



CITY OF SAN ANTONIO

P.O. Box 839966
SAN ANTONIO TEXAS 78283-3966

January 27, 2014

Julián Castro
Mayor

Rebecca J. Viagran
Councilwoman, District 3

Ray Lopez
Councilman, District 6

Joe Krier
Councilman, District 9

Diego M. Bernal
Councilman, District 1

Rey Saldaña
Councilman, District 4

Cris Medina
Councilman, District 7

Carlton Soules
Councilman, District 10

Ivy R. Taylor
Councilwoman, District 2

Shirley Gonzales
Councilwoman, District 5

Ron Nirenberg
Councilman, District 8

SUBJECT: Audit Report of the San Antonio Police Department Uniform Crime Reporting

Mayor and Council Members:

We are pleased to send you the final report of the San Antonio Police Department Uniform Crime Reporting. This audit began in May 2013 and concluded with an exit meeting with department management in November 2013. Management's verbatim response is included in Appendix B of the report. The San Antonio Police Department management and staff should be commended for their cooperation and assistance during this audit.

The Office of the City Auditor is available to discuss this report with you individually at your convenience.

Respectfully Submitted,

Kevin W. Barthold, CPA, CIA, CISA
City Auditor
City of San Antonio

Distribution:

Sheryl L. Sculley, City Manager

Erik Walsh, Deputy City Manager

Ben Gorzell, Chief Financial Officer

William McManus, Police Chief

Hugh Miller, Chief Technology Officer / Director ITSD

Patsy Boozer, Chief Information Security Officer

Robert F. Greenblum, City Attorney

Leticia M. Vacek, City Clerk

Jaime Castillo, Interim Chief of Staff, Office of the Mayor

Frances A. Gonzalez, Assistant to the Mayor, Office of the Mayor

Edward Benavides, Chief of Staff, Office of the City Manager

Donald Crews, Audit Committee Member

Stephen S. Penley, Audit Committee Member

CITY OF SAN ANTONIO
OFFICE OF THE CITY AUDITOR



Audit of the San Antonio Police Department

Uniform Crime Reporting

Project No. AU13-020

January 27, 2014

Kevin W. Barthold, CPA, CIA, CISA
City Auditor

Executive Summary

As part of our annual Audit Plan approved by City Council, and as requested by City Management, we conducted an audit of the San Antonio Police Department (SAPD), specifically the uniform crime reporting (UCR) process. The audit objectives, conclusions, and recommendations follow:

Are crime statistics accurately reported and are there adequate controls over the collection, classification, and reporting of these statistics?

With the exception of arson, crime statistics for the City of San Antonio are accurately reported to the Texas Department of Public Safety. Also, we found controls over the collection, classification, and reporting of these statistics are generally adequate, however improvements could be made.

We examined the process of collecting, classifying, and reporting UCR crimes and noted minor errors; however, the errors were insignificant overall and, therefore, did not materially affect the accuracy of crime statistics reported to the Texas Department of Public Safety (DPS) and the Federal Bureau of Investigation (FBI).

We noted that during 2012, the SAPD UCR group made improvements to the UCR reporting process and established several manual reviews to mitigate limitations and issues with the Record Management System (RMS) application used to generate UCR information. Due to the SAPD UCR group's efforts, no errors were identified with the reporting of homicides and minimal errors were found in the reporting of all other non-arson related Part I crimes.

To improve the UCR process, we recommend that the SAPD Chief of Police:

- Develop and implement controls to accurately identify and report arson-related crimes.
- Implement controls that restrict change-access to the UCR_Type field in the Record Management System (RMS) application to authorized members of the UCR group.
- Strengthen IT general controls for the RMS and Automated Field Reporting (AFR) applications by:
 - Defining and formally documenting a controlled process for handling new, modified, and terminated users.
 - Developing procedures and performing periodic (e.g. quarterly) reviews to ensure that user access is appropriate. Access should be limited based on job title and function.
 - Enabling password complexity on the RMS application and defining password policies that require AFR users to use complex passwords.

SAPD Management's verbatim response is in Appendix B *on page 11*.

