February 15, 2016

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

RE: RFI for a Computer Aided Dispatch System (RFI 011316CAD)

Dear Ms. Young:

TriTech Software Systems is pleased to respond to the above-referenced Request for Information (RFI) for the County of San Mateo, Office of Public Safety Communications. Our recommended Commercial-Off-the-Shelf (COTS) solution for the County consists of a high performance Computer Aided Dispatch system (Inform CAD), mobile data system (Inform Mobile), as well as our comprehensive reporting and analytics tools, TriTech.com IQ and TriTech.com Analytics. TriTech has extensive experience in large, complex multi-agency county communications centers in California and across the country.

Jeff Pare, TriTech’s Account Executive, and Robert McGrath, Director of Sales – Western U.S., look forward to discussing your project in more detail and are available to respond to any technical or clarification questions that you may have:

Jeff Pare
Account Executive
TriTech Software Systems
San Diego, CA 92121
530.346.8850 Office
858.349.6119 Mobile
Jeff.Pare@TriTech.com

Robert McGrath
Director of Sales – Western U.S.
TriTech Software Systems
San Diego, CA 92121
858.799.7440 Office
858.356.8029 Mobile
Robert.McGrath@TriTech.com

TriTech is confident that our recommended solution will meet the needs and goals of the Public Safety Communications Center and provide the maximum integration of the County’s public safety entities. We believe that TriTech’s solid reputation as a provider of leading public safety solutions, our commitment to exemplary 24x7 customer support, and the value that TriTech places on its client relationships will greatly benefit the County, its public safety departments, and the citizens of San Mateo County.

We look forward to being your partner in the success of this project.

Sincerely,

[Signature]

Blake Clark
Chief Financial Officer
Response to Request for Information for County of San Mateo, California
Office of Public Safety Communications

COMPUTER AIDED DISPATCH AND MOBILE SYSTEMS
RFI 011316CAD

FEBRUARY 15, 2016
# Contents

Introduction .......................................................................................................................... 1
TriTech’s California-Specific Experience ............................................................................. 1
Project Objectives ................................................................................................................ 1
Solution Overview ............................................................................................................... 3
TriTech Participation In Standards Development ............................................................... 4
TriTech’s Commitment ......................................................................................................... 4

Solution Description .......................................................................................................... 5
System Functionality ........................................................................................................... 5
  Inform CAD ...................................................................................................................... 5
  Inform Mobile .................................................................................................................. 6
  Inform Me ......................................................................................................................... 7
  TriTech.com IQ ............................................................................................................... 7
  TriTech.com Analytics .................................................................................................... 7
Major system modules ....................................................................................................... 8
CAD/Mobile System Integration .......................................................................................... 24
Mapping Functionality ....................................................................................................... 24
  Location Validation ......................................................................................................... 25
  GISLink Utility ................................................................................................................. 25
  Live Updates to Inform CAD and Inform Mobile ............................................................. 25
System Reporting Capabilities .......................................................................................... 26
  Inform CAD Reports ....................................................................................................... 26
  Inform CAD Browser Reports ......................................................................................... 27
  Ad Hoc Reporting: CAD Data .......................................................................................... 27
  TriTech.com IQ and TriTech.com Analytics ................................................................... 27
Business Intelligence .......................................................................................................... 28
  CrimeView Dashboard ...................................................................................................... 28
  CrimeView Advanced Reporting ....................................................................................... 28
  Crimemapping.com .......................................................................................................... 29
  CrimeView Predictive Missions ......................................................................................... 29
  NEARme ........................................................................................................................... 30
System Configuration .......................................................................................................... 30
  Technical Architecture ..................................................................................................... 31
System Interfaces ................................................................................................................ 33
Data Conversion .................................................................................................................. 34
  Conversion of Legacy CAD Data into Inform CAD Data .................................................. 34
  TriTech.com IQ and TriTech.com Analytics Query and Access Legacy Data .................. 34
Support and Warranty ......................................................................................................... 35
Introduction

TriTech Software Systems is pleased to provide this response to the County of San Mateo (County) RFI for a Computer Aided Dispatch System (RFI 011316CAD). Our end-to-end, integrated solution includes the requested application software, interfaces, and integration services necessary to support the goals and mission of the public safety agencies represented by the RFI. TriTech’s response includes details on our Computer Aided Dispatch system (Inform CAD), mobile data system (Inform Mobile), Inform Mobile app (Inform Me), and comprehensive reporting and analytics tools (TriTech.com IQ and TriTech.com Analytics) that will equip the County with the latest technology and tools available.

TriTech is a leading provider of mission-critical integrated public safety software and services to local, state and federal agencies. TriTech’s combined customer base includes some of the most highly-regarded police, fire, and EMS agencies who protect and serve more than 255 million people in 14 countries. The company supports installations in every U.S. state, including 82 of the top 100 municipalities. Police, fire, and emergency medical services (EMS) agencies representing over 3,000 installations, rely on TriTech’s solutions, including its computer-aided dispatch, 9-1-1 telephony, mobile data, records and jail management, analytic and intelligence, and field-based reporting systems. Backed by a long history of successful software system deployments, TriTech boasts the industry’s leading reputation for superior reliability, functionality and customer service.

TRITECH’S CALIFORNIA-SPECIFIC EXPERIENCE

TriTech has a long history of successful implementations in the State of California with our first implementation taking place in the late 1990s. As an experienced public safety solution provider within the State of California, TriTech is uniquely positioned to provide the lowest risk, most cost-effective solution to the County, having already successfully delivered systems meeting California statutes and state reporting requirements. The strength of TriTech’s California user base will provide the County ample opportunities for data sharing. Our California installations serve 3 statewide agencies, over 15 county agencies, and over 45 city agencies. Several of these agencies serve the Northern California area, including the City and County of San Francisco, California Highway Patrol, Solano County Sheriff, Concord Police, Milpitas Police, and many more. In addition, we are currently implementing three projects in the state: San Ramon Valley Fire District and Police, Santa Ana Police, and Monterey County Emergency Communications Department.

PROJECT OBJECTIVES

TriTech understands that the County has established this RFI for a Computer Aided Dispatch System with the goal of modernizing the County’s CAD/Mobile system. The following table details how TriTech’s solution addresses common goals for agencies similar to the County’s Office of Public Safety Communications.

<table>
<thead>
<tr>
<th>Common Objective</th>
<th>TriTech Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modernizing County CAD/Mobile system with a system that can provide reliable service for years to come.</td>
<td>TriTech’s computing platform is designed to provide optimum performance, maximum availability, unsurpassed scalability, and centralized administration. TriTech solutions rely on premium components that will serve the County for many years. The TriTech solution includes proven hardware and commercial software technologies from industry icons such as Microsoft, VMware, Intel, HP, EMC, Cisco, APC and others.</td>
</tr>
<tr>
<td>Enhanced analytical capabilities for directed policing.</td>
<td>TriTech’s recommended solution offers a set of tools to allow the County to effectively engage problems using the tremendous amounts of data that are already collected and available. TriTech has partnered with The Omega Group (a Trimble Company) to include their comprehensive Precision Policing Solution, which includes: CrimeView Dashboard, CrimeView Advanced Reporting, Crimemapping.com, CrimeView Predictive Missions, and NEARme. This solution will provide County law enforcement agencies with the tools needed to conduct timely analysis of crime data and to disseminate actionable intelligence for the effective allocation of resources.</td>
</tr>
</tbody>
</table>
| Implementing a system with features to shorten response times and improve public safety | Inform CAD provides some of the most advanced capabilities for ensuring the right resource arrives on scene in the fastest time.  
- The Inform CAD Caller Location Query (CLQ) feature allows an agency to obtain X/Y coordinate data via SMS by capturing the caller’s location via GPS location-based services enabled on the caller’s handheld device.  
- Inform CAD employs automation that evaluates every unit clearing the scene of one incident to determine if the unit could arrive on scene on another event faster than those units already dispatched.  
- Units can be automatically dispatched upon incident creation requiring no recommendation and manual assignment activities.  
- The most effective and efficient response recommendations are achieved through superior calculations using time differential offsets to account for the time it takes to get units ready.  
- Advanced cross staffing at the individual unit level and the station level provides maximum flexibility in resource utilization.  
- Innovative use of Dispatch Levels to initiate upgraded emergency response plans during periods of heightened threats. |
| Integrated support for multiple agencies and multiple jurisdictions allowing data sharing and individual agency configurations | Inform CAD is a feature-rich CAD solution for multi-agency, multi-jurisdiction operation. It provides a real-time link between agencies, with flexibility and user-friendly features that enable each agency to configure the system to meet its business operational requirements and jointly respond to events while retaining those individual configurations. Multi-agency, multi-jurisdictional functionality includes:  
- Add Agency feature allows one or more agencies to be added to a response when a responding unit’s ETA is greater than a specified time.  
- Add agency allows linking of incidents across agencies or within agencies.  
- Multi-Agency Problem Cross-Reference allows for agency uniqueness while maintaining cross agency flexibility.  
- Cross agency move up allows for the movement of units to stations across agencies to cover.  
- Automatic or manual generation of events to pre-defined Agencies based on geographic location and problem type as a result of a single 9-1-1 call.  
- Security granularity to allow each agency to decide which data to share and which to keep private. |
SOLUTION OVERVIEW
TriTech recommends a state-of-the-art solution that meets current County requirements, provides tools for enhanced operations, and facilitates product upgrades in the future. The Inform Public Safety Suite offers applications for dispatchers, patrol officers, investigators, records clerks, property and evidence management, and executive leadership. The seamless integration between the components of the Inform Public Safety Suite drastically reduces redundant tasks and minimizes the opportunity for error. Common fields transfer from one application to the next over the life of the. Dispatchers and officers in the field have access to incident and person records and to CLETS, NCIC, and Nlets.

Our recommended solution features the following applications from the Inform Public Safety Suite:
- Inform CAD
- Inform Mobile
- Inform Me
- TriTech.com IQ and TriTech.com Analytics

TriTech’s computing platforms are designed to provide optimum performance, maximum availability, unsurpassed scalability, and centralized administration. TriTech designs our solutions to use proven hardware and commercial software technologies from industry icons such as Microsoft, VMware, Intel, EMC, and Cisco.

TriTech recommends deployment of our applications on virtualized systems using the VMware vSphere platform. The beneficial characteristics of the VMware vSphere platform include:
- Exceptional performance, reliability, and scalability
- Small footprint
- Robust infrastructure and application services
- Expansive resource management and allocation options
- Availability of vMotion, vStorage, vNetwork and other virtualization extensions
- Simple deployment, administration and operation capabilities

The High Availability (HA) features of VMware’s vSphere are recommended to operate the Inform Public Safety Suite applications and other related business applications, and manage the operation of all systems and resources to provide the availability required of mission-critical information systems such as those used by the County.

TriTech provides our clients with all of the services required to implement a turnkey solution and maintain their applications software. Our project implementation methodology has proven to be successful in hundreds of public safety deployments and follows the Project Management Institute’s (PMI’s) guidelines to deliver a high quality, cost-effective process that ensures successful implementation of the systems. Our training approach maximizes the use of hands-on training and students receive detailed instructions on a field-by-field, screen-by-screen basis. This methodology has been refined and optimized over the past 22 years of successful system deployments.

TriTech provides software support services from our National Support Center where our knowledgeable, cross-trained staff can handle peak periods and serve as a backup to product line support teams that ensure day-in and day-out uninterrupted support. Updates and version
upgrades for the County-licensed TriTech software applications are provided as part of the annual software support and continuous upgrade fees.

