Project Profile | State of Washington D.O.C., Correctional Industries Timekeeping System (CITK)

Applications Developer, MS Access / VBA, UX / UI Designer

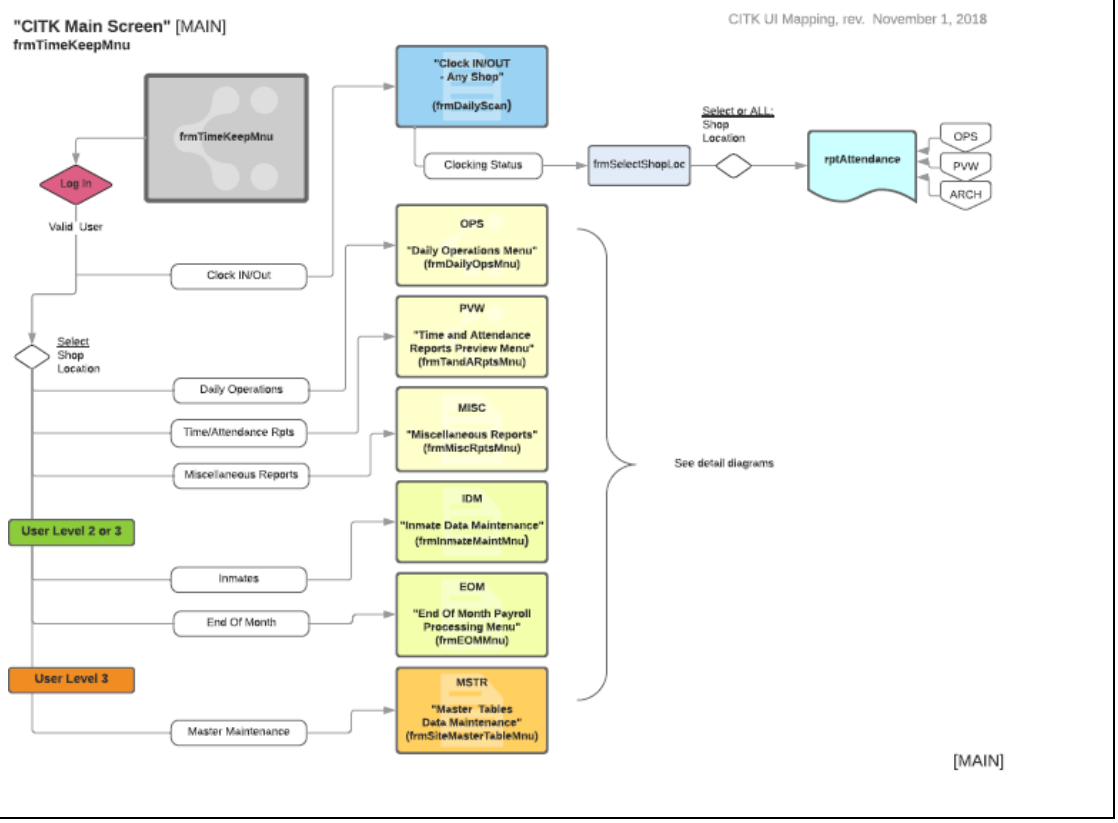
Contract: The State of Washington, D.O.C. Correctional Industries, Airway Heights, WA (through **MACRO.CCS**, Bellevue WA). Feb 2011 – Sep 2018

Development and support for the 'CITK' (Correctional Industries Timekeeping) System, (MS Access / VBA), on-call as-needed for over 7 years. Incremental upgrades and enhancements of a mission-critical system, enabling the State to administer and improve management of offender payroll, and to expand deployment of the system to all 12 of its major correctional facilities.

