

RFB Response & Proposal:
Intterra Operations
Intterra Wildfire & Structure Pre-Planning
Intterra Incident management
Intterra Reporting & Analytics

Prepared for

San Bernardino County Fire Protection District

November 2, 2018



Prepared by
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Executive Summary

The vision of the San Bernardino County Fire Protection District is to “Be nationally recognized as a premier fire services organization.” In keeping with that vision and our desire to support your agency, Intterra is proud to provide this response to the Request for Bid for software to support an integrated emergency responder information system.

San Bernardino County Fire Department is an all-risk/full-service fire department committed to providing the highest level of service in the most efficient and cost effective manner to the citizens and communities that you serve. SBC Fire is a community-based, all hazard emergency services provider, dedicated to the protection of the public you serve, organizational sustainability, performance excellence, and safety. You accomplish this through a balance of regionalized services delivery and accountability to our local communities.

With Intterra, you can access your department’s data through a unique visual display that combines maps with data science to give you insights into spatial relationships, time relationships, asset availability, resource utilization, and more, all in near real time. You’ll have your first ever complete picture of what you’re dealing with on a moment-by-moment basis, so you can make the right decisions at the right time – during an event or in preparation for the future.

San Bernardino County Fire will be able to use Intterra to manage evolving incidents, do effective pre-planning, and share a common operational picture. By bringing together information from across your department, along with information gathered in the field, Intterra helps you serve your communities more safely and effectively. When you need to report to your stakeholders, the Intterra analytics and reporting engine arms you with unique insights about your agency, enabling you to share your story of effective, responsive community service.

Again, thank you for the opportunity to submit this response. We are extremely excited that another thought-leading, advanced agency in your area is considering the deployment of a solution to better serve your communities. We look forward to supporting those efforts now and in the future.

Respectfully submitted,

Robert N. Edson
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RFB Responses

1. Must be proven existing system that is in use by fire agencies for needs described below.

Intterra is currently utilized by dozens of agencies nationwide for the needs your agency has described. This includes many agencies in California, several nearby to San Bernardino County, including Ventura County and Santa Barbara County Fire & San Diego Fire & Rescue.

2. Ability to immediately integrate with existing platforms in use by County Fire. This includes TriTech CAD, Tablet Command, and Image Trend.
TriTech CAD – Intterra has this capability today. We have extensive familiarity with many instances of TriTech CAD and Intterra is in direct, favorable, communications with TriTech. For each installation of Intterra at a TriTech client, we have documented the installed engineering solutions that apply to standard TriTech instances as well as several responses for customized on-site instances of TriTechCAD. We are capable of working direct with the TriTech database, however, most often, work with a separate data-store of the real-time CAD data.

Tablet Command – we can provide data to Tablet Command using standard ESRI ArcGIS Server REST protocols (as well as Open Source Geospatial Consortium compliant map services) from our servers for use in Tablet Command.

Note that TC has never provided data to Intterra – however our software is capable of interactive data sharing according to the following standards

- ESRI ArcGIS Server REST / ArcGIS Online
- Open Source Geospatial Consortium (OGC) web services
- Other web and REST APIs

Image Trend - Image Trend integration requires that the client subscribes to either the 'datamart', 'subscription database' and the Report Writer tools from ImageTrend.

- Report Writer – Client can execute reports and link them to Intterra for extended analysis using the DSA. This has been demonstrated at Cosumnes.
- Subscription Database – Local instance of Image Trend data that can be linked to the Intterra analytics platform using the DSA. Capability to send that data to Intterra servers REST services.

3. Ability to immediately integrate with the existing support systems already in use by County Fire. This includes the Microsoft platform, SQL server databases, GPS system, geospatial data structure, and ESRI-licensed GIS products developed by SBCFD.

Microsoft Platform – please elaborate on what integration requirements exist with which Microsoft Platforms.

SQL – Intterra has extensive experience with SQL. Our software has a Data Shipping Application that provides direct interaction between our software and SQL

GPS – we have ability to ingest GPS data thru CAD or via the following methods:

- a. Sierra Wireless Modems
- b. SPOT Devices
- c. DeLorme InReach Service

ESRI – as an ESRI partner, our solution is based on ArcGIS server and is compliant with data exchanges with all ESRI-based products.

4. Cloud-hosted capability with integrated maintenance, training and tech support in addition to GIS, data storage, and configurable plug-ins.

