

AUDITOR'S REPORT

SHERIFF'S OFFICE ALARM TRACKING AND BILLING SYSTEM (CRY WOLF) IMPLEMENTATION JANUARY 5, 2015, IMPLEMENTATION



May 1, 2015

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May 1, 2015

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Houston, Texas 77002

Sheriff Adrian Garcia
Harris County Sheriff's Office
1200 Baker Street
Houston, Texas 77002

RE: Sheriff's Office Alarm Tracking and Billing System (Cry Wolf) Implementation

The Audit Services Department performed procedures relative to the Sheriff's Office Alarm Tracking and Billing System (Cry Wolf) implementation. The objective of the engagement was to determine whether acceptance testing by the Central Technology Services (CTS) and the Harris County Sheriff's Office (HCSO) provides assurance that the new Cry Wolf system was properly implemented to replace the legacy False Alarm Reduction System (FARS). Our procedures included the following:

1. Selectively reviewed the completed acceptance testing documentation to evaluate whether the departmental testing supports that:
 - The Cry Wolf system's interface to the County Integrated Financial and Administrative Solution (IFAS) system is in compliance with Harris County Accounting Procedures O.15, *New System Interfaces to IFAS*, and O.15-1, *Internal Financial Systems*.
 - The Cry Wolf system has the ability to restrict access of users and customers to the correct modules and functions as required.
 - Critical application functions have been adequately tested with results supported by the documentation.
2. Evaluated whether CTS documentation for the data transfer from FARS to the Cry Wolf system for the system go-live is supported by the acceptance testing documentation indicating that the data transfer was successful.

The engagement process included providing you with a combined engagement and scope letter and conducting an entrance and exit conference with your personnel. The purpose of the letter and conferences was to explain the process, identify areas of concern, describe the procedures to

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be performed, discuss issues identified during the engagement, and solicit suggestions for resolving the issues. A draft report was provided to you and your personnel for review. The enclosed Auditor's Report presents the significant issues identified during our procedures, recommendations developed in conjunction with your staff, and any actions you have taken to implement the recommendations. Less significant issues and recommendations have been verbally communicated to your staff.

We appreciate the time and attention provided by you and your staff during this engagement.

Sincerely,



Barbara J. Schott
County Auditor

cc: District Judges
County Judge Ed Emmett
Commissioners:
R. Jack Cagle
El Franco Lee
Jack Morman
Steve Radack
Devon Anderson
Vince Ryan
William J. Jackson

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OVERVIEW

The HCSO is the largest sheriff's office in Texas and the third largest in the United States with more than 4,000 employees who aid in providing safety to nearly 4 million residents in the County. The HCSO is the primary law enforcement agency in the County for people living in the areas not governed by their own local municipal corporation (unincorporated). The HCSO has fully empowered peace officers with county-wide jurisdiction and thus may legally exercise their authority in unincorporated areas and within jurisdictions of city governments inside the County. However, the HCSO primarily provides law enforcement services for only the unincorporated areas of the County, while yielding to municipal police or city marshals to provide law enforcement services for the incorporated areas. The HCSO also has state-wide warrantless arrest powers for any criminal offense (except certain traffic offenses) committed within their presence or view. They also may make arrests with a warrant anywhere in the state. In an emergency, the HCSO, along with mayors and district judges, are empowered by state law to call forth the National Guard to preserve the peace. The current County Sheriff, Adrian Garcia, has been in office since 2009.

The alarm regulation (Local Government Code Sections 233.091-233.092 and 233.094) requires every residence and business with an activated security alarm system in unincorporated Harris County and its jurisdiction within the County to have an alarm permit. Alarm Detail, a department of the HCSO, ensures the enforcement of the regulation. Alarm Detail issues alarm permits, citations, and/or fines for noncompliance when necessary throughout the unincorporated jurisdictions of the County.

The HCSO had been using FARS. Management informed us that the purpose of this system implementation to replace FARS was to reduce the operating costs and administrative time and to increase payment expedience from Harris County's false alarm cost recovery program. The HCSO plans to achieve these objectives by using modifiable commercial off-the-shelf Cry Wolf Alarm Tracking and Billing software developed by the Public Safety Corporation. The primary advantages of Cry Wolf over FARS are to allow residential and business owners to apply for alarm permits on-line and pay the fees (new, renewal, and false alarms) on-line with their credit cards through a third-party bank payment portal.

