



West Virginia Purchasing Division

2019 Washington Street, East
Charleston, WV 25305
Telephone: 304-558-2306
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Bid Fax: 304-558-3970

The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at ***wvOASIS.gov***. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at ***WVPurchasing.gov*** with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Header @ 7

List View

General Information

Procurement Folder: 327111

Procurement Type: Central Contract - Fixed Amt

Vendor ID: VS0000007390

Legal Name: ImageTrend, Inc.

Alias/DBA:

Total Bid: \$3,566,174.83

Response Date: 06/21/2017

Response Time: 10:59

SO Doc Code: CRFQ

SO Dept: 0506

SO Doc ID: BPH1700000005

Published Date: 6/16/17

Close Date: 6/21/17

Close Time: 13:30

Status: Closed

Solicitation Description: Add. #3-EMS
Credentialing/Licensing &

Total of Header Attachments: 7

Total of All Attachments: 7

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	EMS CREDENTIALING AND LICENSING SYSTEM - YEAR ONE	0.00000			\$1,831,896.65

Comm Code	Manufacturer	Specification	Model #
80101500			

Extended Description :	Maintain and Manage WV EMS DATA System - Year 1
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Comments: Please see ImageTrend Proposal and quote attached for more details and exceptions.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
2	EMS CREDENTIALING AND LICENSING SYSTEM - YEAR TWO	0.00000			\$561,091.65

Comm Code	Manufacturer	Specification	Model #
80101500			

Extended Description :	Maintain and Manage WV EMS DATA System - Year 2
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Comments: Please see ImageTrend Proposal and quote attached for more details and exceptions.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
3	EMS CREDENTIALING AND LICENSING SYSTEM - YEAR	0.00000			\$577,924.40

Comm Code	Manufacturer	Specification	Model #
80101500			

Extended Description :	Maintain and Manage WV EMS DATA System - Year 3
-------------------------------	---

Comments: Please see ImageTrend Proposal and quote attached for more details and exceptions.

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
4	EMS CREDENTIALING AND LICENSING SYSTEM - YEAR FOUR	0.00000			\$595,262.13

Comm Code	Manufacturer	Specification	Model #
80101500			

Extended Description :	Maintain and Manage WV EMS DATA System - Year 4
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Comments: Please see ImageTrend Proposal and quote attached for more details and exceptions.

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: CRFO BPH1700000005

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:

(Check the box next to each addendum received)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input checked="" type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Image Trend, Inc.
Company
Michael J. M. Brady
Authorized Signature
6/21/17
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Lisa Vanina, Proposal and Contracts Manager
(Name, Title)

(Printed Name and Title)

20855 Kensington Blvd, Lakeville, MN 55044
(Address)

952-469-1589 / Fax: 952-985-5671
(Phone Number) / (Fax Number)

Proposals@imagetrend.com
(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

ImageTrend, Inc.

(Company)

Michael J. McBrady

(Authorized Signature) (Representative Name, Title)

Michael J. McBrady, President
(Printed Name and Title of Authorized Representative)

6/21/17
(Date)

952-469-1589
(Phone Number) (Fax Number)

STATE OF WEST VIRGINIA
Purchasing Division

PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: Image Trend, Inc.

Authorized Signature: Michael J. McNulty Date: 6/21/17

State of Minnesota

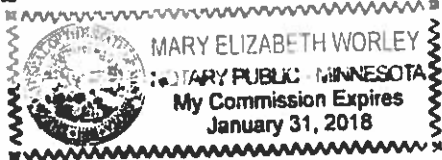
County of Dakota to-wit:

Taken, subscribed, and sworn to before me this 21 day of June, 2017

My Commission expires Jan. 31, 2018

AFFIX SEAL HERE

NOTARY PUBLIC




Mary Elizabeth Worley

EMS Credentialing/Licensing Hospital Bed Tracking System
CRFQ 0506 BPH1700000001
Pricing Page

Qty.	Unit	Section	Description	Unit Price	Extended Price
1	Year	4.1	Year One (1)	\$1,831,896.65	\$1,831,896.65
			In accordance with section 4 and all mandatory requirements and deliverables :		
			EMS Credential/Licensing System		
			Education, Certification, Licensing & Inspection of System		
			EMS Run Reporting		
			Hospital Bed Tracking		
			EMS Quality Data Reporting & Quality Improvement - Lead EMS Researcher		
1	Year	4.1	Renewal Period Year Two (2)	\$561,091.65	\$561,091.65
1	Year	4.1	Renewal Period Year Three (3)	\$577,924.40	\$577,924.40
1	Year	4.1	Renewal Period Year Four (4)	\$595,262.13	\$595,262.13
Grand Total:				\$3,566,174.83	

Vendor Signature:
Company Name:
Address:
Phone:
Email:
Fax:


ImageTrend, Inc.
20855 Kensington Blvd
Lakeville, MN 55044
952-469-1589
mmcbrady@imagetrend.com
952-985-5671



Request for Quotation
EMS Credentialing/Licensing and
Hospital Bed Tracking System
Due: 21 June 2017



Remittance to:
State of West Virginia
Attn: April Battle
Department of Administration
Purchasing Division
2019 Washington St E
Charleston, WV 25305

Prepared by:
Lisa Vanina
Proposals and Contracts Manager
Email: proposals@imagetrend.com

IMAGETREND®

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EXECUTIVE SUMMARY

ImageTrend, Inc. is pleased to present this proposal outlining our products and services in response to the State of West Virginia's Request for Quotation for EMS Credentialing/Licensing and Hospital Bed Tracking Systems. We are confident that our user-intuitive and dynamic Emergency Medical Services (EMS) system **ImageTrend Elite™ EMS** will meet or exceed the proposed requirements. **ImageTrend Elite™ EMS** is an Electronic Patient Care Reporting (ePCR) Solution that provides a secure method of collecting pre-hospital data for extracting existing data, reporting Patient Care and exporting and sharing the data with other agencies and applications. Not only does this system provide data handling, it has also provides extensive data analysis and data mining tools for turning this data into valuable and discernible information and the extensive capabilities of reporting and geographically displaying the information.

ImageTrend's introduction into the EMS market started in the State of Minnesota. The State was searching for a cost-effective solution for the collection and management of EMS pre-hospital data. ImageTrend not only offered the EMSRB (Minnesota EMS Regulatory Board) a sophisticated database-driven solution and explained that a Web-based data entry possibility would provide their out-state services a straightforward, low cost opportunity for data entry. This provided a platform for 100% compliance with mandated EMS data reporting within Minnesota. Developing multiple data exchange methods (XML, Access, and Formatted File) gave services that were already collecting data electronically a means to move their data to the State and allowed them to choose the best method for their system. Since then an additional 34 states and over 2,000 services have made ImageTrend the leading provider of statewide EMS data collection systems.

Since 2001, ImageTrend has developed industry-specific software for emergency medical services. From medics in the field to data managers of large agencies to governmental Reporting, our solutions focus on your needs for maximum efficiency. During this time, 36 states, as well as, the many service groups and individual users have provided us invaluable information for product refinement and expansion. The states we provide services to including the States of Minnesota, Ohio, Massachusetts, Maryland, California, Illinois, and New York which have 9 of the top 10 Best Hospitals in the country according to U.S. News & World Report. Some of the large service groups ImageTrend works with are Inland Counties Emergency Medical Services Agency (ICEMA) (CA), Houston Fire Department (TX), Orange County (CA), Nashville Fire Department (TN), the City of Memphis (TN), New Orleans EMS (LA), Ventura County EMS Agency (CA), Lee County (FL), and many more. In 2015, ImageTrend signed our first contract outside of the US with Australia. They are now also on our Elite ePCR Solution and are looking to add additional services once the new hospitals are up and running. With all the vast and detailed input from all our customers has resulted in an ePCR Solution that not only collects data, but allows us the ability to provide further features for streamlined electronic field data collection to eliminate redundancies and save time.

ImageTrend was the first software company to formally certify its software solution, ImageTrend Elite, as National EMS Information System (NEMSIS) v3 *Receive and Process* compliant on December 17th, 2013 and on May 29th, 2014 became the second software company to be formally certified as NEMSIS v3 *Collect Data* compliant. According to EMS.gov, NEMSIS Version 3 is an important step toward harmonizing EMS data with patients' electronic health records at the hospital. NEMSIS v3 compliance is an important measure of the software's ability to correctly record and transmit medical data. The testing process ensures the data system conforms to the National Highway Traffic Safety Administration (NHTSA) Version 3 Dataset for interoperability among systems used by dispatch and medical devices.



ImageTrend's growing reputation in the EMS market brought input for other system needs addressing many facets of emergency related data requirements. Thus, ImageTrend began developing systems for its Emergency Data Systems (EDS) group. One of these systems is the **Patient Registry**, which was initially designed as a trauma registry and has now been expanded to include stroke, STEMI and burn registry functionality all in one system. The **Resource Bridge** was developed to accommodate hospital diversion status and resource allocation on a regional, county or statewide level. Emergency communication and alerting functions allow for immediate notifications throughout the system and via email, phone and pager providing for timely communications to multiple locations simultaneously. **Patient Tracking**, a component of the Resource Bridge, connects first responders, hospitals and the patients' family members with critical and up-to-date information. Each patient is tracked through first contact, transport, destination arrival and family reunification. As a statewide installation these can be stand-alone systems or installed as a component of the. All of these systems are designed on the ImageTrend interoperability platform to support efficient seamless data integrations where required.

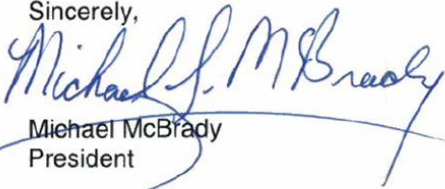
With the release of the NEMSIS v3 dataset, ImageTrend Elite development team looked at the dataset as a way to create the data platform of the future and set out on the formidable multi-tasked project. While simply retrofitting the NEMSIS v3 data dictionary into existing code may have been possible, the results would have been less than optimal for our valued end users. The new Elite platform allowed our developers to implement more features such as; custom validation rules for fire, more synchronized fields from License Management and improved dynamic power tools, to further help agencies easily analyze and check data quality. We were also able to realize several additional goals of a future more robust data platform.

ImageTrend's stance on corporate social responsibility is simple: Do the right thing. We are committed to providing innovative solutions that make people's lives better and easier while also providing

legendary client service. We provide a workplace that attracts, rewards, and retains talented and motivated people, our most important asset. We provide development opportunities, offering excellent health and wellness benefits, in-house daycare, and promote diversity and transparency within our organization. We are committed to and encourage supporting charitable initiatives, participating in local community outreach, recycling and efficient use of resources to reduce environmental impact. The strength of ImageTrend lies within our community - people who come together every day to help us build a better world and make the impossible, possible.

ImageTrend has taken great care in preparing this proposal for your RFQ, answering all questions in detail and providing comprehensive information regarding our products and services. Since it is true that a picture is worth a thousand words, we would encourage and welcome an opportunity to demonstrate our offering to you in person for efficient and thorough understanding. This would give you the chance to not only view the solution, but to meet our enthusiastic and dedicated team to ask questions about the solution as well. ImageTrend's successes are predicated on the valued partnerships with our customers. These are communicative, responsive and appreciated endeavors. We would be proud to enter into such a relationship with you.

Sincerely,

A handwritten signature in blue ink that reads "Michael J. McBrady". The signature is fluid and cursive, with a large loop at the end.

Michael McBrady
President

QUALIFICATIONS

3.1 REFERENCES

Names of States and contact Person for each to provide a reference must be submitted along with the request quotation/bid.

ImageTrend has included below four (4) State references for your consideration.

1. State of Virginia

Contact: Camela Crittenden

Title: Manager of Trauma and Critical Care

Address: VA Department of Health's Office of EMS

Phone: 804-888-9141

Email: camela.crittenden@vdh.virginia.gov

2. State of Wyoming

Contact: Jay Ostby

Title: Licensing Officer, Reporting and Data Analyst

Address: 6101 Yellowstone Rd, Suite 400
Cheyenne, WY 82002

Phone: 307-777-6023

Email: jay.ostby@wyo.gov

3. New Hampshire Department of Safety

Contact: Chip Cooper

Title: EMS Data Manager

Address: 33 Hazen Drive
Concord, NH 03305

Phone: 603-223-4200

Email: Richard.cooper@dos.nh.gov

4. Arizona Bureau of Emergency Medical Services & Trauma System

Contact: Anne Vossbrink

Title: EMS & Trauma Data Manager

Address: 150 N. 18th Ave., Suite 540
Phoenix, AZ 85007

Phone: 602-364-3164

Email: anne.vossbrink@azdhs.gov

PRODUCT DESCRIPTIONS

IMAGETREND ELITE™ EMS

ImageTrend's Elite™ system is a centralized, Web-based system that offers pre-hospital emergency data collection, analysis and reporting in one enterprise solution. It supports the identification of evolving problems or successes in emergency health care while simultaneously providing secure access of that information to authorized personnel from anywhere, at any time. The information can be used to set priorities, make plans and ultimately assure safe and effective delivery of EMS to the public.

