize a secure network and to adhere to specific procedures and standards to protect credit card data. Failing to comply with PCI DSS can result in significant fines. Credit card providers can fine merchants up to $500,000 per compromise if it is established that the merchant was not complaint at the time at which data was compromised Merchants may also be banned from accepting certain types of credit cards.

Additional information is available at https://www.pcisecuritystandards.org/tech/index.htm

PCCD Board Policy / Administrative Procedures 5040 Student Records, Directory Information and Privacy and Administrative Procedure 5045 Student Records—Challenging Content and Access Log

These policies have been adopted by the Board of Trustees and address the way in which student data is used and shared at PCCD.

Appendix B – Data Map/Element Dictionary

Due to their size, the spreadsheets are provided in separate files.

Each Data Map/Element Dictionary MIS element entry contains of the following information:

Grouping	Data	Col
SCFF, 320, IPEDS	Indication of use in SCFF reporting	A
	Indication of use in CCFS-320 reporting	B
	Indication of use in IPEDS reporting	C
MIS Element	MIS Element Code	D
	MIS Element Format	E
	MIS Element Name	F
Organization Responsible for Data	District Organization	G
	Berkeley City College Organization	H
	College of Alameda Organization	I
	Laney College Organization	J
	Merritt College Organization	K
Data Entry/PeopleSoft	Method of Collection	L
	Source Field Name	M
	Table	N
Customized System/PeopleSoft Staging Database	SQL Logic	O
MIS Checks	Syntactical Checks	P
	Referential Checks	Q
	Quality Checks	R

Appendix C – Data Entry Standard Examples
North Orange Data Entry Standards

Data Standards
A Data Entry Survival Guide

Never use # or % sign!   Use GUAPSWD to change passwords!

Field	ACCEPTABLE	FORBIDDEN
PERSON NAME - STAFF or STUDENT		
LAST NAME	Upper/Lower case McDonald	ALL CAPS, all lower
	Hyphens. Apostrophes Smith-Jones or O'Leary	, # %
	Spaces between names St John St James	Period (.) (even after abbreviations, i.e., St. John)
		Prefixes and Suffixes
	Last names are to be entered as presented. In other words, if the person puts a space, you put the space.	
LEGAL FIRST NAME Enter legal first name even if they prefer to use the initial of first name and middle name.	Upper/Lower case	ALL CAPS, all lower
	Hyphens, Apostrophes	, # %
	Period (.) Use Exception: Period is allowed only after single character initial when all that is available is initial. A.	PERIOD (.) except as noted. Using period after initial when first name available
	Spaces between names Mary Lou	Prefixes and Suffixes
PREFERRED First Name	Same as for Legal First Name	
MIDDLE NAME (enter entire middle name if available)	Upper/Lower case	ALL CAPS, all lower
	Hyphens, Apostrophes	, # %
	Period Use Exception: 2 middle initials. A.H or P.R	PERIOD (.) except as noted System generates period after middle initial.
	Spaces between multiple middle names	
PREFIX	Mr. Mrs. Ms. Dr. Hon. Rev.	All other prefixes
SUFFIX	Sr. Jr. II III IV	
NON-PERSON NAME - VENDOR		
VENDOR NAME	Upper/Lower Case ALL CAPS: Recognized acronyms, i.e., IBM, AT&T	ALL CAPS, all lower
	Hyphens May be used to separate double name	, Apostrophes
	Spaces If legal spelling and format of the name includes spaces	, # %

Vendor Name Field con't	Period Name may include a period, i.e., Amazon.com	
	& only when part of a formal name: Baltimore & Ohio Railroad	& Use and in all other cases
	Co Corp Ltd Inc when used after name of a corporate entity	All other abbreviations
GOVERNMENT OFFICES: State and County departments and agencies—State or County as Vendor		
Vendor	State of California	
Address Sequence	Address 1:Department of Revenue Address 2:Department of Transportation Address 3:Department of Taxation	
ADDRESS STANDARDS		
TYPE	Validation Tables exist: CN, MA and PR for Persons CO used by HR only: limit 24 BU, RE and MA for Non-Persons	
STREET Standards	Upper/Lower case	ALL CAPS, all lower
	hyphen allowed: 39-2 Rd & allowed: 1500 R & S St In Care of allowed	- (In number part of address, i.e., 39.2) % (for in care of)
Secondary Address	Multi-unit dwellings: Place Room, Suite, or Apt to right of street address 102 Main St Apt 101 454 N Jones Rd No. 5 Period allowed only after No.	NEVER USE # Use No. NEVER USE #
Unit Abbrev.	Apt Bldg Dept Fl Rm Sp Ste	No period .
Direction Abbrev.	E W N S NE NW SE SW	No period .
Street and PO	Mail is delivered to the address immediately above the City, State line Line 1: Street Address Line 2: PO Address	
CITY STANDARDS		
CITY	Upper Case/Lower Case	ALL CAPS, all lower punctuation, # ' % Canadian provinces
STATE	REQUIRED - Canadian Provinces go in State Field	
ZIP	REQUIRED for US and Canada US: 5 digits, hyphen, 4 digits. Use the 5 digit zip if 9 isn't available Canada: 6 digits only	

Revised Feb. 2001

Always SEARCH first

Data Entry Rules Creighton University

GENERAL RULES:
- Check your spelling and accuracy! Accuracy is more important than speed.
- Use title-case format (upper case for first letter, all the rest lower case) for person names, street names, and cities. Remember that Banner is **case sensitive**. Banner will accept the data exactly as you enter it. To be able to easily retrieve the information you enter, follow the Data Standards concerning capitalization. It **does matter** where you use upper case and lower case.
- Refrain from punctuation except where noted.
  - Do **not** use pound signs (#), asterisks (*), or commas (,) under any circumstance
  - The only punctuation allowed in Banner are Hyphens (-) in Last Names for individuals with hyphenated names.
- Apostrophes (') in Last Names.
- Slashes (/) in Address fields for In Care of (c/o).
- Periods (.) in a Prefix field.

NAME (L/F/M/S) RULES: USE UPPER AND LOWER CASE
Last Name:
- Use the full legal name.
- Put two-part names together with no space. EX: Mc Donald as McDonald or Van Den Berg as VanDenBerg
- Use an apostrophe (') with no spaces. EX: O'Donnell
- Use a dash (–) when typing combination names with no spaces. EX: Huntley-Gruether

First Name:
- Spell out the legal name fully.
- If they have a multi-name first name omit any spaces between the names. EX: Mary Jane as MaryJane

Middle Name:
- Preferably type the Middle name, however, if not given, Middle Initial is OK.
- Do not use punctuation with middle initial.

