Response to the County of San Mateo Office of Public Safety Communications

Request for Information for Computer Aided Dispatch and Mobile Systems

February 10, 2016

Office of Public Safety Communications
Attn: Director Jaime D. Young
400 County Center – PSC100
Redwood City, CA 94063

RE: Public Safety Operational Software Systems

To Whom It May Concern:

Spillman Technologies is pleased to offer our bid in response to the County of San Mateo's Request for Information. This proposal outlines our company's expertise in successfully implementing and supporting an integrated Commercial off the Shelf (COTS) CAD and Mobile system, as described within the RFI.

We look forward to demonstrating the benefits of partnering with Spillman, an experienced vendor backed by unmatched functionality and support.

As an organization dedicated to providing integrated, state-of-the art public safety software, Spillman Technologies stands ready to support the County of San Mateo as you research the functionality, features and capabilities of modern systems. We appreciate your consideration and anticipate a strong partnership as we work together to further improve the County's technological needs.

Sincerely,

Spillman Advantages

- Included upgrades and enhancements for the life of the contract
- Site license structure for unlimited workstations and unlimited users
- Seamless integration across all modules
- Industry leading multi-jurisdictional experience
- 100% dedication to public safety software

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Executive Summary

Spillman Technologies appreciates the opportunity to respond to the County of San Mateo's Request for Information (RFI) for a CAD and Mobile Public Safety Software System. We look forward to working with the agency in successfully implementing and supporting this vital project.

The Spillman Advantage

With an unparalleled track record of state-of-the-art software development, Spillman is uniquely positioned to support the County of San Mateo in obtaining a CAD and Mobile system. Spillman offers an advantage few others can – a dedicated solution with no competing interests. This is a distinct feature in an industry where vendors view public safety software as merely a line item or a fraction of their business model.

Spillman Longevity

Since 1978, Spillman has been engineering cutting edge technologies that provide timely and dependable access to information. Longevity in the industry has allowed Spillman to develop a comprehensive suite of products and services to support our loyal customer base of over 1,500 customers nationwide. We attribute this loyalty to an extraordinary record of service and an unwavering commitment to managing flawless agency implementations.

Spillman Reliability

As the Spillman offering has matured, it has never been necessary to acquire new technologies in order to provide a more complete offering. Any acquisition or third party product solution would require temperamental interfacing and inordinate patchwork, ultimately resulting in an unreliable and inconsistent design. The Spillman system has always evolved on its own to implement the latest technologies available and continue to meet the expanding needs of the industry.

The Spillman Solution

The Spillman system is powered by a 35-year history of dynamic growth, superior technology, and unsurpassed service excellence. This vast expertise has allowed Spillman to grow a solution that meets the progressive needs of our expanding customer base.

Site License Structure

Spillman provides a site license for all modules including Mobile. This unique licensing structure provides system-wide access to all purchased modules for an unlimited number of users with no price increase for extra licenses – ever. Our customers never worry about how to accommodate expanding user needs as Spillman's licensing structure anticipates and supports agency growth. This key feature allows our customers to effortlessly adapt according to their changing needs and truly utilize the system to its full potential.

The Spillman Support Structure

In an industry where vendors come and go, and where agencies often change software vendors in 5-10 year cycles, reliability may be more the exception than the rule. With that said, Spillman is proud of our impeccable implementation and support track record. In the company's 35-year history, Spillman has an unprecedented success rate for new system implementations and has never failed to satisfactorily complete any work we have been awarded. Our continued growth in recent years can be attributed to both our powerful solution and the unmatched support Spillman customers have come to rely on.

Implementation

Spillman's Implementation Team follows the Project Management Institute (PMI) framework in its approach to project communication, strategic execution, and timeline management. Our highly skilled personnel provide onsite end user training during implementation to educate agency staff on how to optimize the system. Spillman also offers agency-specific training courses that consist of classroom instruction, written examinations, and supervised practice exercises on computer terminals. To ensure users have the opportunity to become completely familiar with the software, Spillman provides focused support at implementation and on an ongoing basis.

Upgrades and Enhancements

All Spillman-licensed software upgrades and enhancements are included as part of an executed Support Agreement. While other industry vendors often structure agreements that include minimal service commitments, such as version upgrades and bug fixes or enhancements for only a specified time period, it is Spillman's practice to include all software upgrades and enhancements for the life of the partnership. This philosophy allows our customers to not only receive comprehensive software maintenance, but also to take full advantage of our continually improving technology.

Conclusion

At Spillman Technologies, it is our mission to provide state-of-the-art technology for public safety agencies that increases user efficiency, improves the safety of first responders, and enhances the quality of life for residents. The complete Spillman solution has been performing above that standard for decades. We look forward to working closely with the County of San Mateo to customize the best solution to meet your specific needs.

SECTION I – INTENT

The County of San Mateo, California is interested in obtaining information concerning an integrated Commercial Off the Shelf (COTS) CAD/Mobile system. San Mateo County Public Safety has utilized the same CAD/Mobile system since 1993 and is in the process of researching functionality, features and capabilities of modern systems. All information is welcome including specific material concerning:

- **The functionality of each major system (i.e., CAD, Mobile, GIS/Mapping, etc.) for Police, Fire and EMS**

System Overview – Computer-Aided Dispatch

Spillman CAD

Spillman's CAD enables dispatch personnel to access mission-critical information and effectively manage calls for individual agencies as well as those in multiple jurisdictions. Advanced features such as real-time call updates, unit responses, and automatic alerts for wanted persons and dangerous locations help ensure the most appropriate units are dispatched in the most efficient way possible – every feature of Spillman's CAD system has been designed to arm users with the tools necessary to respond safely and efficiently.

Visible Name and Address Alerts

Spillman's Alerts feature prepares officers for responding to calls by providing critical information about individuals and locations. For each record in the system, users can view any applicable address or name hazards.

Ease of Training

Because Spillman's CAD has been designed for both beginning and advanced users, all dispatchers are able to train on and operate the system proficiently. Beginning users have the opportunity to perform simple actions, such as selecting icons, dragging and dropping, and right clicking. Experienced dispatchers can use keyboard shortcuts or operate the system from the command line. This flexibility allows users to train at their own pace.

Real-Time Status Alerts and Timers

Spillman's alerts and timers help ensure officer safety by keeping dispatchers apprised of all call and unit activity. Audible and visual notifications instantly provide real-time status updates, informing users of any actions needed or time lapses beyond predetermined agency thresholds.

Multiple Sessions

With Spillman's flexible architecture, users will be able to open more than one CAD session at a time to maximize operational efficiency. As shown in the screen shot below, multiple command lines representing multiple sessions can easily be opened and managed by any authorized personnel.

System operators have the option to open multiple CAD sessions simultaneously to streamline operations

Quick CAD Commands

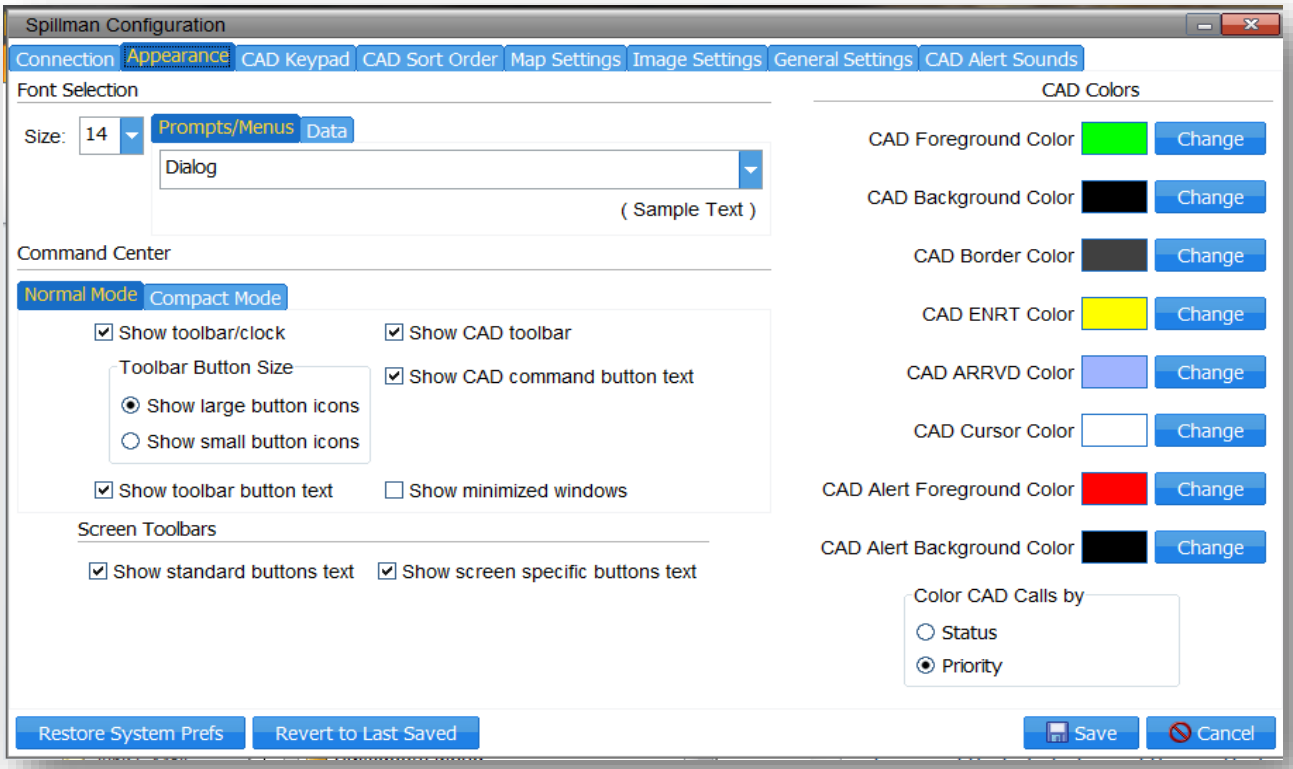
By using Spillman's CAD command line, dispatchers can work more efficiently. Every action the system supports can be executed using quick CAD commands, saving users valuable time as they dispatch units, add calls, and search data.

Automatic Radio Log Entries

Spillman's automatic radio log functionality saves users time, while increasing unit safety and decreasing agency liability. The CAD solution automatically tracks radio transmissions and creates a log entry for every status change and furthermore, all communications are recorded with complete accuracy. As a result, units have immediate access to information and administrators can review unit activities at their own discretion.

Customizable Screen Options

With the level of customization Spillman offers, each dispatcher and call-taker can take full advantage of their personal use of the system. Most elements on the CAD status screen can be customized, including display windows, column settings, toolbar buttons, right-click commands, and color display options. For example, users could display only calls from specific geographic areas. These settings can also be locked system-wide so that all users operate in the same way.



Individual users have the ability to easily customize their unique viewing preferences

System Overview – Mobile Data Computing

Mobile Data Computing

Spillman's Mobile Records module empowers field personnel with universal data access. This allows Mobile personnel to search for records without leaving the Mobile vehicle or requesting dispatch assistance. Field narratives and image display options provide tools necessary for effectively managing records from the field.

Voiceless Dispatch

Spillman's Mobile Voiceless CAD module allows field personnel to access accurate, real-time call information from their laptop computers, preserving radio air for other critical communication.

The module also enables personnel to quickly update their status, add and view call comments, and efficiently access radio logs and incident information without burdening dispatchers.

Spillman's Voiceless Dispatch provides accurate call information in real-time for Mobile officers

Mobile Access to Call Information

Spillman's Mobile Voiceless CAD module allows users to access information about a call's address, nature, and any additional comments as they are entered by dispatchers.

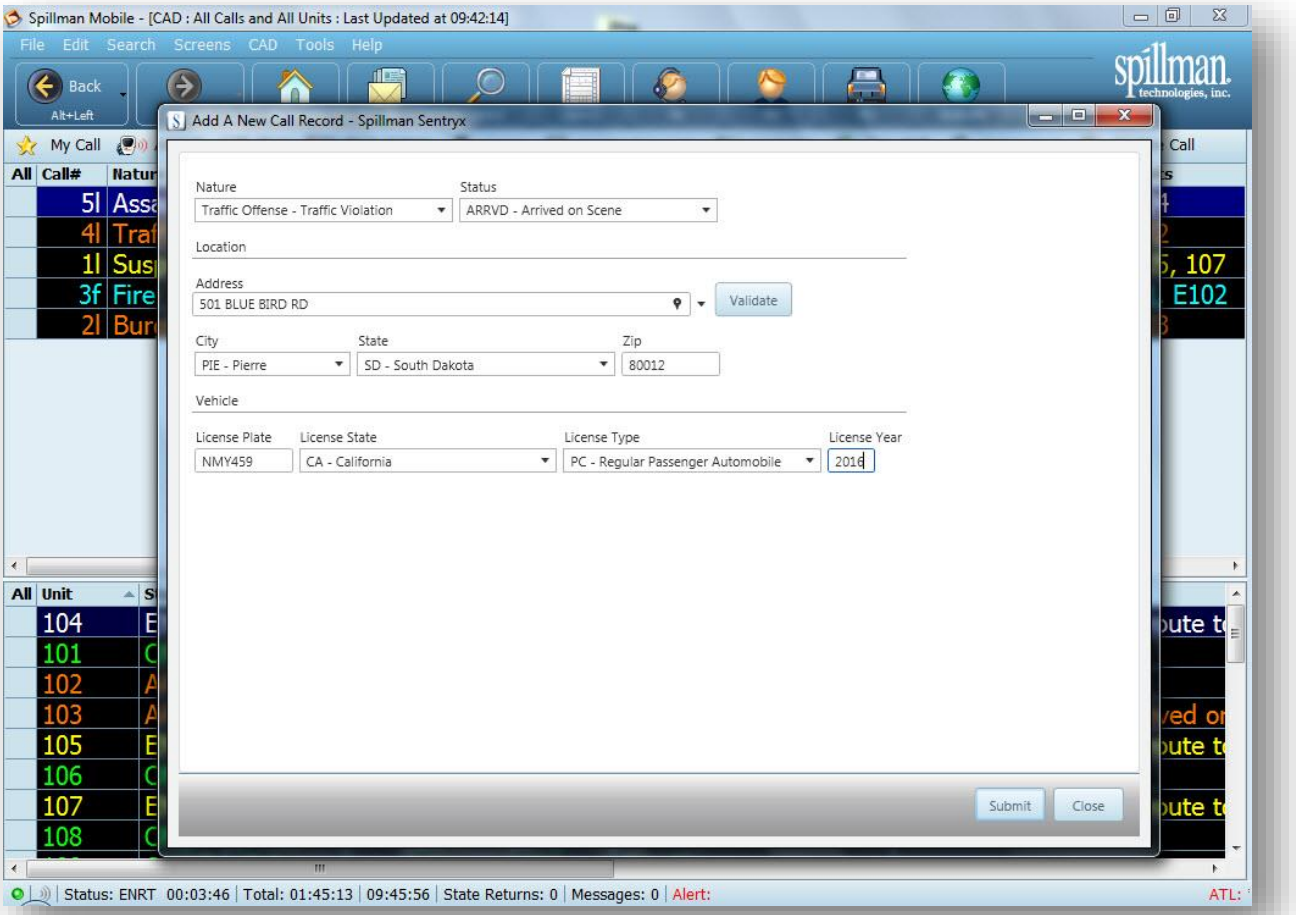
The software frees up radio frequencies for high-priority calls and eliminates the potential for misheard information or communications interrupted by radio noise. Mobile Voiceless CAD prevents others from monitoring communications over a non-secure radio channel.