Elite EMS Key Features

- A centralized, dynamic data warehouse with a scalable, open architecture for ever-changing and growing requirements.
- Full NEMSIS v3 compliancy (for both “Collect Data” and “Send and Receive”); NFIRS also available.
- Secure multi-tiered access to ensure and respect data privacy to HIPAA and other standards.
- Agency Administration from an enterprise level, allowing consistency within data entry and reporting.
- Web-based online patient incident forms for data entry by all EMS providers.
- Audit Validation to track and record access and changes to all ePCR records.
- A robust internal messaging system to allow for easy and quick QA/QI processes.
- The Report Writer which offers over 160 pre-created reports and easy to use ad hoc reporting with advanced query capabilities.
- A Data Exchange module that can interface with many different formats (including NEMSIS v3, EKG, CAD, Billing, Telestaff, and others).
- Optional modules:
 - Web-based Hospital Hub™ for secure, online viewing of incoming patients at the receiving facility.
 - Elite Field for field reporting, EKG wizard, and offline data entry capabilities.
 - License Management for managing end-to-end licensing and records processing.
 - Visual Informatics for advanced reporting with data mining techniques.
 - Mapping and Reporting System (MARS) to allow plotting data on geographical maps and data analysis.

Elite EMS System Architecture

The overall architectural design of the ImageTrend Elite system is comprised of a scalable database structure that supports full functionality with ease of expansion as requirements grow and change.

The Elite data repository is based upon the NEMSIS v3 uniform data set (NFIRS also available). In addition to collecting all aspects of NEMSIS v3 (including NOT values, Pertinent Negative values, ICD-10

codes, RxNorm values, GNIS addresses, and SnoMed codes), Elite is also capable of collecting custom elements.

Data Repository

The data repository is Microsoft SQL based and designed to support the expanding and dynamic requirements of the EMS community. These requirements include, but are not limited to, system-wide quality improvements identified through tracking of trends and procedures, benchmarking of specific indicators for compliance and public health issues, and a non-redundant data flow and sharing between concerned agencies from the local to the agency to the national level. The NEMSIS v3 data set populates the database hosted at ImageTrend's secure facilities or at the client's hosting facilities. All fields of the data set are available for reporting and exchanging with other agencies and applications.

Data Entry

Electronic data entry, whether via the Web or with the field clients supports ease of collection and ensures non-redundant entries, while being workflow oriented. The data can originate from CAD, Transfers, and medical devices, as well as quick-pick entries in the field (as it happens). This data collection constitutes the incident level and can be posted to the data repository. From here the data is available for querying, comparing, reporting or sharing.

Security

The multi-tiered security module incorporated into this application meets HIPAA guidelines and has been reviewed by HIPAA officers of various organizations with a positive outcome. The reporting and auditing functions of the application's procedures allow for complete safeguarding and immediate notifications of any attempted breaches. This provides for data access only through assigned permissions and ensures that only those intended see their data and can access it for reporting.

Scalability

ImageTrend systems are designed with open, scalable architectures and modular functionality. Modules can be added at any time, and if functionality is desired that does not exist, it can be designed as a module. All system additions are designed and tested on development servers to ensure desired functionality and full functional interfacing with existing functionality. This also provides the client with the ability to review and perform final acceptance prior to going live. The scalability lets the systems grow as needs, budgets and hardware capabilities allow, delivering continual progression.

Another consideration of scalability is the user and data volumes. ImageTrend systems are designed for high volume and traffic user bases, and there are many examples of each of these types of systems in use today.

This solution provides:

- Limited information access to the ambulance volunteer or paramedic in the field to their personal data and the ambulance incidents they perform.

- The ambulance agency manager has access to all of the data on all of the incidents that are handled by his or her agency.
- The city administrator has access to all of the incidents for his or her city.
- ImageTrend's familiarity with all sizes of EMS reporting systems is reflected in our diverse list of clients, ranging from agencies with fewer than 200 incidents per year to states with millions of incidents per year.

Compliance with National EMS Database

ImageTrend is NEMSIS compliant – in both Collect Data and Send & Receive - and based upon the most current version of the NEMSIS data set, which is version 3. ImageTrend is committed to supporting the national data set. We understand the importance of a national data set and its positive impact on convenient data exchange and the potential role that EMS data plays in improving health care.

Agency Administration

The agency administrator will have the ability to manage their agency through a series of setup screens and functions. Items such as Data Validation, Closed Call Rules, Dataset manipulation, and Form Builder are centrally administered which offers consistent, easy-to-use incident forms.

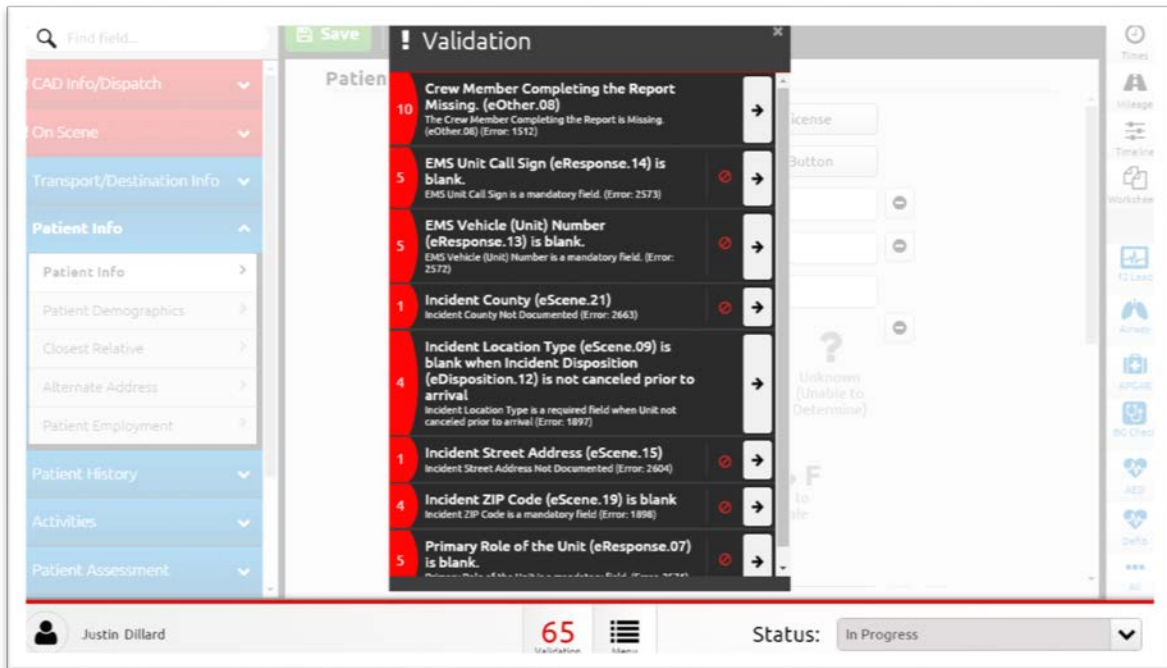
Agencies can set up their agency information, including contact information and customized resource lists. The custom defined resource lists allow an agency administrator to set up lists including:

- Facilities/Destinations
- Agency Locations
- Leave of Absence Reasons
- Vehicles
- Call Signs
- Zones & Districts

The user directory allows the agency administrators to set up crew members that will have access to the system or that will be available in the list boxes in the incident form allowing quick selections. This includes entering the certification numbers to expedite the data entry process.

Validation

The Validation rules are set up by the agency administrator and are administered to the agencies and Elite Field users. The built-in Data Validation includes scoring to ensure data quality. Each field can have its own value towards the validity score. Items that require further information are highlighted in red and the user is prompted at the middle-bottom of the form about the current validity score and the missing items that require attention. The validation runs "real-time" so that each time the user changes a value, the score is re-calculated and any appropriate fields are colored "red" to indicate they need to be filled out correctly.



Validation rules with quick links to make corrections on the form.

Closed Call Rules

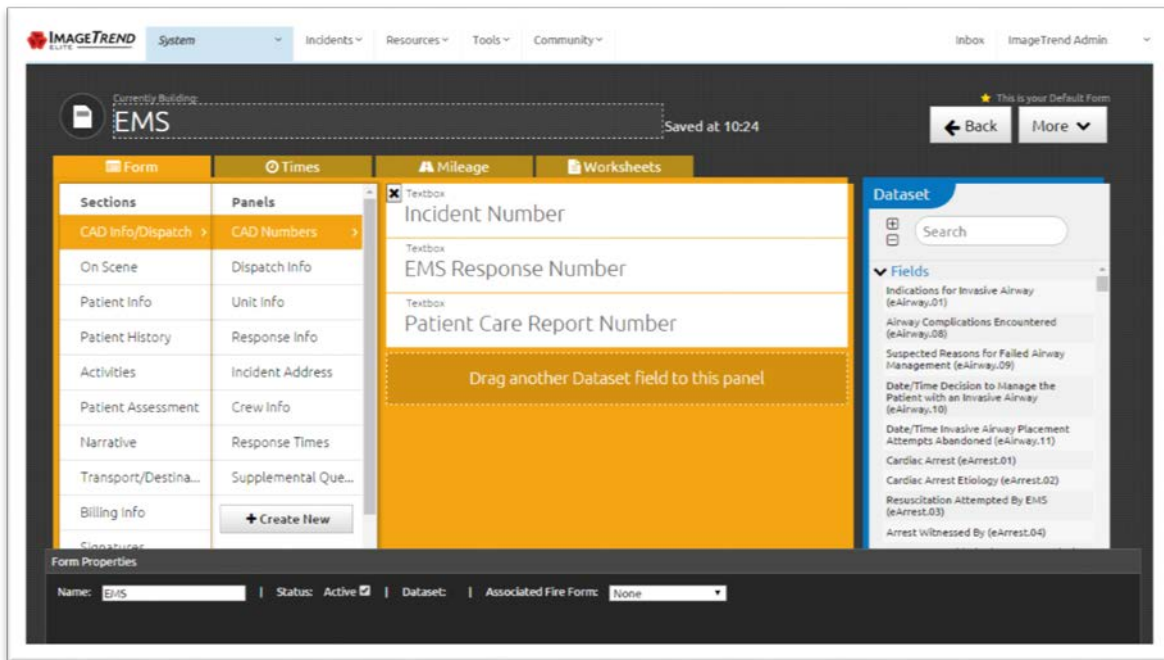
System Administrators have the ability to create closed call requirements per individual validation rule. This will restrict providers from posting an incident from the Elite Field to the central Elite system until the provider satisfies those rule(s).

Dynamic Power Tools

Dynamic Power Tools allow users to group any grid from Medications, Procedures, Vitals, EKG and Assessments to provide documentation for common situations. These dynamic power tools can be named/labeled whatever the administrator would like. The layout of the fields is also completely customizable.

Form Manager

The Form Manager is used to configure the incident form's layout. The Form Manager allows the incident forms to be configured to the exact needs and specifications of the individual agency. Tabs, panels or fields can be moved, added or deleted, creating an incident form to meet the needs of each agency for data reporting. Other configurations include the ability to change labels, inactivate fields, and group fields within a section. There are several other configurations to allow for quicker and easier data entry. Multiple incident templates can be created for different situations - for example, a form for cardiac arrest calls and another for cancelled calls. In addition, default values can be added into most of the fields. Default values are based on template type -- so a Cancelled call may have different defaults than a Scheduled Transport.



The EMS Forms Manager allows the administrator to configure fields on a form or worksheet

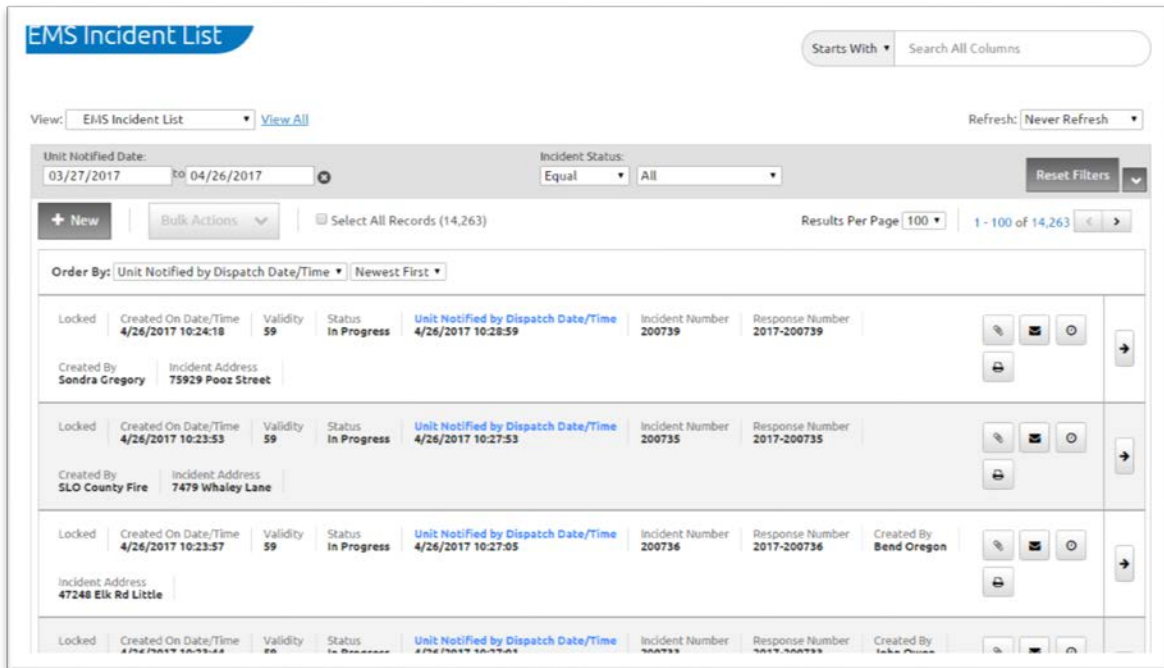
User Management

The Users section of each agency allows an agency or system administrator to track and enter many details about the agency and its staff, including:

- User Listing with Permissions
- Individual Staff Profile
- Add Staff
- Certification Management
- Employment Details (personnel ID, start date, title, etc)
- Immunization Records

Incident List

The EMS incident list allows the user to search for incidents by incident number, response number, date, time and validity (%) and then view them. The specific columns that appear are customizable per user.