Intterra software is cloud-based, hosted on Amazon Web Services. We do not have any plug-ins – but we have API-based data exchange capabilities with products listed in 2 and 3 above. Maintenance is seamless and included, with regular updates to the software as part of the Software as a Service model. There is no additional charge for upgrades over time.

Additionally, Intterra ingests commercial and government aircraft and satellite image collection capabilities (Colorado MMA, San Diego-based remote sensing aircraft, all Commercial Satellite based imagery systems thru USGS, USFS Cobra aircraft)

Intterra provides direct integration with the Federal Wildland Fire Geospatial System of Record (NIFC Enterprise Geospatial Portal).

5. Ability to create data interoperability on-demand during an emergency incident with other regional agencies.

Incident management data within the Intterra system is read/write capable within the Intterra cloud-based software as well as thru any ESRI-based or OGC-compliant software system utilizing a credential generated by Intterra systems administrator. Thru this process, Intterra client share situational awareness data with:

- SCOUT
- USFS Enterprise Geospatial Portal
- National Incident Feature Service
- Other Intterra systems at local, regional, State, and Federal levels

6. Ability to share emergency response data real-time between the State (SCOUT) and San Bernardino County public safety agencies.
See #5 – specifically, Intterra has a direct relationship with SCOUT for
 - Sending data from designated client TO SCOUT (Incident Mapping, AVL)
 - Displaying data FROM SCOUT (Incident Mapping, AVL). The receipt of data from SCOUT is a project that is currently underway with SCOUT/Taborda Solutions. Targeted completion is December 2018.
7. Ability to ingest incident photos/videos/aerial imagery into the platform.
Photos and Attachments – can be added directly into Incidents and PrePlans via the Intterra web interface or the Intterra Field Tool (native application available via GooglePlay/IOS App Store)

Aircraft & Satellite Imagery – Intterra's remote sensing tool has a defined API to receive and display Video, Imagery, and Mapping data from any aircraft or satellite source via Amazon S3. Intterra's Aircraft Intel tool uses published protocol that is currently compliant with Colorado's Multi Mission Aircraft/Bode Aviation/Churchill Sensor, the USFS (Enterprise Geospatial Portal, USFS Cobra Aircraft), and USGS (all satellite imagery in the Hazard Data Dissemination System). In addition, the protocol supports any sensor system capable of producing OGC (Open Geospatial Consortium) Compliant spatial data.
8. Ability to create, manage, and modify user passwords during both routine and emergency events.
Intterra is fully compliant with this requirement; end users set & recover their own passwords.
9. Ability to incorporate mobile-device based preplanning data into the platform.
Intterra is fully compliant with this requirement when using the web-based application or field tool to enter geospatial planning information into a pre-defined schema. Attachments and photos can also be added. See #7.
10. Ability to use the integrated CAD and RMS platforms to provide Operational and District level metrics.
Intterra is fully compliant with this requirement. RMS data is preferred; if based upon CAD data only, Unit Performance and Incident Performance can be achieved.
11. Ability to expand the operational platform to any San Bernardino County public safety agency.

The annual Intterra subscription is not priced on a per-user basis. Any current San Bernardino County Fire Protection District agency/employee/cooperator can utilize the platform under this proposal within the parameters of the onboarding assumptions listed in the attached "Appendix A- Onboarding Assumptions" document. San Bernardino County Fire is responsible for user creation, assignment and long-term management.

12. Ability to create, archive, and immediately share tactical maps for wildfire, search and rescue and hazardous materials incidents using national data standards and symbology.

All mapping in the Intterra system is available for display by the agency in Intterra software for any user granted access. In addition, the agency can grant access to external users or systems to interact with the data via a user credential. (See #11).

Operational Data is archived and versioned by Intterra as an ESRI archived database that can be shared to client for client storage and use.

Intterra wildfire mapping schema is the same as the National Incident Feature Service and can be integrated in several ways. Intterra administers both services and provides synchronization between them for optimal interoperability.

(<https://intterra.helpdocs.com/common-workflows/national-incident-system-nis-best-practices>).

13. Ability to seamlessly integrate with existing San Bernardino County fire prevention, planning, and public education data.

In order to be compliant, Intterra would need definition of scope and requirements for this specific request. In general, other agencies have successfully integrated Intterra to their agencies websites for PIO use during certain incidents, allowing them to keep the general public up to date with real-time, scrubbed data from Intterra.