**TRITECH PARTICIPATION IN STANDARDS DEVELOPMENT**

TriTech personnel participate on the Integrated Justice Information Sharing (IJIS) Institute Public Safety Technical Standards Committee (IPSTSC). Our representatives contribute to and review the draft specifications and developing standards to ensure that TriTech’s products continue to evolve and meet the changing needs of law enforcement and to take advantage of new and existing standards that can accelerate the product’s ability to communicate with third-party systems. This committee published the NIEM Conformance for RFPs White Paper in 2009 to educate practitioners on the technology standards and best practices available for use in the implementation of information sharing projects.

TriTech will continue to conform to standardized data exchanges, and alignment with emerging standards. TriTech applications conform to the following standards:

- National Information Exchange Model (NIEM)
- FBI Criminal Justice Information Services (CJIS) Security Policy
- Law Enforcement Information Technology Standards (LEITS)
- National Emergency Number Association (NENA) ALI/GIS Standards
- Next Generation 9-1-1 (NG9-1-1)
- Commission on Accreditation for Law Enforcement Agencies (CALEA)
- National Fire Incident Reporting System (NFIRS)
- National EMS Information System (NEMSIS)

**TRITECH’S COMMITMENT**

TriTech is proud of our deployments for some of the most complex and demanding public safety operations across the U.S. and around the globe. Given our extensive experience within California, coupled with the fact that our corporate headquarters and Inform CAD development center is in California, TriTech is uniquely positioned to provide the lowest risk, most cost-effective solution to the County, having already successfully delivered systems meeting California statutes and state reporting requirements. The strength of TriTech’s California user base will provide the County ample opportunities for data sharing.

TriTech welcomes the opportunity to meet with the County’s project team to explore this solution in more detail and to collaborate on the most effective mix of products and services to meet the County’s needs today and for many years to come.
Solution Description

TriTech offers a state-of-the-art solution that meets current County requirements, provides tools for enhanced operations, and facilitates product upgrades in the future. The Inform Public Safety Suite offers applications for dispatchers, officers in the field, and administrators. The seamless integration between the components of the Inform Public Safety Suite drastically reduces redundant tasks and all but eliminates the opportunity for error. Common fields transfer from one application to the next over the life of the incident with a single common case number. Dispatchers and officers in the field have access to incident and person records and to National Crime Information Center (NCIC).

TriTech has provided information about our Inform Public Safety Suite applications (Inform CAD, Inform Mobile, and Inform Me), as well as, our cloud-based reporting and analytics applications (TriTech.com IQ and TriTech.com Analytics). The information provided responds to the requirements listed in RFI Section I – Intent:

SYSTEM FUNCTIONALITY

RFI Requirement:
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

TriTech Response:
Our recommended solution features the following applications from the Inform Public Safety Suite:

• Inform CAD
• Inform Mobile
• Inform Me
• TriTech.com IQ and TriTech.com Analytics

Descriptions of these applications are provided below. Additionally, the Inform Public Safety Suite offers the following applications to meet future needs of the County:

• Inform 911
• Inform CAD+911
• Inform RMS
• Inform FBR
• Inform Jail
• Inform Fire

Please refer to the Additional Information section for more information about these applications.

Inform CAD
The core software application within our suite of products is Inform CAD, a multi-agency, multi-jurisdictional application that is highly configurable, allowing police, fire, and EMS departments to configure the system to meet the specific business needs and workflow of their operations. Inform CAD leverages Microsoft SQL Server to create a comprehensive data management
platform that meets the high demands of Inform CAD transaction processing and data management.

Inform CAD is a feature-rich, CAD solution for single or multi-agency operation. It bridges the communication gap between dispatch and the field, and ensures the continual availability of data for immediate sharing of incident information, patient data, and criminal records. It provides a real-time link between agencies, with flexibility and user-friendly features that enable each agency to configure the system to meet their needs, yet jointly respond to events while retaining their individual requirements.

In addition to the many modules listed in response to the “Major System Modules” requirement below, TriTech offers two ancillary applications to augment Inform CAD functionality: Caller Location Query and Inform CAD Browser.

Caller Location Query
The Inform CAD Caller Location Query (CLQ) feature allows an agency to obtain X/Y coordinate data via SMS by capturing the caller’s location via location-based services enabled on the caller’s handheld device. At times this data can be more accurate than the location provided by the wireless carriers via the 9-1-1 network as it bypasses the traditional network-based location system in favor of the GPS system. Using this method of inquiry also can provide a means to capture locations for non-911 based wireless calls. The Call Taker requests location information from the caller via the generation of a text message. The text message is sent to the caller’s smartphone and directs the caller to activate a web-based link which sends the caller’s GPS location back to Inform CAD. Once location information is received from the caller, Inform CAD processes the coordinates into a potential addresses for dispatch and allows the call taker to update the incident address accordingly.

Inform CAD Browser
Inform CAD Browser provides remote users with a secure administrative or operational view of Inform CAD functions using an Internet browser. This software has been designed to work in tandem with Inform CAD on a Microsoft Windows platform using a Web browser such as Internet Explorer, Chrome, or Firefox. Using Inform CAD Browser, users can query data through a local or wide area network (LAN/WAN) as well as through a dial-up or wireless connection, dedicated circuit or over the intranet/internet, receiving near real-time access to active and pending incidents, unit status, rostering, and messaging. Access is secure from remote locations, including headquarters, fire stations, emergency operation centers, remote dispatch centers, and in the field to mobile systems.

Inform Mobile
Inform Mobile extends the power of information to vehicle laptop computers through sophisticated, integrated mapping components and wireless communications. Officers can run NCIC and RMS queries, check email, or message other units, all while monitoring incident and unit updates from their vehicle. This equips officers with the information they need while in the field.

Inform Mobile users execute actions by the use of icons and forms. Inform Mobile is designed to allow field units to run silently and perform all functions necessary to their field operations role. Users can also query Inform CAD for information about locations, incidents, and units from Inform Mobile.
Inform Mobile architecture is based on .NET/XML technology to provide a highly maintainable configuration, as well as open and extensible integration to multiple disparate systems. The secure, wireless solution operates on a variety of wireless platforms, and provides secure Federal Information Processing Standard (FIPS) 140-2 compliant access to mission-critical information in the field. Fire and police field units can make on-scene decisions that enhance personal safety and improve operational efficiency through secure, real-time access to CAD, RMS, and other public and proprietary databases.

**Inform Me**
The ubiquity of smart phones and tablets has drastically changed the way we work and communicate. As more personnel begin to use smart phones and tablets in the field, TriTech recently introduced the Inform Me mobile app to extend the use of our Inform Mobile solution to everyone, everywhere. Designed for iOS and Android devices, Inform Me provides users the benefit of extreme mobility and constant access to Inform CAD to send and receive information. The Inform Me app allows users to view critical incident-related information, update their status, send messages, and perform other critical functions. With FIPS 140-2-compliant encryption, Inform Me users can securely send and receive records, check queries to reduce dispatcher workload, and reduce radio traffic. This easy-to-use application is an essential tool for users who perform their jobs outside of the emergency vehicle.

**TriTech.com IQ**
TriTech.com IQ provides agencies with the ability to aggregate data from multiple systems into one public safety-centric database for reporting and analysis. Users get near real-time access to solve crimes, monitor performances through agency-designed dashboards, or create management reports. Data can be obtained from other systems regardless of vendor or database type. As a vendor- and platform-agnostic system, TriTech.com IQ supports regional information sharing initiatives by allowing agencies to provide access to share and search information with neighboring jurisdictions.

**TriTech.com Analytics**
TriTech.com Analytics allows agencies to work with the data that has been aggregated from multiple systems into the public safety data warehouse. The visual dashboards transform complex data into easy to understand charts, graphs, and summary reports.

TriTech.com Analytics focuses on two types of dashboards: Analytical and Performance. Users can easily build and customize their own views to support their desired projects and goals. TriTech provides additional customization services to develop new dashboards to meet unique operational and end-user management requirements.
MAJOR SYSTEM MODULES

RFI Requirement:
- Major system modules

TriTech Response:
Inform CAD provides the following modules and functionality:

Inform CAD Base Modules

<table>
<thead>
<tr>
<th>Base Module</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>System Information Windows</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Main Window</strong></td>
<td>The Inform CAD Main Window consists of numerous functions that can be arranged in a variety of ways to ensure fast, effective dispatch. The Main Window displays the incident and status queues which are configurable to display incidents using agency defined color codes based upon the incident’s priority and status.</td>
</tr>
<tr>
<td><strong>Advisor</strong></td>
<td>Inform CAD Advisor functions as the CAD operator’s information assistant by examining relevant operational events and providing an organized visual display for those events. Advisor notifies the user about important system events and offers a default action the user can choose to execute. The System Administrator can configure the default actions based upon the agency’s operational requirements.</td>
</tr>
<tr>
<td><strong>Waiting Incidents Queue</strong></td>
<td>The Inform CAD Waiting Incidents Queue lists calls awaiting unit assignment.</td>
</tr>
<tr>
<td><strong>Active Incidents Queue</strong></td>
<td>The Inform CAD Active Incidents queue displays active calls with assigned units.</td>
</tr>
<tr>
<td><strong>Unit Status Queue</strong></td>
<td>The Inform CAD Unit Status queue tracks units and their statuses from response dispatch to completion as well as tracking and sorting available units.</td>
</tr>
<tr>
<td><strong>Call Taking and Dispatching</strong></td>
<td>Inform CAD streamlines call taking and dispatching by providing fast, versatile tools for emergency and non-emergency calls. These two functions provide increased flexibility in the way both types of calls are handled by putting critical call location, resource allocation and demand information at the user’s fingertips.</td>
</tr>
<tr>
<td><strong>Emergency Call Taking</strong></td>
<td>The Inform CAD Emergency Call Taking window is highly configurable and provides address verification that is optimized by city and county selection and rapid selection of a problem type.</td>
</tr>
<tr>
<td><strong>Scheduled Call Taking</strong></td>
<td>The Inform CAD Scheduled Call-Taking Module allows agencies to create calls for service in advance. These calls appear in the Pending Incident Queue at an administratively defined threshold relative to the time that the incident was scheduled for dispatch.</td>
</tr>
<tr>
<td><strong>Geo-Locator Screen</strong></td>
<td>The Geo-Locator screen works with the street information built into Inform CAD. Every time location/address information is entered into an address field and the user tabs out of that field, the system activates the Street Finder utility.</td>
</tr>
<tr>
<td>Base Module</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Notifications and Pre-Alerts</strong></td>
<td>Groups of individuals and units can be paged automatically based on the problem type or location of the incident, and other granular triggers such as alarm level, priority, location type and more.</td>
</tr>
<tr>
<td><strong>Location Information</strong></td>
<td>Caution notes, Hazmat information, location notes and automatic map grid coordinates are associated to the verified address.</td>
</tr>
<tr>
<td><strong>Closest Premise Type to Incident</strong></td>
<td>The system displays a configurable number of closest premises to the incident location based upon premise type and incident type. Results contain the premise name, address, and estimated drive time from the incident location. Results are displayed to the CAD and Mobile user.</td>
</tr>
<tr>
<td><strong>Confidential Comments</strong></td>
<td>Users can mark new and pre-existing comments as confidential.</td>
</tr>
<tr>
<td><strong>Comment Numbering</strong></td>
<td>The System Administrator can configure the system to successively number comments as the comments are entered into an incident.</td>
</tr>
</tbody>
</table>
| **Dispatch Rules Setup Utility**   | The Dispatch Rules Utility allows the agency to create, save, edit, and delete advanced dispatch rules. Dispatch rules allow the following recommendation algorithm modifications:  
  - Activate an In Quarters delay time;  
  - Designate alternating unit recommendations for like units in the same station;  
  - Create rules to set weighting factors for ETAs by primary resource type.  
  - Designate higher priority response rules.  
  - Designate unit swap notification parameter rules  
  Dispatch rules are agency-specific with interagency security controlling access to the utility. |
| **Facility Divert Module**         | The Facility Divert CAD module alerts the user when a receiving location (e.g., hospital, trauma center, jail, detoxification facility or juvenile detention center) is temporarily unable to accept new sick, injured or in custody personnel. This feature works with the Depart Scene screen and warns the user when an attempt to change a unit’s status to enroute to a destination with an active facility status warning. |
| **Quickest Path Unit Recommendation** | Provides for quickest path unit recommendations and routing instructions for Inform CAD and Mobile. This layer of data calculates travel time based on road networks using operations research modeling technology. Inform CAD uses this information to identify the closest applicable unit available based upon projected travel times. |
| **Unit Recommendations**           | The Inform CAD Response Recommendation system can make unit recommendations based on a fixed station order, closest unit by direct distance or by estimated travel time using AVL data and the optional Inform CAD Quickest Path Dispatch (QPD) recommendation module. |
### Base Module | Description
---|---
**Dispatch Levels** | Dispatch levels are used to initiate upgraded emergency response plans during periods of heightened (or reduced) threats, such as brush fire season or disaster situations *e.g.*, earthquakes, terrorist acts. This enables the System Administrator to create multiple dispatch levels within each response plan. Dispatch levels can be changed as needed by an authorized dispatcher.