The EMS Incident List

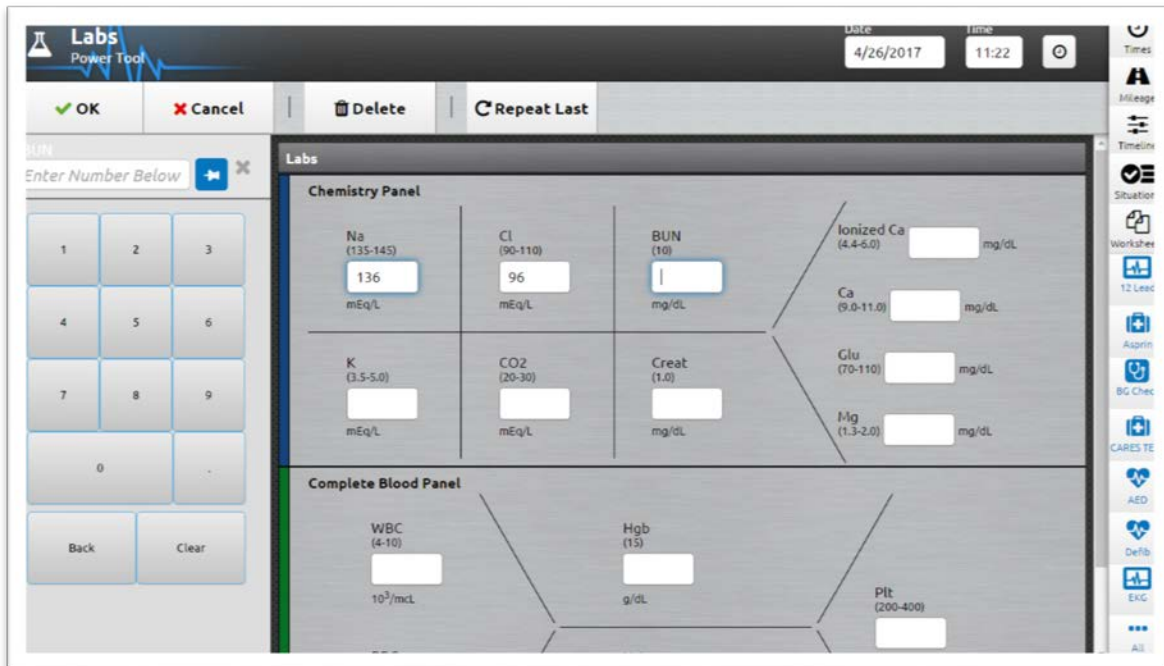
Elite EMS Data Entry

As a Web-based application, data is entered via an online form that can be accessed from any internet connection at any time. This form replicates a paper patient care report (PCR) with all fields for data collection. Many features for simplifying data entry are standard including:

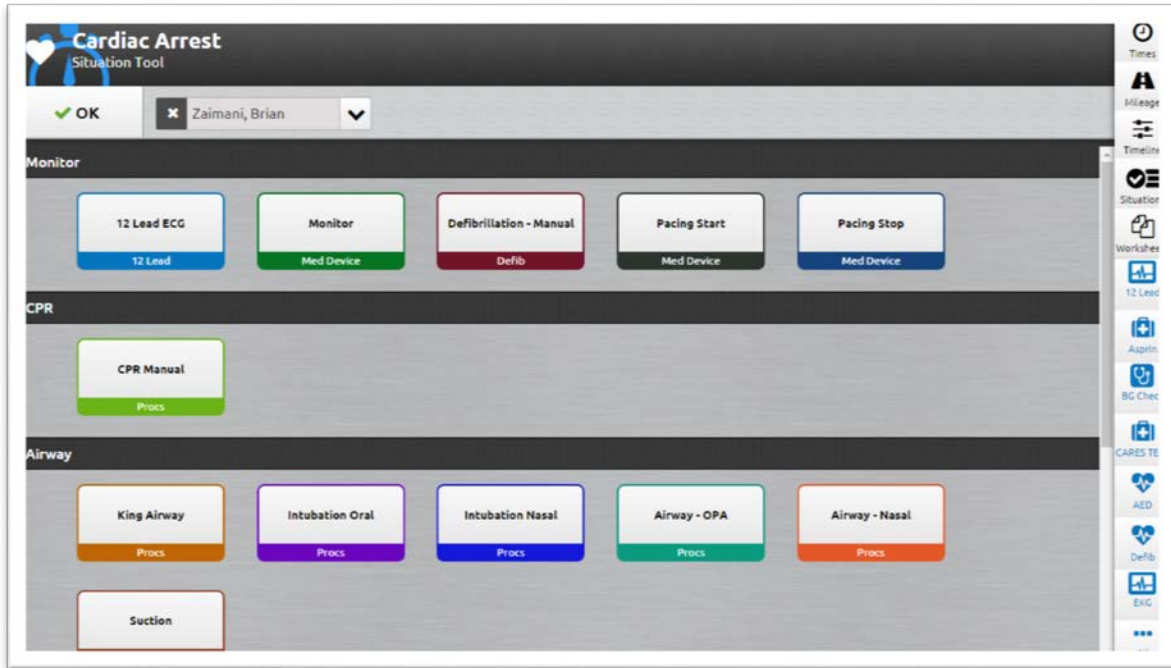
- Quick-pick lists
- Default Values
- Dynamic Power Tools™
- Situation Tools™
- Billing Information
- EKG Integration
- Validation Rules
- Electronic Signatures
- Repeat Patients
- Response Times



The Assessments Power Tool



The Labs Power Tool (fishbone)



The Cardiac Arrest Situation Tool

Audit Validation

There are several levels of auditing within ImageTrend Elite. The auditing feature not only tracks and records every access and change to an ePCR field, it ties into the Data Validation engine which audits each data field to assigned business rules and produces a validation score of completion. All data transfers include validation algorithms to ensure successful data transfer. Additionally our hosting infrastructure includes several automated monitoring and auditing features to ensure security and quality assurance.

The Elite EMS system also tracks each time a user access an ePCR, prints an ePCR report, or changes a data value within an incident.

Quality Management and Inbox

The QA mechanisms in Elite go beyond validity, and allow agencies and Medical Directors to track, review and comment on all incidents within their agency. To start, the system contains numerous standard QA reports that allow agencies to review and quickly determine the quality of incident being entered by their emergency technicians. Additionally, each incident can be assigned a status. This list is dynamic, and can be added to or modified at any time. This may include statuses for: In Progress, Completed, Submitted for Review, Needs Review, Reviewed/Sign Off, Billed, etc. Users and billing companies can search and report on status of all incidents.

If an incident is determined to need follow-ups with emergency personnel, the medical director or other agency administrators can record a note with a link to the incident. They can identify to which specific individuals to send the note. Users are automatically notified upon entering the system that they have

unread notes. These correspondences are tracked within the system with no limits on the number of notes attached to the incident, for ease of review by the administrator or the Medical Director. Users with unread notes can reply to these just like email.

All internal notes/messages can be accessed by clicking the “Inbox” after the user is logged into ImageTrend Elite. From within Inbox, you can see your unread messages, read messages, sent messages, and messages flagged with a color-coded category. The user can delete messages, reply to an existing message, or create a new message.

Incidents can be locked from editing to maintain the integrity of incidents that have been submitted or billed. Administrators have the ability to lock or unlock incidents at any time. This can also be set on a schedule. For example, auto-lock incidents upon posting from Elite Field.

Report Writer

ImageTrend’s Report Writer allows users to dynamically create, display, and store pre-created as well as ad hoc reports. With over 160 pre-created reports and the ability to create ad hoc reports as needed, the Report Writer offers expanded reporting and data analysis capabilities. Reports can be scheduled on regular intervals and supports distribution via email to a pre-determined list of recipients.

Data Conversion and Integrations

ImageTrend’s goal in any solution is to streamline data flow and maximize data usage. The NEMESIS XML version 3 standard data exchange methodology has been successfully implemented in numerous solutions and with many different vendors. To accomplish this we have a team that thoroughly investigates the existing data and requirements and develops a plan of integration for ongoing data communications between systems or a data conversion plan for those instances when a singular import of existing data into the new database is required. In either of these instances, the file import method, file data type, and accurate mapping are the keys to success.

These interfaces will be fully reviewed for implementation requirements, after which a detailed implementation and acceptance will be presented. Even in the case of standard interfaces, ImageTrend reserves the right to fully review all requirements, as it has been our experience that even standard products from vendors often have variances that may not be thoroughly documented.

Every client has a unique set of interfaces that define their system and configuration; therefore, not all interfaces may be available for their specific versions. Even if we do not have a specific integration available, as integration experts we fully understand the issues involved and will prepare a detailed plan for successful implementation within reasonable timelines.

Cardiac Monitor Integration

ImageTrend currently integrates with ZOLL, Physio, and Philips cardiac EKG monitors. The data types that ImageTrend Elite Field currently captures are based on what the manufacturer exports. These include: 12-Lead Analysis, Defibrillation, ETCO2, Heart rate, Invasive blood pressure, Noninvasive blood

pressure, Respiratory rate, and SPO2. Each entry is imported and saved as a new entry within the Vitals/Treatments section of the Elite EMS incident, which also appears on the printed report. In addition, the original manufacturer file is dynamically saved as an attachment in the specific incident. This allows the end-user to be able to view six-second waveform strips, as well as related waveforms for each vitals record at any time in the future. This data – when collected within Elite Field – can also be posted up to the Elite EMS data repository.

CAD Integration

- Dispatches are usually text files that contain full or partial incident information.
- ImageTrend has successfully built an import method for most of the existing CAD vendors.
- CAD data is imported into an ImageTrend database, where it resides and can be downloaded into an Elite incident.
- CAD/Incident reconciliation reports come standard with this integration.
- All CAD data that has been imported into the Elite system is viewable from within the Incidents app menu item.

Billing

ImageTrend's software fully supports integration with all billing systems that are ready to accept NEMESIS v3 data. In addition, ImageTrend offers the capability to send data to secure FTP locations.

NFIRS Integrations

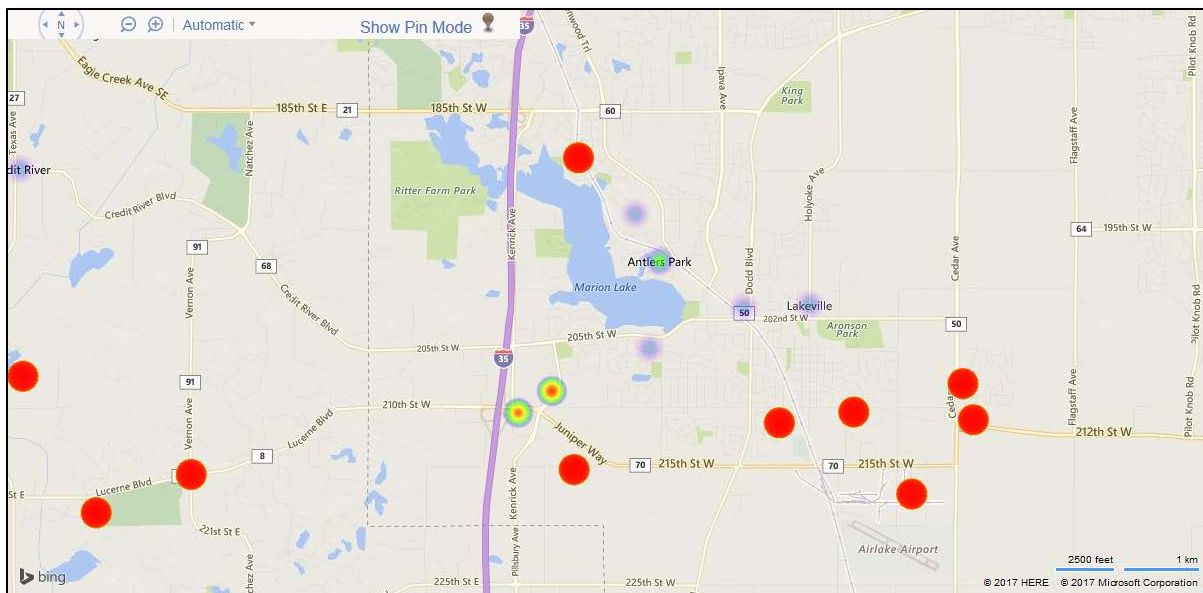
ImageTrend's systems provide an NFIRS file export of available data for systems to use as a data import. If integration services are required, these are available at time and materials rates and will be offered as a change order scope of work after full discovery as described above.