Responsibilities:

- UX/UI design
- MS Access / VBA development
- Client-facing documents and support
- Reports development

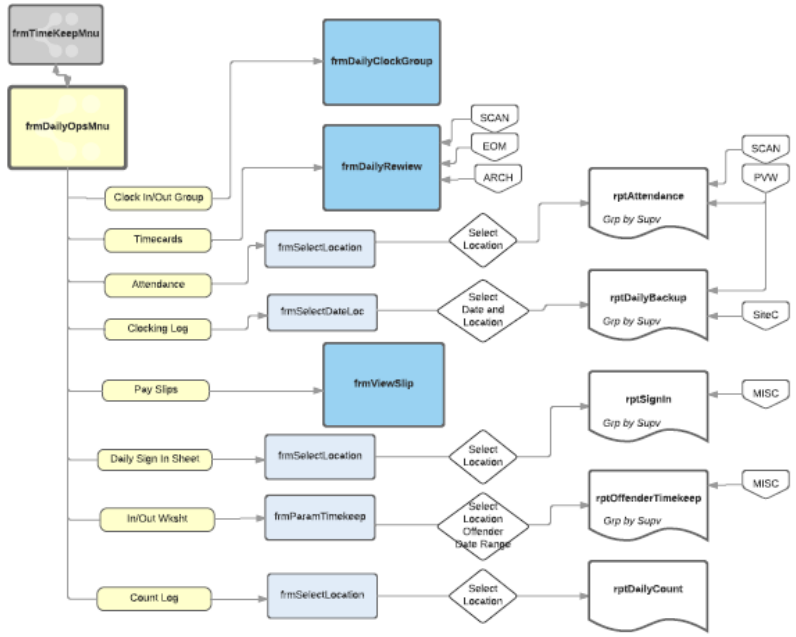
Accomplishments:

UX / UI design included a major revamp of the work-flow and reorganization of the 50+ editor screens and reports.	

Earnest Development, LLC, Seattle WA USA

"Daily Operations Menu" [OPS]
(frmDailyOpsMnu)
Available to All User Levels, after Shop and Location are selected

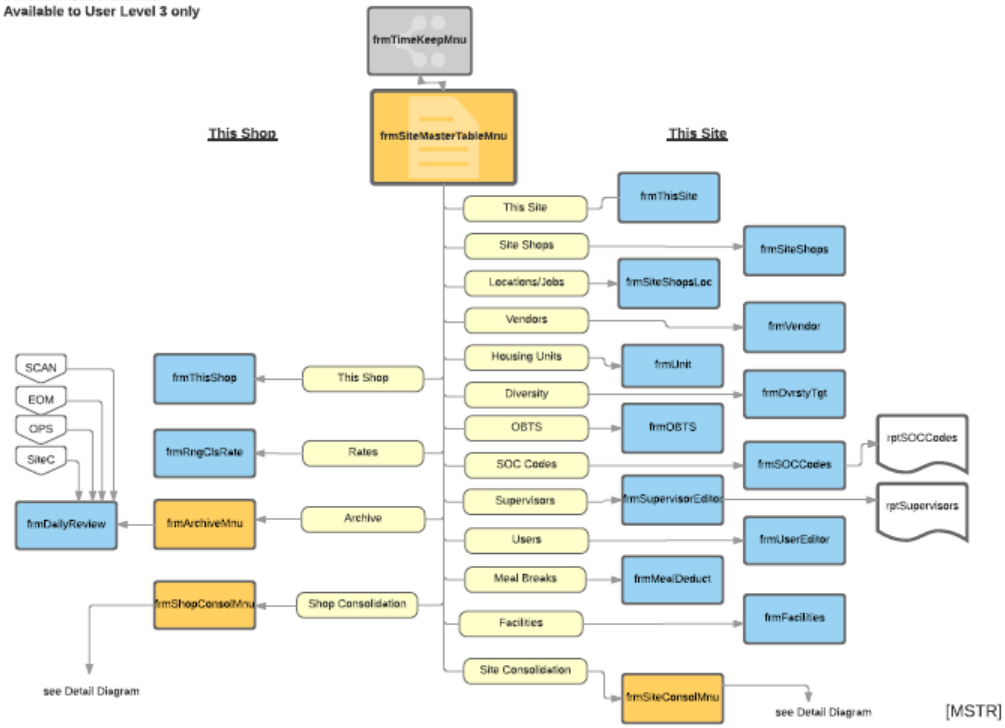
CITK UI Mapping, rev. July 28, 2016



[OPS]

"Master Tables Data Maintenance" [MSTR]
frmSiteMasterTableMnu
Available to User Level 3 only