**Capabilities** | Each capability listed in the Resource or Capability list is evaluated individually.

**People as Capabilities** | The system administrator can assign special capabilities or skills to individual crew members or officers. When the crew members or officers are assigned to a unit, that unit will then assume those capabilities.

**Capability Type/Substitution Builder** | The Capability Type/Substitution Builder is a resource management tool that allows alternative capabilities to be created.

**Resource Group Manager** | The Resource Group Manager is used to combine several resources into a single “super” resource. For example, if there is a strike team composed of five engines and one strike team leader, a client system administrator could set up one group containing all of these resources and call it Strike Team 1.

**Greater Alarm** | At any time, the user can activate special alert conditions which result in differing levels of preparedness in anticipation of an unusual or critical situation by increasing the alarm level of an active call.

**Response Reconfigure** | The Response Reconfigure feature allows users to re-evaluate the resources originally assigned to a call whenever the response changes after one or more vehicles have been assigned. CAD will then recommend any additional resources that are needed or any resources that should be cancelled.

**Unit Tracking** | Inform CAD enables the user to track and deploy Public Safety resources with maximum efficiency. Each unit is monitored at every status.

**Primary and Back-Up Unit Tracking** | Inform CAD provides an option to identify Primary Units on each incident. The first unit dispatched/assigned to the call will be designated as the Primary Unit by default.

**Conditional Availability** | Statuses are labeled in accordance with the organization’s standard terminology. Unit status can be changed without leaving the dispatch screen, allowing the user to remain focused on the system at all times.

**Conditional Availability and Out of Service Manager** | This utility allows for the creation of user-defined Out of Service and Conditional Availability Reasons.
### Base Module