Efficient Radio Logs

Keep accurate radio logs for federal, state, or department records using Spillman's Mobile Voiceless CAD module. The module automatically tracks response times and status updates, eliminating the need to request a radio log history from dispatchers.

Status Updates and Call Comments

Users can update the status of a call or unit directly from their laptop, saving valuable time and eliminating the need to notify dispatchers via radio every time a situation changes. Comments can also be added to a call, and new comments can be viewed using the Mobile Voiceless CAD module. The ability to view call comments from the field provides users with critical access to important details, alerts, and tactical updates.



Using Spillman Mobile, officers can generate call updates directly from patrol vehicles

Driver License Scanning

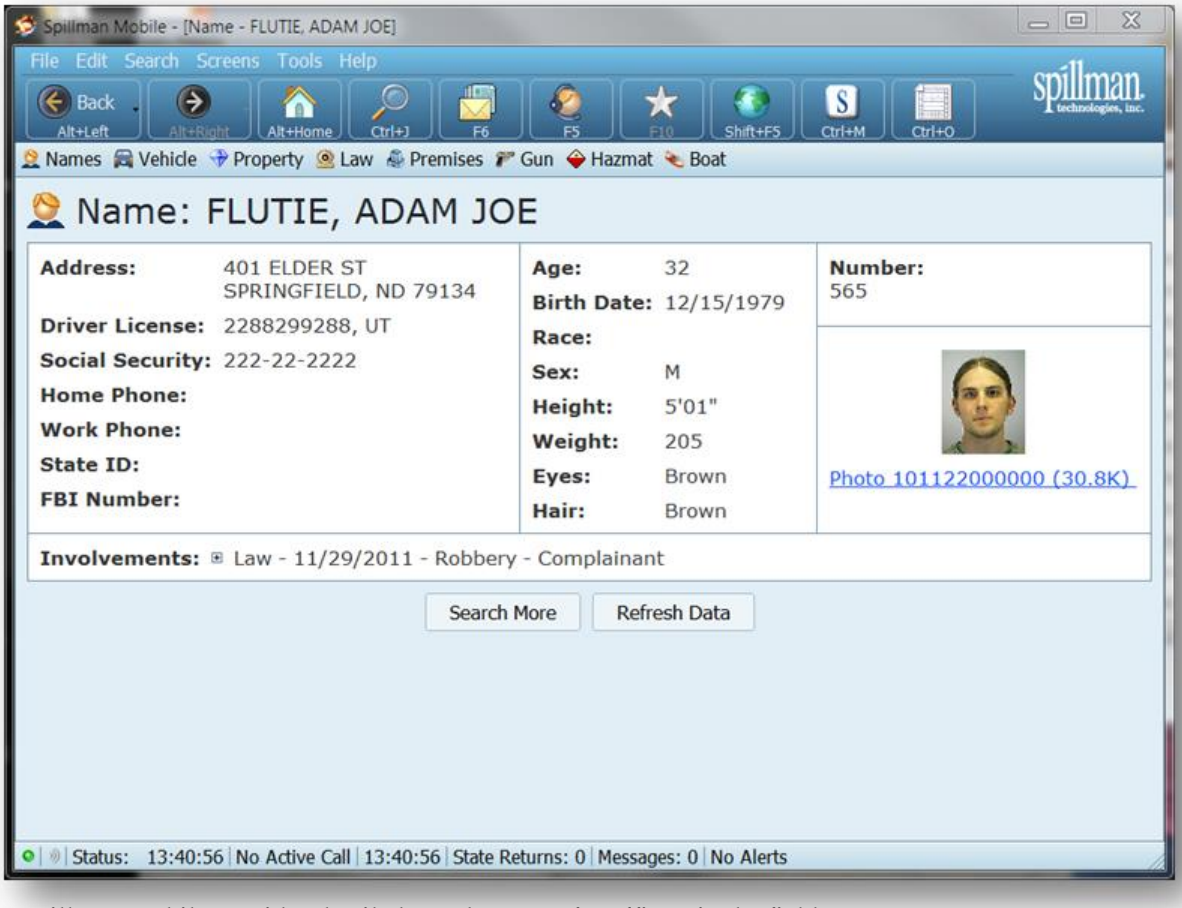
Spillman's Driver License Scanning module gives officers the ability to scan a driver license to populate Mobile search screens with the driver's name, date of birth, address, race, gender, and driver license identification number, and automatically query the local database as well as state and National Crime Information Center (NCIC) databases. Data gathered from a driver license can be used to efficiently conduct database searches and complete field reports.

Local RMS Queries

Mobile Records combines speed with flexibility. With a single query, users have the ability to search for names, vehicles, incidents, property, and wanted persons. These queries provide comprehensive search results from local, state, and national databases.

Image Display

The image display function helps field personnel identify suspects and verify criminal histories. While viewing a record, associated images related to that record are available.



Spillman Mobile provides detailed search returns for officers in the field

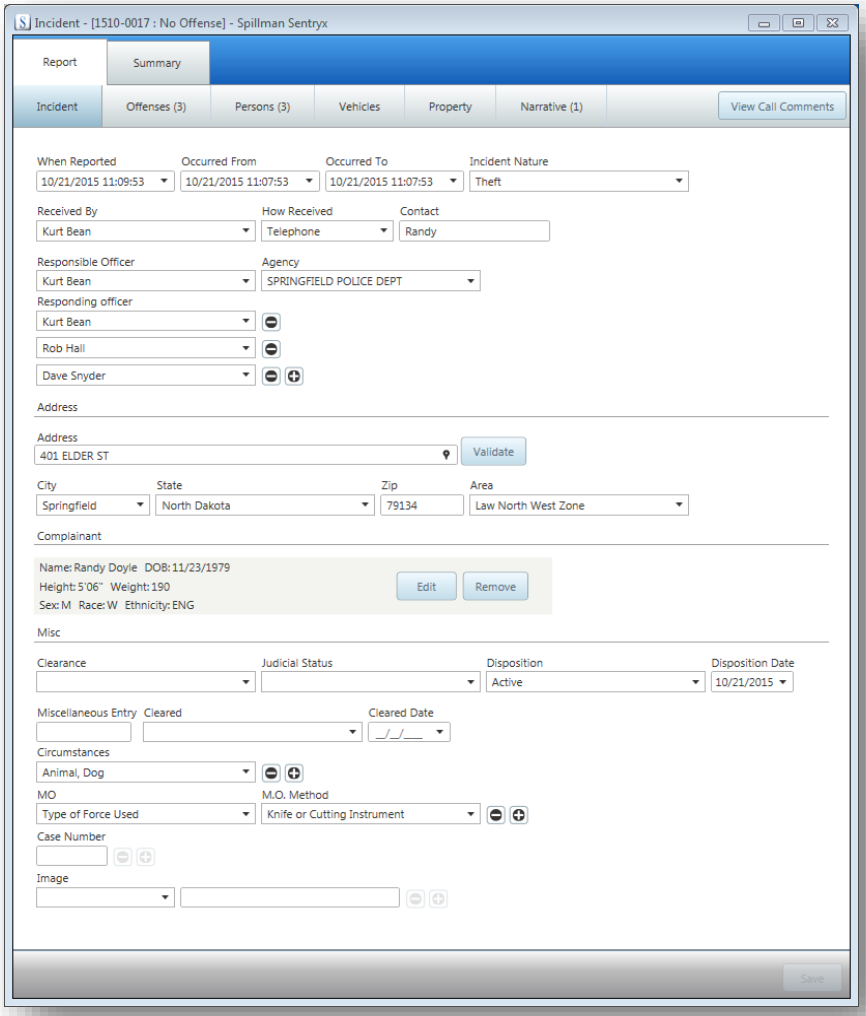
Field Narratives

Field narratives can be entered into the system directly from the vehicle to save valuable time and improve record details. Each user can view, add, and append narrative information or supplemental narratives directly from the Law Incident screen.

Automated Field Reporting

Spillman's Automated Field Reporting modules allow officers to quickly complete forms from patrol vehicles. All forms have large, easy to navigate field compatible with a touch-screen monitor or a keyboard and mouse.

Form information is stored in the Spillman Records Management solution, and can be electronically routed for approval.



Spillman's Field Reporting modules are easy to navigate for rapid completion

Automated Data Entry

By querying Spillman's Mobile StateLink product or scanning a driver license barcode or magnetic strip, forms are pre-filled with information from the database. After patrol officers run a query on a name or vehicle, they can fill out multiple form fields using the search results.

Customizable Fields

Spillman's Automated Field Reporting modules allow patrol officers to add an unlimited number of people, vehicles, property, and their associated details. Narrative fields have no set length, allowing officers to add as much or as little text as needed.

Integration

Forms are automatically attached to the Spillman record where they can be viewed, edited, or printed. The system also conducts an automatic search for matching name and vehicle records. New records are created if needed, and Involvements® are generated between associated records.

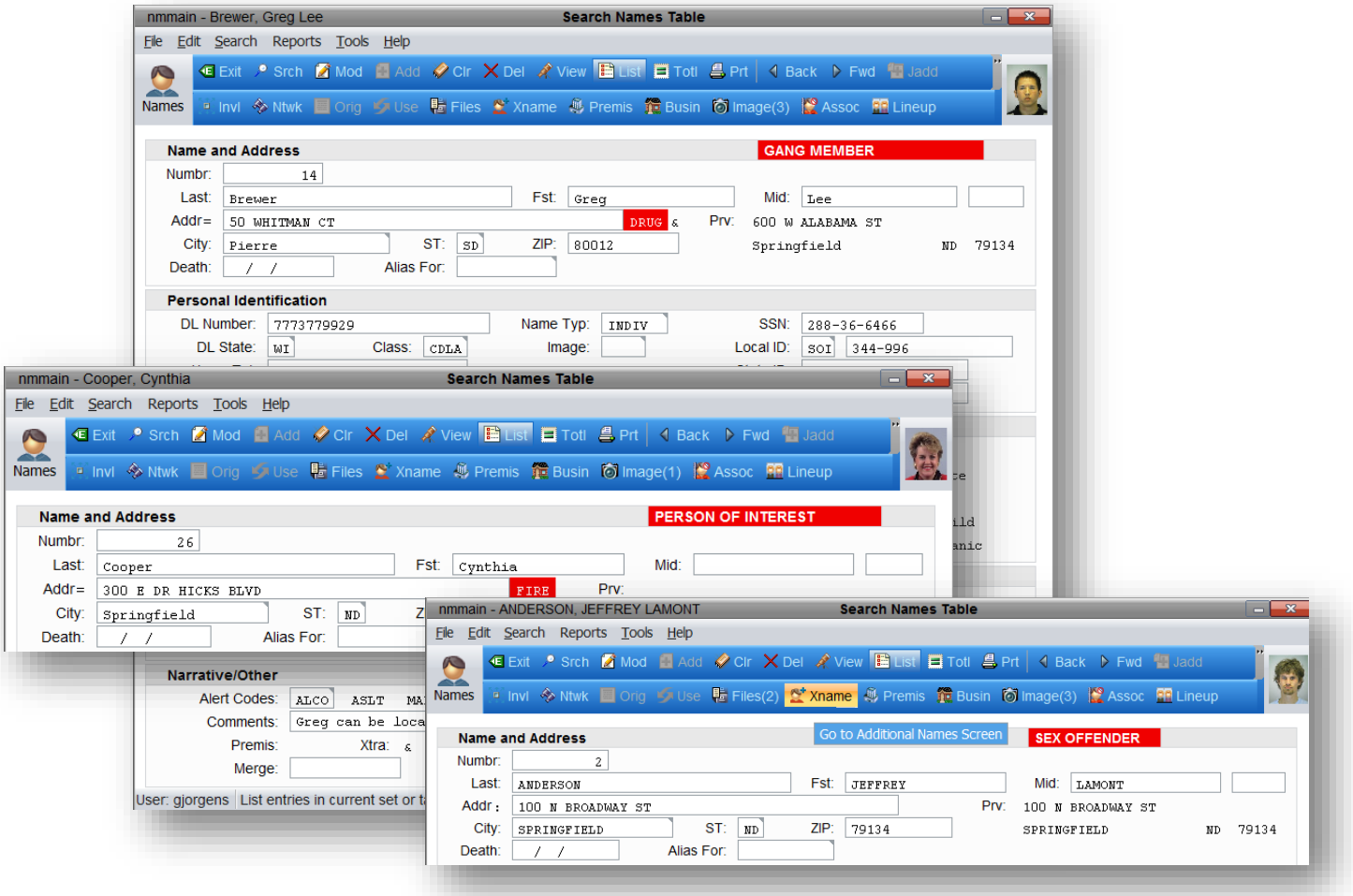
Spillman's Automated Field Reporting allows officers to quickly complete forms

System Overview – General Functionality

Integrated Hub

At the core of Spillman's system is our Integrated Hub, a central resource where information is referenced by all modules. Using a centralized database, all information can be entered, stored, and then extracted in real time. Spillman's Integrated Hub allows all applications in the system to reference the same repository of information. This modular design prevents users from duplicating data entry, which saves time and ensures data accuracy.

