City of Killeen



RMS Assessment Report

1. Executive Summary

The City currently uses Hexagon/Intergraph modules to manage Public Safety processes, including CAD and Records management. The City reported challenges with the Intergraph software and is interested in documenting current challenges and needs along with potential options for a future environment.

In May 2021, City staff conducted an initial project planning meeting with the Information Technology team and the Killeen Police department Command staff to clarify project goals and objectives, identify known project constraints, and refine dates and/or tasks as appropriate.

Following the project kickoff meeting, City IT Staff facilitated fact-finding meetings with department users of the existing systems. The purpose of these meetings was to follow up on information previously provided, document high-level functional requirements necessary to meet the City's needs, understand the current business processes associated with the existing systems, and identify challenges in the current environment.

There were many challenges related to the current systems environment at the City identified as a result of the fact-finding activities, many of which are documented in Section 3.0 Business Process descriptions and Section 5.0 User Web Surveys. In addition to the themes identified in those sections, additional documented challenges and areas for improvement will be incorporated in the development of the Preliminary Functional and Technical Requirements. The Functional and Technical Requirements document will be used to evaluate the ability of a vendor to provide the functionality required to address these challenges.

City staff developed a set of business and technical requirements that represent their current needs and future goals. The requirements development process will be based on identifying the City needs irrespective of vendor functionality in the market. The set of business and technical requirements will provide the City with additional safeguards and risk mitigation opportunities by comparing several products and implementation approaches.

City Staff identified 12 primary challenges and areas for improvement in the current environment at the City, identified in the table below and described in detail in the sub-sections that follow. These challenges represent the themes that emerged from the complete list of documented challenges.

Last Updated: December 8, 2021

	Primary Challenges and Areas for Improvement			
1	There is limited or inadequate functionality in the current system to support certain business processes.			
2	Due to limited functionality in the current system, staff at the City relies on MS Excel, manual, and paper-based processes.			
3	The lack of integration between some Intergraph/Hexagon modules and the existing systems requires staff to perform duplicate data entry.			
4	System navigation is cumbersome and not use-friendly.			
5	System users regularly experience technical issues with the current environment that interrupt continuity of operations.			
6	Staff do not have access to robust workflow automation and alerts within Hexagon, which delays tasks.			
7	System users regularly experience technical issues with the current environment that interrupt continuity of operations.			
8	The vendor reportedly provides ineffective and unpunctual support for the current system and requests for configuration.			
9	The limited functionality with Intergraph/Hexagon forces staff to rely on multiple systems.			
10	Difficulty assigning security roles, administering system fields, and managing accounts (e.g., unavailability of Active Directory).			
11	Correcting and/or updating data in City systems requires manual processes and does not provide adequate audit trails.			
12	Training on software applications is not provided on a frequent basis.			

Last Updated: December 8, 2021

2. Introduction

2.1 Project Background

The City reported challenges with the Intergraph/Hexagon software and is interested in documenting current challenges and needs. A needs assessment is desired to identify options that can best support the vision of all City public safety entities, as well as other supported third-party public safety entities. There are four major phases involved in this project:

- Conduct a Needs Assessment
- 2. Solution Demos
- 3. System Selection

Activities involved in these tasks include fact-finding meetings with key stakeholders, developing a needs assessment (this report), completing requirements confirmation sessions to develop functional and technical requirements for RMS, developing demonstration scripts, facilitating vendor demonstrations and vendor scoring, and the selection of vendor.

2.2 Work Performed

On May 18th, 2021, City Staff facilitated a project kickoff meeting with the Information Technology team and Killeen Police department Command Staff. During the meeting, the Project Team members were introduced and a review of the approach and timeline for the project was provided. In addition, City staff had the opportunity to ask questions about the project and discuss City goals and objectives.

Following the project kickoff meeting, IT Staff facilitated fact-finding meetings with department users of the existing systems. The purpose of these meetings was to follow up on information previously provided, document high-level functional requirements necessary to meet the City's needs, understand the current business processes associated with the existing systems, and identify challenges in the current environment. The meetings were conducted based on the following subject areas:

Table 2.2: Fact-Finding Subject Areas

Fact-Finding Subject Areas		
No.	No. Subject Area	
1	1 Police Records Management	

Immediately following the first work session trip, City Staff coordinated follow-up fact-finding activities in developing the first draft of this Needs Assessment Report.