MAPPING AND REPORTING SYSTEM™ (MARS™)

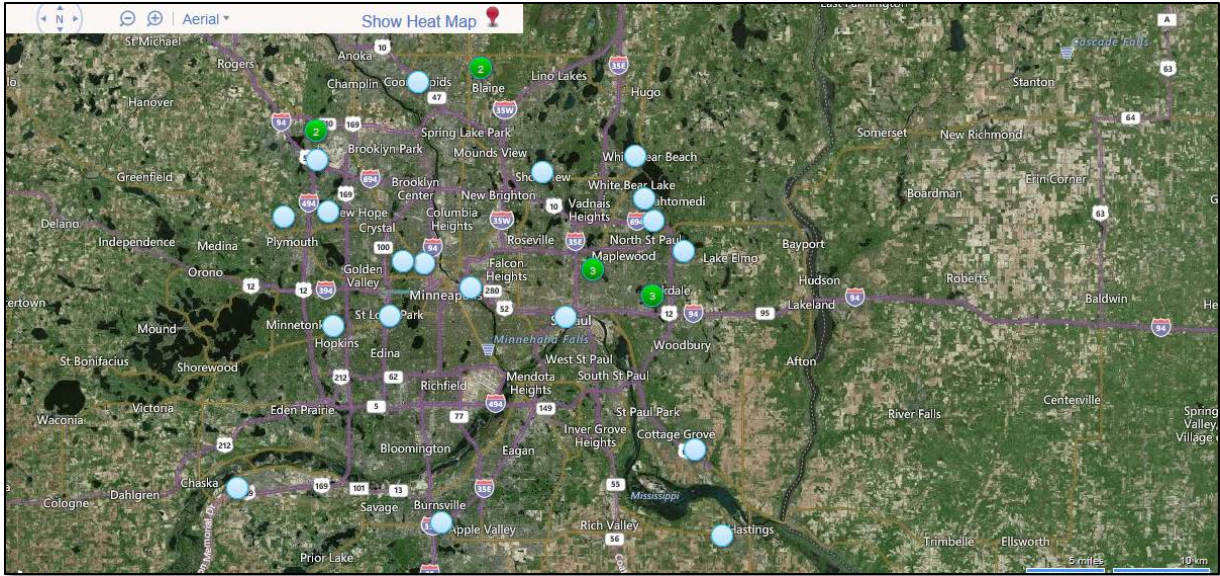
Expand data reporting and understanding to include mapping techniques through MARS. Using intensity shading, cluster mapping or individual pin displays, users can experience advanced data visualization. MARS provides flexible display and data output through aerial, satellite or road views.

Through an integration with Microsoft Bing Maps, the geocoding in ImageTrend’s MARS allows run information, specifically address information, to be fed into Bing Maps. Address information including street address, city, state and postal code, along with relative information (e.g., cardiac data), can be exported to allow for plotting data on geographical maps for use in data analysis. Each point allows a quick-view of the basic patient data and a link to the PDF run form. These maps give the State or agency a high-level view of concentrations of incidents relative to geographic locations.

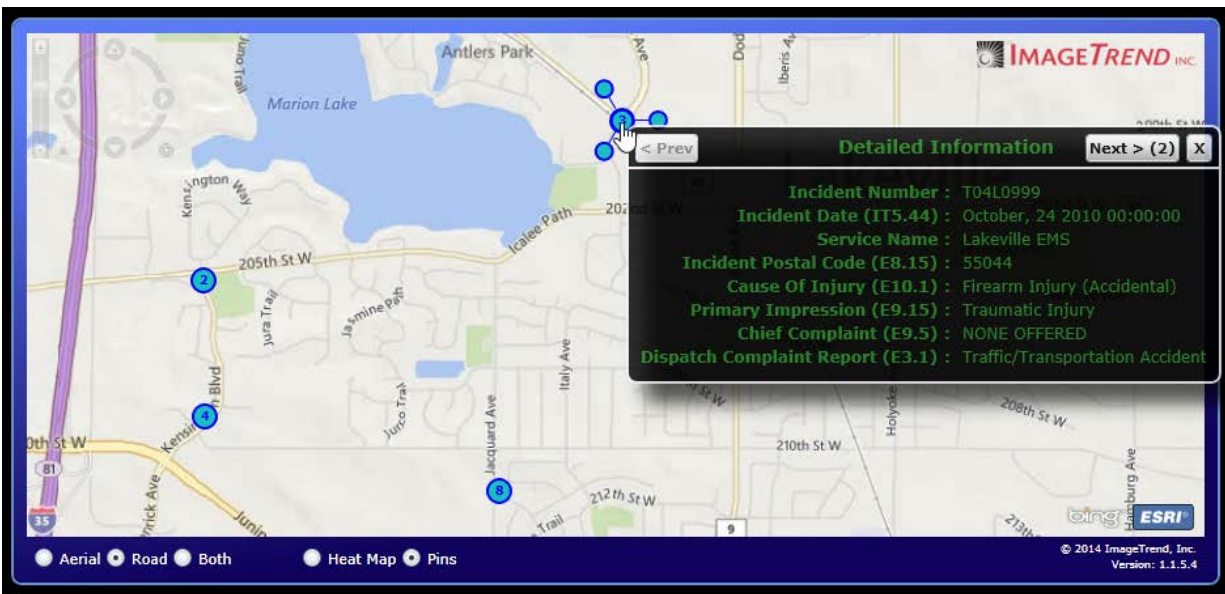
Take your analysis further by using MARS to determine care levels, care proximity and the types of care being provided in selected areas. Through viewing incident volume, conclusions of paramedic workload, performance and patient needs can be made - leading to more efficient resource allocation.



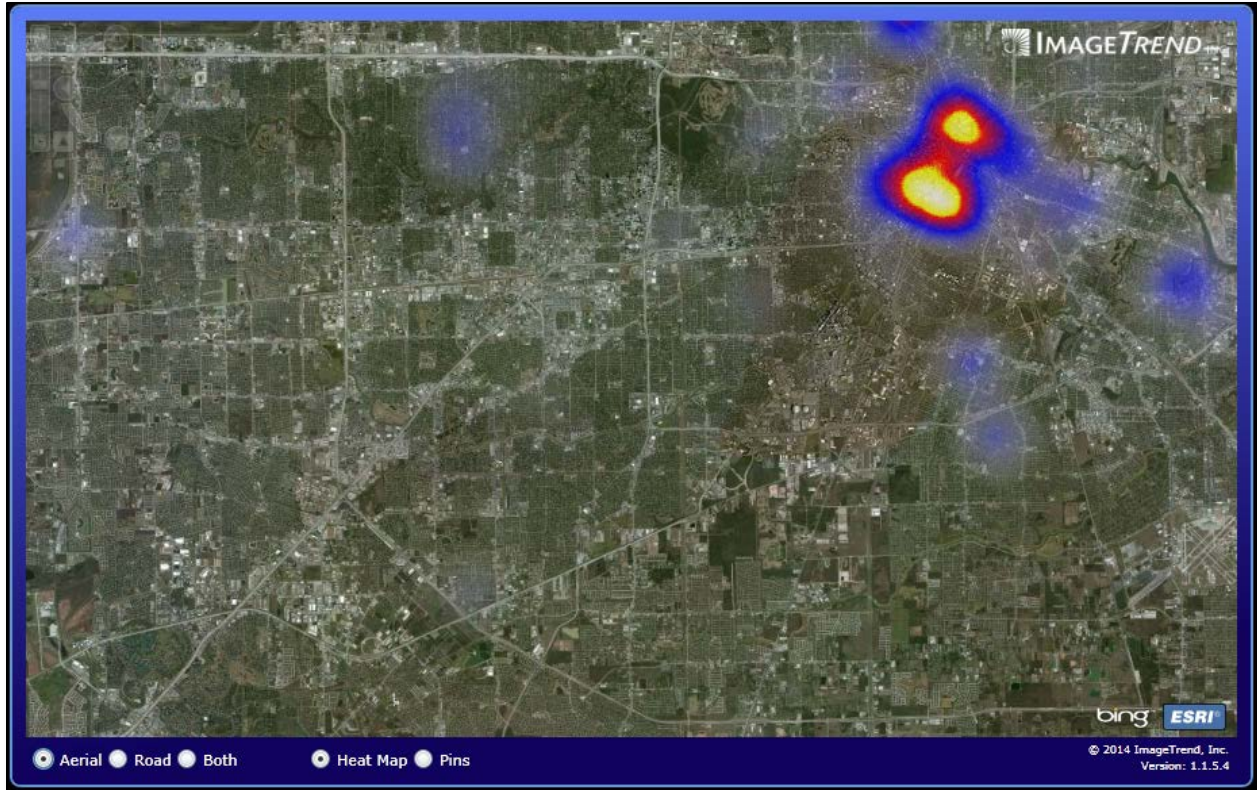
Road view heat map



Aerial map report with pins



Map report with pins, including details



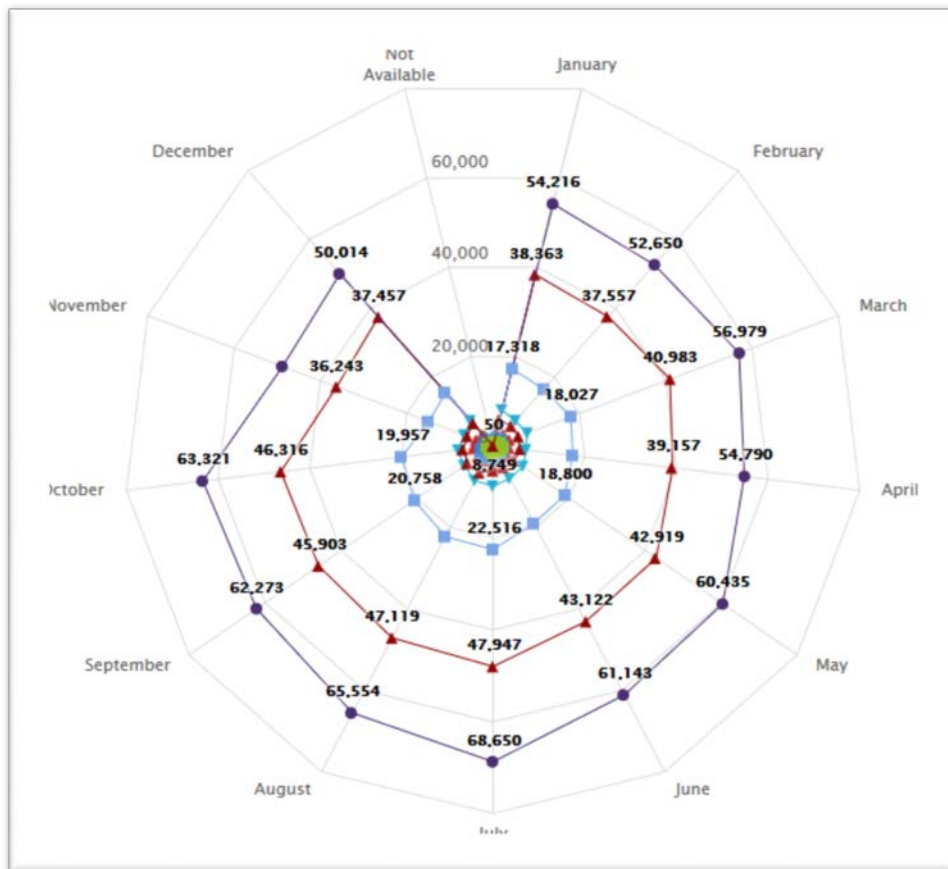
Aerial heat map report

VISUAL INFORMATICS™

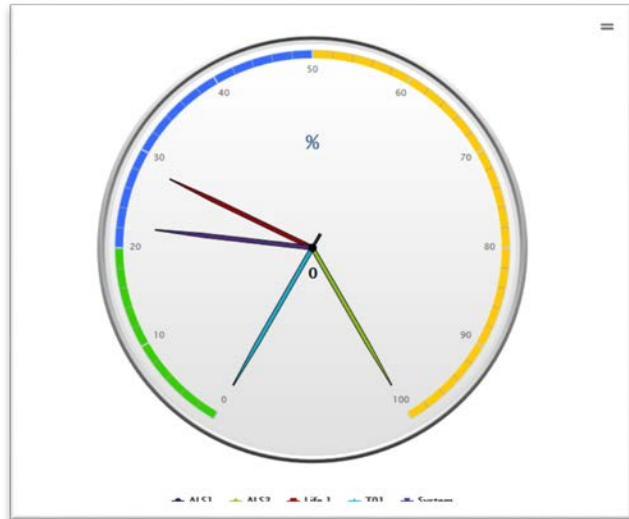
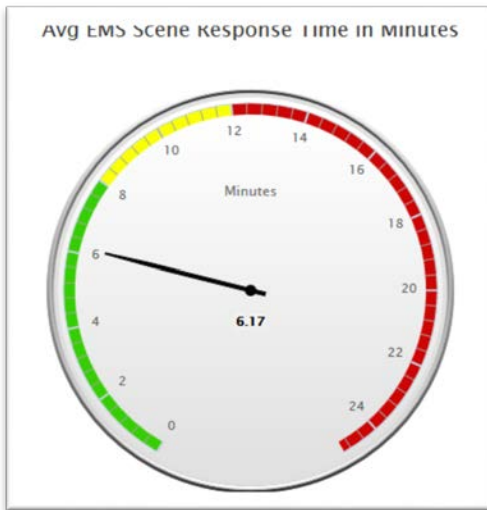
ImageTrend Elite™ Visual Informatics™ (VI) is the Analytics module for Report Writer. It allows the expansion of standard reporting to include more in-depth analysis of data, including trending and predictive assessments.

Visual Informatics creates an element of reporting that is not possible with conventional report methods. With these data mining tools, specific data can be analyzed in different views and multiple relationships, allow for dragging and dropping of columns, rearranging of data views, data drill-down, and creating dynamic charts and graphs. This gives the user flexibility in how to view the data with precise control and display.