The system's master tables share information among all modules in real-time. Because Spillman's Integrated Hub automatically transfers data between all Spillman applications, our customer agencies have immediate access to all data from the moment it is entered. To facilitate this integration, the system features several central tables that cross-reference information system-wide including names, vehicles, wanted persons, and property.



The system's Master tables display critical information to users that is referenced across all records

- **Major system modules**

System Modules

The power of the system stems from the fact that all modules reference the same database. Because we offer a level of integration that no other system in the industry can rival, our solution can be maintained entirely by the Spillman organization.

Automatic Vehicle Locator (AVL)

Spillman's AVL Mapping module employs the highest technological standards for this type of software. State-of-the-art AVL technology is leveraged to track the location of all fleet units using Global Positioning System (GPS) receivers.

Direct AVL

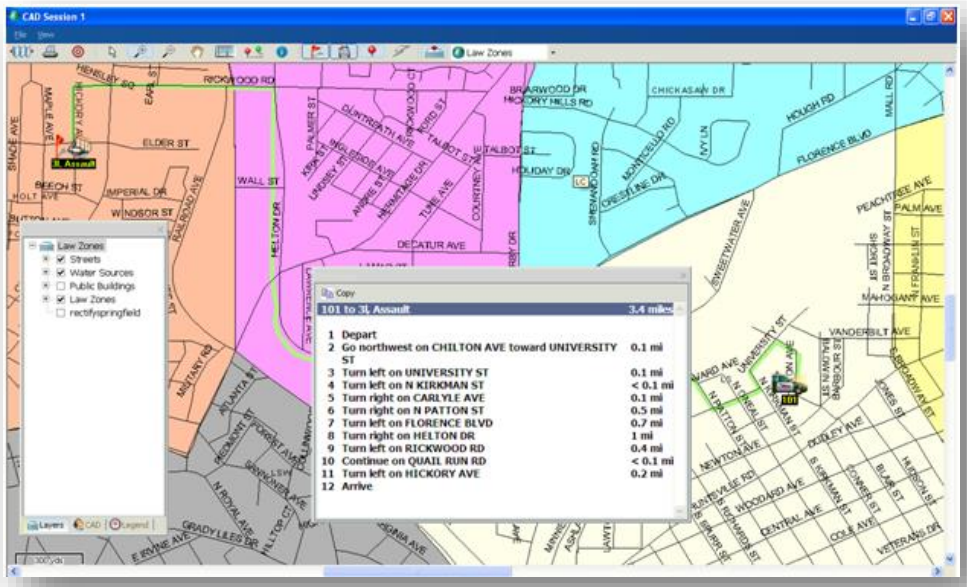
With Direct AVL, users can view the location of a unit as soon as the vehicle is started and its transmitter begins sending pulses. This information is sent directly to the agency using a combined GPS transmitter and wireless modem. Dispatchers can view the unit's real-time movements on the CAD map.

Real-Time Unit Tracking

The AVL Mapping module allows CAD to display the real-time location of all AVL-equipped units on the map. For each unit, the software displays the status, active call, assigned zone and agency, and current location or most recent radio log entry. Knowing the location of units in relation to the vicinity of an active CAD call enables users to quickly dispatch backup or provide further instruction as necessary.

Indirect AVL

Indirect AVL uses a wireless modem to receive real-time location information from a GPS transmitter connected to a mobile laptop computer. The GPS data, along with other information from the laptop, is transmitted to the agency's dispatch center where users can view the unit's movements on the CAD map.



Spillman's AVL Mapping technology supports efficient and accurate unit response

Improved Response Times

With Spillman's Quickest Route feature, the system can determine the fastest route to an incident, reducing the time needed to get personnel and equipment on scene. Based on a unit's current location, the module calculates the total drive time to reach a call, outlining the ideal route and driving directions. This feature factors in the agency's local street network while recognizing barriers such as rivers, canyons, and limited-access highways. Therefore, actual drive time is calculated to recommend the units capable of arriving on scene first.

E9-1-1 Interface

The Spillman E9-1-1 interface allows dispatch centers to pinpoint cellular call location information (ANI/ALI) from a standard E9-1-1 system, populating the data to the Spillman CAD system. This interface helps improve the effectiveness of wireless 9-1-1 services by permitting agencies to more quickly identify the location of a cellular user. In addition, the system meets federal regulations for Phase I and Phase II compliance.

Automatic Field Entry

Spillman's E9-1-1 Interface automatically adds agency-specified call information to the CAD screen, including contact name, address, city, and phone number. This feature minimizes the amount of data dispatchers must enter, enabling the rapid creation of accurate call records. It also reduces the potential for data entry errors.

Accurate Mapping

When used with Spillman's CAD and CAD Mapping modules, the E9-1-1 Interface improves data accuracy and promotes faster response. As a call for service is received, the E9-1-1 interface automatically validates its location with Spillman's GIS solution. Once verified, the call location is automatically plotted on Spillman's CAD map and routed to the appropriate call taker's screen. Dispatchers can view the call location's street name and the nearest cross streets, allowing users to make informed decisions.

Call Data Preservation

Spillman's E9-1-1 interface enables agencies to store raw call information in the call record. The initial ALI information contains Phase I information, or the cell sector from which the call originated. This information automatically populates the Address field of Spillman's CAD Add Call screen. When an ALI rebid is performed to receive any additional Phase II latitude and longitude data, the updated location information also populates the Add Call screen. Agencies can configure to automatically transfer the original ALI information to the Comments field of the call record enabling continual ALI rebids to be performed for location updates while retaining all ALI history.

Response Plans

Spillman's Response Plans module allows public safety organizations to define the agencies and units that will respond to a law, fire, or EMS call at a specified alarm level. Full integration with other system modules such as the Equipment Maintenance and Premises Inspections modules, allows agencies to prepare well-defined response plans.

Unit Recommendations

The software can be configured to recommend units whenever a response plan has been activated. Users can also create plans that identify the order in which units are recommended and specify units that have unique capabilities or equipment.

Call-Back Assignments

The Response Plans module lists call-back assignments and instructions for agencies, divisions, shifts, and officers to prepare for a variety of incidents.

Resource Management

Users have the ability to prepare responses that include equipment recommendations and instructions for any type of incident.

Premises Integration

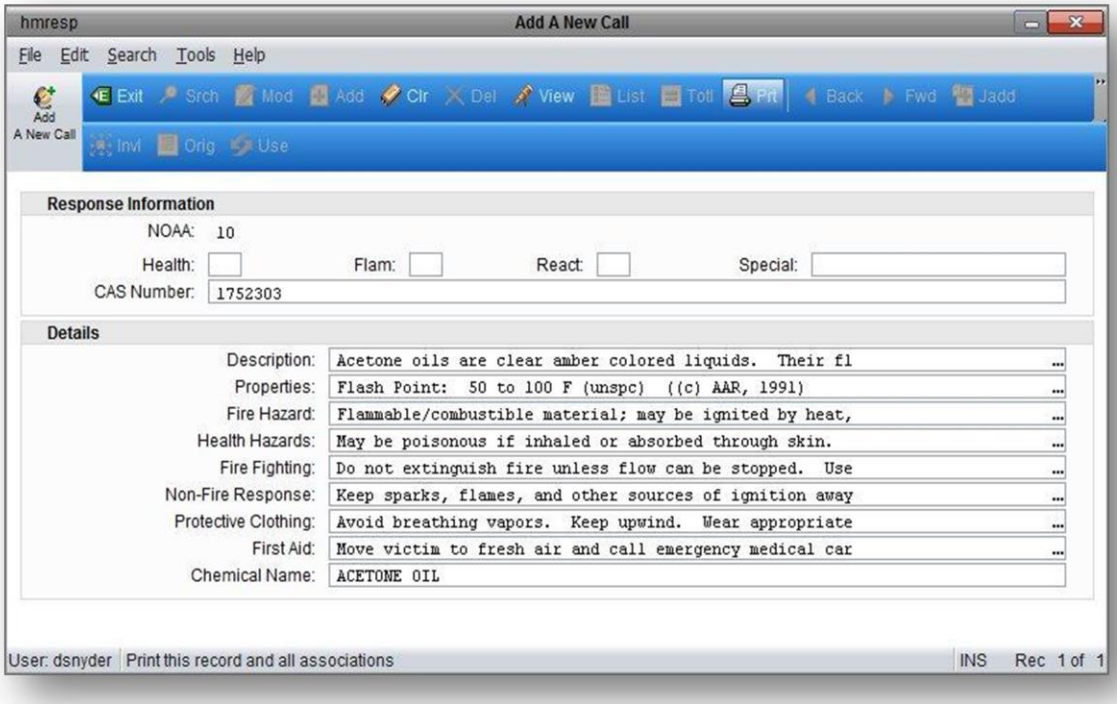
Used in conjunction with Spillman's Premises Inspections module, response plans include information specific to a call location including structure type, a list of all hazardous materials located on the premises, proximate populations, and additional instructions.

Premises Information and HazMat

The Premises Information and HazMat module facilitates recording extensive data on residential, commercial, or public lots. Emergency and law enforcement personnel can use this information to respond accurately to disasters or calls at unfamiliar sites as well as obtain instructions regarding first-aid response, recommended protective clothing, and proper chemical handling.

HazMat Response

Within the NOAA database, users can view detailed information about safety responses to emergencies involving specific chemicals. Users can obtain information regarding the number assigned to a chemical by NOAA, a chemical's health hazard potential, flammability, level of reaction, natural physical state, burning tendencies, tactics to use and avoid while fighting a fire associated with a chemical, and first-aid procedures.



Spillman allows users to obtain safety information for dangerous chemicals

CAMEO® Chemical Database

The ability to view hazardous chemical information can affect the health and safety of both agency personnel and the public. To view hazardous chemical information, users can link the Premises and HazMat module to the CAMEO® Chemical Database. With this database, users can access data on more than 4,150 chemicals obtained from the National Oceanic and Atmospheric Administration (NOAA).

Detailed Premises Data

With detailed premises information, agencies can make informed decisions regarding appropriate incident response. Users can quickly view structure information such as alarm types, alarm locations, number of floors, and a physical premises description. The system will provide information regarding all responsible law, fire, and EMS agencies.

Proximate Populations

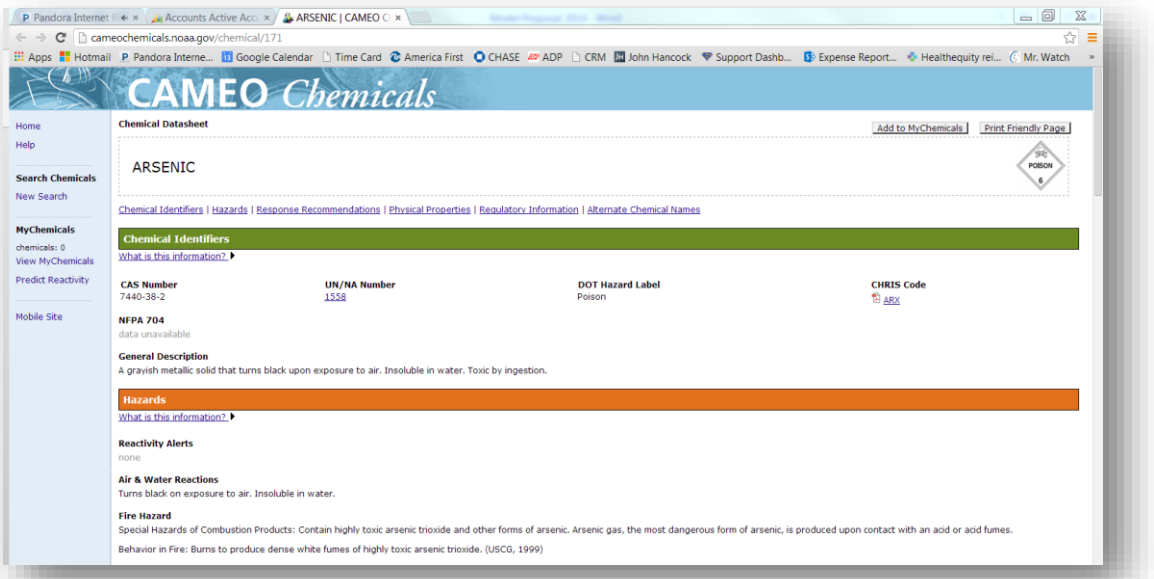
Citizen safety is directly impacted by the information an agency has about a population. For example, users can store information about populations that are near a potentially hazardous business, such as a chemical plant or a toxic waste site.