14. Ability to incorporate damage assessment information into a mobile, shareable application.

Intterra software has a damage assessment database and editing service contained in the Incident Management Module. The data schema is based on a merger of California and NWCG standards so that it remains compatible across incident teams. All mapping in the Intterra system is available for display by the agency in Intterra software for any user granted access. In addition, the agency can grant access to external users or systems to interact with the data via a credential or provide for the sharing of map services to other cooperators systems.

15. Ability to incorporate an Operations hub where CAD, AVL, and GIS are combined to create a dynamic operations picture. The location and status

of all incidents and resources shall be displayed in near real time in the context of local mapping and preplan data. Live drive-time and unit status data shall also be included. This shall all be displayed in a dashboard available any device (Windows computer, IOS, Android).

[Intterra is fully compliant with this requirement, so long as the data can be sourced in the CAD integration.](#)

16. Ability to provide analytics and reporting. Ability to see performance and trend information including the ability to share data during staff meetings and with policy makers. Analytics and reporting shall integrate with the district's Records Management System (Image Trend) into dashboards and maps that are live and available on any device (Windows computer, IOS, Android). Performance metrics shall be available down to the unit level or shift.

[Intterra is fully compliant with this requirement, so long as the data can be sourced from the RMS integration.](#)

17. Ability to provide a dynamic preplanning tools for inspectors and firefighters on any device, on or offline. Ability to click and drag data onto a map or satellite image and have it instantly available to all devices. Ability for crews and inspectors create preplans in the field and use the system to communicate vehicle prepositioning and ideal tactics. The data must be stored in GIS, be sharable, and exportable from any device into Geo-PDF's.

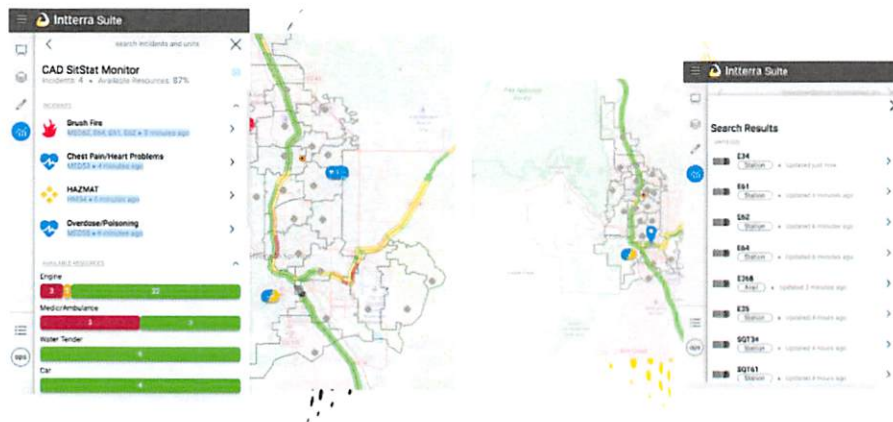
[Intterra software has a structure preplan module which includes a database and editing service. The schema and symbols are based National Alliance for Public Safety and GIS. All mapping in the Intterra system is available for display by the agency in Intterra software for any user granted access. In addition, the agency can grant access to external users or systems to interact with the data via a credential. Exporting the geospatial data can be accommodated via a direct request to Intterra.](#)

18. Ability to participate in a common data warehouse that provides benefits to partner public service agencies. Data shall come directly from the systems of partner agencies after being anonymized for privacy and enhanced for data analytics. Ability to integrate with the Western Fire Chiefs Association (WFCA) Fire Data Lab.

[Intterra is fully compliant with this requirement.](#)