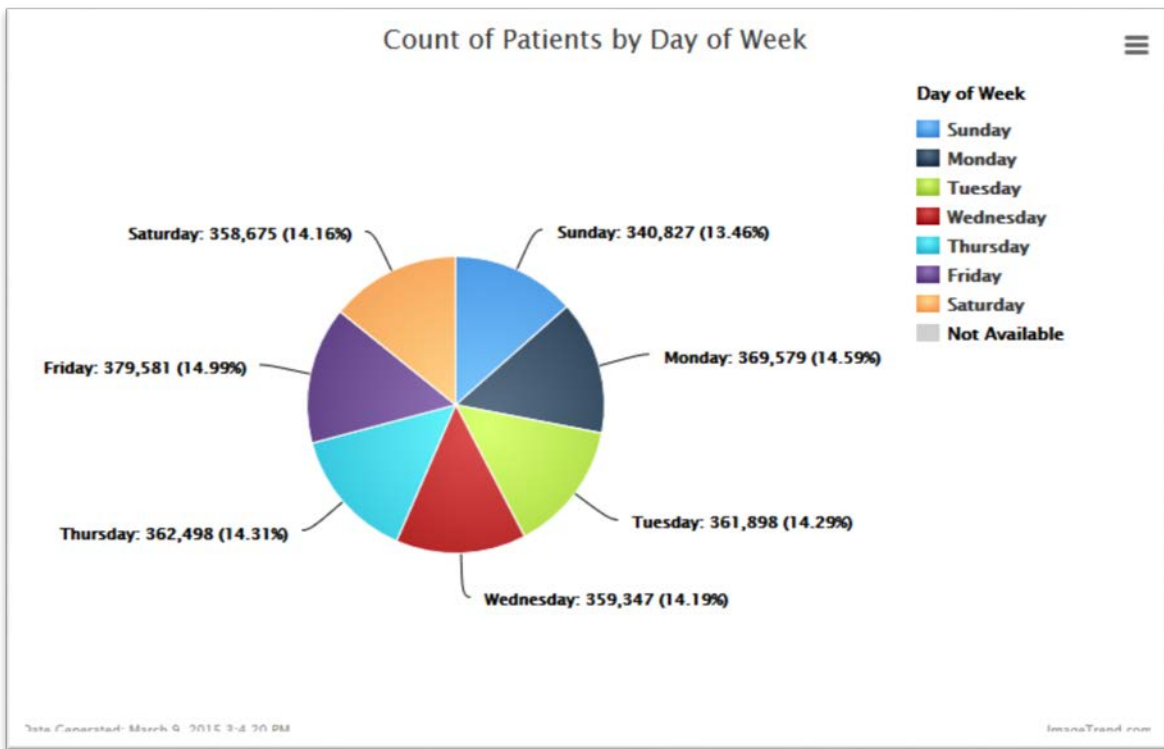
There are multiple chart types including: angular gauge or KPI gauge, area, bar or KPI bar, bubble, column or KPI column, combination, funnel, line or KPI line, pie, polar and scatter. The following reports, charts and graphs are examples of the power of Visual Informatics.



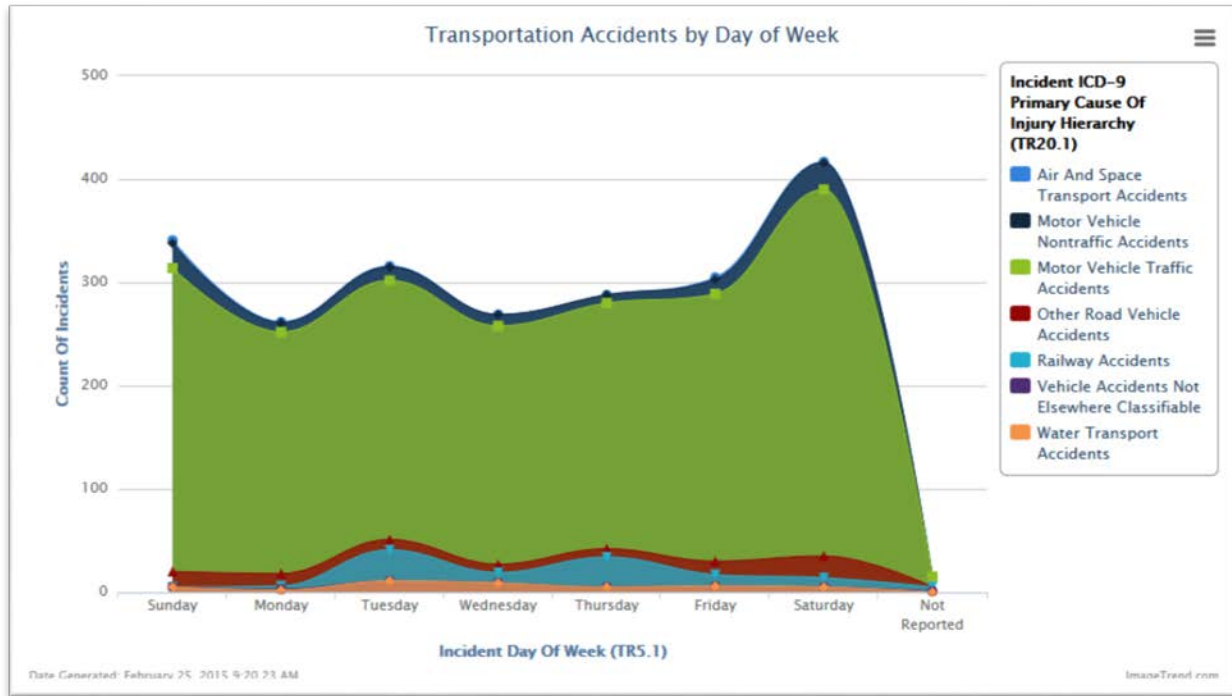
Example of a polar chart



Gauge and KPI gauge examples



Pie chart example



Area chart example

Design | **Actions** ▾ | Data Set: Incidents Cube

This new report has not yet been saved. To save your report, go to Actions -> Save.

Chart Type: ▾

Line Type:

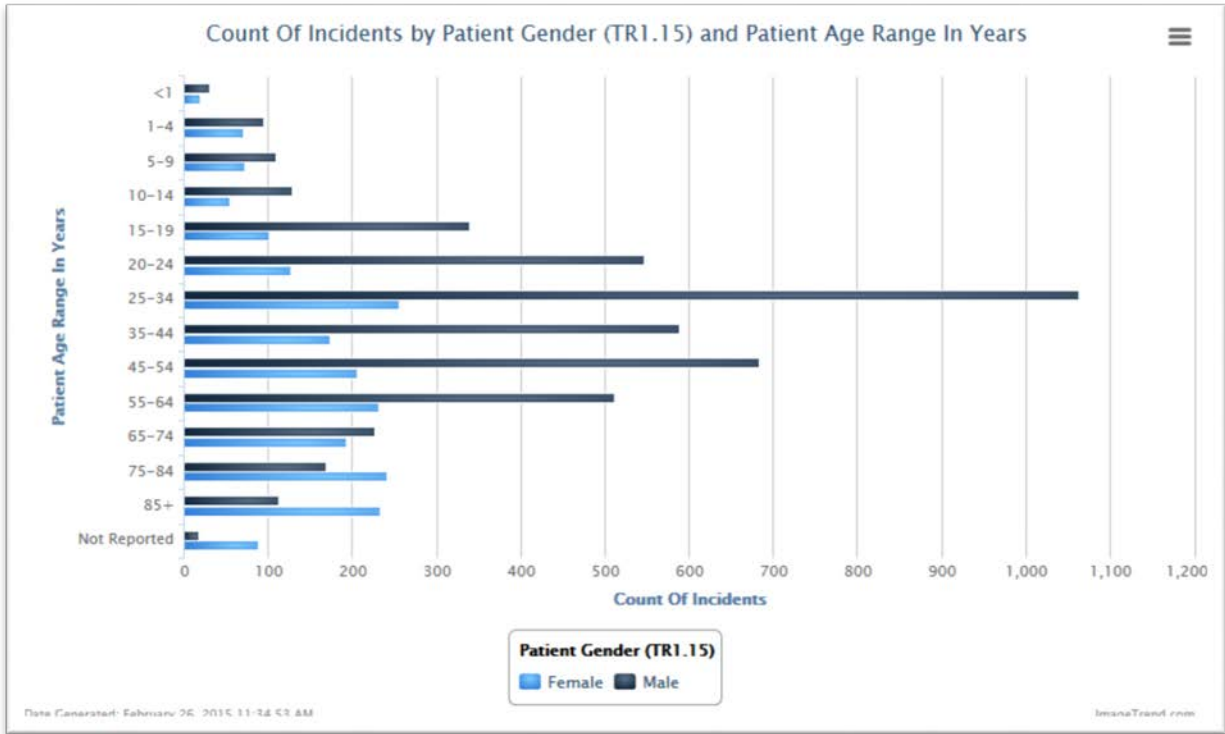
Stacking:

Y-Axis Measure: ▾

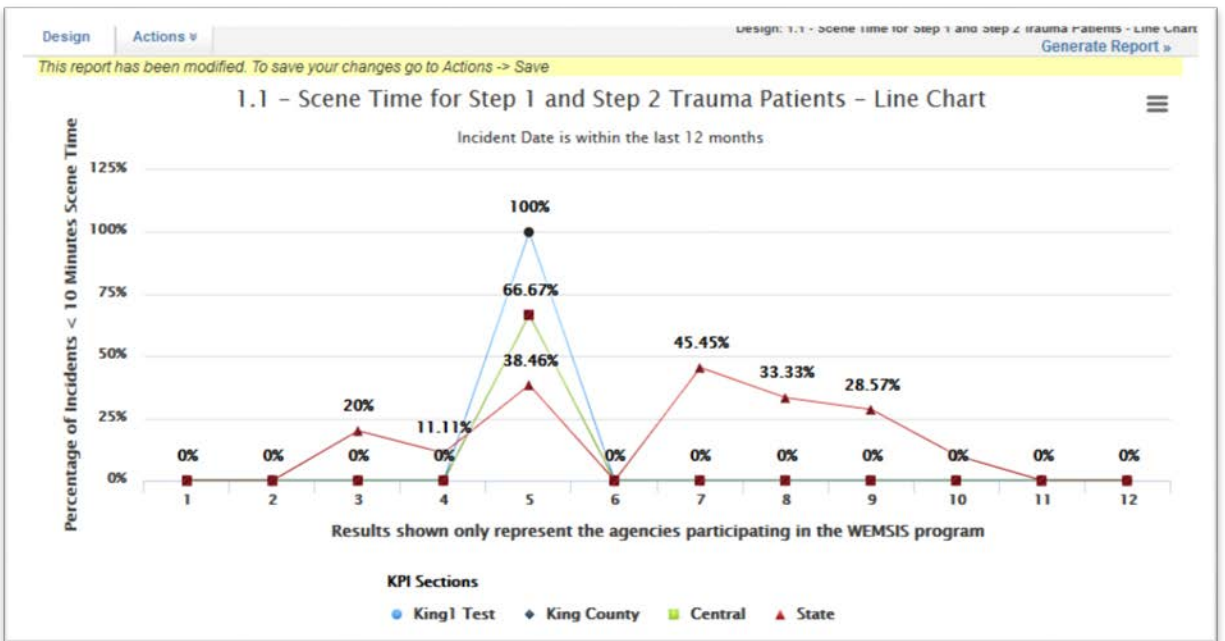
Area Names: ▾

X-Axis Categories: ▾

Example settings for a Visual Informatics analytical chart



Bar chart example



KPI line example

Design | Actions ▾ | Data Set: Incidents Cube

This new report has not yet been saved. To save your report, go to Actions -> Save.

Basic Options | Additional Filters | Additional Options | Metadata

Chart Report Attributes

Report Description:

- Data Set: Incidents Cube
- Chart Type: Scatter
- X-Axis Measure: Count of Medications Given
- Y-Axis Measure: Count of Crew Members
- X-Axis Categories: Day of Week - Filter
- Subset Function: None
- Date Generated: March 16, 2015 1:48.24 PM
- Enterprise: EMS State Enterprise
- User Name: L, Jackie

Version: 3.2.10 mRW-RB-3.1 DB: 3.2.04 at 14-08-07 07:08

Column Filters

Day of Week not equal to Not Available

Tabular Data

Measures	Day of Week						
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Count of Medications Given	169,416	176,314	169,804	167,546	168,489	174,206	174,007
Count of Crew Members	1,532,241	1,656,010	1,632,182	1,625,297	1,626,120	1,711,472	1,596,774

Apply | Cancel

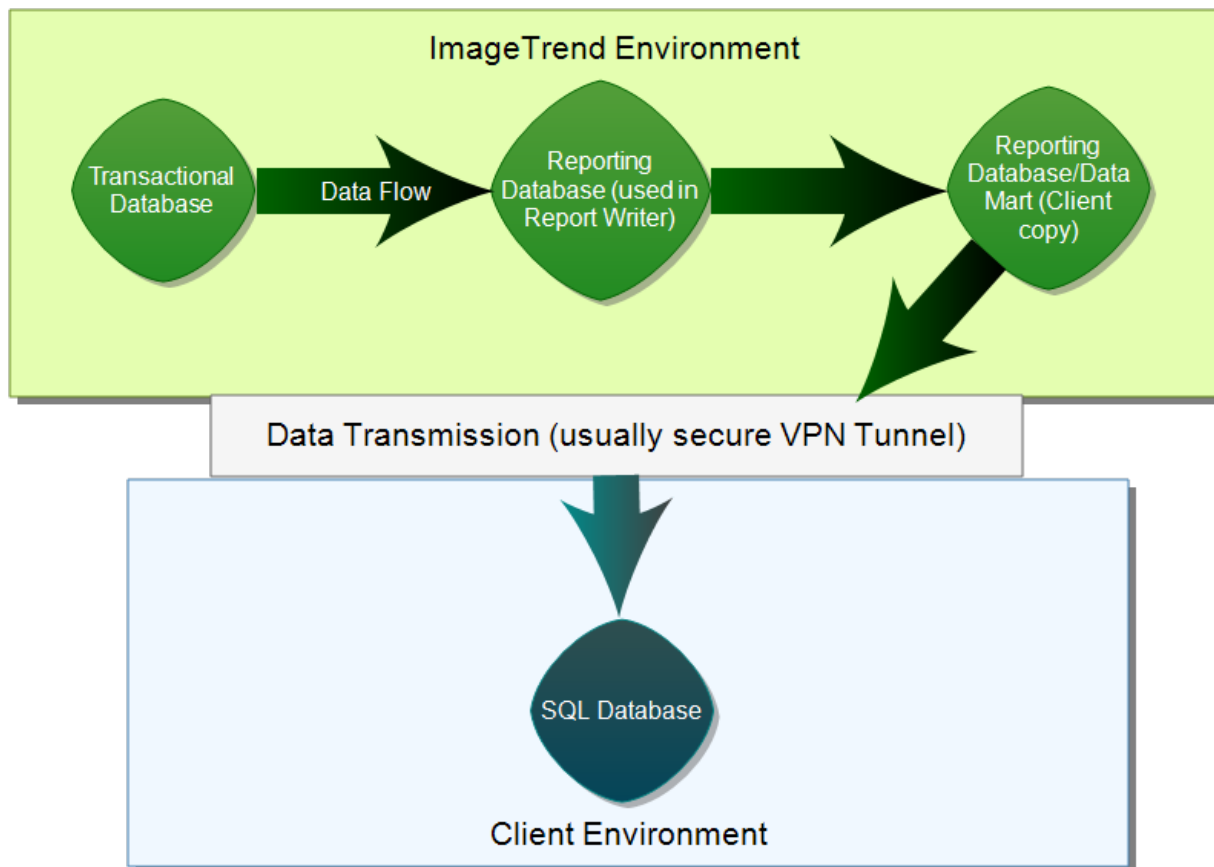
Metadata view for a scatter chart

DATA MART

ImageTrend Elite™ Data Mart allows you to receive a copy of your reporting database to run queries and reports against using your preferred reporting tool. The information derived can assist in making more informed decisions as well as show stakeholders how quality data helps improve operations and patient outcomes.