3 Business Processes

This section of the report describes the current City business processes that were analyzed as part of this project. Within the sub-sections to follow, the specific business processes are outlined, including the identification of areas where applications, standalone systems, and/or manual and paper-based

processes are used. The descriptions are not intended to detail each step involved in the process, but instead are intended to highlight the major activities and areas of challenge.

3.1 Police Records Management

To support its operations, the Killeen Police Department (KPD) uses several technology applications to execute its mission. Those applications include; Telegraph/Hexagon, MS Office, LexisNexis, an inhouse developed public safety database, available state systems, and national public safety databases. The Record Management System (RMS) comprises the Department's main platform to manage its business processes, including field operations, records management, investigations, evidence, and administrative support services. Although the RMS has functionality that meets some of the needs of the Department, each subunit relies on the disparate applications noted above to perform necessary tasks. End-users in several business areas indicated that they do not utilize the features and functions available in the RMS system due to the complexity and cumbersome nature of the software. Rather, each sub-unit, including individual staff, have developed its own ad hoc processes for executing its tasks. The discussion which follows describes each subunit's business processes and practices.

3.2 Field Operations

Operations personnel, such as patrol or traffic officers, use mobile data terminals (MDT) and radios to support field work. Field personnel will initially receive an incident notification via radio or notification through Hexagon installments on laptop devices. The radio alerts the officer to then expect a data transmission to the MDT. Upon receipt of the CAD data to the MDT, the officer transmits a radio acknowledgement of receipt. Field officers use the Mobile dashboard, which allows officers to view dispatch activities through the CAD module. Although the existing mobile devices for field officers allow the relay of information back to dispatch, communicating information on availability, in-route status, or on-scene response, these functionalities are not used due to the lack of ease or insufficient training on system functionality

Incident reporting via RMS and MDT are not routinely used, although the capability exists. End-users reported that the system is unnecessarily complex and unreliable. Staff reported that once an incident report is generated on the MDT, updates and revisions are not permitted. Staff must perform an intensive manual rework of reports before the RMS captures the information. Staff reported that supplemental reports undergo a similar manually intensive process. The lack of parent-child relationships between the initial and supplemental reports is a reported weakness. This weak data relationship prevents field officers and investigators from performing the required depth of field analyses.

3.3 Records Management

The Police Records management at the City ensure the accuracy of report submission, verifies supervisor approval, and manages merging of police records. Upon submission of a report by an officer, a supervisor verifies the information in the RMS. Supervisors check to ensure that officers have completed all mandatory fields. Staff reported that the current system struggles to identify officer corrected data; if a field previously contained inaccurate information, the error report will roll forward into other modules despite the officer correcting the information.

Arrests and booking data management poses a similar challenge. Staff reported that although the Hexagon process is not difficult, the complexity of options and numerous fields overwhelm end-users, which results in limited use or user avoidance. End-users reported that the workflow in the system is too complicated and would like a system with basic mandatory fields that simplify data entry and provide consistent business process across subject areas and staff. Staff further reported a desire for a future system that allows for narrative searches that have "smart" functions that allow for misspelled names, which are a common occurrence.

3.4 Investigations

When a case requires an investigation, supervisors and detectives rely on an ad hoc process for assigning a detective or investigating officer. Although case assignments are determined by the final call type captured in the RMS, the limitations identified by end-users prevent staff from fully utilizing all information stored within the system. Detectives report that Hexagon easily assigns cases to investigators automatically. However, subsequent business process limitations in the system incentivizes workaround activities extraneous of Hexagon. Staff develop investigative reports in a separate word processing tool such as Microsoft Word, which upon completion staff manually copy text into Hexagon. Duplication of work is common in this ad-hoc process. Updated information is often not reflected in reports. One common concern is the inability of the system to capture in a meaningful way updates or the change in case types. A case assignment that was initially categorized as both a property and persons crimes can have two separate detectives assigned for each classification. It is reported that detectives have no easy way to cross-link the cases which result in parallel investigations. Further, cross-linkage or parent-child relationship limitation impeded the sharing of information across cases.