Alarm Tracking and Billing

Spillman's Alarm Tracking and Billing module enables agencies to track false alarms and manage alarm tracking fees. The agency can add incident numbers to false alarm tracking records, which will assist in record keeping for public safety personnel.

Detailed Reports

Alarm tracking reports allow users to create lists of registered alarms and identify discrepancies in false alarm incidents. Pre-formatted reports will also display false alarm counts, enabling the agency to more quickly identify if a false alarm problem exists at a particular business or residence. Reports not only calculate false alarm fees, but they will also display revenue generated from false alarm fines.



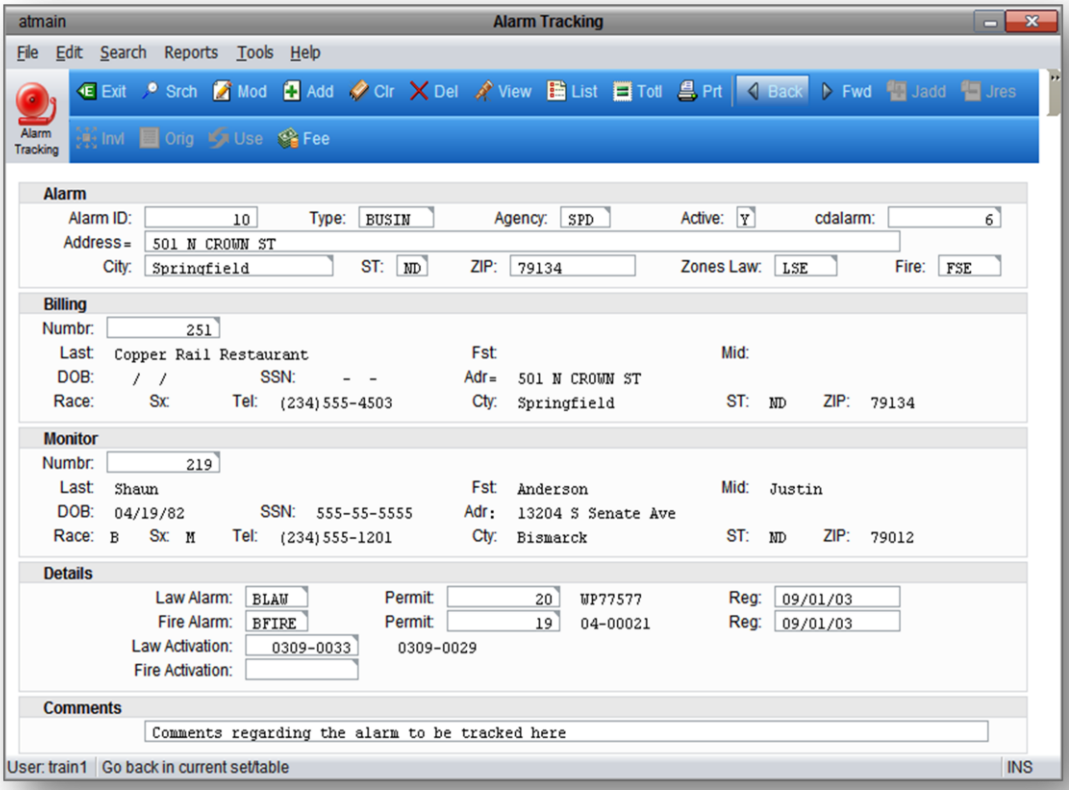
Users can access the CAMEO Chemicals database directly from the Spillman application

Comprehensive Alarm Records

Users can add an alarm tracking record for every alarm in the agency's jurisdiction. This allows the agency to responsibly track all devices, including false alarm incidents. Under the alarm record, users can enter billing information, the alarm tracking agency, the alarm type, law and fire activation incident numbers, and unlimited comments for each alarm.

Fee Management

With the Alarm Tracking and Billing module, users can efficiently manage fees for alarm records. The system tracks incidents involving unregistered alarms, false alarms, and overdue bills. Users are able to create letters, tickets, and summaries for businesses and residences that owe fines.



Using the Spillman system enables agencies to track alarms and manage fees

Rapid Notification

Spillman's fully integrated Rapid Notification module, which offers functionality similar to a Rip and Run module, allows users to send automatic report-of-call details to responding units. This module gathers information from the CAD screen, such as address, nature of call, contact name, and priority, and sends it to a printer at the responding agency.

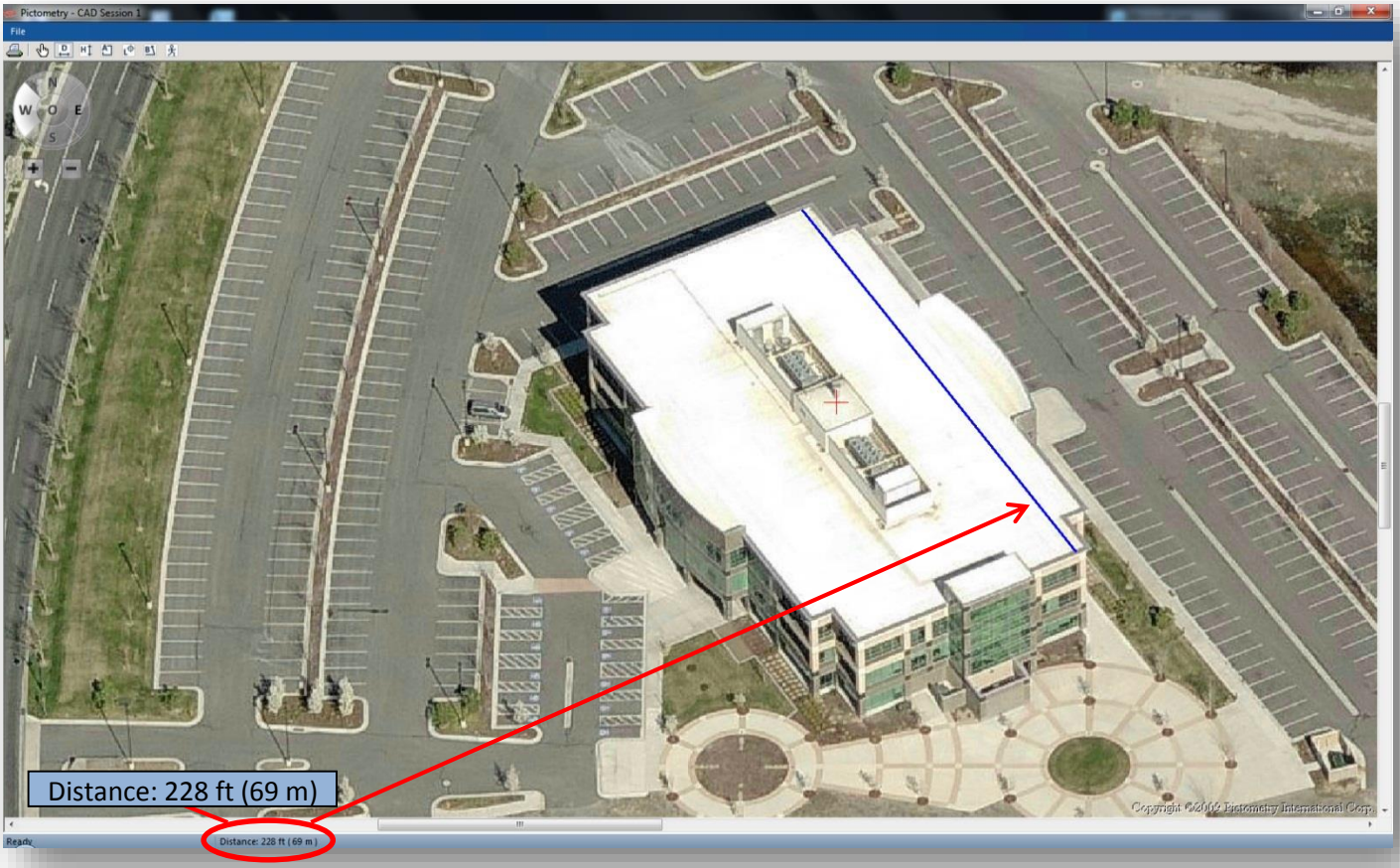
CAD Dashboard

One of the system's most effective tools for administrators to manage their resources is the CAD Dashboard. This product allows communication centers to consistently review their performance, enabling them to target resources, improve response times, and provide the best possible service to their communities. Using this customizable dashboard administers can view the number of calls the center receives and track response times.

Spillman's CAD dashboards provide managers with timely information

Pictometry Interface

With Spillman's Pictometry interface, users are able to view a map image from five different aerial perspectives: north, south, east, west, and from above. Pictometry also provides viewing from all sides of a structure and displays its height, area, pitch, and distance from other objects. Agency users would be able to leverage Pictometry to conduct surveillance, plan raids, coordinate search and rescue efforts, create emergency pre-plans, and more.



Pictometry displays 3-dimensional images and calculates dimensions such as height, area, and length (the blue line)

Because our Pictometry interface is fully integrated with the CAD Mapping, Mobile AVL Mapping, Pin Mapping, and Fire Mobile AVL Mapping modules, users would have quick access to Pictometry images from any location on the map.

If the agency already has access to Pictometry imagery for their jurisdictions, the agencies would only require the Spillman interface. This will allow the agency to integrate their existing Pictometry images with Spillman's mapping software, take measurements, and view objects on the map from multiple perspectives. If there are agencies without Pictometry imagery, they would need to purchase both Spillman's Pictometry Interface and the Pictometry imagery of their jurisdictions.

Imaging

Spillman's Imaging module allows agencies to create a library of full-color digital images that are fully searchable from anywhere in the system. Images can be stored in multiple locations throughout the system and viewed by other users. The program is an all-in-one application for importing, organizing, editing, and sharing photos, and because it connects seamlessly with other modules in the Spillman software.

Unlimited Capture Workstations

Spillman customers can choose to make every user workstation an image capture station, without incurring additional costs. Where other software vendors often charge imaging workstation license fees, Spillman customers do not need extra licenses to use our Imaging module. Users benefit from the convenience of unlimited capture workstations, and agencies take advantage of the long-term savings.

Quick View of Images

If any Spillman record has an image attached to it, the image appears as a thumbnail on the record. To view the image, or any archived image, the user need only click the thumbnail. Users can view archived images when comparing the difference between newer and older images. For example, a detective may want to view an archived Name record image if the subject has changed his or her appearance.

File Description

Users are able to quickly access information about each file attached to a particular record. Spillman's File Capture feature allows users to enter the complete name of each file and create an accompanying description. Icons displayed on the record enable users to see what types of files are attached without opening them.

File Capture Technology

Spillman's File Capture feature allows users to quickly organize images and other files. Users can easily add files to a record by dragging and dropping them onto the correct field, either multiple files together or one-by one. Users can also create an accompanying description for each file to allow others to easily identify its contents.

Intuitive Editing Features

With the Imaging module, users have access to several tools for enhancing and editing the quality of digital images. For example, if photos taken at an accident scene are less vivid than expected, whether too light or too dark, users can easily adjust brightness, sharpness, and contrast with the click of a button. Users can also rotate and resize images as needed.

- **CAD/Mobile system integration**

System Integration

Integrated Software Platform

Spillman Technologies is uniquely positioned as one of the last vendors in the industry that has neither been acquired nor involved in litigation with any of our customers. As a privately held company focused on the software and technologies needed to support public safety professionals across the country, we recognize that our ongoing dedication to integrated products is now more important than ever.

Our truly integrated platform allows us to provide fluid information sharing between the individual workstations of an agency. The power of the system stems from the fact that all modules reference the same database. Because we offer a level of integration that no other organization in the industry can rival, our solution can be sustained entirely in-house.

This level of true integration has always been an essential component of the Spillman solution because it is the only way to ensure real-time information sharing takes place; in the public safety industry, "real-time" is critical when it comes to data access. All of the proposed software products work in complete concert to support timely access to information, vital for enhancing community safety.

Integration Benefits

Although every vendor claims to offer at least some level of integration, definitions of this term widely vary. A truly integrated system will enable an agency to significantly streamline its operations. Data entry procedures and system queries are greatly simplified by allowing users to enter data at single entry point then access that same data in real-time from any other location in the system.

By storing all data within a centralized database on one server, an integrated system can also create important associations between individual records. Agency personnel can then identify trends and make connections that would otherwise be impossible to find.

Finally, because an integrated system populates the same information across all modules, an agency can virtually eliminate redundant data entry. With ready access to precise and accurate data, agency personnel can make better informed decisions and work in a more timely fashion. Officers can respond with greater confidence to any situation, and an agency can reduce its liabilities while increasing the safety of its citizens.