Data extracted from your ImageTrend Elite EMS and Fire transactional databases is transformed into a format that is designed and tuned for optimum reporting and analysis. This allows for the ability to query data from ImageTrend as well as other external databases that you may have access to such as crash data, hospital outcome data etc. Data Marts can be queried using any industry-standard business intelligence tools such as Crystal Reports, SAS and Tableau, as well as many others.

How It Works



1. As new data is entered into Elite, the data is placed into the transactional database.
2. The data is optimized for reporting and placed in the reporting database on a set schedule (usually every 5 minutes).
3. The internal ImageTrend reporting database is copied to create the client copy of the reporting database Data Mart, for reporting from your system.
4. The data is pushed to a SQL database in your environment, based on the setup performed during your implementation.

Client Environment Considerations

Data Mart set up requirements should include these considerations in planning:

- Secure VPN Tunnel Port: 443
- Supported Database Type: SQL
- SQL Server Version: 2012 or Higher (Standard or Enterprise)
 - SQL Express not supported
- Server/DB Size: depends on how the data will be used
 - **Note:** Should be built to allow for future growth
- Who connects to the database once in the client environment is up to the client

Reporting Services

ImageTrend offers the option of reporting services to help expand the potential of the Data Mart. Some examples include KPI and benchmarking reports and dashboards, mapping solutions, and special or unique integration tying into other healthcare or operational data.

LICENSE MANAGEMENT

ImageTrend **License Management** is a highly-configurable, enterprise commercial off the shelf (COTS) system designed for processing regulatory licenses and certification. The solution incorporates some of ImageTrend's shared platform technologies, including the highly capable Report Writer for generating ad hoc and transactional reports. Each implementation is customized to fit the business rules of the client, making License Management the ideal solution for your needs.

License Management is Web-based for anytime, anywhere access. The enterprise architecture allows multiple agencies or regulatory boards within a single system for economies of scale and complete reporting. At the same time, each agency has permissions-based access to its own data stores for configuration and reporting. This gives the system just as much flexibility as it has capability.

ImageTrend has developed and hosted statewide data systems since 2001. We understand that the number of users can vary for these systems, and as such the model is not based on seat licenses, yet each user has unique security credentials which can be administered with group permissions.

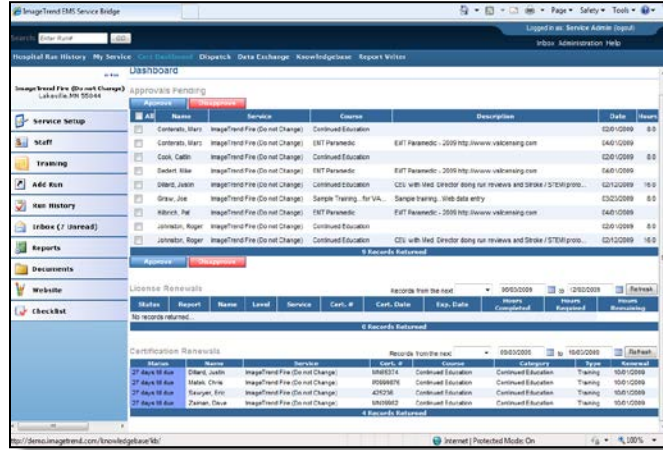
In addition to the back office administrative functions, License Management has a user-friendly interface for applications and renewals. To secure public trust and transparency, public reporting and license lookup is available through a public Web portal as configured by State.

ImageTrend License Management is a complete end-to-end license and certification management solution.

License Management assists agencies in managing and improving the efficiency of end-to-end licensing and records processing, allowing individuals to initiate records, process records through various departments for completion and verification, approve and request copies of licenses and certificates online. The Web-based solution allows individuals to fill out an application form online. Once an application form is completed, the system administrator view will allow for application review, status tracking and additional processing steps including payment and delivery. Many of the processing steps are either self-service or automated providing both cost and time efficiencies.

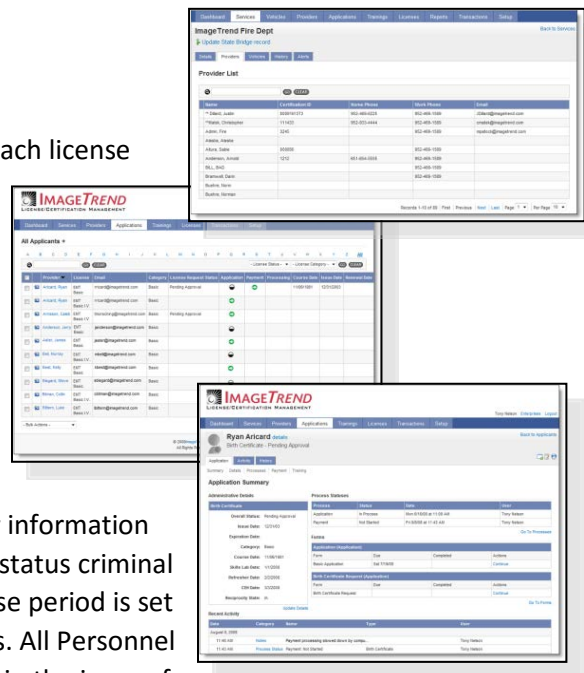
Key Features

- Personnel/Entity/Vehicle Licensing
- Online Payment Processing
- Training Record Collection
- Report Writer
- Automated Workflow
- Content Management
- Integration for Fully Customizable Public Perspective
- Validate Personnel/Vehicle Licenses
- Universal Login
- Web-based for anytime, anywhere secure access
- Secure access to edit and view information as authorized
- Automated next step processing
- Automated email notifications of tasks and statuses
- Centralized database and processing eliminates redundancies



Workflow

Administrators can establish the specific workflow for each license and certification. The entire process from the application to the payment to the approval can be mapped out by the administrator. Quickly identify your tasks in the easy to view layout, similar to Microsoft Outlook.



Personnel Licensing

Applicants can apply for, renew or request copies for licenses and certificate online. Demographics and other information regarding the applicant’s training and examination and status criminal background checks are all collected as required. A license period is set up for easy recording and reporting of renewed licenses. All Personnel Licenses can be audited at any time. The steps involved in the issue of the initial or renewal of any license can be audited at the states discretion. All system transactions are recorded with a date/time stamp for easy retrieval, and reports can be generated at any time to uncover discrepancies.

Entity Licensing

License Management records each entity (business, shop, organization) license application, including demographics and information regarding the type and level of service, service area, contacts, term of license and inspection date.

Vehicle Licensing

Vehicle information can also be recorded, including model year, manufacturer, vehicle identification number, motor vehicle registration plate, inspection date (if applicable) and vehicle type.

Agency Licensing

The ImageTrend License Management product allows for Agencies/Services to apply for initial licenses and for reinstatement of an expiring licenses. The steps in the application process, supporting documentation required, and necessary business rules and approvals, can be configured by the state after training and implemented in a timeline that fits the state’s license terms.

Certification Dashboard

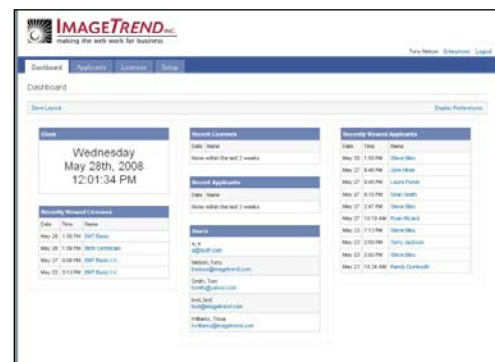
This basic Certification Dashboard allows administrators to track certifications, licenses and coursework for staff members and is included in the base system. If the optional licensure and certification system manager is selected, this will be fully integrated. Staff profiles should include dates for certifications and licenses, which will automatically appear on the Certification Dashboard when renewals are needed. As additional coursework is created, either the administrator or (depending on permissions setup) the staff member can enter information about the hours and types of courses completed towards the certification. The system will automatically update the number of hours completed and needed for the renewal, and allow the administrator to approve or disapprove renewals.

Agency Investigations and Compliance

All Investigations can be recorded and managed by the state through the ImageTrend License Management product. Investigations can be tracked from the individual provider and tied back the service. Supporting documentation to the investigation can be attached and any additional notes recorded. Alert Flags can be placed on the subjects of the investigation and removed by the system administrator when/if this is applicable.

Virtual License Center Portal

This statewide licensure data management system provides the diversity and expanse required for application usage by multiple agencies throughout the State with virtually unlimited users. The main database server has the complexity and scalability required to collect the magnitude of data presented, as well as provides functional and analytical capabilities for dynamic, up-to-the-minute reporting for use and sharing by government agencies, along with public access where applicable.



User Interfaces

This multi-faceted system allows for many groups to initiate, add, or view information for a certificate, whether that is the initial certificate or a copy. As a self-service online form processing system, considerable time savings will be realized. Copy requests, if they do not

require certification, it can be simply downloaded and printed during the initial transaction process. Specific groups will have views to support updating and reviewing information as well as providing authorizations. The multi-tiered access provides data security while ensuring completeness and accuracy. ImageTrend understands that each of the following user groups will have a distinct user interface, which incorporates their specific needs, access rights, workflows and forms as defined in the RFP and the discovery process.

- Supported functions
 - Profile Management
 - Certificate/License Status and History Lookup
 - Pause-Save-Return-Edit
 - Limited Access
 - Printing
 - Error detection and messages
 - Pre-populated form fields
 - Verification and matching integrations
- Business Process Owner Interface
 - Group Specific Access
 - Limited Edit Rights
 - Group Specific Reporting
 - Group Specific User Management
 - Form Design
 - Form Processing Access
- System Administrator
 - System Wide Access
 - Full Permissions
 - System Wide Reporting
 - System Wide Users and Group Management
 - Resource Management
 - Reporting

Continuing Education Records and Management of Education Programs

ImageTrend License Management allows for the tracking of continuing education records. Available classes can be managed by the state and training instructors can submit applications to conduct additional class or training sessions. The available sessions can be reviewed by personnel who can then contact instructors to be enrolled in the class. Instructors can enroll their students and track which attendees passed/failed the session, as well as recording any applicable exam scores. The state can determine the amount of credits required in each category for a valid license issue.

Management of Medical Control Authorities and Protocols

Services can submit proposed protocols for review and approval by Medical directors and protocols tied to each service can be managed and reported on at the System Administrator level.

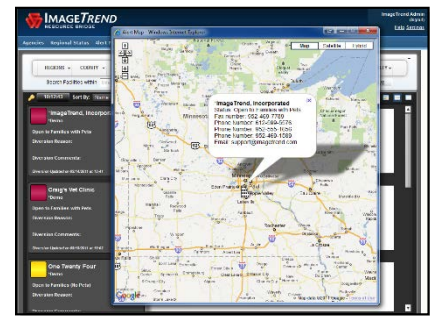
RESOURCE BRIDGE

The **Resource Bridge** is a web-based application allowing for constant access to emergency related logistics. Resource Bridge is used for hospital bed and resource allocation, tracking, and monitoring status in situations ranging from multiple-vehicle accidents to mass casualty alerts to daily operations. Special resource requests range from specific medical supply inventory to specialized doctors to bed availability. The focus of the Resource Bridge is to enable access to specific emergency related logistics, available anytime at your fingertips.

The basis of this resource allocation system is a database-driven application which records all statistics relating to hospital beds and resources by category, type and status along with hospital demographics. The monitoring of this system allows for comprehensive reporting, allocation, and sharing of available beds, supplies, personnel and other resources within regions of any size from city, county, state, or federal levels.