<table>
<thead>
<tr>
<th>Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Estimated Time of Arrival (ETA) Alerts</strong></td>
<td>The System Administrator can configure agency-specific ETA alert thresholds to alert dispatchers when a unit is late arriving at the scene on an incident within the time frame allocated by their routed ETA. The ETA alerts are displayed in Advisor. Sound Manager is used to configure the sounds associated with ETA alerts. Additionally, Column Setup provides the ability to configure a column to display the ETA countdown timer in the Unit Status and Assigned Unit queues.</td>
</tr>
<tr>
<td><strong>Geo-Fencing and Alerts</strong></td>
<td>Geo-fencing enables the user to create virtual boundaries to be displayed anywhere on the CAD Geo map. The Geographic Area Builder provides the ability for users to create ad hoc geographic areas and mark them as geo-fenced. Users can modify, delete, enable or disable geo-fences as required. When a location aware device enters or exits a geo-fenced area, or when an incident is created in a geo-fenced area, Inform CAD generates an alert. The alerts are recorded in the Activity Log and displayed in Advisor, if configured.</td>
</tr>
<tr>
<td><strong>Exception Tracking</strong></td>
<td>Inform CAD Response Exception Reporting tracks a unit’s response times and displays exceptions. Users can add an Exception reason at the time a unit makes a status change, at the close of the call or when the user logs off. The Exception Reporting form allows users to search for exceptions by date, optionally show all exceptions including those that have already been answered, and edit a previously recorded reason.</td>
</tr>
<tr>
<td><strong>Recall Window</strong></td>
<td>The Recall Window allows users to display an incident summary in a separate, resizable window without launching the Incident Viewer or Incident Editor. Users can display multiple Recall Windows providing the quickest means to instant access of specific system stored information.</td>
</tr>
<tr>
<td><strong>Command Line Control</strong></td>
<td>Inform CAD provides a powerful command line tool. The command line is an interactive GUI dialog box that provides for syntax driven command line entry. The command line provides a smart–sense syntax guide to facilitate learning of new commands and guide the user through required parameters of entry.</td>
</tr>
<tr>
<td><strong>Records Check</strong></td>
<td>The CAD Records Check functionality provides the user with a quick method for initiating record checks of people, property and vehicles from databases within Inform CAD and RMS, with the optional Proxy Justice Message Switch, from external sources.</td>
</tr>
<tr>
<td><strong>CAD Be-On-the-Lookout (BOLO)</strong></td>
<td>The Inform CAD BOLO module provides the user with a form that can be used to quickly yet systematically enter enforcement information regarding people, vehicles and locations.</td>
</tr>
<tr>
<td><strong>Communications</strong></td>
<td>TriTech provides a robust messaging system which provides a powerful set of tools for communication within the Inform CAD, Inform Mobile, and Inform CAD Browser environments.</td>
</tr>
<tr>
<td>Base Module</td>
<td>Description</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| **Inform Messaging** | Users have both a Login mailbox and a current workstation mailbox which messages are routed to. Sector controllers and those with appropriate rights for records check queries have additional mailboxes.  
- Standard messaging functionality includes:  
- File attachments (size and file type limitations set administratively)  
- Scheduled Delivery  
- Hyperlink insertion  
- Spell check  
- Priority settings  
- Sensitivity settings  
- Preview functionality  
- Saving messages to folders  
- Attaching messages to incidents  
- Forward and reply functions  
- Intellisense functionality in the To and CC text boxes  
- Message auditing (administrative)  
Inform CAD provides a powerful administrative tool suite for managing mail configurations and for message auditing. |
| **Quick Mailroom** | The Quick Mailroom is an extension of the Inform CAD Mailroom feature and allows the user faster access to important messages. |
| **Paging and Dialing Setup Utility** | Administrators can use the Paging & Dialing Setup utility to create automatic jurisdictionally based client defined paging messages. Service provider configuration properties are also managed in this utility. |
| **Response Group Paging** | When an Automatic Response Group Paging Setup is configured, a page is sent to the assigned paging group(s) when an emergency call meets matching criteria. These criteria include:  
- Jurisdiction  
- Division  
- Battalion  
- Response Area  
- Incident Type  
- Nature/Problem  
- Alarm Level  
- Premise Location Type  
- Premise  
- Geographic Area  
- Disposition |
<p>| <strong>Message Audit Utility</strong> | All messages will be logged and stored in the system audit files. Users allowed to perform audits of all messages within each agency are defined in the system. |
| <strong>Messaging Setup Utility</strong> | This utility provides system administrators the ability to control Inform CAD Messaging mailboxes. |</p>
<table>
<thead>
<tr>
<th>Base Module</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>System Tools</strong></td>
<td>Inform CAD provides a complete toolbox of utilities that enables the system administrator to tailor the system to meet specific requirements and to streamline operations. The Inform CAD modular- and function-level security system allows the flexibility necessary for the system administrator to also provide these tools to appropriate personnel.</td>
</tr>
<tr>
<td><strong>Modify System Information Utility</strong></td>
<td>The Modify System Information Utility is one of the main tools for setting up Inform CAD and setting the operational rules for each Inform CAD agency.</td>
</tr>
<tr>
<td><strong>Pop-up List Manager</strong></td>
<td>Pop-up List Manager allows for the entry of list information that will appear in all the drop-down menus such as cancellation reasons, problem types, personnel certification types, incident types, late response reasons, radio channels, and unit types.</td>
</tr>
<tr>
<td><strong>Column Setup</strong></td>
<td>Each agency can use the Column Setup utility to add and delete columns and change the column titles, data elements, widths, and order of appearance of the Inform CAD windows.</td>
</tr>
<tr>
<td><strong>Cardfile Utility</strong></td>
<td>This utility stores frequently used phone and pager numbers allowing users to respond more quickly to the situation presented. The Cardfile Utility can be searched via the command line for quick access to recorded information by keyword.</td>
</tr>
<tr>
<td><strong>Location Type Utility</strong></td>
<td>The Location Type Utility allows for the categorization of premise location types.</td>
</tr>
<tr>
<td><strong>Caution Note and Permit Manager</strong></td>
<td>The Inform CAD Caution Note and Permits Manager allows the management of warnings and hazards and permits on phone numbers, addresses, premises, streets, block ranges and geographic areas. When one of these items is used in call creation the Caution Note or Premise is triggered. These can also vary by agency in a multi-agency environment. The Caution Note and Permits Manager is capable of linking files for retrieval to Caution Note and Permit records, providing additional information access to Inform CAD and Inform Mobile users.</td>
</tr>
<tr>
<td><strong>PowerLine/Function Key Setup Utility</strong></td>
<td>This utility allows administrators to configure the codes and linked CAD actions used in the Inform CAD command line (PowerLine).</td>
</tr>
<tr>
<td><strong>Problem (Incident Subtype) Utility</strong></td>
<td>Use the Problem (Incident Subtype) Utility to build and maintain a list of problem/nature types that appear in the Emergency and Scheduled Call Taking windows.</td>
</tr>
<tr>
<td><strong>Priority Builder</strong></td>
<td>The Priority Builder is used to build a list of priorities for various Nature/Problems. The type of response required for each priority can be described and the severity level associated with the incident can be selected.</td>
</tr>
<tr>
<td><strong>Response Plan Manager</strong></td>
<td>The Response Plan Manager supports planned management of calls, resources, capabilities, and resource groups. These utilities allow for the creation of response plans that pre-designate the number and type of resources or capabilities to assign to an incident type.</td>
</tr>
<tr>
<td>Base Module</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Emergency Call Setup</strong></td>
<td>The Emergency Call Setup tool allows the client system administrator to determine which fields appear in the Emergency Call Taking window and define the order in which users tab from field to field.</td>
</tr>
<tr>
<td><strong>Scheduled Call Screen Configuration</strong></td>
<td>Both the Patient Information and Scheduled Call Taking screens can be configured, creating customized labels and assigning mandatory fields.</td>
</tr>
<tr>
<td><strong>Pre Assignment Utility</strong></td>
<td>This Utility allows authorized users to pre-assign units to scheduled calls for service up to seven days in advance.</td>
</tr>
<tr>
<td><strong>Pre-Scheduled Call Threshold Utility</strong></td>
<td>Use the Pre-Scheduled Call Threshold Utility to set daily and hourly limits for the number of scheduled calls that can be assigned to a division. Client System Administrators can set an unlimited number of calls or an hourly limit.</td>
</tr>
<tr>
<td><strong>Shorthand Comment Builder</strong></td>
<td>Use the Shorthand Comment Builder to create a list of abbreviations for commonly used terms and phrases.</td>
</tr>
<tr>
<td><strong>Custom Data Field and Custom Time Stamp Builder</strong></td>
<td>The Custom Data Field and Custom Time Stamp Builder tools allow the system administrator to create a limited number of user-definable fields for the capture and storage of data from the CAD Call Taking Screen.</td>
</tr>
<tr>
<td><strong>Timers and Warnings Setup Utility</strong></td>
<td>The Timers and Warnings Setup Utility configures timers, warnings, facility warning colors and timestamps throughout the CAD system. Timers can be set for vehicles in four categories: Flight Timers, Custom Timers, User Timers, and Response Time Timers.</td>
</tr>
<tr>
<td><strong>User Timer</strong></td>
<td>Users can activate a timer for a unit for the default time period or for a user-defined time period.</td>
</tr>
<tr>
<td><strong>Response Time Timer</strong></td>
<td>The Response Time Timer allows users to specify, for each priority, the amount of time before the required response time that the timer will expire and trigger a warning.</td>
</tr>
<tr>
<td><strong>Sound Manager</strong></td>
<td>Use the Sound Manager to create and assign sounds for the warnings set up in the system. The Sound Manager works with the sound card installed in the workstation hardware. Client System Administrators can also use the Sound Manager to record and save customized sounds through a microphone or audio device.</td>
</tr>
<tr>
<td><strong>Personnel Manager</strong></td>
<td>The Personnel Manager is an employee database that allows for the entry and modification of personnel information.</td>
</tr>
<tr>
<td><strong>Vehicle Manager</strong></td>
<td>This utility allows for the creation of units, documentation of unit information and capabilities, and maintenance of unit information.</td>
</tr>
<tr>
<td><strong>Rostering</strong></td>
<td>Inform CAD supports scheduled and “on-the-fly” rostering of units. Rostering allows for the creation, maintenance, and management of crew shifts.</td>
</tr>
<tr>
<td>Base Module</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Auto-Rostering</strong></td>
<td>Auto-rostering provides the following capabilities:</td>
</tr>
<tr>
<td></td>
<td>• Create and assign pre-planned shifts to units and personnel</td>
</tr>
<tr>
<td></td>
<td>• Track scheduled roster events</td>
</tr>
<tr>
<td></td>
<td>• Receive user notifications for service failure, shutdown, or errors that occur while processing shifts eligible for automatic rostering.</td>
</tr>
<tr>
<td><strong>Roster Setup Utility</strong></td>
<td>The Roster Setup Utility is where shift options and defaults are set for each Inform CAD system agency.</td>
</tr>
<tr>
<td><strong>Unit Cross Staff Utility</strong></td>
<td>This Utility manages cross staffing rules on a unit by unit basis. Some stations have the same personnel assigned to multiple units.</td>
</tr>
<tr>
<td><strong>System Status Management (SSM) Manager</strong></td>
<td>The Inform CAD SSM Manager allows for the creation of move up plans (System Status Management Plans) to manage unit locations by time of day, day of week and unit type.</td>
</tr>
<tr>
<td><strong>Rotation Provider Utility</strong></td>
<td>Inform CAD provides the ability to track services provided by outside providers and to rotate calls among them. There are two methods of creating a rotation service request, by using the PowerLine or by using the Inform CAD user interface.</td>
</tr>
<tr>
<td></td>
<td>• The Rotation Provider module of Inform CAD includes the following features:</td>
</tr>
<tr>
<td></td>
<td>• Provider cancelation reasons</td>
</tr>
<tr>
<td></td>
<td>• Enhanced rotation provider information</td>
</tr>
<tr>
<td></td>
<td>• Rotation response numbers</td>
</tr>
<tr>
<td></td>
<td>• Activation or suspension of a rotation provider</td>
</tr>
<tr>
<td></td>
<td>• Default rotation order with or without a service area. With the use of Service Areas the Rotation Provider feature can present users with a recommendation of a Rotation Provider for an incident, based on a preconfigured rotation and geographic location.</td>
</tr>
<tr>
<td></td>
<td>• Pager messaging for requests or cancelation</td>
</tr>
<tr>
<td></td>
<td>• Rotation Providers can specify which Service Area (zone) they provide service to. For each area, Rotation Providers should specify which types of categories they can support in a given area. For example, for Service Area A, a provider can support light tow and motorcycle, but in Service Area B, a provider can support light tow, flat bed, and impound. The options are agency configurable.</td>
</tr>
<tr>
<td><strong>Rotation Setup Utility</strong></td>
<td>The Rotation Setup Utility provides for management of rotation order by category of rotation.</td>
</tr>
<tr>
<td><strong>CAD Media Attachments Module</strong></td>
<td>The Inform CAD Media Attachments module provides the ability to link files to incidents, caution notes and premise records maintaining all links in a documents database. Users can add received documents to incident, premise and caution note records that are readily available upon the recognition of the premise location, caution note or historical incident record.</td>
</tr>
<tr>
<td>Base Module</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Custom Timer</strong></td>
<td>Custom Timers are activated automatically based on Status, primary Resource Type, and Problem/Nature. Any user can reset timers based on the same time measurement.</td>
</tr>
<tr>
<td><strong>Security Tools</strong></td>
<td>The Inform CAD multi-level integrated security system prevents unauthorized personnel from tampering with data or accessing administrative functions. Administrators may control access to the overall program (or any portion). Inform CAD provides full control of user setup, including group definitions.</td>
</tr>
<tr>
<td><strong>Account Lockout</strong></td>
<td>Account Lockout enables authorized personnel with the ability to configure the system to automatically lockout users who enter an incorrect password after a predefined number of times.</td>
</tr>
<tr>
<td><strong>Windows Integrated Security Module</strong></td>
<td>An optional Windows Integrated Security Module allows for a single logon for Inform CAD and the Windows OS.</td>
</tr>
<tr>
<td><strong>Lightweight Directory Access Protocol (LDAP)</strong></td>
<td>Inform CAD supports LDAP. When LDAP security is enabled, unsuccessful login attempts are applied to the Active Directory account.</td>
</tr>
<tr>
<td><strong>Module Security Manager</strong></td>
<td>The Module Security Manager allows each system module to regulate viewing, adding, deleting, editing, and exiting CAD as allowed by user-defined security groups, providing both group and function-level security.</td>
</tr>
<tr>
<td><strong>Functional Security Manager</strong></td>
<td>The Functional Security Manager extends system security by enforcing group security policies and profiles down to the functional level. These security restrictions are applied to each dispatching command.</td>
</tr>
<tr>
<td><strong>Password/Security Assignment Manager</strong></td>
<td>The Password/Security Assignment Manager sets up password formats, expiration dates, account lockout and security levels for the system. It can also change security levels and reset passwords.</td>
</tr>
<tr>
<td><strong>Permission Security Manager</strong></td>
<td>Inform CAD provides both modular- and function-Level security. This utility provides administrators with the ability to easily open or restrict permissions by user functionality group down to view, add, delete and modify rights as well as mandate to the command level what actions a functionality group member can and cannot commit in Inform CAD.</td>
</tr>
<tr>
<td><strong>Multi-Agency Configurations</strong></td>
<td>As a result of the Inform CAD multi-agency functionality, each agency can have a unique set of code files, response areas, response plans, units, etc., which results in an integrated CAD system on the same physical server box while sharing a common messaging system and a single database.</td>
</tr>
<tr>
<td><strong>Agency Builder</strong></td>
<td>Agency Builder allows each agency to build their individual agency hierarchy by defining their agency type, jurisdictions, divisions and battalions.</td>
</tr>
<tr>
<td><strong>Number Setup Utility</strong></td>
<td>The Number Setup Utility is highly configurable and allows each agency to configure unique incident and case numbers by agency and at the jurisdictional level.</td>
</tr>
<tr>
<td>Base Module</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Configurable User Screens by Agency</strong></td>
<td>CAD allows the system administrator to select the information to be displayed in queue columns from a variety of standard CAD data fields.</td>
</tr>
<tr>
<td><strong>Multi-Agency Problem Utility</strong></td>
<td>The Multi-Agency feature allows users to take a call in one agency and then add other agencies to the response. Using the Multi-Agency Problem Utility Administrators can set up cross-references of the problems in one agency to the problems in other agencies, jurisdictions, or response areas.</td>
</tr>
<tr>
<td><strong>Controlling Dispatcher Utility</strong></td>
<td>In general terms, a Controlling Dispatcher has responsibility for one or more defined geographical areas or “sectors” within the service area as a whole. Incidents occurring within these sectors and the units assigned to those incidents are under the control of the Controlling Dispatcher. Certain defined abilities are granted to a Controlling Dispatcher, which cover all incidents and units under that dispatcher’s control.</td>
</tr>
<tr>
<td><strong>Inter-Agency Security Module</strong></td>
<td>The Inter-Agency Security module is used within a multi-agency system and allows the system administrator to limit which users and user groups have permission to view each agency’s CAD information.</td>
</tr>
<tr>
<td><strong>Inter-Agency Comment Sharing</strong></td>
<td>The Inter-Agency Comment Sharing module determines which agency comments can be viewed by other agencies on multi-agency calls.</td>
</tr>
<tr>
<td><strong>GIS-Based Tools</strong></td>
<td>Inform CAD GIS-based utilities allow the system administrator to modify certain settings that affect geographic-based data or functions.</td>
</tr>
<tr>
<td><strong>Geo-Extensibility</strong></td>
<td>Through the use of extensions, ArcGIS Engine and ArcObjects API, developers can add toolbars and other supported enhancements to Inform CAD Geo. Additional features can be added using TriTech’s optional Inform CAD API.</td>
</tr>
<tr>
<td><strong>Extended Street Attributes</strong></td>
<td>The configuration utility enables authorized users to configure extended street attributes.</td>
</tr>
<tr>
<td><strong>Intersection Maintenance Utility</strong></td>
<td>The Intersection Maintenance Utility allows users to view, modify, delete and duplicate existing intersections in the streets database by creating one or more aliases for the intersection. This allows call-takers to select the alias that meets the needs of each call.</td>
</tr>
<tr>
<td><strong>Geographic Area Builder</strong></td>
<td>The Geographic Area Builder enables users to set up and define a mapped area for a geographic region. This lets dispatchers identify the agencies responsible for specific areas, and provides for specialty polygons for Caution Note and Page triggers. Additionally, the Geographic Area Builder provides the ability for users to create ad hoc geographic areas and mark them as geofenced.</td>
</tr>
<tr>
<td>Base Module</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Hydrant Manager</td>
<td>The Hydrant Manager is used to enter and store details about fire hydrants. Users can set up and define hydrant locations that appear in a list and on the Map window. Once hydrants have been added in the hydrant Manager, users can view the hydrants on the Inform CAD Geo map by selecting Hydrant Layer for display. The CAD Geo Map Hydrant Layer will automatically update the symbols for hydrants when location and status (In-Service/Out-of-Service) changes are made to a hydrant record in this utility.</td>
</tr>
<tr>
<td>Intersection Maintenance Utility</td>
<td>The Intersection Maintenance Utility allows users to view, modify, delete and duplicate existing intersections in the streets database by creating one or more aliases for the intersection. This allows call takers to select the alias that meets the needs of each call.</td>
</tr>
<tr>
<td>Premise Utility</td>
<td>The Premise Utility allows for the creation and maintenance of pre-built common locations. CAD Premise records and Caution Notes are capable of providing access to file attachments as well.</td>
</tr>
<tr>
<td>Response Area Builder</td>
<td>The Response Area Builder allows for the creation of geographic response subdivisions that can be in the form of districts, beats or first due areas. This utility includes graphical mapping tools to simplify the process of modifying response area boundaries. Modification to response area boundaries require no system downtime to enact.</td>
</tr>
<tr>
<td>Station/Post Manager</td>
<td>This utility allows for the creation of stations and posts and the documentation of basic station/post information including equipment inventory, staffing information and radio and pager information.</td>
</tr>
<tr>
<td>Street Alias Utility</td>
<td>The Street Alias Utility allows for the creation of alias names for streets or street segments, providing users the ability to attain address validation on numerous aliases in the process of call taking.</td>
</tr>
<tr>
<td>Road Network Management Utility</td>
<td>The Road Network Management Utility allows users to create impedances on the street network and on specific street segments by setting the speed limit to a value greater than or equal to zero. Impedance changes can take effect instantly, affecting the live routing recommendations in CAD or they can be scheduled. Users can also set a recurring pattern. Other features include the ability to specify a reminder of expiration via Messaging.</td>
</tr>
<tr>
<td>GIS Playback</td>
<td>The GIS Playback utility provides the ability to view a vehicle’s travel history on a map window during a specific period. GIS Playback will replay any incident record or time period stored in the system. Users can also use GIS Playback to display incident locations, common locations and station/posts on the map window. It can be used with, or without, an Automatic Vehicle Location (AVL) interface.</td>
</tr>
<tr>
<td>Snapshot Module</td>
<td>The Snapshot module takes a snapshot of the system status each time a unit is dispatched. Aids in diagnosing unit recommendation problems or to assist in response time analysis.</td>
</tr>
<tr>
<td>Base Module</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Geofile Cross Reference (Point in Polygon) Module</td>
<td>Allows the system administrator to provide a polygon shape file covering all or part of the streets feature data set. The Lookup will determine the applicable polygon for a verified incident address, returning up to two field values per specific agency. The system will then enter the associated data into a designated data field. Each Polygon is agency specific.</td>
</tr>
<tr>
<td>CAD Geo Map</td>
<td>The Inform CAD Geo map display allows the user to view system activity geographically. Units are represented by color-coded icons corresponding to each unit's status.</td>
</tr>
<tr>
<td>Reverse Geo-validation Tool</td>
<td>When the Reverse Geo Tool is activated and the user has an Emergency call taking screen open, the user can click a point on the map to reverse geocode the latitude and longitude to a street address or directly to the latitude/longitude if too far from a street. This information populates the address field in the Emergency call-taking screen.</td>
</tr>
<tr>
<td>CAD Information Tool</td>
<td>Left-click to display information about any of the CAD layers except Units at Station or Units at Incident. Right-click to access the status menu for an incident, unit, or user marker functions.</td>
</tr>
<tr>
<td>Street Information Tool</td>
<td>The Street Information Tool displays information about a street such as block range, street name, or response area.</td>
</tr>
<tr>
<td>Route Tool</td>
<td>The Route Tool provides driving directions between two points and graphically displays the route on the map.</td>
</tr>
<tr>
<td>Radius Zoom Tool</td>
<td>This tool will zoom the map according to the distance radius entry in the Locator, the Set Focus Filter, or the default radius zoom entered in the Explorer Setup Utility.</td>
</tr>
<tr>
<td>Distance Calculator</td>
<td>The Distance Calculator measures distances on the map in statute miles, nautical miles, or kilometers. Users can calculate the total distance of a trip or various legs. The calculator figures direction coordinates, distance, and displays the magnetic heading.</td>
</tr>
<tr>
<td>Area Calculator Tool</td>
<td>Inform CAD Geo enables users to draw polygons onto the map display and calculate the area.</td>
</tr>
<tr>
<td>Locator Tool</td>
<td>The Locator Tool opens the Locator window in which users can select a specific Unit, Incident, Premise, Address, or Station/Post.</td>
</tr>
<tr>
<td>User Markers</td>
<td>User Markers are optional graphics representing something other than the standard graphic markers. The user can then place a marker on the map as a visual reminder of a situation or information related to a street or area. User marker icons can be edited by the system administrator.</td>
</tr>
<tr>
<td>Polygon-Search and Save</td>
<td>Users can generate a list of data points located within a polygon. Users have the option to select which polygon layer to search for in multiple layers exist or users can select one or more map layers within which to perform the polygon search. Results can be exported into an XML file for further processing.</td>
</tr>
<tr>
<td>Multiple Mapping Windows</td>
<td>The Inform CAD map can be configured to display one or many maps, and can be configured to meet the individual needs of users.</td>
</tr>
</tbody>
</table>
### Base Module