Table of Contents

Executive Summary	i
Background.....	1
Audit Scope and Methodology	2
Audit Results and Recommendations	4
A. Crime Collection, Classification, and Reporting	4
Crime Collection	4
Part I Crime Classification.....	4
Part II and Non-UCR Crimes	5
Crime Reporting.....	5
B. Arson Crimes Reporting.....	6
C. Access to Change UCR Code Classifications	7
D. IT General Controls	8
Appendix A – Staff Acknowledgement	10
Appendix B – Management Response.....	11

Background

During calendar year 2012, the San Antonio Police Department (SAPD) received over 1.3 million calls for service (CFS) resulting in over 290,000 police reports. The SAPD summarizes these crime reports into statistics which are then made available to the public. The SAPD voluntarily reports crime data and statistics to the Texas Department of Public Safety (DPS) and the Federal Bureau of Investigation (FBI). Crime data is collected monthly and reported to the DPS, who collates the data for all of Texas and semi-annually reports the results to the FBI. *The DPS uses the data to generate its annual 'Crime in Texas' reports and the FBI uses the data to generate its annual 'Crime in the United States' reports.* Both reports are made available to the public.

To facilitate accurate and timely reporting, the SAPD uses the Intergraph software suite that includes the Automated Field Reporting (AFR) and Record Management System (RMS) applications. Through the AFR application an officer can remotely write and submit a crime report to his/her supervisor for review. Upon supervisor approval, the crime report is forwarded to the SAPD UCR group for review and uniform crime reporting (UCR) classification.

Daily, the SAPD UCR group reviews each crime report for completeness. Next, based on the narrative and other information on the crime report, the group classifies each crime as defined by the FBI's UCR standards. According to UCR standards, crimes fall into two categories; Part I Crimes and Part II Crimes. Part I Crimes include the following in order of severity:

- Murder and Non-negligent Manslaughter
- Forcible Rape
- Robbery
- Aggravated Assault
- Burglary
- Larceny-Theft
- Motor Vehicle Theft
- Arson

Part II Crimes consist of all other criminal activities not expressly stated as Part I Crimes (e.g. simple assault, fraud, vandalism, prostitution, gambling, and drug abuse violations). In some cases, the local and State penal code definitions differ from the FBI UCR standards.

The UCR group receives, reviews, and processes approximately 1,100 crime reports daily. Each report is checked for data completeness. If the criminal activity report is missing any key data, it is sent back to the SAPD supervisor to obtain the missing data.

Once a crime report is assigned a UCR classification, the SAPD UCR group approves the AFR report and the RMS application generates and stores a PDF version of the crime report. The RMS application serves as SAPD's 'system of record' for criminal activity.

On a monthly basis, the UCR group uses the RMS application to generate draft reports of the UCR data. The UCR group uses several manual processes, as necessary, to ensure the reports provide accurate crime statistics, and then submits them to the DPS through a web portal. For any data that cannot be submitted via the portal, email or fax is used. The UCR group finalizes and submits UCR statistics to the DPS monthly.

Audit Scope and Methodology

The audit scope was from January 2012 to April 2013. Our audit procedures included a mixture of historical and current-state testing. We performed testing from June 2013 through October 2013.

We interviewed SAPD department management and staff to gain an understanding of the uniform crime reporting process, including the collection, classification, and reporting of criminal activity. Additionally, we also examined SAPD department policies and procedures. We also tested and documented system settings, configurations, diagrams, and other evidence.

To establish test criteria, we used the FBI's *Uniform Crime Reporting (UCR) Handbook* and the Government Accountability Office's (GAO) *Federal Information System Controls Audit Manual (FISCAM)*. The GAO's FISCAM presents a methodology for performing information system control audits in accordance with government auditing standards. We also relied on City Administrative Directives (ADs) and ITSD Security Standards.

We relied on computer-processed data in Intergraph's AFR and RMS applications to validate completeness and accuracy of crime records. Our reliance was based on a combination of evaluations of general IT and application controls over these applications and direct testing of the data.

Specifically, we examined general and application controls over the RMS application including evaluating the change management process and user access management process. We examined and tested RMS application controls related to data validity. Finally, we evaluated AFR and RMS IT general controls.

In order to adequately test the audit objective, we examined and tested the data flow process from the initial 'call for service' through to the AFR application, then to the RMS application, through UCR classification, and finally to DPS reporting. We also tested manual controls throughout the process placing particular attention on homicide and arson reporting processes.

We examined a random sample of 382 crimes in the RMS application to validate that the SAPD's UCR group correctly applied classification and scoring guidelines. We also tested adherence to FBI jurisdiction, hierarchy, and separation of time-and-place rules. Furthermore, we tested crime clearances for compliance with UCR guidelines.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Audit Results and Recommendations

A. Crime Collection, Classification, and Reporting

In 2012, the SAPD received over 1.3 million calls for service (CFS) resulting in over 290,000 police reports. These reports consisted of Part I crimes, Part II crimes, and informational reports.