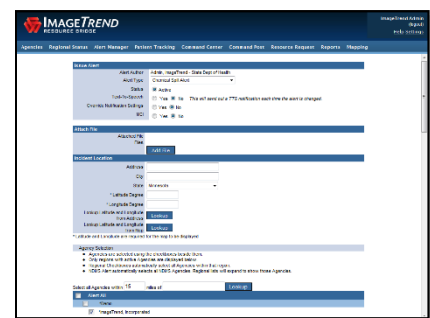
Save Time, Save Lives

Real-time search capabilities provide immediate status information and assignment possibilities. Through an alert notification capability via paging, popups, text messages and text-to-speech, users are made aware of allocation requirements and can assess the immediate availability. Lives can be saved with an overall increase in communication management and efficient delivery. Resource Bridge facilitates better situation assessment by providing location information on resource and care availability. Individual views provide geographical information and hospital summaries.



Create a better future

Resource Bridge lessens adverse impact during a mass casualty situation by helping people determine how to provide the best possible care. Having pertinent information in real time with Resource Bridge provides confidence and assurance for emergency personnel during critical decision-making moments. Secure a safer future through better emergency preparedness.



Centralized Management

As a database-driven Web application, Resource Bridge provides for centralized data aggregation and management. This ensures that any changes or updates are propagated throughout the system automatically. Centralized composite data for the whole state provides

accurate information to support critical decisions required for emergency preparedness. This information supports efficiencies in resource allocations and surge capacity identifications.

Multiple Role-Based Consoles

The Resource Bridge as a centralized management system provides user consoles specific to each of the various groups that require access. Access to these consoles is controlled through the advanced security modules permissions assignments. Each console provides unique functionality for that group ensuring controlled accessibility and streamlined usage.

- **Facility Management Dashboard** is the primary input tool that enables facilities to provide data on available resources for allocation and real-time diversion status updates.
- **Regional or County administrators** have individual administrative consoles that provide an aggregate view of all participating facilities and resources.

In times of emergency when preparedness is paramount, the **incident command view** provides real-time bed and resource availability for both ED and facilities, which can be searched and updated in the event of mass casualty or critical incidents. The flexible search capacity filters by using the dropdown menu or by selecting regions on the state map for incident command that is simple to navigate. This navigation provides for up-to-the-minute information and collaboration for effective responses.

Communication Management

Centralized facility listings and automatic contact lists provide for the dissemination of critical communications from the incident command center during critical events, keeping all persons informed without time intensive searches for contact information. An integrated communication system for authorized system users allows for direct communications which supports multiple participants simultaneously and supports complete interaction during the intense times of an emergency.

Report Writer

The Report Writer allows you to dynamically create, display, and store standard as well as ad hoc reports. This gives you the power to find and display the data that you want without relying on static reports that may not have the information that you need. The report writer encompasses a single reporting tool that gives you complete control of data output and display.

Available Reports by Category

Alerts

Acknowledgements

Alerts by Facility

Alerts by Type

Beds

Beds by County and Type

Facility Bed Information

Surge Capacities by Facility

- Diversion
 - Diversion History by Facility
 - Diversion Status by Region
 - Hospital Diversion Report
 - Hours Closed by Hospital
- Facilities
 - MCI by Facility
- Inventory
 - Inventory Items by Agency
- Users
 - Content Rights by User
- Surveys
 - Survey Responses
- Patient Tracking
 - Patient Destination
 - Incident Patients

Adhoc Report Writer

Choose from multiple display methods including a row/column report or single record display per page. Database search criteria can be selected on a field level basis allowing you to define exactly the fields you want. User-defined headers, sorting, and grouping provide you the ability to display search results using a number of options. Reports can be saved for later review or editing, and also as static content as a HTML file, Microsoft Excel, Word, CSV, or PDF document.

User security is strictly enforced to only allow users to report and view information that they have rights to. Additionally, based on your permission group, you will have rights to the following report functions:

- Define Data Set
- Choose Field Properties
- Define Selection Criteria
- Report Layout Options
- Display Options
- Saving and Scheduling Reports
- Setting up Permission

Administration of the Report Writer involves the complete setup, display, and management of reports.

System administrators can:

- Manage Reports
- Manage Report Categories
- Setup Tables and Field to be reported on
- Setup Table Relationships
- Create Formulas

- Schedule reports to be generated and distributed

DataPort

ImageTrend DataPort technology allows for the integration and exchange of data from multiple sources and through multiple methods. This includes the transferring, processing and importing of data files. The DataPort is the gateway for how data is received and processed between applications, such as the Federal HavBED reporting system and Patient Tracking Integration

In order to effectively implement a robust data processing tool, the application must be able to collect data from disparate systems and in multiple formats to ensure the most widely acceptable and cost effective solution. ImageTrend DataPort Technology accomplishes all of this using the following methods.

Allowing the importing of data in multiple formats gives the system the ability to accept data from almost all existing data collections systems. This gives the customer the flexibility to submit data with minimal effort.

The DataPort can be configured to assist the retrieval of data, process and formatting, transfer, and import, or any combination in-between. This can be accomplishing automatically by the system or with user interaction.

Data Warehouse

This is a Microsoft SQL based and designed to support the dynamic requirements of this resource allocation and emergency planning application. These requirements include, but are not limited to, system-wide tracking of facilities, diversion status, beds, and other resources; availability to a multi-faceted community covering a large area (i.e. region or state); benchmarking of specific indicators for emergency usage; a non-redundant data flow and sharing between concerned agencies from the local to the state to potentially the national level. This dynamic, relational database is populated from the intuitive user interface and definable resource tables and is hosted at ImageTrend's secure facilities. All fields of the data set are available for reporting and exchanging with other agencies and applications.

System Expansion

As a product offering, the ImageTrend's **Resource Bridge** can be acquired in any configuration and extended as needs arise. Available functionalities for this product are detailed below.

Command Center

Resource Bridge Command Center allows groups or individuals to communicate in a central location. Real-time instant message and document sharing gives users the tools they need in an emergency situation for coordinating resources, or in a non-critical situation for general discussions.

Emergency Chat

This is an intuitive communication feature that allows all medical personnel to communicate real time within a group. Ultimately, this makes it easier for multiple people to communicate at the same time with each other.

It is designed to handle real-time live user interaction over the internet, allowing for online meetings, interactive emergency chats for instantaneous updates of the events for both private and group needs.

Threaded Chat

ImageTrend Threaded Discussion Web Board delivers collaboration across the organization through:

Topic-Based Rooms

Rooms can be created for a specific subject matter or interest group. Users can be assigned by the administrator to specific rooms, limiting participation to only necessary users.

Moderation

Features full moderation capabilities, like moving messages and topics, deleting messages and topics, banning users, locking topics, etc.

Smart Categories

Organize the forum content by creating categories within categories to reduce clutter on the entry page to the forum. Each category can have its own status and be viewable to a select group of users.

Locked Categories

Within a forum you can have any number of categories, each of these categories can have different access rights. Categories can be created with full permissions, read only, reply only, locked, password protected and

more. Locked categories are especially important as they allow Forum Administrators to create a category and have a certain group of user's access it.

Private Messaging

When using third party clients, users can engage in personal conversations between one another, and save the history of those conversations. These conversations can be controlled by the user by allowing them to ban other users from communication or disable the feature all together.

Private Topics

Allows users to create a topic and select users who can participate.

Administration

Create and manage one forum or manage multiple forums, each forum can have its own permission structure which the Global Administrator dictates.

Reporting

Includes the ability to report on users, topics, categories and more, as well as allows exports to other formats such as CSV or Excel.

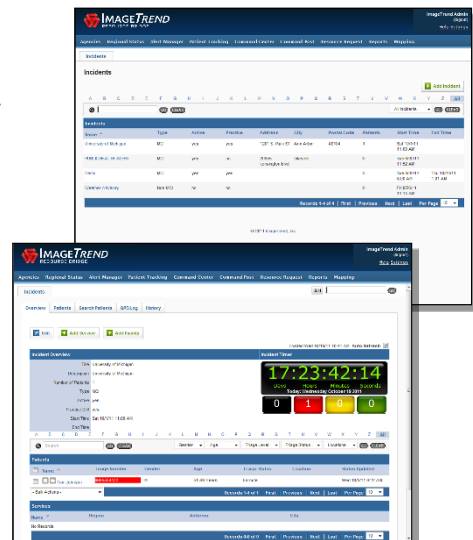
Document Hub

The document hub allows users to share and organize documents from a central location. Documents can be uploaded and tagged for easy retrieval and searching. Permissions enforce the ability to allow or restrict access to sensitive documents. The document hub acts like a single stop knowledgebase for important emergency planning documents.

Patient Tracking

Connects first responders, hospitals and the patients' family members with critical and up-to-date information. Each patient is tracked from initial assessment to the hospital where they are being treated. Patient Tracking is quick, easy to use and can be configurable for any service.

Using secure data sharing, hospitals can receive advance notice of patients that will be arriving at the hospital and are able to ensure preparedness. This allows for a more efficient response to the emergency.



Incident Management

Incidents can be created as the following types: MCI, non-MCI, Daily, or archived. This gives you flexibility to respond and track the types of patients and for the rights types of situations. Permissions allow users to see only the information needed for their position and roles.

Searching/Reunification

Searching for patients for reunification purposes or quickly admitting or discharging is easy for users. Extensive search capabilities allow you to scan in a triage number, search by patient name (with extended soundex capabilities) and filter by current patient locations. Again, permissions allow you control the options for user searches.

Quick Patient Entry/ QPE

The quick patient entry screen, or QPE, allows users to rapidly enter multiple patients at one time. Used in either an MCI or on a daily basis in a communication center, the QPE can be used to both enter patients, and view and update multiple patients with online editing.

Patient Tracking Mobile (Android)

The optional mobile component allows for swift in-the-field data entry to be set to the hospital, resulting in the quick assessment and care of patients.

Rapidly and consistently identify patients and their initial triage status utilizing barcode scanning for unique identification. Emergency personnel are able to enter pertinent data into the scanner which is then paired with the patient's barcode, collecting fast and accurate data.

ePCR/EMS Integrations

This optional integration allows pre-hospital ePCR data to be submitted in a patient tracking incident to start a patient encounter or update data using standard NEMESIS XML files. Data files are accepted then checked with existing triage numbers. If a patient triage ID is not found, the new patient is added to the incident, if one is found, updates are made and logged. This allows for the continuation of care documentation from initial triage on scene, to transport, to arrival.

Fatality Tracking

The optional mass fatality component has the ability to manage post-mortem data from a mass fatality event, such as a structural collapse or a pandemic event.

Alert Manager

Alert Manager allows participants access to hospital status during both emergency and non-emergency times.

Facility Status

The facility view captures facility information, staff information with contact information, and diversion status on any event.

Calling Directory

Generate call lists of all participants involved in the event for fast notification by telephone.

Email/Pager/Text Message Alert

Users can specify particular alerts which they would like to receive notification upon creation. System administrators can override these settings to force users to receive notifications if their contact information is in the system.

Short Message Service Notifications

Another notification possibility that can make users aware of potential implications and allocation requirements via cell phone SMS.

Templates

Users have the ability to create alert templates, which can be used to easily and quickly send out alerts.

Regional Status

Regional Status provides a dashboard view of hospital status, bed allocations, etc. This is used to get a common operating picture of the system as related to hospital readiness and capabilities.

Bed Allocation

The Bed Allocation module includes bed availability, bed surge, specialty, MCI Capacity, NEDOCS and HAVBED export. Bed Allocation enables administration an aggregate view of all participating facilities. The basis of this resource allocation system is a database driven application system that records all statistics relating to beds by category, type and status along with hospital demographics. The monitoring of this system allows for comprehensive reporting, allocation and sharing of available beds within a region of any size from city, county, state, or federal levels.

Inventory Management

The Inventory Module allows the tracking and management of physical assets on a high-level or detailed basis. The Inventory Module allows agencies to manage their inventory based on agency needs, providing a user-defined dashboard which allows for an overview of inventory items, status, recently viewed products and many other widgets which can be utilized to meet the user's display preferences.

Track Equipment

Each agency has the ability to define their desired level of inventory management. Administrators can define a hierarchy from location sites, products and items within each level, to an unlimited depth. Intuitive search capabilities identify items in each station and pinpoint exactly where they are stored.

Unique Search Functionality

The Inventory Module utilizes bar code technology to provide quick look-up and seamless intake and allocations on several levels. Once a barcode is scanned, the system will automatically display the product if it exists in inventory or the option to add the product if it does not. Other advanced search options include the capability to define search criteria, whether item specific or general product information.

Customized Inventory Management

Tracking product information is simplified through detailed records and easy data entry. Users have the ability to enter information specific to each product through the use of custom questions. Additional information that can be recorded includes product attributes, useful life and purchase information. Photos and related documents, such as manuals, specifications or invoices, can be attached to each product and/or item.

Inventory Request

Requesting needed supplies and inventory is easily done with the Inventory Request module. Users with appropriate permissions can request products and items from other agencies, which they in turn, can choose to fulfil your requests. Controls are built in to give users the flexibility to fulfill all or part of a request. Products and items are automatically updated for both the requesting agency and fulfilling agency. This gives you a real-time update on inventory levels. Audit trails track the movement and acceptance of requests.

Procurement

Procurement and Inventory modules work in unison to allow the tracking and management of grant and other fund distribution and assets with total control at your

fingertips. Available at a state, regional or local level, Inventory and Procurement allows administrators to distribute funds efficiently, while also allowing agencies to manage their inventory based on the needs of the agency.

Manage the Funding Process

The Procurement module provides administrators the flexibility to create multiple programs for different types of funding sources, including HPP and EMS distribution. Administrators are able to configure simple to complex workflows and approval processes that fit their needs. Fund allocations can be built based on definable calculations and formulas.

Track Procured Items

Items allocated through grant funding can be tracked through their entire life cycle. The procurement and inventory modules work together to display where items are located, if they were used or disposed of and their remaining usable life.