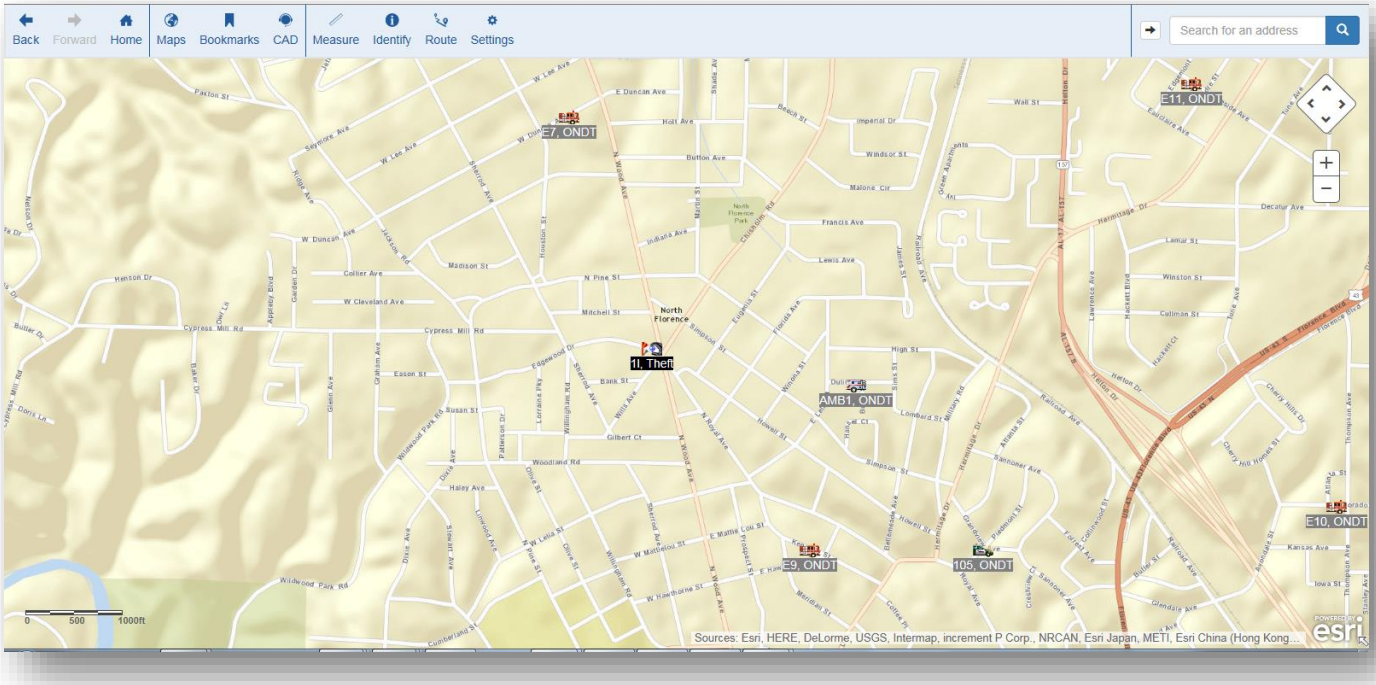
- **Mapping functionality**

Mapping Capabilities

CAD Mapping

Spillman's CAD Mapping module provides users with ready access to location and call information. Dispatchers can quickly view jurisdictional data, including street names, major buildings, landmarks, police districts, and fire/EMS zones. To streamline operations, the system automatically plots call locations, and allows dispatchers to view more detailed data as necessary. Dispatchers can also view information about specific locations by simply clicking on the map.

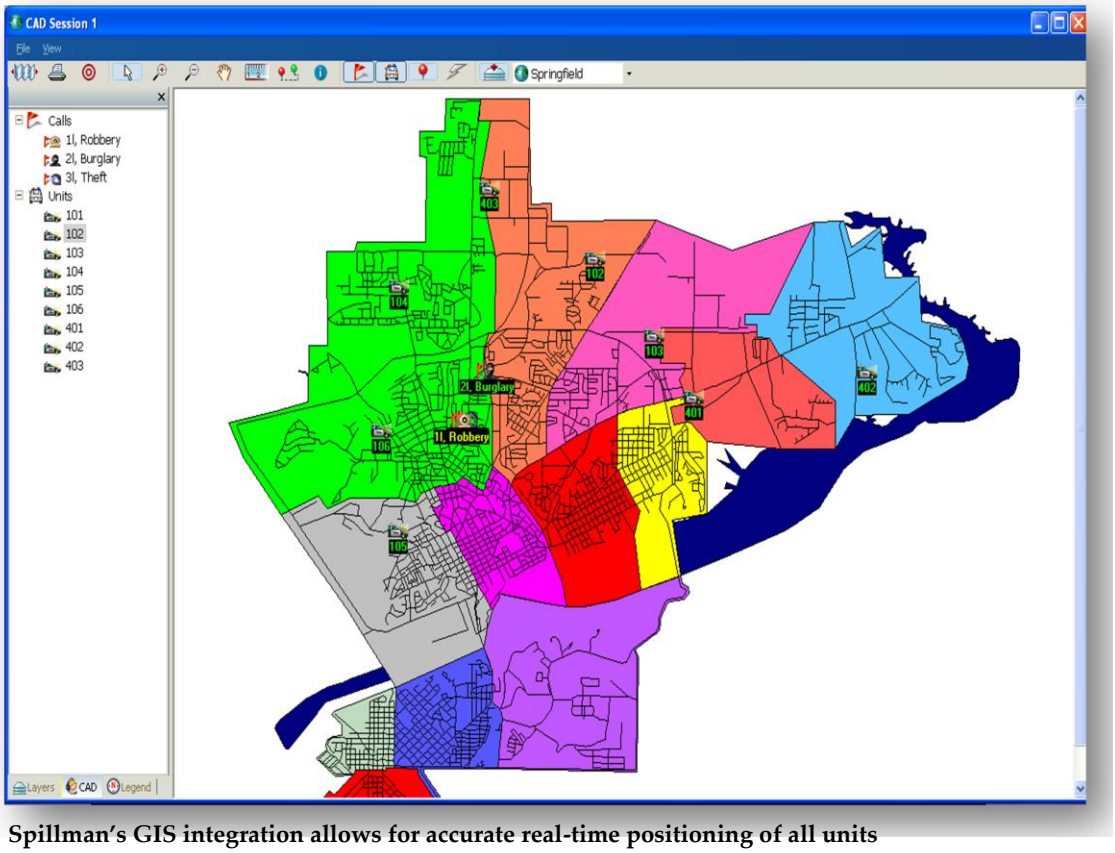
By using the Esri® ArcGIS server, Spillman's CAD Mapping communicates directly with the GIS. This functionality eliminates the need to load map data into a separate database and streamlines address verification. In addition, Spillman's mapping solutions are compliant with Phase I and Phase II wireless requirements by displaying longitude and latitude points at the approximate location of a call.



Spillman's GIS integration allows for accurate real-time positioning of all units

Flexible Dispatching

With Spillman's drag-and-drop functionality, users can quickly and easily dispatch units to a call by dragging a unit symbol to a call symbol, or vice versa. Alternatively, dispatchers have full use of their keyboards, with the ability to perform any function directly into Spillman's CAD command line. This flexibility accommodates a variety of user preferences when interacting with the system.



Spillman's GIS integration allows for accurate real-time positioning of all units

Customizable Features

The CAD Mapping software can be configured to meet both agency and individual users' needs. Users have the option to center new calls on the map; add map layers such as streets, landmarks, and law enforcement districts; and change the color of map elements to identify roads, city boundaries, or the map background. By catering to a variety of preferences, Spillman allows users to operate the system in the most efficient way possible.

Mapping Toolbar

Spillman's CAD Mapping toolbar streamlines the dispatching process using intuitive navigation tools. Users can quickly zoom in, zoom out, pan, view the entire map, and change layer properties as needed. The system provides reminders of each button's function by displaying tool tips that enhance usability.

Call and Unit Information

Spillman's CAD Mapping gives users direct access to call and unit information, improving response times and ensuring appropriate actions are taken by officers. Users can right-click on a call or unit symbol and select the specific information they want to view. For example, on the Display Call screen, dispatchers can view information regarding a call number, nature, address, complainant, or assigned officers. Timely access to critical data increases officer safety, improves response results, and ultimately helps diffuse potentially dangerous situations.

System Integration

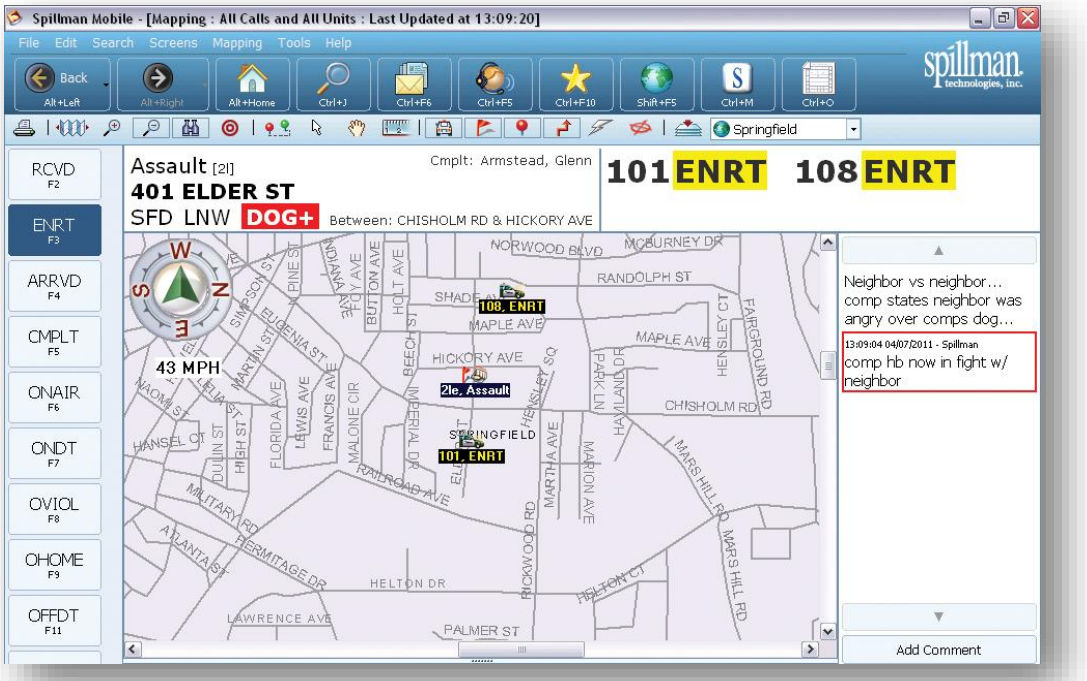
Spillman's CAD Mapping fully integrates with the CAD and AVL modules, as well as our GIS system. With Spillman's GIS, CAD calls automatically appear on the agency's jurisdictional map. Spillman's AVL Mapping module, paired with Global Positioning System (GPS), displays real-time location information for all units on the CAD map.

Mobile Mapping AVL

The Mobile AVL module uses state-of-the-art technology to track the location of all fleet units through Global Positioning System (GPS) receivers. To view this information, Spillman Mobile supports a variety of GPS devices.

Mapping

With Spillman's Mobile AVL Mapping module, personnel in the field can access critical call information and a map from a single screen. Addresses, cross streets, hazards, updated call comments, responding units, weather, and premises and HazMat information can be accessed alongside the map.



Spillman's Mobile AVL Mapping technology provides access to comprehensive information

Mapping Tools

Users have the ability to easily search by X and Y coordinates, calculate the distance between calls with a measuring tool, hyperlink a website or photo to a call, and view predefined map layers such as law and fire zones, water sources, and ortho images. This powerful functionality allows users to view call and officer locations as well as receive turn-by-turn driving directions to improve response times.

Pictometry displays 3-dimensional images and calculates dimensions such as height, area, and length

Unit Location Display

Dispatchers and field officers can view the location of agency units and CAD calls on a jurisdictional map. This enables dispatchers to quickly assign units to calls based on proximity and field officers can view the map to determine the shortest route to calls. This can occur directly from the map by dragging a unit to a call or vice versa.

Unit Status Information

The Unit Status screen displays the status of units dispatched. For each unit, the software displays the status, active call, assigned zone and agency, and current location or most recent radio log entry.

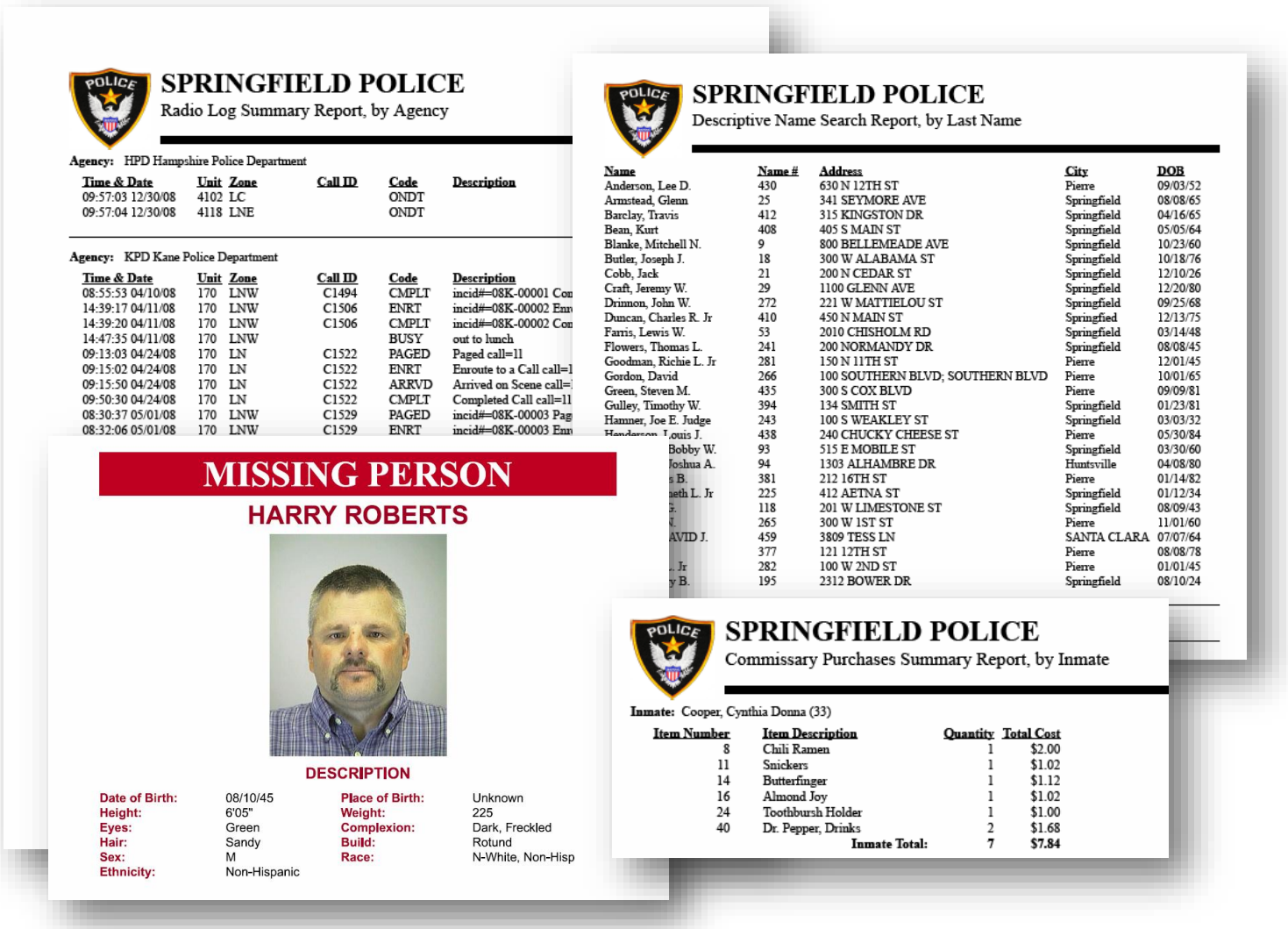
- **System reporting capabilities**

System Reporting Capabilities

Spillman's software solution offers several methods to maintain records and retrieve data. Users can easily generate report content by pulling preformatted reports already in the system or configuring ad hoc reports on the fly. As the Spillman system is ODBC complaint agencies can also use third party reporting applications such as Crystal Reports and Microsoft Excel.