<table>
<thead>
<tr>
<th>Base Module</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Creating a Call from the Map</strong></td>
<td>The Inform CAD reverse geo-coding feature allows users to pinpoint a call location on the map. When a location is selected, Inform CAD updates the map coordinates and/or call address in the Emergency Call Taking screen.</td>
</tr>
<tr>
<td><strong>Dispatching with CAD Maps</strong></td>
<td>Users can dispatch directly from the integrated maps. This functionality includes incident and unit management actions.</td>
</tr>
<tr>
<td><strong>Dynamic Shapefile Display</strong></td>
<td>Inform CAD can receive and process any ESRI ArcGIS compliant externally generated shape files or layers. Using this functionality Inform CAD will automatically distribute and display the shape files or layers on the Inform CAD workstation Geo maps.</td>
</tr>
</tbody>
</table>

### System Analysis and Reporting Modules

<table>
<thead>
<tr>
<th>System Analysis and Reporting Modules</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inform CAD Standard Reports</strong></td>
<td>Inform CAD includes more than thirty standard reports that allow management to better visualize and utilize statistical information and recommend changes in resource deployment. Inform CAD reports are user-configurable and can be printed in either tabular or graphical form.</td>
</tr>
<tr>
<td><strong>Incident Editor</strong></td>
<td>The Incident Editor allows for the viewing and editing of Inform CAD incident information. The Incident editor provides the ability to conduct simple or complex searches of Inform CAD historical data, and can be directed to production servers or reporting servers.</td>
</tr>
<tr>
<td><strong>Viewing System Logs</strong></td>
<td>All transaction activities are logged to a system transaction file, which includes date, time, unit, activity type, location, comments, dispatcher, and computer activity.</td>
</tr>
<tr>
<td><strong>Ad Hoc and Complex Reporting Access</strong></td>
<td>Ad hoc reporting is readily available through the Inform CAD relational database management system (RDBMS) which is built upon Microsoft SQL Server and makes full use of SQL Server’s compliant open database connectivity (ODBC).</td>
</tr>
</tbody>
</table>

### Inform CAD Optional Modules

<table>
<thead>
<tr>
<th>Optional Module</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Call Taking and Dispatching Utilities</strong></td>
<td>Inform CAD streamlines call taking and dispatching by providing fast, versatile tools for emergency and non-emergency calls. These two functions provide increased flexibility in the way both types of calls are handled by putting critical call location, resource allocation and demand information at the user's fingertips.</td>
</tr>
<tr>
<td><strong>Triage Integration in Call Processing</strong></td>
<td>For operations that act as medical dispatch or call triage centers, the Emergency Call Taking activities can be supported by the Inform CAD Protocol module. In addition, the Emergency Call Taking module can be integrated with the following third-party emergency medical dispatch and triage systems: Priority Dispatch’s ProQA™, APCO MEDS™, or PowerPhone™.</td>
</tr>
<tr>
<td>Optional Module</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>ProQA Response Level Assignment Manager</td>
<td>The ProQA Response Level Assignment Manager (RLA) to link ProQA determinants to Inform CAD on a per-agency basis. ProQA codes and linked directly to a nature/problem and priority in Inform CAD.</td>
</tr>
<tr>
<td>Deccan Integration and Commit Module License - MUM</td>
<td>Provides integration between CAD and the Live MUM product from Deccan. The interface allows user to commit recommended move-ups in CAD using the Commit feature in MUM. Live MUM must be purchased separately.</td>
</tr>
<tr>
<td>Standard Pictometry Integration Module License</td>
<td>Inform CAD offers an optional interface for integration to Pictometry. The Pictometry integration provides the ability for users to automatically send location information to the Pictometry application for call taking and dispatching.</td>
</tr>
<tr>
<td>Unit Swap Recommendations</td>
<td>Inform CAD continually monitors an Incident response and the progress of assigned units.</td>
</tr>
<tr>
<td>Auto Dispatch Module</td>
<td>The Auto Dispatch Module is a server-side component automatically dispatches selected call types without user intervention. Configurable by agency and incident type. Requires Quickest Path Module License.</td>
</tr>
<tr>
<td>Records Check</td>
<td>The CAD Records Check functionality provides the user with a quick method for initiating record checks of people, property and vehicles from databases within Inform CAD and Inform RMS, with the optional Proxy Justice Message Switch, from external sources.</td>
</tr>
<tr>
<td>CAD Command Line Records Check</td>
<td>Inform CAD contains a variety of command line functions for law enforcement operations. Using an optional Justice Message Switch, the inquiry can include external justice databases such as local Police RMS, County, State, or Federal Justice databases.</td>
</tr>
<tr>
<td>CAD Records Check Window</td>
<td>The CAD Records Check window provides users performing a query with an alternative method to the Powerline. When inquiry results are returned, the system will route the results to the user that made the request.</td>
</tr>
<tr>
<td>CAD System Tools</td>
<td>Inform CAD provides a complete toolbox of utilities that enables the system administrator to tailor the system to meet specific requirements and to streamline operations. The Inform CAD modular- and function-level security system allows the flexibility necessary for the system administrator to also provide these tools to appropriate personnel.</td>
</tr>
<tr>
<td>Protocol Utility</td>
<td>The Protocol utility is made up of three components: the Protocol Utility, the Protocol Form, and the Protocol Summary Form. Use the Protocol Utility to build a set of questions and answers, or Q&amp;A trees, call takers can use to walk a caller through an emergency or crisis.</td>
</tr>
</tbody>
</table>
Optional Module | Description
--- | ---
**SOP Setup Utility** | The Standard Operating Procedures (SOP) Utility provides the ability to manually invoke an index of SOP documents and provide visual indications and links to call takers and dispatchers based on Agency, Jurisdiction and Division identification as well as Problem Nature triggers. The SOP Utility can be configured to either automatically display the sop, or merely alert the dispatcher / call taker that a SOP exists.

**Flight Timer** | Flight Timers are automatically triggered based on the Resource Type and Vehicle Status.

**GIS-Based Tools** | Inform CAD GIS-based utilities allow the system administrator to modify certain settings that affect geographic-based data or functions.

**GISLink** | GISLink, TriTech’s GIS migration tool, allows clients to reference third-party GIS data sets and migrate the GIS data to and from Inform CAD. GIS data is maintained outside of Inform CAD using third-party GIS software such as ArcGIS. GISLink is then used to update Inform CAD with GIS-centric changes such as street attributes, response areas, and geographic areas. GISLink creates a “differences” shape that can be used to view changes made to Inform CAD. In addition, GISLink produces a log file detailing actions and potential errors encountered during the GISLink import process.

**Development Tools** | The Inform CAD Application Programming Interface (API) lets programmers create applications that seamlessly integrate with CAD.