3.5 Evidence/Storage

Evidence Technicians rely on hexagon, Prop Room, and Microsoft applications to manage and process the evidence that officers submit. Access to the evidence room is restricted via two gateways: the evidence locker room and a main registration gate where staff are stationed. Evidence is submitted by an officer via the locker room. An officer green tags an article of evidence with initials and places it in a secure locker. It is then received by a technician from a second locker door that is located opposite the deposit door. Upon retrieval, the technician applies a tag. The evidence is then logged into the records management system. A barcode is generated and affixed to the cream-colored tag using the Prop Room application. Physical evidence such as firearms are segregated further in a secure room, while others are placed in boxes and shelved. The shelved evidence boxes are organized by the staff by date and time. Biological evidence is stored in dedicated freezers and refrigerators.

Evidence can be checked out by filling out a paper form, which is then recorded in the RMS system for inventory control. The paper form is filed in a folder. A technician reviews the folder at least once every thirty days to ensure that checked out items have been returned. The RMS system does not have a reminder/tickler functionality to help staff review checked out evidence based upon user-defined preferences. In the evidence room, like other business functions in the Department, the RMS system is not central to the business process of the evidence management. The project team was not able to determine whether the core business processes of evidence management that are common to a RMS system are used by Department staff. Those processes typically have mandatory procedures and data entry fields to ensure that evidence ties back to the correct originating agency. Once Crime

Lab staff have logged in under the PD credentials, entry of evidence follows the same protocol. For example, the property evidence processing in a standard RMS system has a number of mandatory fields that staff complete, including case number, property type, property code, facility (i.e., storage facility), and storage location. A description section and field exist that allow staff to enter brief descriptions based on the officer's written detail.

3.6 Support Services

Administrative support and crime analysis comprise the main components of Support Services. Administrative support provides personnel management services for the Department which involve tracking personnel information, supervisor assignments, unit assignment transfers, emergency contact information, testing evaluation and scoring, certification and training credentialing, and payroll. These functions do not reside within the Department RMS but rather are maintained and managed by the City's Human Resources Department which use Central Square HR ERP. Department end-users reported basic familiarity with Central Square, which involve mainly data entry. However, data analysis and report generation capabilities are not fully utilized.

Crime analysis business function relies on a patch work of software application outside of the record management system. Crime Analysts reported that analysis is labor intensive and rely significantly on text query of word-processed documents from field and investigative reports. This methodology compounds the complexity and difficulty of linking related crimes against persons and property, and elucidating patterns and clusters of criminal activity. Crime analysis is constrained by the limited use of the RMS system.

4. Current Technical Environment

The following subsections describe the current technical and software support structure at the City, the current infrastructure, current applications in use, and the current technology projects at the City.

4.1 Current Support Structure

The Killeen Police Department is a 334-member organization, with 258 members allotted sworn strength. KPD is responsible for all police functions in Killeen, Texas, a city of approximately 149,103 (2018), covering approximately 55.235 square miles. The Killeen Police Department operates three facilities: a Headquarters, a North Annex, and a Training Academy. The City of Killeen is located in Bell County, and is the home of Fort Hood, one of the largest military installations in the world. Dispatch and 911 services are performed by the Bell County Communications Center (BCC) located in Belton, Texas. BCC maintains call taking, CAD, mobile data terminal and RMS software currently used by KPD and other jurisdictions within Bell County. The Killeen Police Department prides itself on its relationship with the community and values transparency. The department must be able to provide accurate data regarding law enforcement activity and crime statistical information.

4.2 Current Infrastructure

The City has 2 locations that access RMS Hexagon, three of which have fiber connections. Bell County maintain all servers, firewalls, and implementations. Bell County operates on VMWare, uses Windows.NET, runs SQL, and has a VOIP system. Public Safety hardware operates on PowerEdge, dual socket 12 core 256 GBs RAM 10, 20, 40, and 80. Bell County backs-up RMS on a nightly basis.