When a crime is initially reported, a CFS incident is created and assigned to a police officer for investigation. The officer assesses the crime and documents the events in SAPD's AFR crime report application. The AFR report is then reviewed and approved by the officer's supervisor and forwarded to the UCR group for classification. The UCR group reviews every crime report and uses the FBI's crime definition to classify the type of crime.

In order to assess the accuracy of the UCR statistics, we reviewed the following UCR processes.

Crime Collection

To validate that CFS were appropriately captured and resulting AFR crime reports were created, we matched all CFS that were coded with a case number to corresponding AFR reports. Additionally, we identified 1,392 CFS that did not have a case number (i.e. no associated AFR report) but based on certain criteria potentially should have resulted in an AFR report/Part I crime (e.g. burglary, robbery, etc.).

We selected a judgmental sample of 30 of these 1,392 CFS to determine if they should have resulted in an AFR report. We reviewed supporting documentation and police reports for each of the 30 CFS and determined that 24 of them did not require an AFR report, but that 6 of them ($6 \div 30$, or 20% of the sample) potentially should have resulted in an AFR crime report. However, based on available documentation, we could not determine with any certainty if any of the 6 CFS should have actually resulted in an AFR report. Accordingly, we determined that if the 20% error rate of our sample was representative of the error rate in the entire 1,392 CFS, at most 278 ($20\% * 1,392$) calls potentially should have resulted in AFR/Part I reports. However, in relation to the total population of 87,480 Part I crimes reported by the SAPD in 2012, at most this would only amount to a 0.3% error rate ($278 \div 87,480$) in under-reported crimes which is well within FBI reporting guidelines. Assuming all 1,392 CFS were in error, the maximum error rate would still only be 1.59% ($1,392 \div 87,480$).

Part I Crime Classification

We tested the crime type classification process by randomly selecting and reviewing a sample of 382 crime reports. We examined each crime report to validate that the UCR group correctly applied guidelines from the FBI’s UCR Handbook and identified 7 errors in our sample.

The table below shows the results of our testing.

Part I Errors found in a Random Sample of 382 Crime Records

Part I Crime Type¹	Errors Classifying Crimes per UCR Guidelines	Errors Applying the ‘Separation of Time and Place’ Rule	Errors Applying the ‘Multiple Offenses’ Rule	Total UCR Errors
Criminal Homicide	0	0	0	0
Forcible Rape	0	0	0	0
Robbery	0	0	0	0
Aggravated Assault	1	0	0	1
Burglary	0	0	0	0
Larceny-Thief	3	0	1	4
Motor Vehicle Theft	1	1	0	2
Total Errors	5	1	1	7
Total Error Rate	1.31%	0.26%	0.26%	1.83%

Based on the results of our testing, we are 95% confident that the actual crime classification error rate for Part I crimes (excluding arson) is 1.83%, plus or minus a margin of error of 1.34%.² This error rate is well within the FBI’s acceptable error rate guideline of 10% for uniform crime reporting.

Part II and Non-UCR Crimes

In order to validate that Part I crimes were not incorrectly classified and reported as Part II or non-UCR crimes, we randomly selected and examined a sample of 25 Part II and 25 non-UCR crime reports. We reviewed the officer’s description of the crime and compared it to UCR guidelines to determine if it was incorrectly classified. We determined that no Part I crimes were incorrectly classified or reported as Part II and non-UCR crimes.

Crime Reporting

Finally, using the RMS data, we compared classified Part I crimes to total crimes reported to the DPS via the *Return A* report. The RMS application uses the “UCR Tool” function to generate draft UCR statistical reports. These draft reports

¹ The process for collecting, classifying and reporting arson related crime was tested separately and the audit results are reported in observation B on page 6.

² Stated another way, we are 95% confident that the actual error rate is between 0.49% and 3.17% of the population.

are used to create the final UCR report that is sent to the DPS. Prior to November 2012, the RMS application was not closing out crime statistics properly in the "UCR Tool" resulting in an over-reporting of crime data (excluding homicide and arson³). In November 2012, the UCR group modified the reporting process to correctly close each month in the RMS application's UCR tool to prevent over-reporting crime data. However, we determined that in 2012, the SAPD over reported certain crimes by 2.75% due to this issue; though this error rate is within the FBI's acceptable error rate guideline of 10%.

Summary

With the exception of arson crime reporting (addressed below in observation B), we determined that SAPD UCR statistics were accurately collected, classified, and reported. Therefore, we make no recommendations regarding these processes.