Inform CAD Browser provides:
- Real-time access to the Inform CAD queues: pending incidents, active incidents, unit queues and personnel information
- Search by incidents (advanced), unit incidents, unit activity, locate Personnel/Resources/Units
- Roster Summary Report provides the ability to view each unit, its status and location, shift times, assigned personnel, and any temporary radios.
- Call-taking - Remote Call Taking capabilities
- Rostering - Change the unit crew, place a unit on duty, or take a unit off duty. Personnel and vehicle rostering on and off duty.
- BOLO - Create and view "Be On The Lookout" entries in CAD
- Facilitates communication to dispatchers or field personnel using pagers
- Messaging capabilities from field to dispatch and to mobile units.
- User links – Links to other internet and intranet sites which can be presented to users dependent on agency.
- Discussion boards - bulletin boards with administrative review capabilities.
- Reporting package that includes summary reports:

Inform Mobile provides:
- Seamless CAD integration for voiceless dispatch
- Integrated mapping with in-vehicle navigation and GPS
Extensive messaging with photo transfer capability
Maintains network connections for secure wireless updates
Integrated query forms for CAD and local RMS records check
Real-time incident updates
Initial dispatch and automatic field-level incident updates
Active and pending incident queues
Unit status queue
Integrated Messaging (Inform CAD-to- Inform Mobile, Inform Mobile-to- Inform CAD, Inform Mobile-to- Inform Mobile, Inform Mobile-to- Inform CAD Browser)
Field-Initiated Incident Creation (On view and incidents)
  o Automatic records check (traffic stop)
  o Allows self-assignment and dispatch
  o Incident and Unit Queries
  o Look up active or prior incidents
  o Research unit activity
  o Access to premise history, hazmat, and cautions

Inform Me provides:
- Integrated CAD functionality for global system view
- Real-time access to information for quick decision making
- Out-of-the-box detailed maps improve situational awareness
- Flexible configuration options support agency personalization
- View prior incident information
- Voice-activated comment entry
- Get alerted of a call even when device is in your pocket
- Real-time incident updates
- Integrated query forms for CAD and local RMS records check
- Seamless CAD integration for voiceless dispatch and status changes
- Dispatch Summary Panel
- Call Times

TriTech.com IQ provides:
- Powerful search capabilities include fuzzy searching, stemming searches, diminutive names, name expansion from all entities including narratives.
- Saved searches for future hits
- Notifications when new data hits the database.
- An embedded report authoring tool to meet individual agency ad hoc reporting requirements.
- Operational trending and historical analysis to improve performance and productivity.
- A data set selection tool that makes summary reporting intuitive for public safety
- Creation of predefined reports that can be tailored for custom requirements

TriTech.com Analytics provides:
- Two types of dashboards: Analytical and Performance.
- Easily built and customizable dashboard views for individual users
CAD/MOBILE SYSTEM INTEGRATION

RFI Requirement:
- CAD/Mobile system integration

TriTech Response:
Inform Mobile was designed by TriTech as a tightly integrated bidirectional extension of Inform CAD in the field. Inform Mobile users are provided real-time access to available CAD data for incident responses. From the moment the mobile unit is dispatched to the incident and beyond incident closure, the mobile unit receives all data relevant to the call and call location, without manual push actions from the dispatch environment or manual refresh actions from the mobile environment.

As the dispatcher makes the incident assignment, or as the unit marks itself responding to the incident by self-assignment, the unit has instant access to all information recorded to the incident form. This information includes all caller and location data (premise information, hazmat warnings, caution notes, preplans, file attachments or special location based narratives) and the recorded details and narratives of the call as entered and updated by dispatch, including triage summaries and determinant codes.

If the user has the Inform Mobile Incident screen in focus, the system emits an audible alert and highlights new information in blue. Inform Mobile displays new comments at the top of the incident view comment field, the user will not need to scroll down. If the user has a comment in focus, the screen will not jump to the latest comment, but will allow the user to maintain focus on the comment until they release focus and scroll to the top of the comment field.

If the user is not focused on the Inform Mobile Incident screen, but is on a different Inform Mobile screen instead, the system alerts the user to new information via an audible alert and a flashing blue light on the Calls button of the client button bar. Clicking the flashing Calls button will take the user to the updated Incident screen which has new information highlighted in blue.

If the user is in a program other than Inform Mobile at the time of incident update, Inform Mobile will come to the foreground of the Windows screen.

MAPPING FUNCTIONALITY

RFI Requirement:
- Mapping functionality

TriTech Response:
TriTech’s Inform CAD was the first computer aided dispatch solution to offer an embedded map. Since its inception, Inform CAD has been GIS-centric, using native Esri data to ensure fast, accurate, visual unit routing and incident response time. The dispatch map display shows the current position of each AVL-equipped unit, hazards, premise locations and other layers. Unit position is updated and allows dispatch staff to quickly generate turn-by-turn routing instructions. The Inform CAD GIS system is a powerful search engine using extensive address search routines that have been field tested in communities with some of the most complicated addressing schemes in the world.
Inform CAD Geo is a mapping application that displays incidents, premises, hydrants and many other features relevant to Inform CAD and allows the user to access a number of Inform CAD features directly from the map. It is powered by TriTech's leading CAD engine and the industry-standard GIS (geographic information system) technology platform, ArcGIS, created by Esri. The information in the Inform CAD Geo Map window displays both standard Inform CAD features, as well as, additional geographic data that optionally can be added to the maps.

Inform Mobile features routable mapping with driving directions to assigned incidents including turn-by-turn voice notification to ensure the quickest response to incidents. The mobile map presents a path line and waypoint directions, scaling the map to a tighter perimeter as the unit approaches the scene. Field personnel can visually locate their own unit and incident locations as well as the location and status of closest units.

Inform CAD and Inform Mobile can use the same GIS data set for visual display purposes as well as geo-centric functions such as validation of an address or routing to a location. The Inform Mobile map runs on Esri’s ArcGIS Runtime for optimization of deployment and performance in the mobile environment and gives users the ability to view and perform mission critical tasks such as real time display of units and incidents or query information from user defined layers in the map.

**Location Validation**

Inform CAD is engineered to use available unique address points for location validation. Address points can optionally be defined to the building or apartment level. Address point data is automatically updated by the GISLink Utility when an update is processed from an Esri source file. Shapefiles that define spatial response areas are matched to address points with each GIS data migration processed by the GISLink Utility.

**GISLink Utility**

Included with the Inform solution is the GISLink Utility, an ArcGIS™-based utility that simplifies and accelerates the transformation of data from an Esri® Geographic Information System (GIS) for use with Inform CAD and Inform Mobile. The GISLink Utility, provides tools designed for effective maintenance of geographic source data and for extracting GIS data to create geographic datasets optimized for CAD mapping and CAD location validation.

The GISLink Utility consists of a Windows Forms application and a command line console application, and is built on the Esri ArcObjects™ data model using ArcGIS Engine™ to build and import the geographic data needed for use with Inform CAD and Inform Mobile. The salient features of the GISLink Utility include:

- Directly reads Esri feature classes and shapefiles.
- Updates streets centerline files to Inform CAD. Supported Esri data formats include shapefile, personal geo-database, file geo-database and ArcSDE™ geo-database.
- Updates response area polygons in Inform CAD. Supported Esri formats include shapefile, personal geo-database feature classes and ArcSDE geo-database.

**Live Updates to Inform CAD and Inform Mobile**

The GISLink Utility is tightly integrated with Inform CAD and is usable with a live production system without appreciable performance degradation. The transparent import/export operations of the GISLink Utility maintain links with existing tables, allow for updates only and full data replacements, reduce the complexity of transforming and importing geographic data, create spatial projections, and maintain data consistency.
SYSTEM REPORTING CAPABILITIES

RFI Requirement:
- System reporting capabilities

TriTech Response:

Inform CAD Reports
Inform CAD includes more than thirty standard reports that provide management the ability to better visualize and utilize statistical information and recommend changes in resource deployment. Inform CAD reports are user-configurable and can be printed in either tabular or graphical form. The data values that the standard reports can be filtered on include (but are not limited to) date (day, week, month or months), time, agency, jurisdiction, division, incident type, priority type, unit/radio ID, personnel ID, and response area.

 Inform CAD provides the following standard reports:
- Alarm Site Report
- BOLO Briefing Report
- CAD Log of Calls Report
- Call Source Analysis Report
- Caller Type Report
- Calls by Grid Report
- Call Volume by Service Level Report
- Canceled Incident Report
- Incident Report
- Inter-Agency Comment Report
- Inter-Agency Security Report
- Out of Service Report
- Command Line/Function Key Configuration Report
- Prescheduled Call Report
- Response Incident Listing
- Roster Hours Worked Report
- Rotation Provider Report
- Rotation Request Report
- Transportation Volume Report
- Unverified Address Report
- Vehicle Response Report

Inform CAD Time-Based Reports
TriTech has designed the Time-Based reports to provide a method to measure and evaluate call taking, dispatching and response performance within your organization.
- Activation Report
- At Scene Time Report
- Call Duration Report
- Call-Taker Performance Report
- Dispatcher Performance Report
- Late (Exceptions) Responses Report
- Out-of-Chute Report
Inform CAD Browser Reports
Inform CAD Browser supplies a set of predefined web-based CAD reports that can be generated remotely. Each report provides filter selection criteria, filter exclusion criteria, allows for suppression of zeros and drill down capabilities from the graph or grid. These reports include:

- Caller Type Summary
- Problem Type
- Incident Type Summary
- Method of Call Summary
- Cancel Reason
- Delay Reason Summary
- Time of Day Call Volume Summary
- Day of Week Call Volume Summary

Ad Hoc Reporting: CAD Data
Ad hoc reporting is readily available through the Inform CAD relational database management system (RDBMS), which is built upon Microsoft’s SQL Server and makes full use of SQL-compliant open database connectivity (ODBC). All Inform CAD data can be accessed for ad hoc reporting through use of third-party reporting tools, including SQL Reporting Services, Crystal Reports, Microsoft Access, and Microsoft Excel.

TriTech.com IQ and TriTech.com Analytics
TriTech.com IQ provides agencies with the ability to aggregate data from multiple systems into one public safety-centric database. Users get near real-time access to solve crimes, monitor performance, or create management reports. Data can be obtained from other systems regardless of vendor or database type. As a vendor and platform agnostic system, TriTech.com IQ supports regional information sharing initiatives by allowing agencies to provide access to share and search information with neighboring jurisdictions.

TriTech.com IQ’s powerful search capabilities include fuzzy searching, stemming searches, diminutive names, name expansion from all entities including narratives. Users can save searches for future hits or register for notifications when new data hits the database.

The ad hoc report-writing tool is a simple-to-use data set selection tool that makes summary reporting intuitive. Combined with the report library, this reporting tool provide users an easy way to extract data from the system and export that data into several different formats, including Excel and PDF.

The TriTech.com Analytics dashboards can transform complex data into easy to understand charts, graphs and detailed advanced reports. TriTech.com Analytics focuses on two types of dashboards: Analytical and Performance. Users can build and customize their own views to support their desired projects and goals and can perform operational trending and historical analysis to improve performance and productivity. TriTech provides additional customization services to develop new dashboards to meet unique operational and end-user management requirements.
BUSINESS INTELLIGENCE

RFI Requirement:
• Business Intelligence solution options if different than above system reporting capabilities

TriTech Response:
TriTech.com IQ and TriTech.com Analytics provide reporting and dashboard capabilities for analysis as described in the System Reporting Capabilities response above.

TriTech has partnered with The Omega Group (a Trimble Company) to include their comprehensive Precision Policing Solution. Precision Policing offers a set of tools, including CrimeView Dashboard, CrimeView Advanced Reporting, Crimemapping.com, CrimeView Predictive Missions, and NEARme to allow the County to effectively engage problems using the tremendous amounts of data that are already collected and available. This solution will provide County law enforcement agencies with the tools needed to conduct timely analysis of crime data and to disseminate actionable intelligence for the effective allocation of resources.

CrimeView Dashboard
CrimeView Dashboard brings data to life. Data becomes much easier to access and can be used to provide decision support, performance management, and electronic briefing capabilities. All agency staff at the strategic, operational, and tactical levels can use the Dashboard. Mid-level managers can use the Dashboard to define operational missions, identify crime patterns and trends, allocate resources, and evaluate results. Front-line staff can use the Dashboard to drill down through levels of data to develop actionable information on criminals and crimes. CrimeView Dashboard provides unprecedented mission planning tools for command staff, patrol supervisors, analysts, and field personnel to define, assign, and communicate patrol strategies. With Dashboard agencies can:
• Create “Missions” that indicate priority areas and actions to be taken.
• Allow capture of mission comments as an ongoing communications tool for sharing information at all levels of the department about tactical actions.
• Publish “Mission Packages” to field personnel for viewing on mobile devices (Smart Phones, tablets, or MDC/laptops).
• Manage missions using the “Mission Playbook, a central facility for the coordination of directed patrols across the organization.
• Use Mission plans to ensure that scarce resources are allocated to the right place at the right time and are focused on “Doing” the right activities.