4.3 Software Related to Current Processes

A variety of software exists in the current environment to support the existing City business processes. The following subsections further describe the software currently in use.

Table 4.3: Additional Software Related to Current Processes

	Additional Software Used for Public Safety Business Processes		
No.	Software Product Use/Summary		
1	Hexagon/Intergraph	The City currently uses Hexagon for Computer Aided Dispatch within the City, as well as a Records Management System for Police	
2	Harris P25 Phase 2 The City currently uses Harris P25 phases to suppote telephonic needs.		
5	Crystal Reports	The City currently uses Crystal Reporting to support reporting needs.	
6	Esri	The City currently uses Esri to support GIS mapping functionality.	
7	Omnix The City currently uses Omnix to inquire Sta National Crime databases.		
8	8 Aptian The City currently uses Aptian to support e-cits needs.		
10	Central Square ERP	The City currently uses Central Square ERP to support core financial, payroll, and community development processes.	

Additional Software Used for Public Safety Business Processes			
No.	Software Product Use/Summary		
15	Hexagon	The City currently uses Hexagon to support police evidence management.	
16	LexisNexis	The City currently uses LexisNexis as a database for background checks and to support investigations (e.g., locate suspects).	
17	CrimeMappping.com	The City currently uses CrimeMapping.com as an online crime analysis tool.	
18	Crime Analysis	The City currently uses Crime Analysis as an online crime analysis tool.	

Intergraph/Hexagon is the City's core system to support CAD and RMS activities. The City uses of Hexagon, which reportedly has several bugs that the newest versions remedies. Hexagon has limited integration with other systems at the City, which makes sharing of data cumbersome and often a heavily manual process.

5. User Web Surveys

Prior to facilitating the fact-finding meetings, City Staff developed and administered a web-based survey to various users in the City. The surveys were developed to capture feedback from core system users.

5.1 User Survey Questions

The following table contains the questions that were included in the user survey.

Table 5.1: User Survey Questions

User Survey Questions			
No.	Question		
	Please select the software module(s) that you work with, interact with, or are responsible for and for which the responses in this survey are more directly related to: (choose all that apply)		
1	a. Mobile b. Police Records Management c. Corrections/Jail Management		
	d. Other (please describe)		
	How often do you utilize the existing Intergraph/Hexagon Software System or any of its components as discussed in this survey?		
	a. Throughout each day		
2	b. Minimal times per dayc. Minimal times per week		
	d. Minimal times per month		
	e. Minimal times per year		
	f. Never		
3	Please list all of the system(s) you use to support the primary daily business processes of your department (i.e., the systems/software that your department uses regularly.		
4	Who provides support for the technology software/systems/applications you use on a regular basis (e.g., a vendor, City IT)?		
5	Are you using MS Excel spreadsheets, external databases, or paper-based and manual processes to track information related to your department? (with open comments) a. Yes		
6	b. No		
	What are the greatest strengths you experience with using the existing system?		
7	What are the greatest challenges or problems you experience with using the existing system?		
8	What functionality do you not have today that could help meet the needs of your department?		

9	What specific business process changes do you feel a potential new system(s) may be able to assist with to improve overall efficiencies?			
10	Please describe any training or training manuals you have received for the current system.			
11	Please explain any additional information you wish to share related to the current system.			

5.2 User Survey Responses

Appendix B of this report contains additional survey response information. The following table identifies several of the key themes that were reported by survey participants.

Table 5.2: User Survey Key Themes

User Survey Key Themes				
No.	Theme			
1	Users reported utilizing MS Excel spreadsheets, external databases, or paper-based and manual processes to track individual department information.			
2	Users reported challenges with frequent entry of user credentials under the system's security settings.			
3	Users reported challenges attaching supporting documentations (e.g., photographic evidence) to cases within the system.			
4	Users reported challenges with a lack of integration between modules.			
5	Users reported the benefits of the current system are ease to query information, system navigation, data storage, and familiarity with the system.			
6	Users reported challenges with the mapping functionality with the system.			
7	Users reported challenges with connectivity, system functionality without internet connection, and system speed.			
8	Users reported challenges due to a lack of vendor support of the system.			
9	Users reported challenges with ease of use for mobile functionality.			
10	Users reported that a prolific offender reports and the ability to automatically create photographic lineups would be beneficial.			
11	Users reported a need for information integration between functional areas (police records and the initial call-for-service). Users also stated that the benefits of less duplicate data entry may increase use of system by some City staff to input data.			
12	Users reported a desire for a system that allows for continued activity when the system disconnects due to a lack of signal, and that information is automatically synced when the system again receives signal.			
13	Several users reported manual entry of data in a multitude of locations within the system.			