Prefix:
- Use Mr. for a male or Ms. for a female or leave blank if unsure of the gender.
- Periods are acceptable in the Prefix field.

Prefix List

Br.	Captain	Dean	Dr.	Dr. and Dr.	Dr. and Mrs.
Fr.	Hon.	Judge	Miss	Mr.	Mr. And Dr.
Mr. and Mrs.	Mrs.	Ms.	Pastor	Professor	Rabbi
Rev		Sr.		Sri.	

Data Entry Rules Creighton University (cont.)

Suffix:
• Type Jr, Sr, etc. only if given. Only use suffix if it is part of the legal name (i.e. no MD, PhD in Suffix field).
• Do not use punctuation.
Suffix List

Jr.	Junior	Sr.	Senior
II	The Second	III	The Third
IV		The Fourth	

Data Entry Rules Creighton University

PREFERRED NAME:
• Type the name that a person wishes to be addressed by. Type the legal spelling and format of the preferred first name, using standard capitalization rules.
• This name should not be assumed but one requested by the individual. Ex: Robert may be Rob or Bob

GENDER:
• If you are not sure whether male or female, leave the default of U for Unknown.

GENDER:
• If you are not sure whether male or female, leave the default of U for Unknown.

ADDRESS:
• You must have an address line.
• Omit punctuation such as periods (.), commas (,), and number signs (#). Use of the slash (/) or dashes (-) in C/O is permitted.
• Use standard postal abbreviations such as St for Street, Ave for Avenue – a complete list is attached. Do not use punctuation or periods with the abbreviations.
• Use abbreviations for directions N for North, S for South, E for East, W for West, NE for Northeast, SW for Southwest, etc. EX: 4511 N 19th St or 821 Meadow Ln SW
• Always use th, rd, and nd in the address with numbers. EX: 717 N 33rd St
• Use PO for Post Office Box. Leave no spaces or punctuation between P and O. There needs to be a space between the Box and the box number. EX: PO Box 82
• Use RR for Rural Route and leave a space between RR and the number. EX: RR 1

CITY:
• Spell out cities. The only accepted abbreviations in the City field are St for Saint, Ft for Fort, and Pt for Port. NOTE: There is no punctuation. EX: Balto, type Baltimore or Co. Spgs., type Colorado Springs or Saint Louis, type St Louis
• *Canadian:* Type the City Name in the City field. Spell out all city names as you would with US city names. There is no punctuation.

Data Entry Rules Creighton University (cont.)

- *International:* Type City name, Province or State and Zip in the City field. Attempt to spell out all names in their entirety. If it is necessary to abbreviate city names to fit within 20 characters, use abbreviation standards.

STATE/PROV:
- Use two-character abbreviations only. Press **<<Ctrl-L>>** for a list or double-click in the field.
- *US:* State Codes MUST be entered for all US addresses.
- *Canadian:* State Codes MUST be entered for all Canadian addresses. Canadian provinces are entered in the State/Province field NOT in the City field. Canadian Provinces include Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland, Northwest Territories, Nova Scotia, Ontario, Prince Edward Island, Quebec, Saskatchewan, and Yukon and they have their own code for entry in the State Field. NOTE: Canadian address must include the City in the City field and the Province in the State field.
- *International:* International State and Provinces (excluding Canada) are entered in the City field, NOT in the State/Province field. This field should be blank for all International Addresses.

Data Entry Rules Creighton University

ZIP/PC:
- *US:* Zip or Postal Codes MUST be entered for all US addresses. Enter only five- or nine-digit zips. Nine-digit zips should be entered with the dash. EX: 68144 or 68124-1532
- *Canadian:* Enter the six-character postal code by keying in 3 characters, a space, and the last 3 characters. NOTE: Letters should be capitalized. EX: T2T 2Y5
- *International:* This field should be blank for all International Addresses.

COUNTY:
- If a County Code is necessary, it will default based on the zip code. Banner maintains a list of all the States-Counties and the appropriate Code, if you elect to enter it manually.

NATION:
- A Nation Code is required for all non-US addresses. Banner maintains a list of all the current code options available. Do NOT enter a Nation Code for US addresses.

MILITARY ADDRESSES (OVERSEAS LOCATIONS ONLY):
- Domestic Locations follow regular address rules.
- City: Enter the APO or FPO Code in the City field.
- State: Enter the Military 'State' Code AA (mail going to Americas other than Canada), AE (Mail going to Europe, Middle East, Africa and Canada), or AP (mail destined to the Pacific) into the State field.
- Zip Code: Enter 5 or 9 digit zips following regular address rules. EX: SSGT Max Wayne Unit 2001 Box 1919 APO AP 96522-0010

Data Entry Rules Creighton University (cont.)

SOURCE (ADDRESS):
• Source indicates where we learned about this address.

Source	Description	Explanation
DNLD	From Download Tape File	This address entered the system through a tape download
EDI	Electronic Data Interchange	
POST	Post Office Change	This address resulted from a notification from the Post Office
SELF	Self-Reported	This address was given to us by the person/vendor
WEB	Web Reported	This address was downloaded from a web site

PHONE NUMBER:
  • *US Phone*: First field: type the area code. Second field: type the seven-digit phone number without any dash. EX: 2802946 Third field: type an extension if given. This field is optional.
  • *International:* phone numbers consist of three parts. Enter the International phone number in the International Country Code field. Do NOT enter the dialing prefix of 011. Country Code consists of one to four-digits and is required. City Code consists of one to three-digits, but not all countries utilize city codes. The city code is often reported with a zero (0) in front of it. Do NOT enter the zero. Phone Number consists of four to seven digits and is required.

EMAIL ADDRESS:
  • Type addresses using lower/upper case letters as you see them and leave no empty spaces. Make sure you have full addresses.
  EX: ****@yahoo.com

New Mexico Highlands Community College Data Standard

Person Identification Number

Identification numbers for persons will be generated by Banner using a '@99999999' format (an 8-digit number beginning with '@' to indicate that the number is a generated one).

Social Security Number

Where possible, the social security number field should be entered. However, never put the social security number in the ID field. When the social security number is entered in the social security number field, a secondary ID record will automatically be stored with an alternate identification number consisting of social security number. There are numerous cases such as tape loads from other institutions, where use of social security number helps significantly in the reduction of duplicate person records.

Employees are required to supply their social security number. Students, admission, and financial aid applicants will be asked to supply their social security numbers for identification purposes. Donors' social security numbers will be captured from their checks, if possible. Some searching will be done to locate the social security number of prospective donors.