EXCEPTIONS

4.1.1 – Completion of Implementation, training, etc. must meet the deadline of October 25, 2017.

ImageTrend will be able to accept this requirement; however, the first kick off meeting will need to be held no later than **August 1, 2017**. If the kickoff meeting is scheduled after that date, the October 25th date will not be achievable based on timeline for implementation.

4.1.12.22 to 4.1.12.26 – West Virginia Office of Emergency Medical Services to the National Registry of Emergency Medical Technicians requirements.

ImageTrend takes exception to these requirements. ImageTrend is willing to work with the NREMT API to share data with them however possible, but it is not currently part of our out of the box integration for License Management.

4.1.13.2 – Vendor shall provide a system that migrates and crosswalks the current NEMSIS V2 compliant data system so that reports can be run across V2 and V3 Data.

ImageTrend takes exception to this requirement. The NEMSIS V2 and NEMSIS V3 data sets are fundamentally different at the NEMSIS level (various different fields, different values, etc.). Therefore, to combine those two data sets into a single reporting database would be a very large project and there would be issues with the different semantics and values of NEMSIS V2 and NEMSIS V3 fields.

ImageTrend will work with the State of West Virginia to help translate the NEMSIS data from V2 to V3, however, with the vast differences in the NEMSIS V2 and V3 data, ImageTrend will follow and adhere to the following disclaimer as referenced from the NEMSIS Version 2 and Version 3 Translation User Guide.

Disclaimer and Limitations

This product is provided by the NEMIS TAC, without charge, to facilitate a data mapping between NEMSIS version 2.2.1 and NEMSIS version 3.4.0. The primary target audiences are state employees maintaining EMS databases and software developers interested in enhancing the value of legacy data systems. In most instances, mapping between the two standards is straightforward. For those instances in which mappings are not direct, the NEMSIS TAC relied on our history and experience to confirm an approach to mapping. Neither the NEMSIS TAC nor any employees associated with the TAC are responsible for any perceived “lost data” or “inappropriate” associations detailed in the mapping. By utilizing this program, users accept the decisions and approach taken to provide this mapping.

4.3.2 Vendor must comply with all federal, state, and Agency security and privacy policies and procedures found on the WV Office of Technology site

<http://www.technology.wv.gov/Pages/default.aspx>. The National Institute of Standards and Technology <http://www.nist.gov>.

4.3.5 Vendor must comply with the baseline security controls for moderate impact information systems as put forth in National Institute of Standards and Technology (NIST) Special Publication 800-53, Revision 4, as updated April 30, 2013.

ImageTrend is currently under development for Certified Hosting, which will be complete by the end of 2017.

ImageTrend has completed a SOC2 report. This SOC2 is a SSAE16 audit that results in a report intended to meet the needs of a broad range of users that need to understand internal control at a service organization as it relates to security, availability, and confidentiality. The SOC2 is an evolution of the old SAS70 audit that has been improved for service organizations like ImageTrend that offer colocation services, managed servers and cloud hosting services. ImageTrend's SOC2 Report was performed using the criteria established by the AICPA (American Institute of CPAs) on Security, Availability and Confidentiality. An independent third party public accounting and information security firm conducted this audit and they have issued the report. Similar to SOC 1 engagement, the SOC 2 reports on management's description of a service organization's system and the suitability of the design of controls. ImageTrend's SOC2 report is available for your review under NDA; please contact ImageTrend for more information.

However, if the State of West Virginia requires the NIST standards as specified in requirements 4.3.2 and 4.3.5, ImageTrend will require the State to purchase Certified Hosting at the price outlined in the ImageTrend detailed quote attached.

If the State of West Virginia so chooses to add the option of Certified Hosting, that is a cost that is above and price quoted within this proposal. ImageTrend will not offer NIST standards unless this option is purchased.

4.4.2.1 A completed terminal degree (PHD) is a research related field with demonstrable connection between the terminal degree and the field of Emergency Medical Services.

4.4.2.3 A minimum of 3 years of EMS "in Ambulance" experience as the lead or primary patient care provider.

In March of 2017, ImageTrend hired an Epidemiologist, her name is Morgan Anderson. Please see the press release below. Morgan has already contributed to the ImageTrend community of Clients, this includes two Webinars, one on Tracking Opioid and Nalaxone Usage and one on Identifying Sepsis Early for Better Patient Outcomes, along with various articles.

www.imagetrend.com/resources-webinars

The above requirements cannot be met; however, Morgan has a Master's Degree with additional Graduate level course work in Biostatistics and Epidemiology.

Press Release

Epidemiologist Morgan Anderson Joins ImageTrend

Wednesday, March 15, 2017

Author: ImageTrend

Categories [News](#)

Epidemiologist Morgan Anderson Joins ImageTrend

LAKEVILLE, MINN. [March 16, 2017] - ImageTrend, Inc. announced the addition of Morgan Anderson, MPH, to its growing team. For the prior five years, she worked at the US Army Public Health Center's Injury Prevention Department, where she focused on the study, analysis and interpretation of trauma data.

"We are very excited about the blend of skills and analytical mind Morgan brings to the team," remarked Mike McBrady, President of ImageTrend. "We foresee her work helping our clients do more with their data through guided analysis so they can accomplish their goals."

In addition to working with the company's clients, Anderson will play a key role in further expanding Continuum™ to include essential topics such as the opioid crisis, identifying sepsis and recognizing stress levels in the emergency services industry, as well as publishing findings for scientific advancement. Anderson has articles published in *American Journal of Preventative Medicine*, *The American Journal of Sports Medicine*, *Public Health*, *The Journal of Strength & Conditioning Research*, *US Army Medical Department Journal* and *Military Medicine*.

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 2019 Washington Street East
 Charleston, WV 25305
 304-558-0067
 april.e.battle@wv.gov

Bill To:
 Same as Ship To

IMAGETREND®
Quote

Salesperson	Quote Number	Date
Craig Gazzano	CG-480	June 21, 2017

Description	Qty	Unit Price	Total
Software			
EMS Web-based Products			
ImageTrend Elite™ EMS License	1	\$120,000.00	\$120,000.00
ImageTrend Elite EMS Annual Support	1	\$19,200.00	\$19,200.00
ImageTrend Elite EMS Annual Hosting	1	\$28,800.00	\$28,800.00
ImageTrend Elite EMS Implementation Fee and Project Management	1	\$20,000.00	\$20,000.00
EMS Mobile Products			
ImageTrend Elite Field™ Site License	1	\$120,000.00	\$120,000.00
ImageTrend Elite Field Site License Annual Support	1	\$19,200.00	\$19,200.00
EMS/Fire Add-On Items			
ImageTrend Mapping and Reporting System™ (MARST™)	1	\$10,000.00	\$10,000.00
MARST™ Annual Transactional Fee	1	\$15,000.00	\$15,000.00
ImageTrend Visual Informatics™	1	\$48,000.00	\$48,000.00
		<i>Cube: EMS Cube</i>	
<i>Includes: Analytics, Pie Charts, Charting, Widgets</i>			
ImageTrend Visual Informatics™ Annual Support/SaaS Fee	1	\$7,680.00	\$7,680.00
Exports / Integrations			
Database Backup Setup	1	\$2,500.00	\$2,500.00
Database Backup Annual Support	1	\$3,600.00	\$3,600.00
		<i>Frequency: 4. Monthly Backups</i>	
Data Mart™ License - Client Hosted (1 Data Source)	1	\$50,000.00	\$50,000.00
Data Mart™ - Client Hosted Annual Support (1 Data Source)	1	\$10,000.00	\$10,000.00
<i>Note: Includes Data Dictionary for Data Mart, 3rd Party Access Included</i>			
		<i>Frequency: Continuous</i>	
		<i>Data Source: 1. EMS</i>	
Out of Scope Development Hours	300	\$175.00	\$52,500.00
Training			
Training Sessions - Onsite (Full Day M-F)	15	\$1,000.00	\$15,000.00
Travel per Trainer for Onsite Training	5	\$1,750.00	\$8,750.00
Webinar Training Sessions (2 hour session M-F during ImageTrend's Standard Business Hours)	20	\$250.00	\$5,000.00
State Bridge Elite™ EMS TOTAL Year 1			\$555,230.00
*Annual Fees after Year 1 (includes 3% escalation)			\$158,084.40
Resource Bridge			
Resource Bridge Platform License (Agency Summary, Emergency Contacts, Report Writer, University, HAvBED, Surveys)	1	\$80,000.00	\$80,000.00
Resource Bridge Annual Support	1	\$12,800.00	\$12,800.00
Resource Bridge Annual Hosting (99.9%)	1	\$56,000.00	\$56,000.00
Resource Bridge Implementation Fee and Project Management	1	\$20,000.00	\$20,000.00
Regional Status Module Setup	1	\$15,000.00	\$15,000.00
Regional Status Module Annual Support	1	\$2,400.00	\$2,400.00
Regional Status Module Annual Hosting	1	\$2,400.00	\$2,400.00
Alert Manager Module Setup	1	\$15,000.00	\$15,000.00
Alert Manager Module Annual Support	1	\$2,400.00	\$2,400.00
Alert Manager Module Annual Hosting	1	\$2,400.00	\$2,400.00
Inventory Module Setup	1	\$15,000.00	\$15,000.00
Inventory Module Annual Support	1	\$2,400.00	\$2,400.00
Inventory Module Annual Hosting	1	\$2,400.00	\$2,400.00
Training			
Onsite Administration Training (8 hour session M-F during ImageTrend's Standard Business Hours)	3	\$1,000.00	\$3,000.00
Onsite Travel for Training (3 days)	1	\$1,500.00	\$1,500.00
Webinar Training Sessions (2 hour session M-F during ImageTrend's Standard Business Hours)	4	\$250.00	\$1,000.00
Resource Bridge TOTAL Year 1			\$233,700.00
*Annual Fees after Year 1 (includes 3% escalation)			\$85,696.00
License Management Software			
EMS License Management Software License Purchase	1	\$120,000.00	\$120,000.00
EMS License Management Annual Support Fee	1	\$20,000.00	\$20,000.00
EMS License Management Annual Hosting Fee	1	\$20,000.00	\$20,000.00
EMS License Management Implementation Fee and Project Management	1	\$12,000.00	\$12,000.00
NREMT Integration One-Time Set Up Fee	1	\$7,500.00	\$7,500.00
NREMT Integration Annual Support	1	\$1,875.00	\$1,875.00
Standard Data Migration (Client to populate ImageTrend Workbook)	1	Included	Included
EMS Licensure Offline Inspections License Purchase	1	\$18,000.00	\$18,000.00
EMS Offline Inspections Annual Hosting	1	\$3,000.00	\$3,000.00

EMS Offline Inspections Annual Support	1	\$3,000.00	\$3,000.00
Training			
Webinar Training Sessions (1 hour session M-F during ImageTrend's Standard Business Hours)	40	\$125.00	\$5,000.00
Training Sessions - Onsite (Full Day M-F)	2	\$1,000.00	\$2,000.00
Travel per Trainer for Onsite Training	1	\$1,500.00	\$1,500.00
Out-of-Scope billed at \$175.00/hour - requires separate Statement of Work	TBD	\$175.00	
Licensure TOTAL Year 1			\$213,875.00
*Annual Fees after Year 1 (includes 3% escalation)			\$49,311.25
Summary			
EMS - License & Setup	1	\$555,230.00	\$555,230.00
Annual Support & Hosting	1	\$158,084.40	\$158,084.40
Resource Bridge - License & Setup	1	\$233,700.00	\$233,700.00
Annual Support & Hosting	1	\$85,696.00	\$85,696.00
Licensure - License & Setup	1	\$213,875.00	\$213,875.00
Annual Support & Hosting	1	\$49,311.25	\$49,311.25
Lead EMS Researcher (Epidemiologist)	1	\$268,000.00	\$268,000.00
Annual Support	1	\$268,000.00	\$268,000.00
GRAND TOTAL Year 1			\$1,831,896.65
*Total Annual Fees Year 2 (includes 3% escalation)			\$561,091.65
*Total Annual Fees Year 3 (includes 3% escalation)			\$577,924.40
*Total Annual Fees Year 4 (includes 3% escalation)			\$595,262.13
GRAND TOTAL			\$3,566,174.83
Optional Items			
<i>(Client may elect to purchase any of the following items by checking the associated box. These items will be added to your total cost.)</i>			
Payment Gateway Integration	1	\$7,500.00	
Payment Gateway Integration Annual Support Fee	1	\$1,875.00	
Certified Hosting (annually)	1	\$67,000.00	
<i>Includes: NIST 800-53 rev 4. Third Party Audit Report</i>			
<input type="checkbox"/>			

**EMS Credentialing/Licensing Hospital Bed Tracking System
CRFQ 0506 BPH170000001
Pricing Page**

Qty.	Unit	Section	Description	Unit Price	Extended Price
1	Year	4.1	Year One (1)	\$1,831,896.65	\$1,831,896.65
			In accordance with section 4 and all mandatory requirements and deliverables :		
			EMS Credential/Licensing System		
			Education, Certification, Licensing & Inspection of System		
			EMS Run Reporting		
			Hospital Bed Tracking		
			EMS Quality Data Reporting & Quality Improvement - Lead EMS Researcher		
1	Year	4.1	Renewal Period Year Two (2)	\$561,091.65	\$561,091.65
1	Year	4.1	Renewal Period Year Three (3)	\$577,924.40	\$577,924.40
1	Year	4.1	Renewal Period Year Four (4)	\$595,262.13	\$595,262.13
				Grand Total:	\$3,566,174.83

Vendor Signature:
Company Name:
Address:
Phone:
Email:
Fax:

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