6. Primary Challenges and Areas for Improvement

There were many challenges related to the current systems environment at the City identified as a result of the fact-finding activities, many of which are documented in Section 2.0 Current Environment Summary descriptions and Section 4.0 User Web Surveys. In addition to the themes identified in this section, additional documented challenges will be incorporated in the development of the Preliminary Functional and Technical Requirements. The Functional and Technical Requirements document will be used to evaluate the ability of a vendor to provide the functionality required to address these challenges.

City Staff has identified 11 primary challenges in the current environment at the City, which are identified in the table below, and described in detail in the sub-sections that follow. These challenges represent the themes that emerged from the complete list of documented challenges. While many examples of the challenges listed below were described in several meetings, the challenges described all fall under one of the primary challenges listed below.

Table 6.1: Primary Challenges

1	There is limited or inadequate functionality in the current system to support certain business processes.			
2	Due to limited functionality in the current system, staff at the City relies on MS Excel, manual, and paper-based processes.			
3	The lack of integration between some Hexagon modules and the existing systems requires staff to perform duplicate data entry.			
4	System navigation is cumbersome and not use-friendly.			
5	Training on software applications is not provided on a frequent basis.			
6	Staff do not have access to robust workflow automation and alerts within Hexagon, which delays tasks.			
7	System users regularly experience technical issues with the current environment that interrupt continuity of operations.			
8	The vendor reportedly provides ineffective and unpunctual support for the current system and requests for configuration.			
9	The limited functionality with Hexagon forces staff to rely on multiple systems.			
10	Difficulty assigning security roles, administering system fields, and managing accounts (e.g., unavailability of Active Directory).			
11	Correcting and/or updating data in City systems requires manual processes and does not provide adequate audit trails.			

1. There is limited or inadequate functionality in the current system to support certain business processes.

There are several areas in which the City will likely benefit from expanded functionality not available within the current environment, but generally available in other Public Safety software systems on the market today. On the back end, competing systems have reporting features to ensure that data is accessible through the RMS solution with the ability to import and export into multiple file formats to assist with data manipulation.

2. Due to limited functionality in the current system, staff at the City relies on MS Excel, manual, and paper-based processes.

Staff reported the use of MS Excel, manual, and paper-based processes to overcome the limited functionality within Hexagon. For example, Hexagon has not yet updated the Unified Crime Reporting (UCR) and crime analysis functionality in the system, causing law enforcement staff to conduct the analysis using MS Excel and to use Hexagon instead as a data repository. Although Hexagon documents the initial call type on the RMS report, staff must complete a manual review of the call details to determine the final call type. Hexagon has the ability to store premise warning information (e.g., vicious dog), but officers must generate an "officer alert paper" form and physical deliver the paper form to dispatch staff to enter the information.

3. The lack of integration between some Hexagon modules and the existing systems requires staff to perform duplicate data entry.

Although City staff has access to disparate systems that meet particular needs, staff relies on a combination of systems that do not integrate the complete tasks. The consequences of systems that do not integrate include duplicate data entries. System navigation is cumbersome and not user-friendly.

While performing demonstrations of the system, staff indicated the areas of Hexagon where the system has a cumbersome, non-user-friendly user interface. For example, when responding to an emergency call, fire staff must toggle between a zoom-in and zoom-out button to trigger the desired touch-screen response. Modern day public safety software systems that operate on modern mobile devices offer more efficient zoom functionality. Additionally, staff reported that Hexagon includes a significant number of text fields that staff do not complete. As a result, for example, at-a-glance information on arrest history is not available on a subject; instead, staff must read narrative sections to find the information. Staff also reported that Hexagon does not allow staff to customize dashboards or adjust the layout of the screen.