NAME STANDARDS

Enter all name information in **mixed case** (uppercase/lowercase format, i.e., not all caps or all lower) using standard capitalization rules.

Use **Apostrophes (')** when the symbol is part of the proper, legal name or address, e.g., O'Leary, O'Connor, Sam's Wholesale Club.

Use **hyphens** to separate double names (sometimes used in ethnic names or by persons who wish to use their maiden and married names), when it is indicated by the person that it is part of the legal spelling of their name. However, if there are two last names unhyphenated e.g., Monica Lou Creton Quinton, Lou would be input as the Middle name and Creton Quinton would be input as Last name.

Do **not** enter **periods** in a name unless the person indicates that they are required or in the following circumstances: *in an empty first name field and following a single character name*.

Never use **commas** or the **pound sign (#)** in a name**.**

Always omit spaces between syllables (i.e., Mc, Mac, La, C'de Baca, etc.) and the main portion of the name.
Examples:

L. Christine Johnson	= L Christine Johnson
Mc Donald Van Husen	= McDonald VanHusen
McDonald De La Rosa	= McDonald DeLaRosa
Mac Pherson C' de Baca	= MacPherson C'deBaca
St. John Van der Linden	= St John VanderLinden
Cooper-Smith Anderson Johnson	= Cooper-Smith Anderson Johnson

Preferred First Name is the name one wishes to be called. Enter **preferred name** (excluding last name) into the preferred name field. Examples: J. Edgar, A. J.

Last Name

Required. Enter the **legal** spelling and format of the last name, using standard capitalization rules. Do not enter titles, prefixes (Dr, Mr, Mrs) or suffixes (III, Jr) in this field; this information will be stored in the prefix and suffix fields.

New Mexico Highlands Community College Data Standard – Cont.

First Name

Required. Enter the **legal** spelling and format of the first name, using standard capitalization rules. If there is no first name, *enter a period (.) to satisfy the required field*.

Spaces and hyphens may be included in double first names (i.e., Mary Ann, Bobbie Jo). Enter both names in the first name field **only** if it is **legally** a two-name first name or when the legal first name is one character only.

In those cases where a single character is designated as the legal first name and followed by a middle name, place both the single character first name and the middle name in the first name field. Examples: R. Maureen, F. Robert. Enter single character first names **with a period only if it is part of the legally name**.

If the person prefers to be addressed using both first and middle names, but these are not the legal names, use the **preferred first name** field to enter this information.

Do not include titles, prefixes or suffixes in either the first name or preferred first name fields.

Middle Name

Enter the **legal** spelling and format of the middle name in mixed case using standard capitalization rules or the capitalized middle initial. If the middle initial is used, it should **not** be followed by a period. If there is no middle name, leave the field blank.

Name Prefixes

Prefixes are entered in the prefix title field, not in any of the name fields. Enter the prefix code to be associated with the person's name using mixed case and standard capitalization rules. Do not include a period.
Example: Dr, Mr, Mrs

Name Suffixes

Enter the suffix code to be associated with the person's name using mixed case and standard capitalization rules. The suffix may be up to 20 characters in Banner and multiple suffixes may be entered. Multiple suffixes should be separated by commas. The valid list of suffixes is available in local help for the suffix field. Do not include a period.
Example: III, Jr, Sr

ADDRESS STANDARDS

The United States Postal Service (USPS) has published standards for the **presentation** of address data that are relevant to, but not the same as, standards for **data entry** or standards for **data storage**. Standards for data entry in Banner should be consistent with and promote the **presentation** of data as stated in the USPS standards document. However, in some cases USPS standards are contrary to other needs of the university. For example, the USPS prefers that name and address appear in upper case, but all university offices require name and address in mixed case. **The solution is to enter the data in mixed case, but convert it to upper case when that is a requirement**. The university has summarized the 120 page USPS document into a brief set of recommendations which are available from that office and which were considered in these data entry standards.

The thrust of the USPS standards is to speed the sort (and hence the delivery time) of the mail. Addresses

New Mexico Highlands Community College Data Standard – Cont.

that have been bar coded are not examined further by USPS machinery and thus the existence of punctuation or abbreviations in bar coded addresses are not relevant. Addresses that are not bar-coded are passed through bar-coding equipment at the local post office; OCR software attempts to read the address and supply a 9-digit zip code and a bar code. Since the OCR software can reliably read mixed case and punctuation in Courier fonts, the existence of punctuation and mixed case is not relevant. Addresses that cannot be read by USPS OCR software require operator intervention and may delay that piece of mail. The USPS standard tables shall be adopted for zip code, state, county, city, and elements of the street address. This is true even though address management software will use the abbreviation only when the street address line is too short. The standard federal list of county codes shall be adopted.

The USPS standard tables shall be adopted for zip code, state, county, city, and elements of the street address. This is true even though address management software will use the abbreviation only when the street address line is too short. The standard federal list of county codes shall be adopted.

Address Types (Validated by Banner table **STVATYP**)
AD = Alumni/Development Address
The Alumni/Development address is the primary address presented by Alumni.AD may be updated on the Web, contains both internal and external addresses and will be corrected by the address management software.

AW = Alumni/Development Work Address
The Alumni/Development Work address is the alternate address to which mailings from the Alumni/Development office are sent. This address should not be entered unless the default for mailing (MA or AD or some other) is not the desired destination of the mailing. AW may be updated on the Web, contains both internal and external addresses and will be corrected by the address management software.

BI = Billing Address
The billing address is the alternate address to which bills from the Business office are sent. This address should not be entered unless the default for bills (MA or R1 or some other) is not the desired destination of the bill. BI may be updated on the Web, contains both internal and external addresses and will be corrected by the address management software. Banner requires that the BI address type exist.

BU = Business Address
The Business address is the address to which purchase orders, RFP's, and other business correspondence is directed, and generally reflects the physical location of the vendor. This is the primary address type for storing vendor addresses in Banner, and all entities established in Banner initially as a vendor should have a BU address. Multiple business addresses may be stored for each vendor, using sequence numbers in conjunction with the BU designator. BU may not be updated on the Web, contains only external addresses. Banner requires that the BU address type exist.

DP = Departmental Address

EM = Emergency Contact Information
Emergency contact information about students or employees may be entered on the emergency contact form. The emergency contact information is not a true address type because the data is not stored in the regular address file, but in a file of its own. In an emergency, if no emergency contact information is found, attempts will be made to contact persons at the MA address or other addresses. Emergency contact information may be updated on the Web, contains both internal and external addresses.