Preformatted Reports

An extensive suite of preformatted reports are provided standard for efficiently compiling information for crime analysis and recordkeeping. Spillman offers more than 2,000 preformatted reports that support the tracking and maintenance of critical information.



SPRINGFIELD POLICE
Radio Log Summary Report, by Agency

Agency: HPD Hampshire Police Department

Time & Date	Unit	Zone	Call ID	Code	Description
09:57:03 12/30/08	4102	LC		ONDT	
09:57:04 12/30/08	4118	LNE		ONDT	

Agency: KPD Kane Police Department

Time & Date	Unit	Zone	Call ID	Code	Description
08:55:53 04/10/08	170	LNW	C1494	CMPLT	incid#=08K-00001 Con
14:39:17 04/11/08	170	LNW	C1506	ENRT	incid#=08K-00002 Enr
14:39:20 04/11/08	170	LNW	C1506	CMPLT	incid#=08K-00002 Con
14:47:35 04/11/08	170	LNW		BUSY	out to lunch
09:13:03 04/24/08	170	LN	C1522	PAGED	Paged call=11
09:15:02 04/24/08	170	LN	C1522	ENRT	Enroute to a Call call=1
09:15:50 04/24/08	170	LN	C1522	ARRVD	Arrived on Scene call=
09:50:30 04/24/08	170	LN	C1522	CMPLT	Completed Call call=11
08:30:37 05/01/08	170	LNW	C1529	PAGED	incid#=08K-00003 Pag
08:32:06 05/01/08	170	LNW	C1529	ENRT	incid#=08K-00003 Enr

SPRINGFIELD POLICE
Descriptive Name Search Report, by Last Name

Name	Name #	Address	City	DOB
Anderson, Lee D.	430	630 N 12TH ST	Pierre	09/03/52
Armstead, Glenn	25	341 SEYMORE AVE	Springfield	08/08/65
Barclay, Travis	412	315 KINGSTON DR	Springfield	04/16/65
Bean, Kurt	408	405 S MAIN ST	Springfield	05/05/64
Blanke, Mitchell N.	9	800 BELLEMEADE AVE	Springfield	10/23/60
Butler, Joseph J.	18	300 W ALABAMA ST	Springfield	10/18/76
Cobb, Jack	21	200 N CEDAR ST	Springfield	12/10/26
Craft, Jeremy W.	29	1100 GLENN AVE	Springfield	12/20/80
Drinnon, John W.	272	221 W MATTIELOU ST	Springfield	09/25/68
Duncan, Charles R. Jr	410	450 N MAIN ST	Springfied	12/13/75
Farris, Lewis W.	53	2010 CHISHOLM RD	Springfield	03/14/48
Flowers, Thomas L.	241	200 NORMANDY DR	Springfield	08/08/45
Goodman, Richie L. Jr	281	150 N 11TH ST	Pierre	12/01/45
Gordon, David	266	100 SOUTHERN BLVD; SOUTHERN BLVD	Pierre	10/01/65
Green, Steven M.	435	300 S COX BLVD	Pierre	09/09/81
Gulley, Timothy W.	394	134 SMITH ST	Springfield	01/23/81
Hamner, Joe E. Judge	243	100 S WEAKLEY ST	Springfield	03/03/32
[illegible] Louis J.	438	240 CHUCKY CHEESE ST	Pierre	05/30/84
[illegible] Bobby W.	93	515 E MOBILE ST	Springfield	03/30/60
[illegible] Joshua A.	94	1303 ALHAMBRE DR	Huntsville	04/08/80
[illegible] B.	381	212 16TH ST	Pierre	01/14/82
[illegible] eth L. Jr	225	412 AETNA ST	Springfield	01/12/34
[illegible]	118	201 W LIMESTONE ST	Springfield	08/09/43
[illegible]	265	300 W 1ST ST	Pierre	11/01/60
[illegible] AVID J.	459	3809 TESS LN	SANTA CLARA	07/07/64
	377	121 12TH ST	Pierre	08/08/78
[illegible] Jr	282	100 W 2ND ST	Pierre	01/01/45
[illegible] y B.	195	2312 BOWER DR	Springfield	08/10/24

MISSING PERSON
HARRY ROBERTS

DESCRIPTION

Date of Birth:	08/10/45	Place of Birth:	Unknown
Height:	6'05"	Weight:	225
Eyes:	Green	Complexion:	Dark, Freckled
Hair:	Sandy	Build:	Rotund
Sex:	M	Race:	N-White, Non-Hisp
Ethnicity:	Non-Hispanic		

SPRINGFIELD POLICE
Commissary Purchases Summary Report, by Inmate

Inmate: Cooper, Cynthia Donna (33)

Item Number	Item Description	Quantity	Total Cost
8	Chili Ramen	1	$2.00
11	Snickers	1	$1.02
14	Butterfinger	1	$1.12
16	Almond Joy	1	$1.02
24	Toothbursh Holder	1	$1.00
40	Dr. Pepper, Drinks	2	$1.68
	Inmate Total:	7	$7.84

Spillman comes standard with more than 2,000 reports

Ad Hoc Reports

Spillman has two directories for reports, one that holds all preformatted reports that come standard with the system, and another that holds reports that are customized by the agency. Users always have the option to customize any standard report, or create their own based on unique parameters.

Spillman also provides quick and easy access to a data dictionary directly within the system. Users just right click on any desired field to gain access to the data dictionary, which provides the agency all of the tools necessary to easily create their own custom reports. Each time an ad hoc report is created, the system saves it to the custom directory so it can be accessed by future users.

Built-In Query Tools

Users are able to perform searches instantly with a minimal amount of information. Spillman's precise searching capabilities allow agencies to search on individual fields or a combination of fields using a wide range of search types, including partial pattern match (wild cards), date or value range, and "sounds like," "less than," "equal to," or "greater than" queries. Users then have the option to export the search set to whatever ad hoc report may be appropriate.

Compatibility with Third Party Reporting Tools

The Spillman system is ODBC compliant and adheres to GJXDM protocols for data exports. This allows our customer agencies to use a number of third party query and reporting tools to create charts, graphs, and other reports. Microsoft Excel and Crystal Reports are programs commonly used to create these reports.

Knowledgebase and Report Sharing

Agency users will also be able to download ad hoc reports from Spillman's online knowledgebase. By utilizing out report share feature of the site, users will be able to search for relevant, pre-built reports that reflect best practices from contributing agencies across the country. In addition, our online Knowledgebase is accessible to all customers and has been designed to enhance agency operations opportunities. Agency personnel are able to easily find information, as well as solutions to common needs. Our Knowledgebase offers information compiled directly from customers and includes materials designed to augment system usability.

In addition to the reporting tools described above, the Spillman system provides the ability to search and report on any field in the system in any order. Recent system-wide updates to the system include enhanced list functionality throughout the system. Agency personnel can search for and organize data and Involvements® with greater precision through new filtering, sorting, and grouping capabilities. Many of these fields support the creation of customized statuses and values. There is no limit to the number of customized statuses that an agency can put into the system. Users can also save customized views for future use and easily export results to Excel, increasing efficiency and data utility.

- **Business Intelligence solution options if different than above system reporting capabilities**

Spillman has made a concerted effort to enhance our product suite to follow trending updates regarding statistical analysis; to improve our professional services that address agency goals for better trained and more proficient users; and to offer a full site license for all of our products to allow our customers to focus more on public safety concerns rather than budgetary constraints. A number of tools have been built into the Spillman system to fall in line with agencies' initiatives to utilize data and statistics for becoming more efficient.

CAD Dashboard

With the use of the Spillman CAD Dashboard, the County could display global agency statistics, dispatch information, trend analysis, as well as pin and heat maps. Users can compare the number of calls received during customizable time periods on a bar graph and view the number and type of calls received per day or per hour on a line graph.

The CAD Dashboard further enhances the County's ability to know what makes up the majority of emergency calls, where these calls come from, how fast the calls are being processed, the speed for which resources are deployed, etc.

Pin Mapping

In addition, for accurate and timely data used to analyze calls, agencies can use our Pin Mapping module, which allows for geographical search sets to be plotted on an electronic pin map.

System Reporting Capabilities

Furthermore, our system reporting capabilities include more than 2,000 preformatted reports used in the tracking and maintenance of critical information. Reporting creates ad hoc reports in third party systems such as Microsoft Excel and Crystal Reports based on ODBC compliance.

Our single database architecture will allow the County to eliminate redundant entry, improve the accuracy of information, and provide access to complete system information for all personnel.

Due to Spillman's integrated architecture, the County will have immediate access to all information regardless of where in the system they are working, or where in the system that data originated.

"We liked the availability to have a lot of information available to our staff. Giving them that information will also give them the power to do their jobs. We are excited about having a partnership with Spillman to further enhance our policing capabilities."

John McDonald
New Braunfels Police Department, Texas

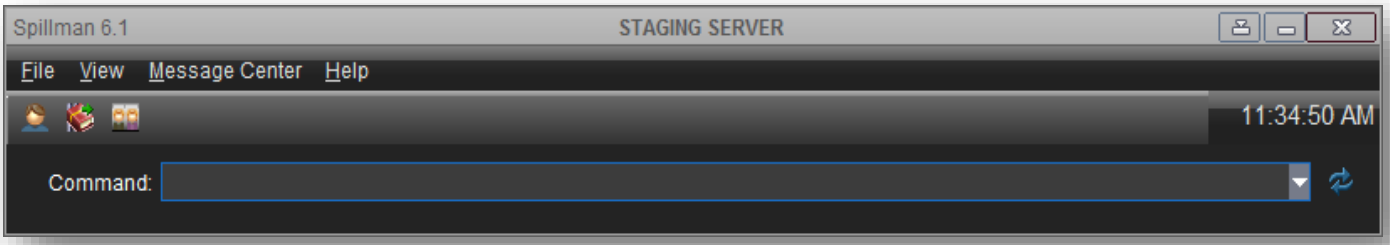
- **System configuration capabilities**

System Configuration

The Spillman system was designed to be highly configurable and customizable. All of our customer agencies have the option of labeling any field within the system to reflect its specific operations and data requirements. Users can also create an unlimited number of custom templates in any module's narrative field to capture additional data. The Spillman system is flexible enough to be fully configured and customized to meet all of the agency's needs.

Look and Feel

Spillman allows users to customize the look and feel of the application to meet any of their specific needs. Individuals can change the colors, fonts, and organization of the screen and Spillman automatically relates those specifications to distinct user login. These customizations allow users in different work environments (for example a low-light environment for dispatchers) to change the software in order to meet individual needs.



The appearance of Spillman can be customized to accommodate a variety of viewing environments and end user needs

Users can also create "hot" buttons that link to the tables they use most often. For example, a dispatcher can create a button that links directly to the CAD module by simply dragging the CAD module from the tree menu to the command line.

Users have the option to create hot buttons based on the system functionality they use the most

Code Tables

Throughout the system, administrators are able to define coded values used to enter data into any module system-wide. These values are customizable and are exclusively defined at the agency level to ensure that unique data quality standards are met.

Ad Hoc Reports

System users can create ad hoc reports using Spillman's reporting system. These reports allow users to gather information without the need to program or set values. Additionally Spillman provides a unique point-click interface on every screen throughout the system that allows users to determine which data fields appear on ad hoc reports and in what order. As an off-the-shelf solution, Spillman can be customized to the individual needs of each of our customer agencies or operate fully right out of the box.

Field Narratives

Field narratives can be entered into the system directly from the vehicle to save valuable time and improve record details. Each user can view, add, and append narrative information or supplemental narratives directly from the Law Incident screen. Additionally, field officers have the flexibility to enter an unlimited number of supplemental narratives for witness statements and other follow-up activities. For routine narrative entries, the system allows users to easily define templates for precise information gathering.

Customizable Fields

Spillman's Automated Field Reporting modules allow patrol officers to add an unlimited number of people, vehicles, property, and their associated details. Narrative fields have no set length, allowing officers to add as much or as little text as needed.