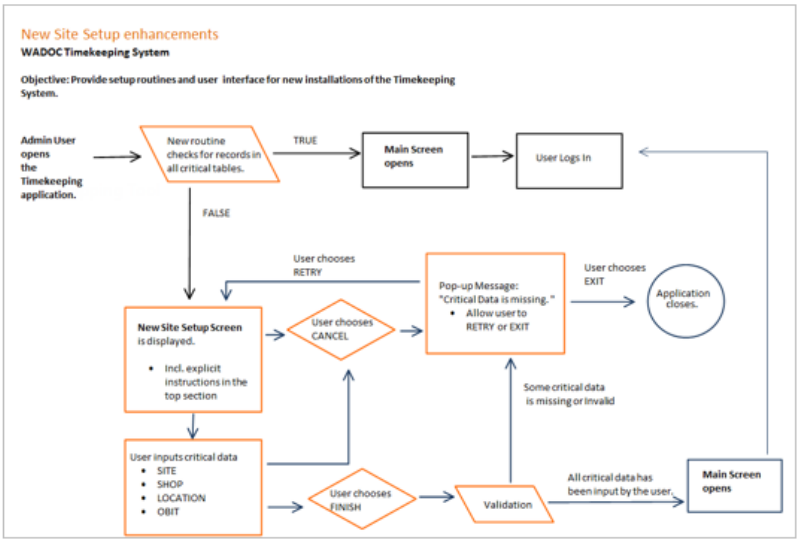
CITK UI Mapping, rev. July 28, 2016



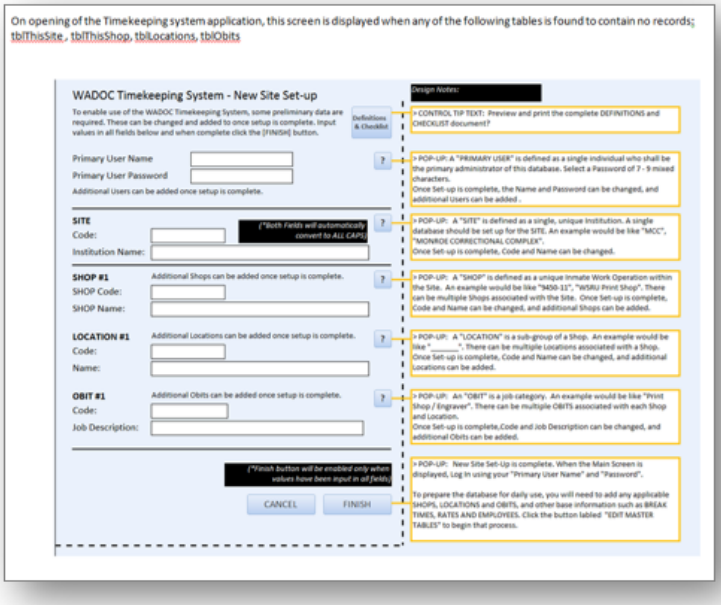
[MSTR]

Incremental enhancements to the CITK system including upgrades for newer versions of MS Access, and solutions for expanded user base and new requirements.