New Mexico Highlands Community College Data Standard – Cont.

MA = Mailing Address

This is the primary address presented by faculty, staff and students. For most, it is their permanent mailing address. It should always be present for every General Person record; its absence will cause processing errors in offices such as Business office, Admission, etc. It is the default address type for Admission and Financial Aid tape loads although it may not reflect a true permanent mailing address until the student applies for admission. This address is used by the Business office for non-person records such as in third party billing. MA may be updated on the Web, contains only external addresses and will be corrected by the address management software. Banner requires that the MA address type exist.

PA = Parent's Address

The parent address should be used only when the MA address is not that of the parent or when one wishes to list an additional parent. PA may be updated on the Web, contains only external addresses. Banner requires that the PA address type exist.

PR = Permanent Address

R1 = Physical Residence Address

For students, the local address is an **off-campus** address in the vicinity of the campus attended; it excludes residence halls and students living at home with parents. Those students living on-campus will have their address listed under address type 'SH = Student Housing Address'. Faculty and staff, typically temporary appointees, who have a temporary address in student housing, will have this address type. R1 may be updated on the Web, contains only external addresses and will be corrected by the address management software.

SH = Student Housing Address

The Student Housing address is an address that includes residence halls whose mail is delivered by campus mail and which are maintained in the University housing computing system. This address type will be loaded from the University housing system and may be changed only by load. SH may not be updated on the Web, contains only internal addresses and will not be corrected by the address management software.

E-mail Address

The **e-mail address** field will be populated with only on-campus e-mail addresses, each night by the account generation process. Each Unique ID which is active in the electronic directory, will generate an e-mail address in Banner in the following format: username@nmhu.edu. E-mail address for people not using the mail e-mail server, must be inputted by hand.

Address Source Codes (Validated by Banner table **STVASRC**)

A valid address source code should be entered.

Street Address Standards

1. Minimum Address – USPS standards require that an address block contain as a minimum a recipient, a delivery address, and a last line. The attention line is optional.

Example	ABC Movers	*Recipient*
	1500 E Main Ave	*Delivery Line*
	Springfield VA 22152-41010	*Last Line*

The delivery address should always contain a street number and street name. Addresses simply listing a building name, or building name and room number, are usually improper. The third of the three street address lines may be used, however it may result in a total address of 7 lines and the need for larger labels and window envelopes.

New Mexico Highlands Community College Data Standard – Cont.

2. Campus Addresses. For campus addresses enter the department (if present) in the first street address line, building/room in the second street address line, and the zip code as illustrated below. This illustration is not necessarily how the address label will appear.

Example	Sarah Faculty	Donna Student	*Recipient*
	Dept of Physical Sciences	Connor Hall Room 312E	*Delivery Line*
	SC-100C		*Delivery Line*
	00000-0000		

3. Format – Although USPS standards prefer uppercase letters for the **presentation** of all lines of the address block, address data should be **entered** in mixed case using standard capitalization rules.
Abbreviations in the address line are optional. When abbreviations are used, they should not be punctuated and they should confirm to the USPS list of standard abbreviations.

Use **hyphens** and **slashes** in addresses when needed for clarity or designated fractions.
Examples:

Mid-Island Plaza	Mid-Island Plz
392 Road	392 Rd
101 1/2 Main Street	101 1/2 Main St
3454 North Jones, Apt. 4	3454 N Jones Apt 4

4. Secondary Designators - Secondary designators, such as suite or apartment numbers, should be on the same line as the delivery address, at the end of the delivery address.

Example: 102 Main St Apt 101
                     102 Main St Ste 101
                     102 Main St Rm 101

Use of the approved designator abbreviation (with no period) rather than the complete word is optional. The most common designators and their approved abbreviation are:

Apartment	Apt
Building	Bldg
Department	Dept
Floor	Fl
Room	Rm
Suite	Ste
Unit	Unit

Do not use the # (pound) sign as a designator. If not known, use Unit.

If there is not enough space on the delivery line for the secondary designator, place it on the line **above** the delivery line, not below it.

Example: Mr. Michael Murray
                      Apt C
                      5800 Springfield Gardens Cir
                      Springfield VA 22152-1058

The above rule illustrates well the principle that the post office reads an address from the bottom up. The next two examples that follow are also illustrations of that principle.

<u>New Mexico Highlands Community College Data Standard – Cont.</u>

5. Attention Line - The attention line (person's name) should be placed above the Recipient Line (name of the firm or business to which the mail piece is addressed). The phrases 'In care of' and 'Attn:' and the abbreviation 'c/o' are optional, but may improve local delivery. The abbreviation '%' should not be used.

Example:	John Doe	*Attention Line*
	XYZ Company	*Recipient*
	1401 Main St	*Delivery Line*
	Falls Church VA 22042-1411	*Last Line*

6. Dual Addresses - If a mailing file contains both a physical address (street number and name) and delivery address (PO Box), make sure that PO Box is placed immediately above the last line.

Example: Mr. John Doe
      1201 Broad St E
      PO Box 1001
      Falls Church VA 22042-2102

7. Delivery Line Standards - The standard layout for the Delivery Line is:

a) primary address number	numerical, not word
b) predirectional abbreviation	N, E, S, W, NE, NW, SE, SW,
c) street name	normally not abbreviated
d) suffix abbreviation	St, Dr, Cr, Blvd, etc.
e) postdirectional abbreviation	N, E, S, W, NE, NW, SE, SW,
f) secondary addr identifier	Apt, Rm, Ste, etc.
g) secondary number	numerical, not word

The USPS prefers use of pre-direction and post-direction abbreviations. These describe the geographic direction before and after the street name. Directional should be spelled out only when they are part of the street name.

    Example: 1501 Southwest Freeway
   101 West Drive
   202 County Road NE
   303 Bay West Drive
   500 Bay Drive W

   The preferred delivery line for USPS box service is PO Box.
   Example: PO Box 10525

   The preferred delivery line for Rural Route designations is Box.
   Example: RR 2 Box 18

Secondary Street Address Designators
If the address is for a multiple-unit apartment or building, place the room, suite, or apartment number to the right of the street address.

Street Address and PO Boxes
Always abbreviate **Post Office Box** as **PO Box**.
Change "Caller", "Lockbox" and "Drawer" to PO Box.

Abbreviations for Street Designators are defined by the USPS. If used, enter in mixed case (uppercase and lowercase). If you cannot locate a street designator on the USPS chart, spell it out rather than using an abbreviation.

New Mexico Highlands Community College Data Standard – Cont.