The resulting combination of measures, maps, and missions—always current and interactive—enables operational performance support at a level unparalleled in the law enforcement profession.

CrimeView Advanced Reporting
Advanced Reporting brings Business Intelligence and advanced reporting capabilities to the Precision Policing model. Key Performance Indicators (KPI’s) identified by the agency are delivered via Advanced Reporting directly from the Dashboard infrastructure.

Reliable, targeted and task-specific statistical reports are produced at the click of a button. Data filtering and advanced printing capabilities empower staff to produce and deliver reports in hardcopy or as PDF’s. Every selection and drill-down not only yields reports consisting of measures and charts, but also enables select staff to export data for further use.
Designed around needs and requirements identified by hundreds of Omega clients, Advanced Reporting is deployed with a standard set of task-specific agency reports, including the following:

- **Command Summary Report** – This simplified interface draws attention to unexpected change in activity by crime type in particular areas and allows for geographic selection and drilldown to individual reports.
- **COMPSTAT Report** – A report based upon a user-defined period (weeks, months, etc.). Statistics include the period selected, the previous period and the same period in the previous year. An accompanying chart compares the three periods together.
- **Offense Report** – A summary and detailed report of activity by Crime Category, Crime Description, Crime Activity, Case Number, Date, Address, Area and Counts.
- **Weekly Activities Report** – A weekly line chart summarizing selected crime activity by type. With the click of a button crime categories can be combined or separated as needed.
- **Temporal Analysis Report** – Three charts and associated tables used to analyze activity by day of week and hour of day.
- **Repeat Addresses Report** – A summary of repeat activity by address.

The Omega Group continuously evolves the reporting portfolio based on the needs and feedback of its customers and partners. As new data are integrated into the Dashboard, new reports, templates and formats will be developed and added to Advanced Reporting.

**Crimestriking.com**
Crimestriking.com has been developed to help law enforcement agencies throughout North America provide the public with valuable information about recent local crime activity. Crimestriking.com utilizes Esri’s advanced mapping engine, which provides a high level of functionality as well as flexibility. Crime data is extracted on a regular basis from each department’s records system so that the information being viewed through a Web browser is the most current available. This data is always verified for accuracy and all address information is generalized by block in order to help ensure privacy is protected.

**CrimeView Predictive Missions**
Predictive Missions is an add-on capability for the CrimeView Dashboard that employs a multi-dimensional analytics engine to generate priority deployment missions for command consideration. Predictive Mission recommendations can be viewed within CrimeView Dashboard as another data layer in the command decision process.

Predictive Missions uses three years of agency crime data history, in conjunction with a set of parameters specified by the department. These parameters include time period, geographic area(s), crime types, and available resources. CrimeView Predictive Missions is the first predictive policing product to include an “available resources” parameter into the predictive analytics equation.

With the three years of crime data and the configured parameter set, the multi-dimensional analytics engine derives a new predictive model based on historical data patterns and trends. Analytical approaches that add dimension to the prediction model include the definition of levels of risk, projected times of highest expected risk, temporal heat charts, Near Repeat probabilities and combined Kernel Density Estimation (KDE) scores. All of these dimensions are validated
science and evidence-based. Once the new model has been developed, the results can be automatically updated as new crime data records are imported.

For each crime type specified, a risk surface is developed and geographic boundaries are created defining those places with elevated risk. These high-risk areas become mission deployment possibilities. To these targeted locations, information about available resources (i.e., units, time commitment, dosage) are added to the process in order to best prioritize locations of highest risk that can actually be covered based upon the resources available and the time commitment necessary for this directed patrol task.

Predictive Mission recommendations chosen for deployment can be memorialized in a widget within a page in a Dashboard Briefing Book and published to the CrimeView NEARme Mobile application for field execution.

**NEARme**

NEARme is designed to allow strategically planned tactical missions to be pushed out to the patrol officer in the field. It brings situational awareness to officers by providing geospatial incident data specific to each officer’s beat or district.

NEARme provides up-to-date criminal incident data, as well as, a defined map of the officer’s territory or beat. Officers with little or no computer skills can filter through the data to view individual crime types and or persons of interest in their assigned territory.

NEARme allows officers to see which missions they are assigned and also those missions that may cross boundaries with their own. A live blog built into the software allows for dynamic communication with the command staff supervising each mission and keeps the information available for each shift as the mission progresses.

**SYSTEM CONFIGURATION**

**RFI Requirement:**
- System configuration capabilities

**TriTech Response:**

The TriTech solution has been built on a Windows platform around the needs of our clients to provide rich functionality, flexibility, and ease-of-use. Inform CAD supports an industry-standard graphical user interface that can be configured to agency and jurisdiction preferences. Such functionality allows agencies to implement their own business rules and operate on the same system without compromising their individual requirements.

Inform CAD users can execute specific functions using a variety of methods including pre-defined command line entries, pre-populated pull-down fields, character matching using type-ahead functionality, user-defined hot keys, function keys or standard Microsoft mouse functions.

Screen resolutions are adjusted through the Windows Operating System display property controls. Font and icon sizes are administratively configurable, and scale in accordance to map zoom. Incident form font sizes are administratively configurable.
Font display and sizes are not adjustable in the Inform CAD dispatch queues through Inform CAD controls; however, adjustment of screen resolutions can compensate where larger font size is deemed necessary.

Inform CAD provides administratively configurable color palettes for incident markers, unit status, and priority labels using the full Windows Operating System color palette. Screen resolutions can be increased/decreased through Windows operating system controls. Map themes can be created administratively to accommodate different visual spectrums. Windows also has functions such as Zoom Bubble or Zoom Mouse Window that can be utilized in conjunction with Inform CAD.

Inform CAD provides a complete toolbox of utilities that enables the system administrator to tailor the system to meet specific requirements and to streamline operations. The Inform CAD modular- and function-level security system allows the flexibility necessary for the system administrator to also provide these tools to appropriate personnel.

Inform Mobile allows administrators to customize the look and feel of the application for groups of field users and for different disciplines such as law enforcement or Fire/EMS. This includes items such as button labeling, sizing, and placement which makes use of the Inform Mobile client very easy to learn. Business Rules configured in Inform CAD are followed by all applications in the Inform Public Safety Suite.

Inform Mobile provides a flexible, customizable user interface through the use of configurable buttons, forms and function keys. Inform Mobile uses HTML, XML, XSL, and Java in the creation and configuration of the client screens and forms. This functionality will provide field users a highly user-friendly application which is configured to meet the agency’s business practices.

**TECHNICAL ARCHITECTURE**

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

**TriTech Response:**
TriTech designs operating platforms with sustained availability between 99.95 and 99.999%. The difference between projected uptime results is a factor of the technologies employed which translates to hard dollars. For a computer aided dispatch system to satisfy the needs of an organization like San Mateo County, TriTech suggests targeted availability of 99.999%.

Using the technologies briefly introduced below, most Inform CAD transactions can execute in fractions of seconds. As a general rule, system performance meets or exceeds the timing that users require for effective execution of their duties.

The typical installation of the Inform Public Safety Suite includes separate hardware and software infrastructures at a protected (primary) data center and a disaster recovery (backup) data center to deliver continued operations in case of catastrophic system or facility failure. Our best practices favor the use of automated (as opposed to automatic) failover technologies.
A TriTech recommended operating platform provides ample redundant computer resources at each data center to yield the reliability and performance essential for mission-critical applications such as CAD, mobile communications, and message switching. Our solutions can also include a redundant platform at the primary data center so that operations can continue even with a catastrophic systems failure. The disaster recovery data center is then only required in cases of complete facility failure at the primary data center.

Components and interconnectivity within the TriTech solution are conceptually divided into five layers:

<table>
<thead>
<tr>
<th>Layer</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compute</td>
<td>Contains the components that provide the computing power within the TriTech operating platform. This typically includes Cisco UCS, HP ProLiant or Dell PowerEdge servers with Intel 64-bit x86 processors to host the VMware vSphere suite of virtualization products, the virtual machines, and the Microsoft Windows Server operating system software for the virtual machines.</td>
</tr>
<tr>
<td>Network</td>
<td>Contains the components that provide switching, routing and network security between the TriTech operating platform and the end user networks operated by Harris County. TriTech can support independent storage and general purpose switching fabrics or a converged network design between servers and switches. In absence of a vendor preference, TriTech promotes Cisco network hardware.</td>
</tr>
<tr>
<td>Storage</td>
<td>Contains the components that provide shared storage. TriTech recommends an enterprise Storage Area Network (SAN) that includes a combination of solid state, high performance SAS and robust NL-SAS hard drives with dynamic distribution of data across the array. While being storage technology- and vendor-agnostic, TriTech has enjoyed great success using storage solutions manufactured by EMC. All TriTech systems relay on Microsoft SQL Server Relational Database Management System software.</td>
</tr>
<tr>
<td>Disaster Recovery</td>
<td>Contains the components that enable the continuation of vital technology infrastructures and systems during and following a natural or human-induced disaster. TriTech has deployed our systems with a number of disaster survivable/recovery solutions using EMC VPLEX with vSphere DRS, EMC RecoverPoint with VMware vCenter Site Recovery Manager (SRM), Arcserve High Availability, as well as the promising products from Zerto.</td>
</tr>
<tr>
<td>Client</td>
<td>Contains the components that provide end-user access to the suite of Inform modules. Many Inform applications leverage the universal features of browser software such as Microsoft Internet Explorer, Google Chrome, Mozilla Firefox and Apple Safari, and many operate successfully on Windows, Android or iOS devices equipped with a supported browser.</td>
</tr>
</tbody>
</table>

TriTech implements a Disaster Recovery solution to a backup datacenter that ensures operations continue in the event of a failover. The remote servers in the backup datacenter act as replacements for the primary site servers in the event of a catastrophic failure at the primary site.
SYSTEM INTERFACES

RFI Requirement:
- System interface information – Federal, state and local databases plus third party applications

TriTech Response:
TriTech understands that no single software vendor or application will meet all the needs of modern public safety agencies. A key component of our application structures for the last 22 years is a solid foundation for interfacing and integrating with other systems. This starts with a foundation of standard interfaces that work with industry standards and/or common vendors across our client base. These standard interfaces can be extended and upgraded, should the need for modification arise.

TriTech has standardized the following interfaces due to frequency of deployment and value brought to the users of the systems:
- Regional, State, and Federal crime databases and fusion centers
- State and local warrant systems
- Esri mapping
- NENA-compliant ANI/ALI
- Basic and advanced two-way CAD-to-CAD integration
- Standard Alpha-Numeric Paging Interface Software (for paging, sms, and email notifications from the CAD system)
- Station Alerting
- Station Printing
- Standalone AVL
- Push-to-Talk
- Priority Dispatch/APCO Meds/Powerphone
- Deccan LiveMUM
- TeleStaff
- Premise Data
- Hydrant Information
- Biometric identification systems
- Public crime mapping sites
- Crime Analysis

TriTech has also developed and licenses an Application Programming Interface (API) for use by partners, third parties, and clients. Through this API, integration is enabled to many of the core functions of our public safety suite. Documentation, training, and consultation are made available to the users of the API to help achieve the desired integration. The API is versioned, upgraded, and tested with each release, ensuring compatibility with other systems.

Should integration needs arise that cannot be satisfied via an existing standard interface or by using the TriTech API, TriTech provides the engineering and deployment services to develop custom interfaces. TriTech has developed a comprehensive integration framework upon which custom integration work is performed. TriTech’s experience in custom integration is extensive and includes complex criminal justice systems, air transport and naval navigation systems, various local, in-house developed applications and literally hundreds external platforms. Each custom interface is supported during upgrades and, if needed, enhanced over time.
DATA CONVERSION

RFI Requirement:
- Approach regarding legacy CAD/Mobile system data conversion and/or access to legacy CAD/Mobile system data.