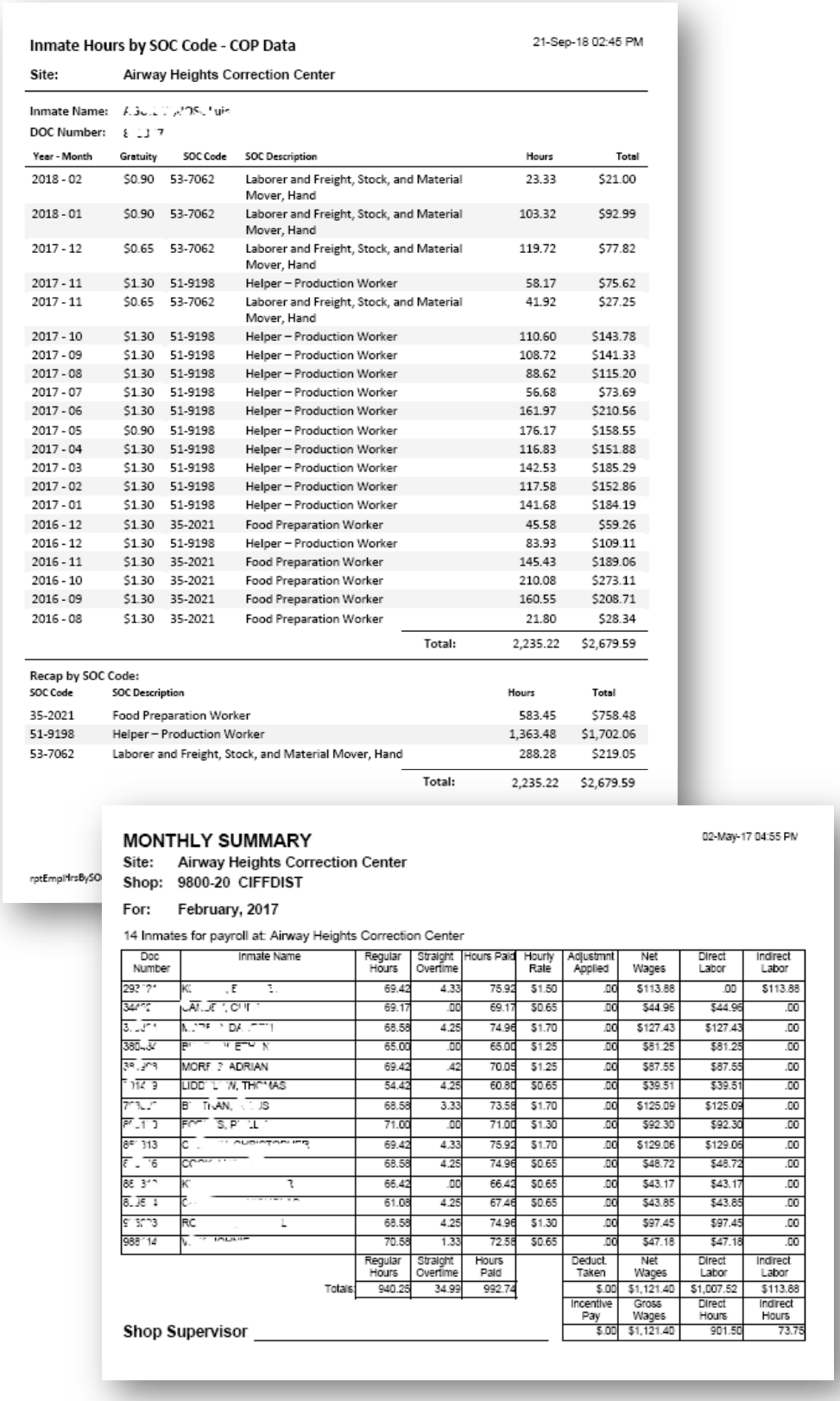
Workflow diagram



User Interface: Screen Mockup



Reports design



Inmate Hours by SOC Code - COP Data

21-Sep-18 02:45 PM

Site: Airway Heights Correction Center

Inmate Name: [redacted]

DOC Number: [redacted]

Year - Month	Gratuity	SOC Code	SOC Description	Hours	Total
2018 - 02	$0.90	53-7062	Laborer and Freight, Stock, and Material Mover, Hand	23.33	$21.00
2018 - 01	$0.90	53-7062	Laborer and Freight, Stock, and Material Mover, Hand	103.32	$92.99
2017 - 12	$0.65	53-7062	Laborer and Freight, Stock, and Material Mover, Hand	119.72	$77.82
2017 - 11	$1.30	51-9198	Helper – Production Worker	58.17	$75.62
2017 - 11	$0.65	53-7062	Laborer and Freight, Stock, and Material Mover, Hand	41.92	$27.25
2017 - 10	$1.30	51-9198	Helper – Production Worker	110.60	$143.78
2017 - 09	$1.30	51-9198	Helper – Production Worker	108.72	$141.33
2017 - 08	$1.30	51-9198	Helper – Production Worker	88.62	$115.20
2017 - 07	$1.30	51-9198	Helper – Production Worker	56.68	$73.69
2017 - 06	$1.30	51-9198	Helper – Production Worker	161.97	$210.56
2017 - 05	$0.90	51-9198	Helper – Production Worker	176.17	$158.55
2017 - 04	$1.30	51-9198	Helper – Production Worker	116.83	$151.88
2017 - 03	$1.30	51-9198	Helper – Production Worker	142.53	$185.29
2017 - 02	$1.30	51-9198	Helper – Production Worker	117.58	$152.86
2017 - 01	$1.30	51-9198	Helper – Production Worker	141.68	$184.19
2016 - 12	$1.30	35-2021	Food Preparation Worker	45.58	$59.26
2016 - 12	$1.30	51-9198	Helper – Production Worker	83.93	$109.11
2016 - 11	$1.30	35-2021	Food Preparation Worker	145.43	$189.06
2016 - 10	$1.30	35-2021	Food Preparation Worker	210.08	$273.11
2016 - 09	$1.30	35-2021	Food Preparation Worker	160.55	$208.71
2016 - 08	$1.30	35-2021	Food Preparation Worker	21.80	$28.34
			Total:	2,235.22	$2,679.59