Private Mailbox Addresses

Private companies offering mailbox rental service to individuals or businesses may require a "box" number called a **mailstop code (MSC)** for the final mail sort. Print the MSC above the recipient's name or in the attention line as indicated in the example below. Since the MSC is not a post office box, the words "PO Box" followed by the MSC may not be used on the delivery address line. Only the USPS is entitled to provide delivery to a PO Box.

> MSC 1587
> ABC Company
> 12 E Main Ave
> Blacksburg VA 24060-4544

8. Last Line Standards - It is strongly recommended that mailers use the official USPS City or Place name as contained in the USPS postal database. Whenever possible, spell City or Place names in their entirety. Where abbreviation is required due to label or field size, follow the same standards for suffixes or directional words.

Example:	West Stockbridge	to	W Stockbridge
	Newberry Springs	to	Newberry Spgs

ZIP Code Standards (Stored in Banner table **GTVZIPC**).

Enter zip codes for all US addresses. If the zip code is in the GTVZIPC table, after you enter the zip code, the city, county, state and country (if applicable) will be displayed in the appropriate fields eliminating the need to key this information.

US Zip Codes

Enter the first five digits. If you have the last four digits, enter the first five, a hyphen and then the last four digits.

Examples:	24060	24060-6363

International Addresses and PIN Numbers

For all international (non-US) addresses, including Canadian addresses, put CITY, PROVINCE, PIN (not to be confused with a person's PIN number for accessing the WEB) on the next available street line. Enter the six-digit international PIN number (without hyphens) to the right of the city and province. **Do NOT enter the PIN number in the ZIP code field.**

Thus, for international addresses, no data should be entered in the state or ZIP code fields; enter a dot (.) in the city field to satisfy the requirements of Banner. Mailing labels generated through our reporting tool can strip out the dot in the city field.

The description of the nation code for USA is blank; therefore, no local address will print a nation description. All other nations including Canada will print as an extra line on the mail piece.

Canadian zip codes will not be populated in GTVZIP and were not purchased with Code 1 (the Address Management Software).

> Example: Petko Metodiev Kitanov
> POB 140
> Balgoevgrad Hyderabad 2700
> BULGARIA

New Mexico Highlands Community College Data Standard – Cont.

City Standards

Enter all city information using mixed case (uppercase and lowercase) and standard capitalization rules. International addresses, including Canadian addresses, will have a period in the city field as described above under 'International Addresses'. **Punctuation** is never used with city names.

County Table (Validated by Banner table **STVCNTY**).

US States and Territories and Canadian Provinces Standards
(validated by Banner table **STVSTAT**).

Country Code Standards (Validated by Banner table **STVNATN**).
If entered, country name will print with the address; therefore, **do not enter "United States" or US or USA** in the country name field.

Military Address Standards
Military addresses for destinations **within** the United States should be addressed no differently than any other mail. Following are instructions for military addresses **outside** of the United States: Enter the APO or AFO code into the city field.

In the state field enter:
AE - Europe, Middle East, Africa or Canada (ZIP=09nnn)
AP - Pacific (ZIP=96nnn)
AA - The Americas (excluding Canada) (ZIP=34nnn)

Example:
Alice VanFrogulemen
HHB 6th Battalion 43rd Box 72
Air Defense Artillery CMR 417
APO AE 09602-8802

TELEPHONE NUMBER STANDARDS
Telephone numbers are presented in a three-field format.
Area Code - enter the three-digit area code for all phone numbers.
Phone Number - enter the seven-digit number without hyphens.

Extension - If an extension number is provided, enter only the digits of the extension. DO NOT enter EXT or X into the extension field.
Example: 703-231-7865 extension 2114 would be entered as 703 2317865 2114

Telephone Types (Validated by Banner table **STVTELE**)
The following telephone types and descriptions are approved at Miami University and default to their corresponding address type where applicable:

BI = Billing	PR = Permanent
BR = Business Remittance	R1 = Physical
BU = Business	SH = Student Housing
CELI = Cell	
EM = Emergency Contact	
FAX = Fax	
PA = Parent	
PAGE = Pager	

New Mexico Highlands Community College Data Standard – Cont.

DATE STANDARDS

Except for special cases defined below, enter dates into Banner in **mmddyy (or mmddyyyy)** format. All dates are stored in Oracle data format which involves an eight-character date. To simplify data entry, the century pivot has been set for the year 1928. If only the last two digits of the year are entered, all those years greater than or equal to YY of the pivot will be assigned a "19". Those less than YY of the pivot will have "20", e.g. 70 will be 1970 and 08 will be 2008.

Dates **may** also be entered as dd-mon-yyyy or dd-mon-yy where Mon is the abbreviation for the month, e.g., 12-Dec-1994, or 12-Dec-94. Hyphens must be used between the day, month and year.

If the correct date is not known at time of data entry leave the field blank, this implies that no date field may be required.

Banner Job Submission is special case with regard to date format because they require a wide variety of date formats, depending on the particular job that is being submitted.

Appendix D – Data Integrity Project Summary of Tasks

The Summary of Tasks in the following pages is presented in two sections. The first section is the Gap Recommendations presented in priority order and should be used by the Steering Committee to track the progress of implementation. The Steering Committee will need to identify a responsible party, set a target completion date, and track status per the definitions provided below.

The second section is organized by functional department and should be used by the departments to track their progress in implementing departmental changes. The department will need to set target completion dates and track status. Note that many of the departmental recommendations will rely on Gap Recommendations implementation – there is duplication in the two sections to allow departments to track all recommendations that affect the department.

The description for the use of each column is below:

Recommendation describes the action to be taken, based on research and analysis, that CWP feels with improve the process.

Timing and Effort identifies if the task is a one-time, annual or continuing activity. Many one-time tasks establish new processes and procedures that should be reviewed and updated on an annual basis.

Responsible Party identifies the individual or group assigned the responsibility to launch, oversee and complete the implementation of the recommendation. The Responsible Party may complete the recommendation individually or collaborate with others.

Target Completion is a date or timeframe within which the institution strives to initially complete the implementation of the recommendation. Some Initiatives will be ongoing.

Status describes the work accomplished and may identify what still needs to be completed.

The first recommendation is completed below as an example.

Summary of Tasks – Gap Recommendations in Priority Order

This summary of tasks includes all the recommendations for the Fit/Gap Analysis and puts them in priority order with those directly affecting funding with the highest priority. Then those that affect student success, which indirectly may affect funding, are listed. Finally, those items that will make the institution for effective/efficient finish out the priority list. Note that all of these are very important to ensure data quality.