TriTech Response:

Conversion of Legacy CAD Data into Inform CAD Data
TriTech has refined our conversion processes over the past thirty years working with data from every major information systems vendor in the public safety market. TriTech typically recommends a structured conversion of select legacy CAD data for insertion in the Inform CAD database.

TriTech recommends conversion of several classes of legacy data, including:
- Most recent three years of CAD incident records
- Current tables of CAD premise data
- Current tables of CAD caution notes

TriTech will work with the County to identify and include conversion of additional and/or alternative classes of data. TriTech has converted several Northrup Grumman databases into Inform CAD, most recently for Orange County Fire Authority (OCFA), California and Ada County, Idaho.

Our data conversion services begin with the development of a custom plan detailing the mapping schema for transforming the data from the legacy CAD system to the target files in the new Inform CAD system. The legacy data must be in documented structures that align to a corresponding structure in the target Inform CAD database.

Exported data can be provided in one of several formats, including:
- Direct ODBC access to a non-production SQL database
- Microsoft Access file (.mdb)
- Microsoft Excel file (.xls)
- Comma-separated values (.csv)

Participation and input from County staff during the data mapping and testing phases of the data conversion process are essential to ensure a successful data transformation

TriTech.com IQ and TriTech.com Analytics Query and Access Legacy Data
TriTech.com IQ provides agencies with the ability to aggregate data from multiple systems into one public safety-centric database. Data can be obtained from other systems regardless of vendor or database type.

The historical data import is a process by which TriTech extracts applicable data from TriTech applications and imports that data into TriTech.com IQ, this includes three years of the legacy CAD data that is recommended to be converted into the Inform CAD. The data is then available for search, reporting, analytics and dashboard design functionality subject to subscriptions purchased.
SUPPORT AND WARRANTY

RFI Requirement:
- Support and warranty information

TriTech Response:
The following table outlines the support and warranty services provided by TriTech.

<table>
<thead>
<tr>
<th><strong>No additional costs for updates and version upgrades</strong></th>
<th>Updates and version upgrades for the County-licensed TriTech software applications are provided as part of the annual software support and continuous upgrade fees. TriTech’s Support Center team will work with the County to schedule upgrades for the TriTech software as they are released. Although there are no costs for the software updates/upgrades, if on-site resources are required, additional costs for travel and labor incident to the on-site support may apply.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>National Support Center Staffed 24x7x365</strong></td>
<td>Our National Support Center is always available to respond to Client calls according to the Priority matrix in the applicable Support Agreement. TriTech’s National Support Center, located in Decorah, Iowa, is dedicated to delivering excellence in customer service.</td>
</tr>
<tr>
<td><strong>Unlimited Technical Support</strong></td>
<td>TriTech provides unlimited telephone support during contracted calling hours.</td>
</tr>
<tr>
<td><strong>Live Assistance</strong></td>
<td>When using our toll-free telephone number, clients never receive an automated response during regular operating hours: clients speak directly with a trained Support Center technician.</td>
</tr>
<tr>
<td><strong>Highly Trained Technical Analysts</strong></td>
<td>Support Center staff consists of trained IT professionals with a wide range of certifications, including Microsoft, A+, and Cisco-certified professionals. Our technicians have extensive knowledge of commonly used technology, concepts, practices, and procedures and have completed rigorous TriTech product training, skill assessments, and routinely participate in continuing education events.</td>
</tr>
<tr>
<td><strong>Remote Analysis and Support</strong></td>
<td>Reported issues are diagnosed via remote connectivity. Complex problems are more easily reviewed and resolved by Technical Analysts taking a hands-on approach, minimizing the potential for miscommunication.</td>
</tr>
<tr>
<td>Customer Service Center Website</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td></td>
</tr>
<tr>
<td>The Customer Service Center website provides clients with:</td>
<td></td>
</tr>
<tr>
<td><strong>Knowledge Base</strong>: A comprehensive knowledge base with entries that cover TriTech software, operating systems, hardware, federal reporting requirements, state reporting requirements, and more. This knowledge base is always available for clients and internal technical analysts.</td>
<td></td>
</tr>
<tr>
<td><strong>Service Request Access</strong>: Provides up-to-the-minute status on all service requests. Also allows clients to submit new service requests or research the status of new or historical tickets.</td>
<td></td>
</tr>
<tr>
<td><strong>Documentation</strong>: Download the latest version of all TriTech software documentation, including user and setup guides, articles, white papers, and notices designed to enhance productivity with the Inform Public Safety Suite.</td>
<td></td>
</tr>
</tbody>
</table>

TriTech’s maintenance agreement includes:

- Unlimited telephone support for the licensed TriTech software, using a toll-free line provided by TriTech. During each term of the County’s software maintenance agreement, this telephone support is available 24x7 for Inform CAD and Inform Mobile and 8x5 for non-critical TriTech.com IQ and TriTech.com Analytics issues.

- Initial fact-finding (Tier 1) support for third-party software embedded or used in conjunction with the application software (e.g., the embedded Report Writer, Microsoft products, etc.).

- TriTech will correct documented malfunctions in the TriTech application software based on the severity of the issue and how it impacts the County and TriTech’s user base.

- Updates and version upgrades to the current production version for the County’s licensed TriTech software. TriTech will work with the County to schedule updates/upgrades.
Additional Information

TriTech’s Inform Public Safety Suite centers on proven technology to form an end-to-end, complete solution with a shared and consistent workflow, maximizing the availability and re-use of critical information for all. In addition to the applications recommended in response to the County’s RFI, the Inform Public Safety Suite includes the following applications to meet future needs of the County:

- Inform 911
- Inform CAD+911
- Inform RMS
- Inform FBR
- Inform Jail
- Inform Fire

INTEGRATED SOLUTION

The Inform Public Safety Suite integrates the workflow and aggregates the information across agencies, departments, and staff regardless of where users interact with the system. The Inform Public Safety Suite integration extends from the 9-1-1 call through dispatch, response, reporting, arrest, incarceration, and data analysis. With an emphasis on an intuitive user experience that minimizes data re-entry and maximizes relevant informational awareness, the Inform Public Safety Suite provides the following key integration points across users, in the center, out to the field, and at the station:

- A common public safety database for searching and automatic notifications based on a user’s request.
- The flow of Inform CAD Call for Service information to the mobile responder, the field reporting officer, records and investigations and even the booking officer in the jail.
- The sharing of user credentials in common environments like the vehicle. Inform Mobile and Inform FBR allow the user to respond and report without having to re-enter credentials and user information.
- A common, Esri GIS source that feeds Inform 911, Inform CAD, Inform Mobile, and Inform RMS users for location validation and map displays built for the task at hand.
- Access to a set of common Master Indices that include person, vehicle, location and property that can be searched by dispatchers, responders, investigators, jailers and analysts.
- The re-use of incident, person, location, vehicle and property information that a user has entered in any part of the system without having to re-enter. This expands to allowing the re-use of data entered by other system users.
  - Jail Booking information in Arrest Report
  - Arrest Report information for Booking an inmate
  - Secondary officer uses Person or Vehicle information queried by Primary officer in report
  - Officer uses location and incident information from Inform CAD to complete report
- A common user experience and system for Inform 911 and Inform CAD with a streamlined workflow, single keyboard and mouse and common screens for entry.
  - Use of common geospatial tools to detect duplicate calls and incidents and alert the call takers.
  - Common premise history and caution notes to enable immediate awareness before the call is answered
- A heads up alert to Inform Mobile users from Inform 911 when a call starts ringing in the comm. Center originating from a location in the vicinity.
- A single data warehouse with powerful ad-hoc reporting and dashboard based analytics.

APPLICATION DESCRIPTIONS

Inform 911
Until recently, the computer and the telephone—two powerful but separate tools—have not worked together efficiently; however, the trend toward universal data access is changing the face of both technologies and accelerating their merger. Inform 911 is the amalgamation of computer processing and telephone calls. Every operation that call takers perform using a telephone can now be performed on an Inform 911 intelligent workstation, a NENA i3-compliant comprehensive, IP-based CTI solution integrating a simple, intuitive call taker user interface for call handling of traditional and IP media.

Inform CAD+911
Building upon TriTech’s proven emergency call taking and incident data management platform, Inform CAD+911 is the convergence of 9-1-1 call processing with Inform CAD’s inherent ability to take action through the real-time exchange of incoming and historical information, all in one solution. Designed to address the current problems that exist today and the future challenges of NG9-1-1, Inform CAD+911 provides users the ability to interact with and incorporate new types of data into a seamless workflow. As a combined solution, Inform CAD+911 links relevant data from each system, such as caution notes and caller or location history, to present meaningful information to the call taker even before the call is answered. These capabilities are available when adding Inform 911 to existing Inform CAD solutions.

Inform RMS
Inform RMS is a multi-jurisdictional, functionally rich solution that seamlessly integrates records management, property and evidence management, accident report management, investigative case management, crime and trend analysis, statistical reporting, and other key functions, including UCR or NIBRS reporting to the State. Inform RMS allows users to quickly locate information related to subjects or criminal activity through an intuitive and user-friendly interface; quickly capture and view subject and crime scene images, and produce line-ups with minimal effort. Inform RMS provides an additional layer of protection by notifying users of warnings or alerts associated with individuals, and warnings for outstanding warrants, civil papers, and stolen property.

Inform FBR
Inform FBR is a flexible web-enabled field reporting solution that allows officers to enter reports while in the field or in the station, using ordinary laptop computers increasing community policing efforts. After going through an approval process, reports entered through Inform FBR are uploaded directly to the Inform RMS server. The system provides the basic reports required by an Officer in the field: Incident, Accident, Arrest, Citation, Custody, and Field Interview. Many other required forms can be accommodated through the use of our Attachment feature. These forms can be completed by the officer in the field, attached to the relevant Incident, Accident, or Arrest report and submitted for review along with the main report. Once the report is approved, these attachments will be linked to the case in Inform RMS.
Inform Jail
Inform Jail provides seamless integration as a core component of the Inform Public Safety Suite and will dramatically improve the County’s workflow. By sharing a common Master Indices database with Inform RMS, Inform Jail users can save time, avoid duplicate data entry, and view alerts tied to the Master Name to ensure the safety of correctional officers and inmates. Inform Jail tracks all activities related to confined inmates, including movement, bed assignment, medical data, account information, commissary activity, and visitation records. Keep Separate records alert personnel to inmates that must be prevented from being housed, moved, or transported together as well as potential visitors that must be kept separate from one another. The event scheduler allows users with the appropriate security rights to create, edit, or close transports, inmate releases, court dates, and other agency-defined events.

Inform Fire
Inform Fire is a feature-rich technology built specifically for the demands of metropolitan, suburban, and rural fire and emergency medical agencies. Leveraging Microsoft .NET technology, Inform Fire integrates SQL reporting services to provide the industry’s leading reporting tool, and provide timely, critical access to data. Developed as a web-enabled full service solution, TriTech’s records processing platform provides an efficient, technologically advanced environment that automates all fire and rescue records and reporting operations. Inform Fire allows agencies to report incidents to any state and federal entity in conformance with regulations and industry best practices and Inform Fire’s independent modules streamline and consolidate fire and rescue records and reporting operations.

TriTech.com Data Vault
TriTech.com Data Vault enables organizations to back up data in a reliable, efficient manner. All backups are compressed, encrypted, and transferred to a secure, offsite storage facility. TriTech.com Data Vault’s advanced continuous data protection (CDP) technology provides a reliable, cost-effective, and continuous offsite backup solution.
This page intentionally left blank.