RESULTS

Based on the procedures performed, Cry Wolf's interface to IFAS is in compliance with Harris County Accounting Procedures O.15, *New System Interfaces to IFAS*, and O.15-1, *Internal Financial Systems*. In addition, Cry Wolf has the ability to restrict access of users and customers to the correct modules and functions as required. Critical application functions were adequately tested with results supported by the documentation.

However, the historical data was not completely and accurately converted from FARS to Cry Wolf. Although CTS and the HCSO are aware of this situation, the following improvements are needed for future and current implementations:

- For the future system implementations, documented procedures should be included in the implementation plan to ensure that the historical data will be converted accurately and completely.
- For the current implementation, manually review accounts that were identified (less than 1% in both dollar value and number of accounts) by audit procedures as they were not converted over to the new system, or were converted but with different balances in the new system.

More detail on these issues can be found in the "Issues and Recommendations" matrix on the following page.

ISSUES AND RECOMMENDATIONS

Subject	Background	Issue	Recommendation	Management Response
Data Migration Plan	<p>The HCSO has replaced FARS with Cry Wolf to support its alarm management requirements. As part of the system conversion, per the Statement of Work, historical electronically stored alarm-related data should be imported into the Cry Wolf from FARS.</p>	<p>The HCSO, CTS, and the Public Safety Corporation were aware that there were differences in account balances during pre-implementation conversion testing. However, documented procedures were not included in the implementation plan to ensure the historical data was converted accurately and completely or identify causes for any differences. This was noted and communicated prior to implementation.</p> <p>Without a process to verify the completeness and accuracy of the data conversion and identify causes for differences there is increased risk that an implementation will fail or that the HCSO will have to manually research and correct data.</p>	<p>HCSO and CTS management should include procedures to ensure that the historical data will be converted accurately and completely for future system implementations.</p>	<p>Harris County secured and contracted the PSC Corporation with the intent and purpose of upgrading the outdated alarm tracking and billing platform. The new Crywolf platform uses a detailed windows based, letter driven system. The Crywolf system has multiple capabilities that allow administrators to view the entire data base while providing real time reports and totals. This new system will be constantly updated and maintained by HCSO Alarm Detail staff members. The system will be used to assure record integrity and should provide HCSO and CTS with an accurate data migration if needed in the future.</p>

ISSUES AND RECOMMENDATIONS

Subject	Background	Issue	Recommendation	Management Response
Data Conversion	Data conversion refers to translation of existing data in the current system's database to data in the new system's database. The objective of data conversion is to convert the existing data to the new system while ensuring that the meaning of the data and its integrity is maintained.	Audit procedures, performed after the data conversion, identified that receivable balances did not agree between FARS and Cry Wolf. FARS' total accounts receivable balance was \$8,827,990 versus Cry Wolf's \$8,744,281, for a difference of 83,709 (1%). Of the approximately 61,600 accounts that had balances in FARS, 417 did not appear to have corresponding accounts in Cry Wolf. An additional 106 FARS accounts had corresponding accounts in Cry Wolf, but the balances did not agree. Taken together, these 523 accounts created a net difference that accounted for approximately \$73,780 (.89%) of the total difference (\$83,709) between FARS and Cry Wolf accounts receivable balances. The source of the	HCSO management should research the 523 known discrepancies and take appropriate action to ensure that the correct balances are in Cry Wolf. In addition, the HCSO management should train staff on how to research customer complaints regarding incorrect billing related to pre-implementation transactions that may be a result of account balances that did not convert correctly.	HCSO is proactively addressing account corrections as needed. All accounts originating in the previous FARS system can now be researched and systematically reassigned to the corresponding accounts in Crywolf. This process is currently underway and is proceeding as planned. The HCSO Alarm Detail staff has been trained to research account issues and customer related questions. Staff members are given direct and detailed instructions regarding all accounts that may need updating as a result of data that may have not converted accurately.

ISSUES AND RECOMMENDATIONS

Subject	Background	Issue	Recommendation	Management Response
		<p>remaining \$9,929 difference, or about 0.11% of the ending receivable balance in FARS, could not be identified.</p> <p>If action to research and correct discrepancies between the historical data in FARS and Cry Wolf is not taken then accounts could be overbilled, negatively affecting the reputation of the HCSO and the County, or under billed, resulting in a loss of revenue.</p>		