Data Integrity Project	Summary of Tasks – Gap Recommendations – In Priority Order			As of April 15, 2021
Recommendation	**Timing and Effort**	**Responsible Party**	**Target Completion**	**Status**
Make the following changes to the Financial Aid MIS reporting: • **Report all students who enroll and whose drop date is after the first class meeting** • **Capture Federal Financial Aid reporting (Pell) as a trailer (Fall/Spring/Summer)** • **Capture Promise Grant Financial Aid reporting (CCPG) as a header (Summer/Fall/Spring)** • **Report all $0 Promise Grants up to 7% of total students reported**	One-time Task – implement the appropriate logic in the MIS SQL reports	Institutional Research	June 2021	
Contact Los Rios CCD for advice on how to implement the sync process they have developed to create the fee waivers for all colleges when a student is granted a fee waiver at one college	One-time Task – contact Los Rios and implement same or similar sync process			
Hire a consultant twice a year (or more if needed) who is familiar with PeopleSoft to train staff on performing aid year and semester setup, review system setup and validate processing will be done properly; consider using BFAP funding	Annual Task – consultant on site to train FA staff on changes, practice setup and disbursement and aid year setup			
Streamline the Student Enrollment Survey to ask only what is needed. Consider the following: • **Ask to verify existing email and phone and only have student update if needed** • **Remove educational goal/major for each semester – consider once a year only** • **Move VTEA/Perkins questions to the top** • **Do not ask what is not necessary**	Annual Task – review and update the survey to ask only what is needed			

Recommendation	Timing and Effort	Responsible Party	Target Completion	Status
Require all students to complete the "Student Enrollment Survey" regardless of how they register – see Summary of Tasks - Recommendations by Department for specifics	One-time Task – determine how this will done for walk-in students (possibly provide kiosks)			
Perform a detailed analysis of all CTE Degrees/Certificates to make sure all courses and pre-requisites to those courses are coded SAM A-D	One-time Task – review all CTE courses and update SAM coding to be A -D			
Collect and report WIA status by creating a student group for this population	One-time Task – develop process to collect WIA status using student group Continuing Task – maintain student group			
Continue development of reporting capabilities for staff to use in validating data prior to submission and involve departmental users in the collection of MIS data in all aspects of collection, validation, and reporting – see Summary of Tasks - Recommendations by Department for specifics	One-time Task – set up validation/audit process for all MIS reporting areas and train staff in use and monitoring of the data			
Implement auto-awarding of degrees/certificates to maximize funding and service students	One-time Task – implement auto-awarding using PeopleSoft functionality			
Develop process maps of the student experience from the student perspective and streamline processes where possible, including standardizing processes across all colleges	One-time Task – develop process maps and analyze the processes to better serve students Annual Task – review and update the process maps to reflect changes in practice and identify further changes beneficial to students			

Recommendation	Timing and Effort	Responsible Party	Target Completion	Status
Create district quality analyst function for coordination of state reporting, federal reporting, and ad-hoc internal reporting	One-time Task – select or hire staff to perform this coordinating function and reflect this in the appropriate job description(s)			
Develop a comprehensive set of data policies (Data Governance Policy) that addresses the following: • **Data Integrity including the quality of the data expected (Data Entry Standards), ethical use of data, and terminology standards regarding institutional data** • **Confidentiality including the privacy, sensitivity, and security of data** • **Availability of the data including retention, storage locations and the timeliness of data availability**	One-time Task – develop a set of Data Governance Policies (see example policy in this report)			
Use the Steering Committee for this project to be data stewards defined in the foundational Policy by: • **developing the operational guidelines mentioned above,** • **tracking the implementation of the recommendations in this report.** **Further, consider having the person(s) filling the CWP recommended data quality analyst function as the chair of the committee.**	One-time Task – identify group to develop data governance policies and track implementation of these recommendations Continuing Task – review policies annually and evaluate use of data as needed			

Recommendation	Timing and Effort	Responsible Party	Target Completion	Status
Develop subject matter experts in each department on system functions	<u>One-time Task</u> – select or hire staff designated to be the subject matter experts in their respective departments and provide training; incorporate in the appropriate job description(s)			
Use the resulting process flows and data maps from this report to provide functional training for department staff including: 1. **Facilitating an annual review of processes with end users** 2. **Cross-training of existing departmental staff** 3. **Training of new staff**	<u>One-Time Task</u> – train all staff on the use the process flows and data maps <u>Annual Task</u> – review, update and train staff on the flows and maps <u>Continuing Task</u> – train and cross-train using the flows and maps as needed			
Examine current structure of departments at both District and campuses and optimize the structure to best support students and eliminate duplicate effort – see Summary of Tasks - Recommendations by Department for specifics	<u>One-time Task</u> – conduct a thorough review of the structure of those departments that are duplicative at the District and campus and select the best structure; update job description(s) as needed			

Recommendation	Timing and Effort	Responsible Party	Target Completion	Status
Clearly define roles and responsibilities of the similar departments at District and campus and clearly communicate this to students and staff – see Summary of Tasks - Recommendations by Department for specifics	<u>One-time Task</u> – define the roles and responsibilities of the duplicative District and campus departments			
Develop a methodology and assign responsibility for the maintenance of all student groups in PeopleSoft – see Summary of Tasks - Recommendations by Department for specifics	<u>One-time Task</u> – develop methodology for maintenance of student groups; assign responsibility and incorporate in job description(s)			
Develop standards for Home Campus designation and adhere to the standard across the District – see Summary of Tasks - Recommendations by Department for specifics	<u>One-time Task</u> – determine the standard for Home Campus designation			
Develop a methodology and assign responsibility for Enrollment and Residency status for the maintenance of these in PeopleSoft – see Summary of Tasks - Recommendations by Department for specifics	<u>One-time Task</u> – develop methodology for maintenance of Enrollment Status and Residency; assign responsibility and incorporate in job description(s)			
Complete an analysis to determine if PeopleSoft is used to the fullest extent possible (i.e. Educational Planning, Degree Audit, Workflow, Absence Management, MIS, etc.)	<u>One-time Task</u> – hire consultant to review usage of PeopleSoft and identify functionality not used			