4. Staff do not have access to robust workflow automation and alerts within Hexagon, which delays tasks.

The cumbersome and time-consuming workflow of Hexagon causes staff to perform workarounds and manual notifications. For example, if an officer submits a case to a supervisor who determines that the case must be reworked, the supervisor will call the officer instead of sending a notification through the system to the officer to make adjustments on the submissions. Staff reported the notification or alerts sent from supervisors are difficult to remove from the user dashboard. Modern systems have customizable workflow that deliver notifications to the user dashboard or MS Office account while also having automated rerouting regarding approval, as desired, when a user becomes unresponsive.

5. System users regularly experience technical issues with the current environment that interrupt continuity of operations.

Staff reported that the Hexagon will either crash or freeze during a task, requiring an application restart and, thus, an interruption the business process. For example, staff reported that accessing particular features of the Hexagon system from MDCs will trigger a system freeze and force the individual to reboot the application. Staff also reported that narratives will occasionally disappear from reporting, which requires staff to perform the entry a second time.

6. The vendor reportedly provides ineffective and unpunctual support for the current system and requests for configuration.

Staff reported that when submitting support tickets and requesting information from Hexagon, the vendor is usually unresponsive, delayed, or provided the incorrect information. For example, the City requested additional information on network servers, but the vendor provided the incorrect documentation. Similarly, when the City makes requests for configuration to meet federal reporting standards, such as the update Uniform Crime Reporting Standards, the vendor remains unresponsive or extends the configuration process.

7. The limited functionality with Hexagon forces staff to rely on multiple systems.

Staff reported the use of multiple disparate systems to work around the limited functionality within Hexagon. For example, Hexagon lacks indexing functionality, which requires staff to spend a significant amount of time searching the system for information. In the place of Hexagon, staff instead use Spillman RMS to locate records, store information, and pull details to support case development. Similarly, Hexagon does not provide staff the ability to conduct and track thorough

investigation due to missing fields or investigation details

Staff reported that the current system environment does not adequately support the assignments of various security hierarchies among users. Although role based security is available, staff reported the need to have a large range of role and user-based security permissions for access to specific areas of a future system. Similarly, staff reported that that Hexagon does not afford the ability to set mandatory fields, which allows system users to bypass certain details and creates discrepant or missing information. Furthermore, the City does not have access to Active Directory, causing systems users to enter multiple log-ins throughout the system or, in some cases, share credentials to access the system.

8. Correcting and/or updating data in City systems requires manual processes and does not provide adequate audit trails.

When details of a case, for example, change in one area of the system, administrators must manually update the information in a separate module for the information to reflect accurately throughout the system. Furthermore, when administrators or users make adjustments to files within the system, Hexagon does not provide a detailed audit trail to show the information that the user changed, the user who made the change, and the data/time associated with the adjustment. Staff reported that a future system would document all changes to cases in order to reverse any incorrect adjustments while also complying with best practices through user accountability.

9. Training on the software applications is not provided on a frequent basis.

Staff reported that training on the systems in place at the City occurs on either an infrequent basis, only occurred during the implementation of the Hexagon product, or was provided during the onboarding process. Many users are reportedly "self-taught" by using the system on a daily basis, while other users report that power users provide training and assistance with using the system. In a future environment, staff would like to receive more frequent training, ensure that the vendor provides thorough training during and after implementation (i.e., remedial training), and that power users in each department facilitate the ongoing training.

Table 6.2: Detailed Challenges

Police Records Management

- It was reported that the Hexagon work flow to trigger re-work of incident details by an officer is cumbersome, so staff rely on manual notification over the phone or through email.
- It was reported that staff write reports in MS Word, and then copy the information into Hexagon to overcome the spelling and formatting limitations of Hexagon.
- It was reported that if a different arrest charge type is changed from the initial call type, staff do not receive an automated notification from Hexagon.
- It was reported that the property/evidence room functionality in Hexagon does not allow staff to have thorough parent-child relationships and does not provide notification when an adjustment to the tag number occurs.
- It was reported that the excessive number sub-categories for evidence management causes staff to identify evidence as miscellaneous, which interferes with accurate reporting.
- It was reported that the lack of a global subject file in Hexagon, which was available as a "global jacket" in Aegis, prevents staff from seeing arrest history for a subject unless the staff member reads the full narrative on file.
- It was reported that Hexagon does not provide the ability to perform wildcard searches for addresses.
- It was reported that Hexagon has not updated the system to match the most recent Uniform Crime Reporting (UCR) and crime analysis functionality.