Intterra Operations

Your right now data hub



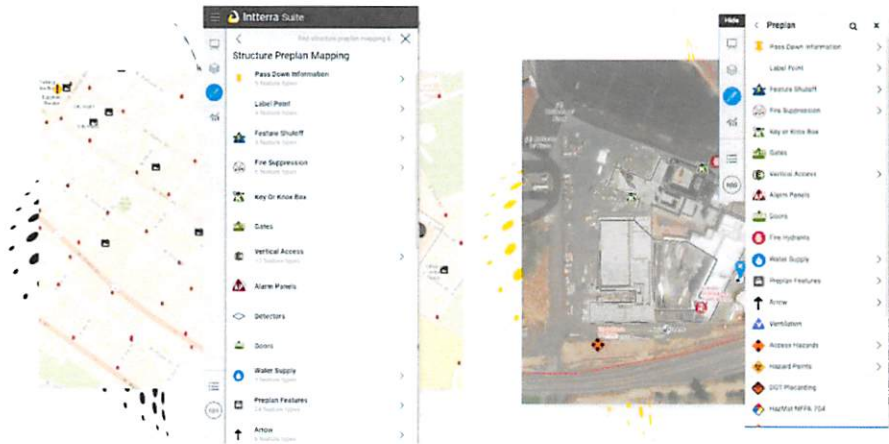
You have more than a single incident to manage. You have tradeoffs to consider and quick decisions to make that often cross boundary lines- that's why we work together in a multi-agency environment. We make your CAD data visual and put it on a map. See every call and its status immediately. Zoom out and see everything or zoom in and see all the detail.

See the locations of all crews and equipment. See their status. Watch events as they happen. Stream your AVL feeds for all your apparatus onto a visual interface, with integrated data from other partner resources.

- Single interface view of all assets and resources
- Map-based view including non-map based information
- Time-based view of available assets and resources
- Fast decision making – tradeoffs on the fly
- Able to see gaps in service delivery ability
- Reveal operational issues that may be agency wide

Intterra Preplanning

Create Dynamic, Real-time Preplans – Never be out of date again



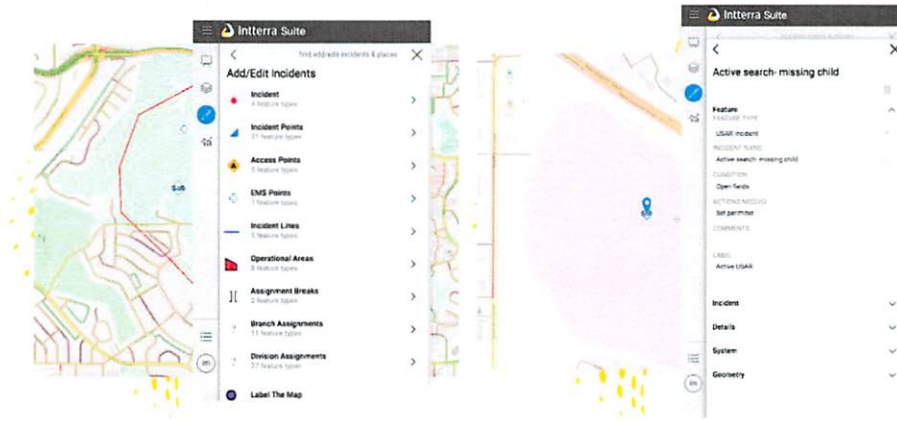
Intterra streamlines your pre-planning – both structure and wildfire. Crews in the field enter data into the same Intterra interface that response teams use. Data entry is easier and data sharing is immediate. You get comprehensive, editable preplans all in one place and alongside your operational data, at the same time. Create preplans in real time – your crews can access them immediately, even while you're creating them.

Information is entered into Intterra using the same interface your crews use to monitor and respond to real-time events. Familiarity with the interface makes data entry easier, and because it's all in the same system, data sharing is immediate. Pictures can also be captured and attached. By using Intterra for your preplanning activities, you will have a comprehensive set of editable and sharable PrePlans at your fingertips.

- Simplify and optimize the hydrant inspection and repair process
- Drag and drop from a library of resource and asset symbols where you can add additional detail, on any device
- Instantly available to everyone in your department as well as cooperators
- Special tools for both structure and wildfire preplanning
- Ideal for preplanning for large, complex events such as music festivals, visiting sporting events, or recurring community functions.
- Crews in the field can enter data into the same Intterra interface that response teams use giving you comprehensive preplans alongside your operational data