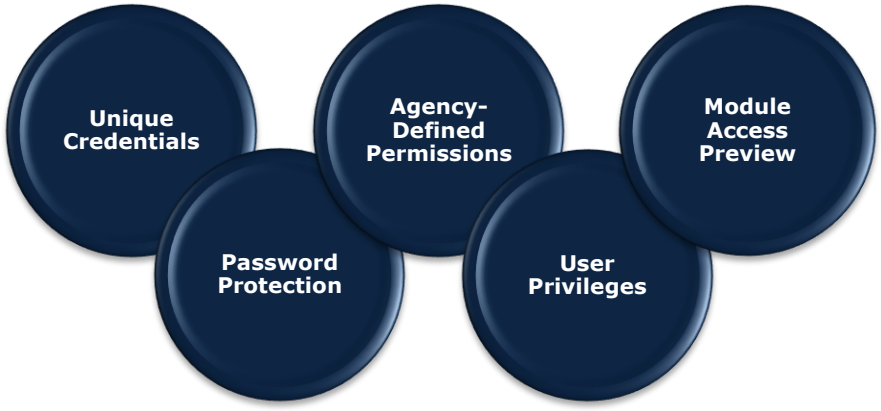
Data Integrity

Wherever possible, data is entered from a drop-down list rather than from open text fields, saving time and helping prevent mistakes caused by incorrectly typed entries. Users must enter data in specified fields before saving the form, ensuring that important data is collected.

Keyboard Templates

As part of our standard system documentation, Spillman provides keyboard templates for agency use during the training process. These templates allow users to operate the system more quickly and efficiently.

In addition, Administrators will have the ability to establish distinct security privileges for users and groups. Spillman operates with a variety of security features, which will allow the agency to define individual access and user rights:



Spillman offers a variety of security features that ensure appropriate access to sensitive data

Unique Credentials

The agency's Spillman Applications Administrator (SAA) will have the ability to define, change, and reassign usernames as needed. Users will be responsible for maintaining their own passwords, but they may be required to change them at whatever intervals the agency' s SAA establishes upon system setup.

Password Protection

An entire record can be hidden behind a password so that no one knows the record exists unless they have the appropriate privileges. For example, a user with privileges may hide an Intelligence record's suspicious activities information or the full text narrative associated with an incident or arrest. To provide extra security for sensitive data, the agency's SAA can also hide an entire table or program behind a password.

Agency-Defined Permissions

System access levels are customizable to include anything from "inquiry only" access to "full modify" or "delete" capabilities. As defined by the agency, only those tables and programs to which users have been granted any kind of access are listed on their system menus or through Spillman' s command line.

User Privileges

Within an individual table, users are only allowed to perform functions they are authorized to perform. Customizable privileges include read/print, add, modify, and delete; any *field* within a table could be denied to a user if deemed appropriate.

Module Access Preview

The main menu provides a complete list of all Spillman modules a user has been given access to. The agency's SAA will have the authority to customize a menu or multiple menus to suit the particular needs of a specific user, combining programs from various modules. The system allows users to access only those menus related to tables and programs that are within their security limits.

Spillman's advanced security features provide maximum flexibility system-wide or at the individual user level. To ensure data integrity, individuals with the appropriate privileges can set security for unique records and fields. For increased information sharing within the agency and beyond, full data partitioning is also available.

- **Technical architecture information – Uptime, dependability, performance, continuity of operations/hot fail-over, disaster recovery**

Technical Architecture

The proposed system architecture has three (3) tiers: the database server, the application server (or business rules), and Spillman's modular solutions and third party interfaces. This single-server design optimizes Spillman's searching and data access capabilities, increasing the system's overall speed. The architecture's scalability will adapt to the needs of the County by accommodating more users as the agency grows or if new agencies join the system.

Performance of the Spillman application is a function of the software architecture as well as the hardware. From a hardware perspective the servers will be sized based on the projected user count. The VMware cluster is designed to allow for the loss of a physical server without the loss of any functionality or performance. In the event of a catastrophic failure of the production site, a failover mechanism is provided to a remote location.

Virtual Failover Solution

The standard virtual failover architecture is based upon significant experience providing business continuity solutions and leverages VMware's vMotion, HA and Site Recovery Manager (SRM) software configured for automated or manual failovers based upon supporting infrastructure. Planned failovers would be manually initiated through the software. Unplanned failovers would be initiated manually or automatically.

This architecture provides both peace of mind and valuable business continuance/Disaster Recovery. Once installed, optional healthcheck and failover testing services can occur to ensure your systems are ready and capable when you need them most.

System Availability

Spillman software has consistently operated in a 99.99% to 99.999% rate of uptime for many years. For the past 12 months, Spillman customers as a whole have averaged an uptime of 99.9963.

A case study performed by Spillman customer of 20+ years, Monrovia Police Department in California, found that during a 12-year period, only 107 hours of scheduled downtime were experienced, due to upgrades and enhancements. Monrovia Police Department had only three (3) hours 20 minutes of unscheduled downtime, or 0.00003% and 0.00102% scheduled downtime, due to hard drive failure, problems with the operating system, and/or database failure.

Other Spillman customers have had similar experiences. Based on the success and track record of Spillman agencies such as Monrovia, the Spillman server, operating system, and database have been field-proven as mission-critical platforms.

Data Replication

Spillman customers will additionally have the option to purchase our Data Replication Tool, a web application utilized to provide a secure, robust module designed for replicating a Spillman database to an external customer database. Customers have the choice of exporting data to a Microsoft SQL or MYSQL database. Other export options, such as exporting to a Spillman-hosted database, may be provided in the future.

The primary purpose of this web application is to supply data for a reporting server. The reporting server hardware and database will be provided by the customer, and the maintenance and tuning of that system will be the customer's responsibility. By using the Data Replication Tool, some indexes will be optimized to increase performance and facilitate better reporting. It should be noted that this application is not designed to be used with disaster recovery, hot backup or high-availability solutions.

The tool provides the following benefits to Spillman customers:

- Isolates the reporting/ODBC queries from the production system, yielding an increase of stability and performance on the production system
- Provides improved functionality over the FairCom ODBC and JDBC drivers
- Allows customers to leverage their existing expertise in other database technologies, such as SQL Server or MySQL

- **System interface information – Federal, state and local databases plus third party applications**

Interface and Third Party Applications

Spillman uses an interface philosophy that follows the NIEM Model of data exchange. With that system, administrators are able to set up data exports based on specific database events or a variety of other data imports. Agencies are also able to perform database queries and file retrievals, or allow third parties to query the Spillman system.

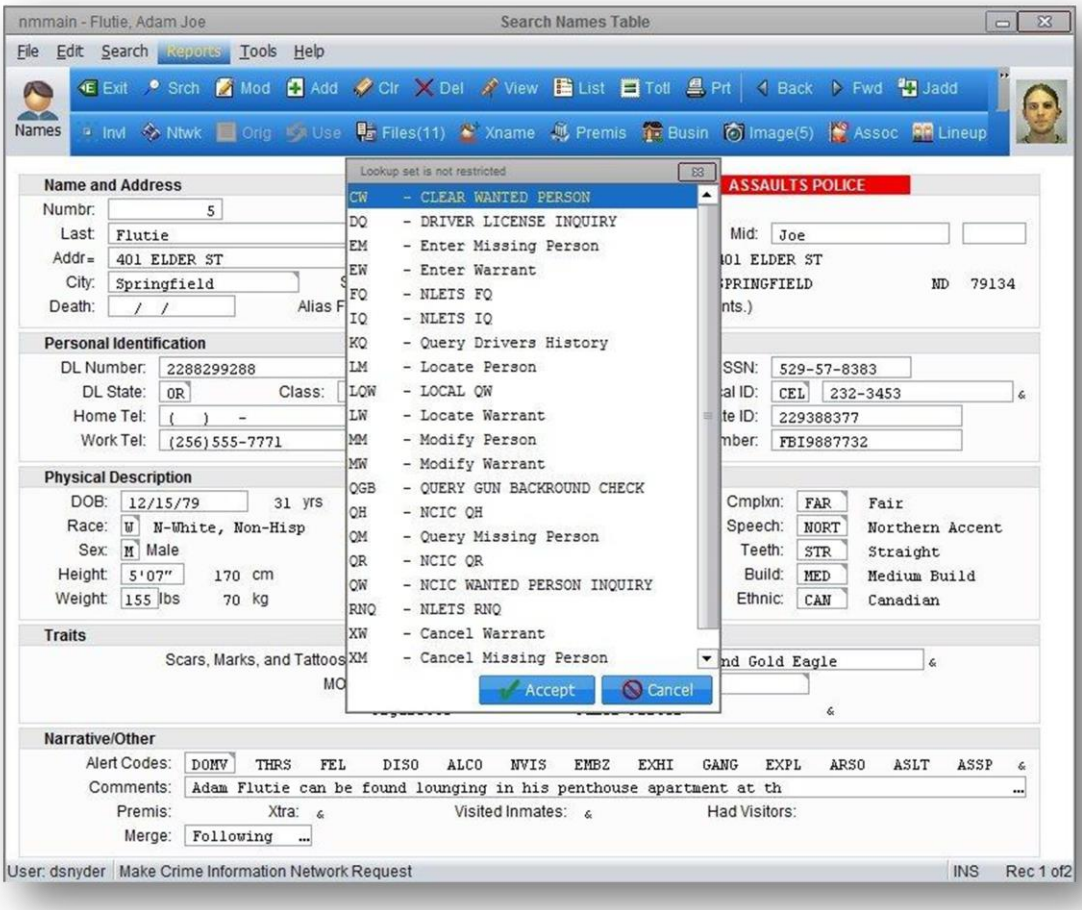
We are committed to staying ahead of industry trends, and look forward to discussing the incorporation of evolving NIEM standards with all of our customers. As a result, Spillman has been actively seeking ways to incorporate NIEM data exchange standards into all of our products.

StateLink - CLETS

The Spillman StateLink module enables agencies to access state, national, and other external databases to send queries regarding information such as warrants, stolen vehicles, missing persons, driver's licenses, and criminal history. With StateLink, local and state queries can be sent simultaneously. Queries and information transactions can also be sent from the Spillman CAD module, the StateLink Request screen, or various other Spillman screens such as Names, Vehicles, and Property.

Recall Transactions

The recall transaction feature displays a list of the agency's 20 most recent StateLink transactions. If an agency has previously sent incorrect information, if the state connection was not completed, or if the agency obtains new transaction information, users can quickly access the transaction, update it, and then resend the information.



Users can access the 20 most recent transactions directly from the StateLink module

Multiple Response Destinations

Query and transaction responses can be sent to a printer, email address, group of users, or to the StateLink request screen. Each time a transaction is sent, users receive a response with the queried information or a response that no matching records where found.

CAD Integration

The system automatically creates a CAD radio log each time a dispatcher sends a transaction to the state, national, or other external database. The radio log entry includes the unit, the responsible agency, the time and date, and transaction information.

Mobile Integration

With the use of a StateLink connection, officers in the field can query local, state, and national databases simultaneously for instant information on names, vehicles, property, guns, wanted persons, etc.

Third Party Interfaces

In addition to CLETS, Spillman interfaces with numerous third party systems and we will continue to write new custom interfaces as the industry evolves. In recent years, Spillman has facilitated development for more than 100 custom interfaces.

Many dispatch interfaces to third party systems are already in place, however, we recognize that additional interfaces will have to be written as agencies nationwide continue to select Spillman as their software provider. Highlighted on the following pages are a few of Spillman's strategic partners in the realm of dispatch.

HipLink Paging Interface

Spillman's HipLink Paging Interface enables dispatchers to automatically relay call information to a wide range of electronic devices including pagers, smart phones, faxes, printers, and laptop computers. This information is transmitted from Spillman's CAD module in real-time to individual users or predefined groups for fast response in emergency situations. Using the HipLink Paging Interface, authorized users can create unique groups for receiving notifications and develop automatic escalation protocols and On-Duty Schedules.

While the majority of applications rely on SMTP delivery of cellphones, HipLink supports enterprise paging protocols supported by carriers (SNPP and WCTP enterprise paging protocols). The advantage of Enterprise-grade delivery is that it is supported by all major wireless carriers making message delivery fast, reliable, two-way, and traceable. This allows HipLink to automatically failover to primary and secondary redundant delivery options if a message does not reach its destination on the first attempt.

Flexible Paging Options

Spillman's paging interface expedites both manual and automatic paging, allowing dispatchers to send pages directly from the CAD command line or by using a mouse. Alternatively, the agency can configure the system to send pages automatically based on the call nature, status, and location, allowing participating agencies in a shared system to establish agency-specific policies and practices.

Wireless Communication

Spillman communicates directly with the paging interface using a TCP/IP connection. Because it is a wireless interface, this solution eliminates the need to purchase expensive hardware, such as modems and paging terminals. The agency may elect to use a Telocator Alphanumeric Protocol (TAP) modem as a backup system or to send pages where wireless coverage is not available. In addition, there are automatic failover policies built into the system to ensure redundancy is present at all times.

Data Preservation

Information transmitted through Spillman's paging interface will be preserved. Because all pages are automatically saved in Spillman's log table, the data can be retrieved later for liability purposes or to evaluate an agency's response times.

Multi-Agency Functionality

Users can allocate device parameters to a number of agencies, allowing each to control their unique settings regarding notification protocols. All participating agencies can work on the same protocol, or each separate agency can allow separate escalation policies.

Alerts

To support advanced elements using a smartphone, HipLink Mobile gives an agency an alternative to standard SMS text. The system allows users to send CJIS information with 256-bit, rolling key encryption, and attach images or documents that are fully encrypted. Separate ringtones can also be utilized to identify different levels of severity, and full system encryption ensures compliance with the most stringent national standards.

Station Alerting

Spillman interfaces with vendors that enable Spillman CAD to communicate with the Fire Station Alerting System. With this functionality, a Spillman customer can automate the process of sending alerts to stations involved in a dispatch.