7. Considerations

This section of the report summarizes needed considerations as planning related to the selection and implementation of a future system(s) continues. This will include the Public Safety Software scope, system functionality, City project team resource considerations, and organizational change readiness and considerations.

7.1 Software Environment

The following table contains the list of functional areas that the City has identified to be a part of a future Public Safety Software system environment.

Table 7.1: Software Environment Functional Areas

No.	Functional Area	
1	Police Records Management	

The following subsections discuss how a future system environment may be comprised in order to provide the functionality the City requires.

7.2 System Functionality

As part of the project, a list of Functional and Technical Requirements will be developed. This list will be organized by functional area and will be developed for each of the modules. These requirements define the detailed functionality a future system must provide the City. The development of the requirements will involve a collaborative process of multiple City stakeholders and will include requirements that ensure a system will allow future City growth. The list of Functional and Technical Requirements will become a part of the published Request for Proposal.

One of the largest factors contributing to a vendor's ability to provide a high level of fit with standard functionality is its level of experience working with government organizations. It is through this experience that increased functionality has been developed over recent years that can be made available to potential customers. If a software vendor is new to the government sector, they may have a lower level of fit due to less experience tailoring their systems to meet the needs of a government organization.

Regardless of the level of experience working with government organizations, a minimum level of functionality will need to be provided through customizations and integration from any vendor in order to meet the specific business needs of the City of Killeen. As the City evaluates the vendor proposals in, it will be important to understand how requirements provided by these methods will impact the system implementation, as well as ongoing maintenance and operations of the software. The impact will vary, and the following table summarizes the four requirements delivery methods and describes some of their long-term implications.

Table 7.2: Functionality Delivery Methods

	Functionality Delivery Methods			
No.	Methods	Summary	Long-Term Implications	
1	Standard	The requirement may be met with the current software version release.	Maintenance and updates performed by vendors will have little effect on core system functionality.	
2	Future	The requirement may be met with a future software version release.	Maintenance and updates performed by vendors will have little effect on core system functionality.	
3	Customization	The requirement may be met with a customization to the current software version release for a fee.	Maintenance and updates will require considerable planning to ensure customizations built in a current software version will work in future version.	
4	Integration with Third-Party	The requirement may be met with an integrated third-party product for a fee.	Maintenance and updates will require considerable planning to ensure integrations built in a current software version will work in future version.	

When a vendor responds to a requirement with a statement that it may be met with a future software version release, it will be important for the City to understand the timing of this release. In some cases, the release may be generally available prior to when that particular functionality would go live. When considering software functionality, the term "customization" is often used to describe a change to the software. The following table contains four common scenarios that the term "customization" is often used to describe.

Table7.3 Range of Software Changes

	Range of Software Changes			
No. Scenario Summary				
1	Personalization	Personalization can occur at the user or user-group level and consists of changes to the system that are not necessarily data-driven, such as screen layout or colors.		
2	Configuration	Configuration activities take place during implementation and include the design of menu structure, workflow, and reports, and the look and feel of the application.		

	Range of Software Changes			
3	Customization	Customizations are changes made beyond the setup and look and feel of the application and may extend to the embedded table structure.		
4	Integration	Integration is built when third-party products are chosen to provide a particular area of functionality. Integration capabilities can vary, but typically include passing general ledger information and potentially allowing reporting across multiple systems.		

Based on the summaries in the table above, the amount of technical expertise and ongoing cost to support customizations and integrations can be significant. As the City evaluates using these methods to provide the typically expected range of 5 – 10% level of fit, the additional expertise and cost will have to be considered in light of expanded functionality. Often a customization is needed due to a complex business process that may not be in line with best practices. With an understanding of the ongoing effort and cost needed with a system to support that complex process, business process change is more easily justified in light of the investment needed for the customization.