B. Arson Crimes Reporting

The SAPD under-reported 50 arson crimes in 2012 or 16.8%.

Under FBI UCR Handbook guidelines, if an arson crime occurs in conjunction with another Part I crime, SAPD is required to report both the arson and the other Part I crime. Currently the AFR and RMS applications can only track one crime per police report. To correct this issue, officers must create two incidents for cases where an arson crime is involved with another Part I crime. However this process was not consistently followed.

In November of 2012, the UCR group indentified this weakness and began manually tracking arson-related crimes for reporting to the DPS. As crime reports are reviewed, all arson-related crimes are manually recorded in an arson log. At the end of each month a UCR analyst uses RMS to search for arson cases for the month and then compares the cases to the manual arson log list. The two lists are consolidated into one report for DPS reporting purposes.

Using an extract from the RMS application, we compared the arson cases reported to the DPS in 2012 to the arson crimes recorded in RMS in 2012 and identified a population of 295 arson cases. In 2012 SAPD reported 245 arson crimes to DPS. We determined that SAPD underreported arson crimes by 50 out of 295 actual arson crimes (or 16.8%). The UCR group's current process fails to identify arson cases that occur in a prior month but aren't processed until after the DPS reporting deadline.

³ Homicide and arson were excluded from this comparison as these crime types are manually tracked and reported and the reporting processes were tested separately.

Recommendation

The Chief of Police should develop and implement controls to accurately identify and report arson related crimes.

C. Access to Change UCR Code Classifications

Access to modify UCR code classifications in the RMS application is not properly restricted.

The SAPD UCR group has ownership and responsibility for collecting, classifying, maintaining, and reporting accurate criminal activities for the City of San Antonio. The SAPD UCR group uses the RMS application as their 'system of record' and uses integrated tools to generate monthly statistics that are reported to the DPS. The RMS application uses a series of tab views to display stored criminal information, including a tab for recording UCR code classifications. System administrators are able to restrict individual access to directly modify data fields within each tab. However, we found that users other than the SAPD UCR group have the ability to modify data fields within the UCR tab, including the UCR code classification (UCR_Type).

Using the Audit Log feature in RMS, we analyzed all changes made to the UCR_Type field between January 2012 and April 2013. We determined that out of 5,465 total changes made to the UCR_Type field, 1,990 (or about 36%) were made by non-authorized individuals.

However, despite the high percentage of UCR_Type changes, crime reporting was not materially misstated as mentioned in observation A. Additionally, we noted that the UCR group has implemented a mitigating control by performing monthly quality control reviews of crime types that have been historically misreported.

Failure to properly restrict edit rights to the UCR_Type field in the RMS application increases likelihood that crimes may be misclassified and incorrectly reported to the DPS.

Recommendation

The Chief of Police should implement controls that restrict change-access to the UCR_Type field in the RMS application to just authorized members of the UCR group.

D. IT General Controls

IT general controls over the RMS and AFR applications used in the collection, classification and reporting of UCR crimes are not adequate.

Specifically, we noted the following:

- User access processes for the RMS and AFR applications do not comply with the City's Administrative Directive (AD) 7.8E - User Access Management. The following issues were identified:
 - User provisioning and termination controls were not well defined.
 - Terminated users were not removed in a timely manner.
 - Formal user access reviews were not performed.
 - Users were granted excessive administrative rights.
- AFR and RMS application password settings do not comply with AD 7.6 - Security and Passwords.
 - The RMS application has the functionality to enforce passwords that comply with the AD 7.6; however, these settings were not enabled.
 - The AFR application does not have the functionality to enforce complex passwords. Currently passwords can be just one character.
- The user access management process lacks formal documented policies and procedures.

IT general controls are designed to restrict and detect inappropriate access to computer systems. Effective IT general controls protect systems from unauthorized access, modification of data, or inappropriate disclosure of information. These controls consist of defined policies, password settings, logical and physical access, user access management, and detective review procedures.

ITSD had previously identified many of these IT general controls issues. However, ITSD was focused on stabilizing the AFR and RMS applications and staffing limitations prevented them from addressing these IT controls.

Without a documented, defined, repeatable, and effective process for managing user IT general controls, SAPD management has no assurance that access to the RMS and AFR applications is appropriate.

Recommendations

The Chief of Police should:

- 1) Define and formally document a controlled process for handling new, modified, and terminated users.
- 2) Develop procedures and perform periodic (e.g. quarterly) reviews to ensure that user access is appropriate. Access should be limited based on job title and function.
- 3) Enable password complexity on the RMS application and define password policies that require AFR users to use complex passwords.