Recap by SOC Code:

SOC Code	SOC Description	Hours	Total
35-2021	Food Preparation Worker	583.45	$758.48
51-9198	Helper – Production Worker	1,363.48	$1,702.06
53-7062	Laborer and Freight, Stock, and Material Mover, Hand	288.28	$219.05
	Total:	2,235.22	$2,679.59

rptEmplHrsBySO

MONTHLY SUMMARY

02-May-17 04:55 PM

Site: Airway Heights Correction Center

Shop: 9800-20 CIFFDIST

For: February, 2017

14 Inmates for payroll at: Airway Heights Correction Center

Doc Number	Inmate Name	Regular Hours	Straight Overtime	Hours Paid	Hourly Rate	Adjustmnt Applied	Net Wages	Direct Labor	Indirect Labor
[redacted]	[redacted]	69.42	4.33	75.92	$1.50	.00	$113.88	.00	$113.88
[redacted]	[redacted]	69.17	.00	69.17	$0.65	.00	$44.96	$44.96	.00
[redacted]	[redacted]	68.58	4.25	74.96	$1.70	.00	$127.43	$127.43	.00
[redacted]	[redacted]	65.00	.00	65.00	$1.25	.00	$81.25	$81.25	.00
[redacted]	MORF[redacted]ADRIAN	69.42	.42	70.05	$1.25	.00	$87.55	$87.55	.00
[redacted]	LIDD[redacted]W, THOMAS	54.42	4.25	60.80	$0.65	.00	$39.51	$39.51	.00
[redacted]	[redacted]	68.58	3.33	73.58	$1.70	.00	$125.09	$125.09	.00
[redacted]	[redacted]	71.00	.00	71.00	$1.30	.00	$92.30	$92.30	.00
[redacted]	[redacted]	69.42	4.33	75.92	$1.70	.00	$129.06	$129.06	.00
[redacted]	[redacted]	68.58	4.25	74.96	$0.65	.00	$48.72	$48.72	.00
[redacted]	[redacted]	66.42	.00	66.42	$0.65	.00	$43.17	$43.17	.00
[redacted]	[redacted]	61.08	4.25	67.46	$0.65	.00	$43.85	$43.85	.00
[redacted]	[redacted]	68.58	4.25	74.96	$1.30	.00	$97.45	$97.45	.00
[redacted]	[redacted]	70.58	1.33	72.58	$0.65	.00	$47.18	$47.18	.00

	Regular Hours	Straight Overtime	Hours Paid	Deduct. Taken	Net Wages	Direct Labor	Indirect Labor
Totals	940.25	34.99	992.74	$.00	$1,121.40	$1,007.52	$113.88
				Incentive Pay	Gross Wages	Direct Hours	Indirect Hours
				$.00	$1,121.40	901.50	73.75

Shop Supervisor _____

Client facing documents to communicate proposed solutions and UI design intent.