Recommendation	Timing and Effort	Responsible Party	Target Completion	Status
Conduct a Cost/Benefit analysis of using consulting services versus in-house development of MIS reporting functionality	<u>One-time Task</u> – conduct in-house or hire a consultant to prepare analysis of the best and most cost-effective manner in which to create and maintain MIS reporting capabilities			
Select and implement a digital imaging system that is integrated with PeopleSoft – see Summary of Tasks - Recommendations by Department for specifics	<u>One-time Task</u> – review, select and implement a digital imaging system that will integrate with PeopleSoft			
Implement the use of workflow where possible to streamline processes and share information – see Summary of Tasks - Recommendations by Department for specifics	<u>Continuing Task</u> – identify functions that would benefit from the use of workflow capabilities in PeopleSoft and implement			
Eliminate manual entry where possible – use electronic data capture such as online forms and systems which interface directly with PeopleSoft – see Summary of Tasks - Recommendations by Department for specifics	<u>Continuing Task</u> – identify functions that would benefit from online entry; develop the capability and integrate data with PeopleSoft			

Recommendation	Timing and Effort	Responsible Party	Target Completion	Status
Develop staff FERPA/security/reporting training and conduct the training with all staff who request additional access **After training, grant access to system functionality and reporting capabilities that will make staff more self-reliant when it comes to reporting using PeopleSoft and help to eliminate shadow systems (i.e. outreach reports, enrollment verifications, etc.)** **– see Summary of Tasks - Recommendations by Department for specifics**	One-time Task – develop FERPA/security/reporting training Continuing Task – offer training as needed			
Use educational planning capabilities and system data to optimize course offerings based on need – see Summary of Tasks - Recommendations by Department for specifics	Continuing Task – each semester collect and analyze educational plan and other system data to determine student demand and schedule accordingly			
Consider production of a single catalog and/or schedule of classes or online version that encompasses all four institutions – see Summary of Tasks - Recommendations by Department for specifics	One-time Task – complete an analysis of the impact of producing one catalog and/or schedule on student success and retention			
Consolidate all data into one single source of truth using specialized consulting resources that can optimize performance and streamline maintenance	One-time Task – consolidate all data into one production and one reporting system			

Recommendation	Timing and Effort	Responsible Party	Target Completion	Status
Provide system functionality training either in person or online – see Summary of Tasks – Recommendations by Department for specifics	Continuing Task – provide training as needed			
Perform annual resubmission of the MIS data to capture changes and corrections in data as a normal course of business – see Summary of Tasks - Recommendations by Department for specifics	Annual Task – Perform annual MIS resubmissions			

Summary of Tasks – Recommendations by Department

Presented below are the recommendations by department. Note that many of the recommendations are duplicative of the Gap Recommendations which are to be implemented across the District and therefore the department will be participating in the implementation of those recommendations with other colleges and departments and may not be able to complete those recommendations independently.

This summary of tasks by department is not prioritized. Implementation of these recommendations will help to improve efficiency and effectiveness and result in cost savings for the department. This is designed to help departments monitor the implementation of all data quality changes affecting each department.

Data Integrity Project Summary of Tasks – By Department		
Recommendation	Target Completion	Status
ADMISSIONS & RECORDS		
Continue to use common forms for students to minimize confusion		
Develop roles and responsibilities for each department and clearly communicate this to staff and students to avoid confusion and double work (see Gap Recommendation 4)		
Consider providing kiosks for registration and training of students to perform online registration under the guidance of A&R staff		
Clearly define roles for maintaining student groups to ensure lists are regularly maintained and accurate; assign specific positions to maintain the lists (see Gap Recommendation 10)		
Clearly define the determination of Home Campus and implement (see Gap Recommendation 10)		
Put in place process and responsible party to make sure Special Admit students are correct each semester; automatically remove Special Admit status when student (see Gap Recommendation 10)		
Review access restrictions for A&R staff and train the on proper security; once training is completed grant access to make staff self-sufficient (see Gap Recommendation 9)		
Implement Degree Audit and auto-awarding of degrees to better serve students (See Gap Recommendation 6)		
Eliminate need for DB/Excel shadow systems to be needed for tracking challenge forms and changes; implement online forms that feed into PeopleSoft where possible (see Recommendation 6 & 11)		
Develop online graduation petition process that uses workflow to route and process petitions and store results in PeopleSoft (See Gap Recommendation 11)		
Review need for Counseling and Admissions & Records to evaluate Degree and Certificate Petitions for Graduation to more quickly process petitions for students		
Develop ability for campus Admissions & Records to award multiple Degrees and Certificates		
Select and implement a digital imaging system (See Gap Recommendation 11)		
Clearly define the Change of Major process including approval by Financial Aid and implement workflow to manage the process including student notifications		

Review the Continuing Student Survey with an eye towards streamlining (i.e. only ask change of major/goal annually; ask to verify info already on file rather than re-enter student information, move important items to top of survey) (see Gap Recommendation 2)		
Collect and report WIA status by creating a student group for this population (see Gap Recommendation 10)		
Create audit reports for early validation of data by the campuses (see Gap Recommendation 5)		
Conduct training on PeopleSoft functionality especially when new releases of the system are implemented (see Gap Recommendation 8)		
Add local additional questions to the online application to detect and direct students to the proper international applications (see Gap Recommendation 10)		
Create a two-way synchronization process between Terra Dotta and PeopleSoft		
COUNSELING & ASSESSMENT		
Continue District-wide effort to select and implement an Orientation system that will interface with PeopleSoft		
Review the Continuing Student Survey with an eye towards streamlining (i.e. only ask change of major/goal annually; ask to verify info already on file rather than re-enter student information, move important items to top of survey); use workflow to process the changes (see Gap Recommendation 2)		
Eliminate or streamline the manual entry of data reserving counseling time for students (see Gap Recommendation 11)		
Provide capability in PeopleSoft to capture all needed counseling data and eliminate the double entry and storage of data (see Gap Recommendation 6 & 11)		
Develop a direct interface from SARS to PeopleSoft to eliminate the double entry of data and regular verification		
Select and implement a digital imaging system (See Gap Recommendation 11)		
Review access restrictions for Counseling staff and train the on proper security; once training is completed grant access to use reporting and analytic capabilities to allow staff to be self-sufficient and better serve students (see Gap Recommendation 9)		
Create audit reports for early validation of data by the campuses (see Gap Recommendation 5)		
Complete the implementation of Degree Audit and Educational Planning modules in PeopleSoft including non-credit (see Gap Recommendation 6)		