Appendix A – Staff Acknowledgement

Mark Bigler, CPA-Utah, CISA, CFE, Audit Manager
Matthew Howard, CISA, Auditor in Charge
Susan Van Hoozer, CIA, Auditor
Bruce Coleman, CIA, Auditor

Appendix B – Management Response



CITY OF SAN ANTONIO

P. O. Box 839966
SAN ANTONIO TEXAS 78283-3966

January 10, 2014

Kevin W. Barthold, CPA, CIA, CISA
City Auditor
San Antonio, Texas

RE: Management's Corrective Action Plan for the Audit of the San Antonio Police Department - Uniform Crime Reporting

The San Antonio Police Department has reviewed the audit report and has developed the Corrective Action Plans below corresponding to report recommendations.

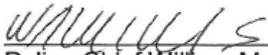
Recommendation					
#	Description	Audit Report Page	Accept, Decline	Responsible Person's Name/Title	Completion Date
1	<p>Arson Crimes Reporting</p> <p>The Chief of Police should develop and implement controls to accurately identify and report arson related crimes.</p>	6-7	Accept	Steven Baum – Assistant Police Director	January 31, 2014
<p>Action plan:</p> <p>In response to the audit, the UCR Section immediately developed and implemented controls to accurately identify and report arson related crimes. The UCR Section will further expand its reporting selection to capture arson related crime reports completed and submitted after each month's reporting deadline by requesting report data from the beginning of the year through the end of the current reporting period. These cases will be identified and reported to TxDPS prior to the year-end deadline.</p>					

Recommendation					
#	Description	Audit Report Page	Accept, Decline	Responsible Person's Name/Title	Completion Date
2	<p>Access to Change UCR Code Classifications</p> <p>The Chief of Police should implement controls that restrict change-access to the UCR_Type field in the RMS application to just authorized members of the UCR group.</p>	7	Accept	Steven Baum – Assistant Police Director	January 1, 2014
<p>Action plan: In response to the audit, the Administration and Records Manager will direct that only designated personnel have editing permissions for the UCR_Type field in the RMS application.</p>					
3	<p>IT General Controls</p> <p>The Chief of Police should:</p> <ol style="list-style-type: none"> 1) Define and formally document a controlled process for handling new, modified, and terminated users. 2) Develop procedures and perform periodic (e.g. quarterly) reviews to ensure that user access is appropriate. Access should be limited based on job title and function. 3) Enable password complexity on the RMS application and define password policies that require AFR users to use complex passwords. 	8-9	Accept	John Rodriguez, Assistant Director – Public Safety Technology	April 1, 2014

Recommendation									
#	Description	Audit Report Page	Accept, Decline	Responsible Person's Name/Title	Completion Date				
	<p>Action plan:</p> <p>1) ITSD developed and implemented an <i>Access Control Management Standard</i> (Signed, September 2012) that provides guidance on access control implementation best practices based on NIST 8001-53A. Account Management Provisioning and Deprovisioning procedures were developed and implemented using the standard. Customer service agents have been trained on the process. SAPD/ITSD is refining a Police Specific User Provisioning / Deprovisioning form that provides coverage for both AFR and RMS applications. The updated form is expected to be completed, approved and implemented by January 31, 2014. The process of provisioning and deprovisioning user accounts in AFR and RMS has been documented for new hires, promotions, transfers, suspension, separation, and termination.</p> <p>2) In July 2013 user account audit procedures were initially developed for AFR and RMS. Supporting documentation was also developed during this time frame and further refined in January 2014. SAPD/Public Safety IT initiated its first internal AFR&RMS user account audit in July 2013 and is slated to perform a follow on audit by end of February 2014. Following Februarys, audit proceedings the audits will occur on a quarterly basis.</p> <p>3) By April 1st, 2014 complex passwords will be implemented in RMS. The passwords will be in line with the capabilities of the application and will require 8 characters, the use of a special character, and the use of alpha and numeric characters. The application will remember the previous 10 passwords and will restrict the user from re-using previous passwords.</p> <p>The currently deployed version of AFR lacks the capabilities to enforce complex passwords. The vendors roadmap for launch of a version of the product that meets this requirement has yet to be finalized.</p>								

We are committed to addressing the recommendations in the audit report and the plan of actions presented above.

Sincerely,



 Police Chief William McManus
 San Antonio Police Department

13 Jan 14

 Date



 Erik Walsh
 Deputy City Manager
 City Manager's Office

1/13/14

 Date