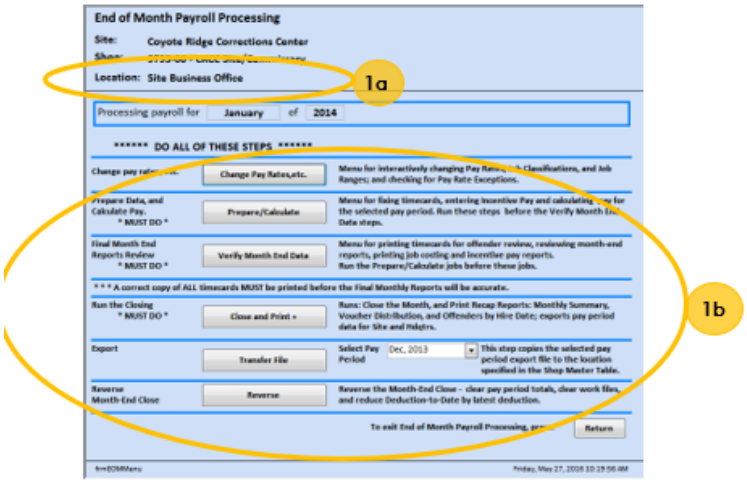
Enhancement #8
Idea: **Shops with multiple locations be able to run EOM payroll separately**
Currently: End of month (EOM) payroll processing can only be done at a single loca
Future: Shops with multiple locations would like to ability for each location to proc EOM
Est. Hrs: 40 +

Discussion / Resolution:

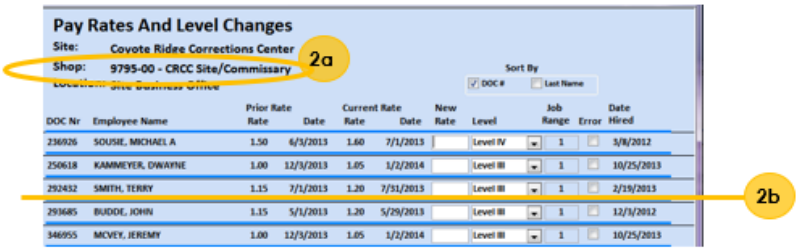
Possibly #7 would be sufficient resolve the problem, make this unnecessary?

Otherwise, change functionality to run the EOM by Location (rather than Shop), impacts sigr number of forms and reports , and EOM calculation routines.

The Location has been selected in the Main Log-In screen, all EOM jobs to be modified to re selected Location (rather than the Shop).



1. **Form "End of Month Payroll Processing (fEOMMenu)**
   a. add "Location" show which Location is being processed. This comes from the screen.
   b. **All** forms and reports launched from this menu to be filtered on the single Loc



Documentation providing step-by-step install and archiving instructions for end users.

Overview

CITK version 40 incorporates a substantial number of enhancements to tables, queries, forms, reports and routines.

Initially the new front-end file will have no table links. Three new back end-files, names ending in '40' are to be created from the Site's existing files, prepared, and then linked manually to the new front end file.

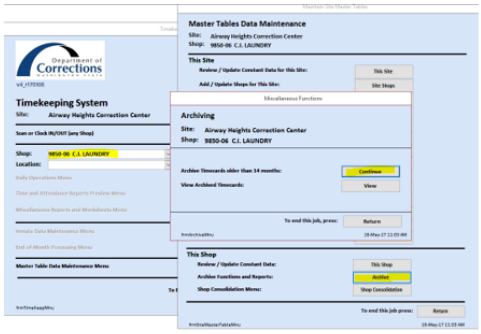
To advance performance, these instructions include **Archiving,** deleting some abandoned tables and renaming 2 tables.

Data Cleanup is recommended for all Sites. There is a separate database 'CITK40_DataFix.accdb' provided to make this quick and easy.

Timing of the upgrade must be done while the Site is inactive. To allow for the time necessary for testing, the back-end files can be first converted and tested, and then to coinside with the final deployment, a fresh file can be converted and installed as a last step.

Pre-Install Instructions

1. Open CITK30, log in to the first of the Shops
2. Press 'Master Table Data Maintenance' > **ARCHIVE** > Continue
    a. Run the **ARCHIVE** on data older than 14 months.



3. Create a Directory named **"CITK30_ArchivedFiles_*yymmdd*'**. This becomes the backup files for the Site.
    a. This Directory can be Compressed to a (ZIP) file, if desired to save space.

Data Cleanup: Fixing Missing Data in Critical Fields

1. Make a backup copy of the Site data file (CITKP30.accdb), name it 'CITKP30_PreCleanup.accdb".
2. Open the 'Data Cleanup and file preparation for CITK40 Upgrade' database (CITK40_DataFix.accdb).