CURRICULUM		
Goal needs to be to input data once (Curricunet) then from there upload to COCI (once it is available) for state approval and then transfer to PeopleSoft once approved (system of record) to eliminate multiple manual entry PeopleSoft contains the official data about curriculum in order to schedule classes. Develop programming to allow PeopleSoft and CurricuNet to share curricular data When COCI mass upload becomes available (development is in progress) use it to upload all curriculum from CurricuNet for approval		
Use CurricuNet to generate Board agenda items for curriculum (see Gap Recommendation 11)		
Evaluate the costs/benefits of producing a single catalog (see Gap Recommendation 3)		
Annually update the Process Flows and review the process with campus staff; develop any needed faculty and staff training (see Gap Recommendation 8)		
DSPS		
Complete the implementation of AIM District-wide in a consistent manner to eliminate the use of Paper Files/Excel/Access/Microsoft Forms/Dropbox and other tools using a common set of forms and integrating directly with PeopleSoft. Fully leverage the functions of AIM. (see Gap Recommendation 6 & 11)		
Select and implement a digital imaging system or use AIM to store DSPS documents (See Gap Recommendation 11)		
Consider use of SAM District-wide for accommodation requests (if AIM does not provide this functionality)		
EOPS/CALWORKS/CARE		
Develop an online EOPS/CalWorks/CARE application that directly interfaces with PeopleSoft to store the data (see Gap Recommendation 11)		
Clearly define roles for maintaining student groups to ensure lists are regularly maintained and accurate; assign specific positions to maintain the lists (see Gap Recommendation 10)		

Capture all data from application directly into PeopleSoft and eliminate the need for Excel to track data eliminating the need to manually input data and reconcile PeopleSoft & Excel data (see Gap Recommendation 6 & 11)		
Develop an interface to import SARS data into PeopleSoft		
Continue training EOPS/CalWorks/CARE staff on the use of BI Tools Group Reports; provide security training & training on ability to create reports to check units enrolled/Financial Aid information to validate eligibility (see Gap Recommendation 5)		
Select and implement a digital imaging system (See Gap Recommendation 11)		
FINANCIAL AID		
Report all student who enroll and whose drop date if after the first class meeting For Pell, report Summer as a trailer For Promise, report Summer as a header Implement sync process for creation of fee waiver at each campus; consult Los Rios CCD for their process Report all $0 promise grants up to 7% of total reported (see Gap Recommendation 1)		
Continue the implementation of CampusLogic consistently District-wide with the ability to share information; setup the storage of documents uniformly for easy access by all Financial Aid departments to better and more consistently serve students		
Hire a consultant twice a year (or more if needed) who is familiar with PeopleSoft to train staff on performing aid year and semester setup, review system setup and validate processing will be done properly (see Gap Recommendation 1)		
Develop roles and responsibilities for each department and clearly communicate this to staff and students to avoid confusion and double work (see Gap Recommendation 4)		
Develop online Financial Aid forms that directly interface with PeopleSoft (see Recommendation 11)		
Select and implement a digital imaging system for all document storage (See Gap Recommendation 6 & 11)		
Create audit reports for early validation of data by the campuses (see Gap Recommendation 1 & 5)		

Investigate the use of texting tools to communicate with students using texting in addition to email (i.e. QLess, etc) to better serve students		
Work with IT to develop logic to import awards where possible from funding sources and to post EOPS/Care awards when awarded (see Gap Recommendation 11)		
Eliminate the need for Excel to track awards and FWS students by using PeopleSoft functionality; develop ability to import FWS pay information into Financial Aid (see Gap Recommendation 6 & 11)		
Clearly define the Change of Major process including approval by Financial Aid and implement workflow to manage the process including student notifications		
Review and document the SAP process and validate that it is working properly		
HUMAN RESOURCES		
Develop ability to import data from PeopleAdmin into PeopleSoft		
Create online Personal Information Change Form and Personnel Action Form with ability to directly interface data to PeopleSoft (see Gap Recommendation 11)		
Develop ability to import data from Adobe Sign into PeopleSoft		
Streamline ePAF approvals in PeopleSoft (see Gap Recommendation 6)		
Implement Time & Labor functionality in PeopleSoft (see Gap Recommendation 6)		
Implement Absence Management functionality in PeopleSoft (see Gap Recommendation 6)		
Select a product to track evaluations and professional development and implement		
Regularly terminate Adjunct Faculty per the contract		
Create audit reports for on-demand early validation of data (see Gap Recommendation 5)		
SCHEDULING		
Evaluate and acquire scheduling software to develop the schedule, review the schedule and load the schedule into Peoplesoft eliminating double entry and manual processes		
Explore the use of the College of Alameda Enrollment Management process Districtwide		

Review the alignment of schedule format and offerings to best serve students; consider consistent format across the four schedules or one schedule for all colleges (see Gap Recommendation 3)		
Create audit reports for early validation of data by the campuses (see Gap Recommendation 5)		
SPECIAL POPULATIONS		
Convert the use of Excel to recording data in PeopleSoft which is currently stored in Excel by leveraging capabilities for data collection in PeopleSoft (see Gap Recommendation 6 & 11), conducting training on functionality in PeopleSoft/BI Tools which will make staff more comfortable using PeopleSoft and more trusting of the data captured and reported Evaluate the costs/benefits of case management software for special populations that will integrate with PeopleSoft		
Select and implement a digital imaging system (See Gap Recommendation 6 & 11)		
Eliminate the entry of SARS data into PeopleSoft by developing a direct interface		
Assign specific responsibility for maintenance of Student Groups to guarantee accuracy (see Gap Recommendation 10)		
Assign specific responsibility for maintenance of Special Admit students to guarantee accuracy; automatically remove Special Admit status of those over age 21 and maintain graduation dates (see Gap Recommendation 10)		
Continue training of special populations staff on the use of BI Tools Group Reports to validate MIS data early in the semester (see Gap Recommendation 5)		
Use the supplemental data feature of CCCApply to capture additional information about students to help identify those who may need or be eligible for additional special population services. Provide access and training for special populations staff (see Gap Recommendations) to be able to perform ad-hoc reporting for special populations such as: • Outreach reports • Class Drop reports • Tracking special population student progress Other needs as identified		

Develop and implement ability to capture veteran dependent information without impacting priority registration and to properly report this information in MIS		
Review and streamline the Continuing Students Survey to ask only what is needed (see Gap Recommendation 2)		
Develop and implement online applications for special population programs that directly interface with PeopleSoft (see Gap Recommendation 11)		
VTEA/PERKINS		
Eliminate the need to store data in two systems by determining where to store the data in PeopleSoft (see Gap Recommendations 6 & 11)		
Complete a review of all courses which are requirements or pre-requisite courses for CTE degrees and certificates; make sure all those courses are coded SAM A-D as appropriate (see Gap Recommendation 2)		
Consider providing kiosks for registration and training of students to perform online registration under the guidance of A&R staff (see Gap Recommendation 2)		
Create audit reports for early validation of data by the campuses (see Gap Recommendation 5)		