7.3 Point Solutions

The fourth requirements delivery method discussed in the preceding subsection is integration with a third-party product, known as point solutions. The City should expect some "prime" Public Safety Software system vendors to partner with these point solution vendors in responding to the RFP (e.g., a "prime" vendor may propose full Public Safety Software functionality, and partner with a specialty vendor for time entry).

Point solutions typically provide a more specialized area of system functionality than a typical Public Safety Software suite and are often state specific. In responding to the Request for Proposal, vendors will determine where a point solution is needed based on the level of functionality defined by the functional and technical requirements. A common scenario is that a Public Safety Software vendor evaluates the requirements and determines that needed functionality is great enough that a specialized point solution will provide a better level of fit than their own product.

As proposals from the Public Safety Software vendor and point solution partnerships and independent point solution vendors are evaluated, it will be important that the City Project Team consider how the entire proposed software suite will provide the needed functionality. Integration between the core Public Safety Software solution and the point solution is an important consideration. Additional factors include how many times the proposed software products have been used together before, and how the multiple vendors will work together to update and maintain their products on an ongoing basis. During the proposal evaluation process, it will be important that the City Project Team apply the same due diligence to company history and background evaluation for all vendors in each proposal.

Table 7.4 contains the purpose or composition of each team or role in the City Implementation Teams Team.

Table 7.4: City Operation Implementation Team

Team/Role	Purpose/Composition
Technical Support Team	Provide support for technical issues to the Implementation Team.
Data Conversion/Interface Team	Assist the Project Resource Teams by providing data conversion assistance and interface design services.
Change Management Team	Coordinate and develop change management strategies to increase the likelihood of stakeholder engagement, mitigate project risks and issues, and improve successful adoption of policy and business process changes brought about by the project. These efforts typically include identifying business process changes, crafting communications to engage multiple project stakeholder groups, developing an end user training approach, and managing the delivery of training instruction and documentation.

Table 7.5 contains the purpose or composition of each team or role in the City Operations Team.

Table 7.5: City Operation Team Descriptions

City Operations Team Descriptions			
Team/Role	Purpose/Composition		
Project Advisory Committee	Continue to evaluate the overall strategic use of the human resource information system and provide guidance on future business process improvement initiatives. This committee should be comprised of members of Executive Management as well as individuals from key stakeholder departments.		
Training Resource	Provide ongoing and follow-up training to existing and new City employees. This could be a City SME.		
Application Owner Teams (SMEs)	Continue to serve as subject matter experts and assist the Project Advisory Committee with business process improvement initiatives.		
Technical Support Team	Continue to provide support for the new human resource information system environment in the areas of security, complex report writing, database administration, and interfaces.		

Proper project planning, executive sponsorship, change management, and resource allocation can be keys to increasing the overall likelihood of project success.

8. Next Steps

The information contained in this Needs Assessment Report reflects the City's current business processes and the associated challenges as a result of the current environment. The next steps in the project involve developing functional and technical requirements, allowing project participants continued involvement in the process. These next steps are summarized in Table 8.1, below.

Table 8.1: Next Steps in the Project

Project Deliverables		
Phase 1 Technical Requirements Development		
D1. Preliminary Functional and Technical Requirements Document		
D2. Final Functional and Technical Requirements		
Phase 2: System Selection		
D3. Demos		

Appendix A: Project Participants

The following table is a list of staff who participated in the On-Site Fact-Finding Work Sessions in August/September.

Table A.1: On-Site Fact-Finding Work Session Participants

	On-Site Fact-Finding Work Session Participants				
No.	Name	Department/Division			
1	Robert Rush	Police/			
2	Antonia McDaniel	Police/Patrol			
3	Alex Gearhart	Assistant Chief			
4	Charles Kimble	Chief of Police			
5	Jeff Donahue	Assistant Chief			
6	Anthony Lourence	Police/CID			
7	Ronnie Supak	Police/Operations			
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