When units are dispatched to a call, the interface notifies the station alerting system, which sends alert tones and automated voice instructions to the station about units dispatched and incident-related details. The interface notifies individuals of the status and station assignment of all units while displaying call information and unit status information on a reader board in each station.

ProQA

Spillman's ProQA Interface allows agency personnel to transfer important law, fire, and medical call data between Spillman's Computer-Aided Dispatch solutions and ProQA. The interface meets ProQA's certified tier of integration, which is the highest level of integration.

Bi-Directional Data Flow

This interface allows agencies to automatically store law, fire, and medical call data in both ProQA and CAD. The ProQA Interface populates ProQA data into the appropriate CAD records. Likewise, the interface integrates CAD data, such as the location of the incident, into the correct ProQA fields.

Fast Response

With the ProQA determinant in CAD, users can quickly define the agency's response plan and unit recommendations. The ProQA determinant is automatically populated into CAD after data is entered in ProQA, allowing the agency to respond efficiently to calls.

Streamlined Operation

Users can open a ProQA screen automatically while working in CAD. System parameters can be set so that ProQA opens when a law, fire, or medical call is received. The interface will automatically populate the appropriate ProQA fields with information determined in ProQA. As determinant codes are updated or reconfigured, this information is immediately passed on to dispatchers through the Spillman CAD system.

E9-1-1 Interface

The Spillman E9-1-1 interface allows dispatch centers to pinpoint cellular call locations. As the interface receives number and location information (ANI/ALI) from a standard E9-1-1 system, it then populates the data to the Spillman CAD system.

In addition, the system meets federal regulations for Phase I and Phase II compliance. Spillman's E9-1-1 interface helps improve the effectiveness and dependability of wireless 9-1-1 services, by allowing agencies to more quickly identify the location of a cellular user.

Automatic Field Entry

Spillman's E9-1-1 Interface automatically adds agency-specified call information to the CAD screen, including contact name, address, city, and phone number. This feature minimizes the amount of data dispatchers must enter, enabling the rapid creation of accurate call records. It also reduces the potential for data entry errors.

Accurate Mapping

When used with Spillman's CAD and CAD Mapping modules, the E9-1-1 Interface improves data accuracy and promotes faster response. As a call for service is received, the E9-1-1 interface automatically validates the call location with Spillman's GIS solution. Once verified, the call location is automatically plotted on Spillman's CAD map and routed to the appropriate call taker's screen. Dispatchers can view the street name where the call is located and the nearest cross streets. The data allows users to make informed dispatching decisions.

Call Data Preservation

Spillman's E9-1-1interface allows agencies to store valuable raw call information in the call record. When the agency receives a call from a wireless device, the initial ALI information generally contains Phase I information, or the cell sector from which the call originated.

This information automatically populates the Address field of Spillman's CAD Add Call screen. When an ALI rebid is performed to receive any additional Phase II latitude and longitude data, the updated location information also populates the Add Call screen. Agencies can configure to automatically transfer the original ALI information to the Comments field of the call record. This way, the agency can perform continual ALI rebids to update location information while retaining a history of all ALI information received.

Emergency Reporting

Spillman partners with Emergency Reporting (ERS) to provide online fire and EMS records management system functionality. Spillman' s interface with ERS allows users to efficiently complete reports and transfer information from Spillman' s Computer-Aided Dispatch module into the ERS fire and EMS reporting and records management system. ERS also allows users to manage fire incident reporting, scheduling, training, hydrant maintenance, reports, and personnel requirements from any Internet browser.

Esri

Spillman works directly with Esri ArcGIS Server Technology for all of our geo-verification processes. Esri is a software development and services company that provides geographic information system (GIS) solutions to organizations across the globe. With more than 3,000 employees, 10 regional offices in the United States, and more than 80 distributors globally, Esri is a major player in the GIS marketplace.

- **Approach regarding legacy CAD/Mobile system data conversion and/or access to legacy CAD/Mobile system data.**

Legacy Data Conversion

Spillman provides a variety of conversion options to meet the unique information needs of each agency. Factors to consider include the overall effects each option can have on data accuracy, system reliability, operational procedures, and personnel resources.

Spillman routinely assists agencies in the data conversion process, but it is important to note that it is much more comprehensive than creating an interface to a disparate system or data repository. In order to provide accurate details with regard to cost and process, Spillman would need further discussion with the County, including sample data from said disparate systems. For your convenience, below we have provided a general overview of what the data conversion process might entail should the County require this service.

Deployment Plan

Before the new system is in use, Spillman's Project Manager will work with our data conversion partner, White Box Technologies, to ensure data conversion is completed as requested and on schedule. The length of time the conversion process takes depends on the amount and type of data converted. Our approach to data migration, as well as the agency's participation in the process, is described in detail below.

White Box and Spillman adhere to a phased approach for the Migration of Data from the legacy databases to the new Spillman system. There are multiple databases that will need to be converted and each database migrated will follow the same process outlined below. While White Box and Spillman will perform the majority of the conversion tasks, there will be times throughout the implementation process that the County will need to review documents or converted data and to provide feedback on the conversion process.

Planning Phase

During the first phase, the parameters of the conversion project are established. This includes defining the overall data conversion scope, the assumptions and constraints that frame the conversion project, conversion entrance and exit criteria, high level conversion milestones, project roles and responsibilities, and data exchange method and procedures.

Analysis and Design Phase

The conversion begins by analyzing the source and target systems through review of available documentation and access to data and applications where available. There are three (3) major subcomponents of analysis and design. These address the overall conversion process, the data conversion rules, and the conversion architecture and infrastructure:

- **Conversion Process Analysis**: This entails a universal view of the conversion project lifecycle while considering how it will be executed once requirements are defined and confirmed, and the tools are built, integrated, and tested. The conversion execution flow gauges how source data is provided to the process, points at which data owners have visibility to data quality, when corrections to the data are to be performed, quality control checkpoints, and how converted data is supplied to the target application.

- **Data Mapping Analysis and Design**: The principal output of data analysis and design is a Table Mapping Document (TMD) that records data conversion rules and establishes a detailed link between source system(s) and the target system at the table level. From this, conversion rules at the field level are developed and compiled in a Data Mapping Document. These field rules must be detailed, unambiguous, and executable, and will include a description of any data manipulation, filtering, parsing, formatting, defaulting, etc. required for a successful data migration.

  A Code Map Document will be created to support the process of converting source data to uniform codes used in the target system. Additional profiles and reports indicating source data cleanliness, quality, and completeness help make a final determination for field conversion rules. White Box works with subject matter experts of the source, target applications, and the County's business process/data owners to ensure data will be converted successfully.

- **Conversion Framework Analysis**: This phase considers data volume, data exchange requirements, security requirements to support conversion, and how the conversion tools will be configured to execute these requirements. Resource allocation will be estimated, such as number of processing computers, database environments, and network infrastructure.

At the beginning of the analysis phase, White Box/Spillman personnel will be onsite to gather information, review and capture screenshots of source applications being converted, and understand the expectations of the converted data results in order to build the Table Mapping Document.

At the completion of the Analysis and Design phase, and prior to undertaking major development work, White Box/Spillman will review the Table Mapping Document and, if adjustments need to be made to the conversion roadmap, changes will be made and agreed to by all parties prior to the next phase of the conversion component of the project.

Build Phase

Following design signoff, White Box's conversion tools are configured to execute the conversion requirements to meet the agreed-to implementation schedule. Quality control tests assess quantifiable and qualitative parameters to verify the results of the conversion process were executed per the design. Iterations of the conversion are run internally to ensure the conversion engine and processes return the expected results.

Test and Refine Phase

Prior to the final Go-live conversion, it is recommended that all key stakeholders participate in one or more simulated conversions during which source data is collected and run through the entire process, the target database is loaded, and data reports are generated as necessary. There are three (3) primary reasons to execute mock conversions:

1. The simulation of the final conversion process from start to finish confirms the amount of time required in order to identify and resolve conversion deployment issues in advance of the final conversion (Go-live). This is most critical on large scale conversions or projects that have tight time constraints on system cutover.

2. The conversion of real data gives visibility into how the data will appear in the target application for resolving conversion and source data problems.

3. Mock conversions supply "sample" converted data for the development team to support design and testing of the target application/database. The conversion team refines the conversion tools and process, as appropriate, based on feedback from the data owner and the target system implementation team. The purpose, number, timing, and input/output content of mock conversions to be done are determined on a case-by-case basis by the conversion team, the target system implementation team, and the County.

During the test and refine phase, data owners address data issues needing to be corrected or enhanced in the source application while providing status updates to the conversion team. Data corrections are usually required if the existing source data cannot be loaded or, if once loaded, it will adversely affect the functionality of the target application. County personnel will review the Mock Conversions and, if adjustments need to be made at that point, White Box/Spillman will make those adjustments prior to the Go-live conversion.

Go-live Conversion

The final, or Go-live conversion, is defined as the last data extracted from the source systems, which results in the converted data populating the final production version of the target application at the end of the overall project. Once data is extracted from the legacy source system(s), those system(s) must be frozen to allow for final data assurance validation and to allow data integrity throughout the conversion and verification process. Any changes to the legacy systems after the data is extracted cannot be included in the conversion and will have to be re-entered into the post production application (usually through manual entry).

When applicable, the data conversion team creates final conversion statistical reports and exception reports. Statistical reports provide quantitative analysis such as the number of date fields that did not conform to an expected date format. Exception reports provide qualitative analysis of records with incomplete or invalid data. The data conversion team and data owners use reports and data analysis to verify that data received from each source system was converted to target system according to the conversion rules defined in the Table Mapping Document.

- **Support and warranty information**

Warranty and Support

Spillman's warranty begins at Go-live and runs for 12 months and consists of ongoing software maintenance services that include updates, enhancements, and bug fixes, as well as support services that include regular hours of telephone customer service and ad hoc technical support.

Every employee at Spillman focuses on public safety software, including our call center and support departments. Our complete support workforce, 100% of Spillman's support staff, is dedicated solely to public safety software.

Support Services

Spillman's extensive training, support, and maintenance services are unparalleled in the public safety industry. Our ongoing commitment to customer support includes trained customer service agents dedicated to responding to customer issues as well as the use of state-of-the-art technology.

"The support we get is phenomenal – from sales right down to the help desk. Customer service is one of the main reasons we went with Spillman."

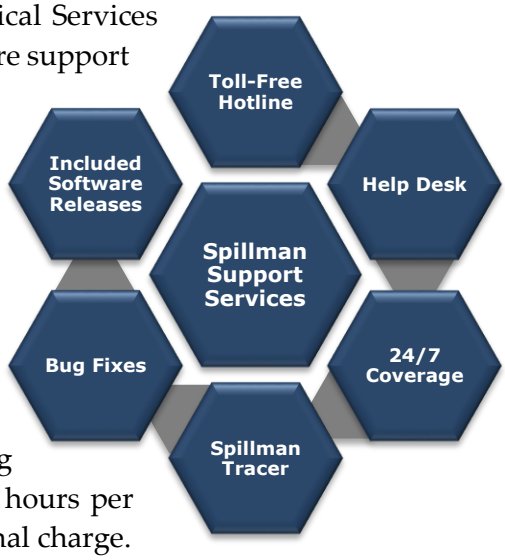
Janice Costello
Cherokee County 911 Communications, North Carolina

Toll-Free Hotline Support

Spillman Technologies provides a toll-free number for use by certified Spillman Applications Administrators. Each call is routed through support staff to ensure immediate assistance and maximum customer satisfaction. In 2015, while addressing these calls, Spillman achieved a 51% success rate with our one-call initiative – support needs were resolved in a single call.

Help Desk Support

Spillman has established a Help Desk within the Technical Services Department to provide telephone assistance to our software support customers. Trained Help Desk personnel are available during normal business hours, Monday through Friday, to provide quick answers to questions and immediate assistance with basic system issues.



Software Support

Spillman offers both standard and extended technical support coverage options for customer agencies. Standard coverage includes support during normal business hours, Monday through Friday, excluding holidays. Extended coverage that consists of support 24 hours per day, seven days per week, is also available for an additional charge.

After-Hours Support

For those customers who do not select extended coverage, after-hours technical support is still available, but is subject to additional hourly charges. Spillman support personnel are on-call 24 hours per day, seven days per week, including holidays.

SpillmanTracer®

SpillmanTracer is a system that has been designed to help technical analysts quickly identify the cause of user, software, operating system, and network connectivity problems. Agencies can use SpillmanTracer to record system issues for accuracy, and then send the information directly to Spillman technical analysts for detailed assessment. This ensures the correct action is taken in responding to the concern in a timely manner.

Annual Support Includes "Bug" Fixes

A bug is defined as any failure of the Spillman software to conform in all respects to the Spillman software documentation. When bugs occur, the software is modified by Spillman development or support personnel, or new routines are developed, at no charge to the software support customer. Bug fixes are provided on an as-needed basis throughout the year.

First Year Support Included in Purchase Price

The price of the software includes the cost of the first year's software support with standard coverage hours. The first year is defined as the 12 months immediately following project Go-live. First-year software support is not included in the price of any future add-on modules. Maintenance, prorated to the normal contract billing date, is billed in addition to the price of the module.

Software Release Updates

All Spillman-licensed software enhancements and releases are provided as part of a current maintenance and support agreement with Spillman Technologies. Spillman typically schedules major releases approximately every 18 months with two or three minor upgrades released every year. All of our customer agencies receive update notes and information prior to any release.

Spillman employs industry-leading support professionals that are available to answer any concern for all of our customers. As a company practice, we do not outsource any of our support or customer service operations. Instead, all support and customer service are responded to directly from Spillman corporate headquarters located in Salt Lake City, UT. This allows our support technicians to interact closely with our developers and product instructors for answers to complex questions as necessary.

Spillman employs 300 individuals based out of our corporate headquarters in Salt Lake City, UT