Intterra Incident Management

Real-time information, when it matters the most



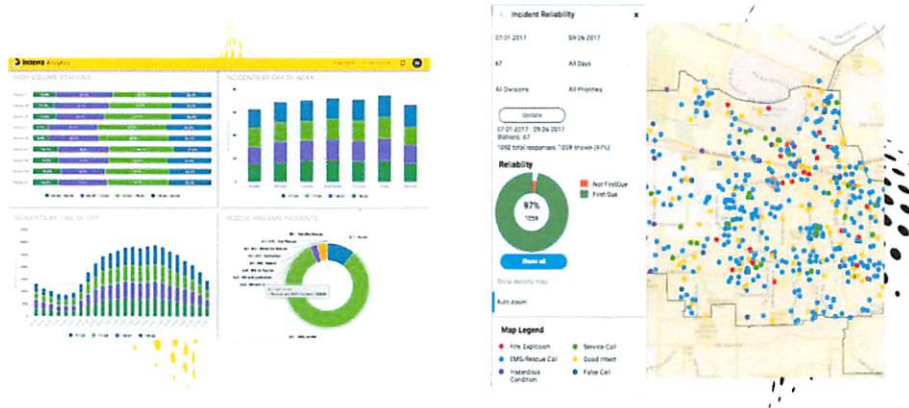
Incident management teams and incident commanders require quick access to a wealth of information about the area around them. Intterra helps you easily focus on critical information, align resources, and act to bring incidents to a close.

In the field, your crews securely access this information from a laptop, a tablet or a smartphone, and they can immediately share it with others. Logins can be given to cooperators for mutual and automatic aid. You and your crew have control over the data and can import or export it to other systems, such as law enforcement, state agencies, or FEMA, as needed.

- Detailed incident maps you can edit in real time – from command or in the field
- Briefing Tool for disseminating key information
- Triage tool to make quick decisions
- Damage Assessments built into the same tool you use for managing the incident
- Real time, instantly shareable

Intterra Reporting & Analytics

Industry-leading, and easy-to-use Fire-centric Analytics



Get analytical insights about your performance so you can consistently improve service to your community as well as share your success with your stakeholders and leadership to secure the budget you need.

The Intterra analytics and reporting engine provide you unique insights using tools focused on unit performance, incident response, and community risk. You can see historical response times broken down to a single resource, shift, and call. An incident metrics tool helps you analyze the types and locations of incidents within your critical areas. Additional reporting tools include resource drawdown (how many resources are assigned, available, or out of service), and incident monitor (a list of all active incidents). Get the analytical information you need from fewer reports for better planning, adaptive resource management, deployment strategies, performance assessment and goal monitoring, and community risk reduction strategies.

Intterra Reporting & Analytics gives Fire Chiefs, analysts and administrators immediate information about how your department is performing at any level within the organization.

- Access real-time reports and stats in either a map-based or dashboard format
- The easy interface lets you drill-down into metrics quickly and get exactly the data you need, when you need it
- Load your standards of cover (SOC) data and track performance against the commitments you made to your community.
- Participate in Fire Data Lab, giving you instant access to comparative metrics across leading departments in the country.

Proposal

Annual Intterra subscription includes 4 modules: \$75,000.00

- Operations
- Analytics & Reporting
- Pre-Planning
- Incident Management

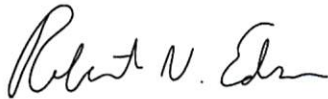
One time implementation fee for CAD & RMS integration- \$9,000.00

Total year 1 investment: \$84,000.00

WFCA Fire Data Lab Data Use Discount: **-\$4,500.00**

Final extended year 1 cost- **\$79,500.00**

Approved by (Intterra):



Robert Edson Director, Sales

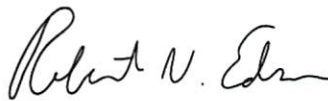
Dated : November 2, 2018

All prices quoted valid until December 31, 2018

Onboarding options

See committed pricing above.

Approved by (Intterra):



Robert Edson Director, Sales
Dated :19 November 2018

Approved by (Client):



Dated: 12/12/2018

Refer to Supplemental Contract Information:

- (1) Intterra Terms of Use Agreement_2018
- (2) Intterra End User License Agreement_2018
- (3) Intterra Website Privacy Policy_2018

Appendix A- Onboarding Assumptions

- From time to time, it is necessary to gather approvals for agency/regional data to pass through to Intterra. The responsibility to attain any outside approvals is the responsibility of the client and may affect expected timelines for deployment.
- Once the project commences, we will jointly agree to the delivery timeline for each contracted module, based on resource availability.
- The Intterra modules will be deployed across all participating agencies as a single, integrated system with a single set of basemaps, tools, roles and workspace configurations. Roles are built per user function; 4 pre-built roles plus 2 client specific roles are available with the multi-agency deployment.
- This proposal includes integration for one consolidated CAD & one RMS system, inclusive of AVL.
- Intterra's access to the CAD/AVL data will be through the permission of San Bernardino County Fire Protection District and Intterra will have a single point of contact for data access & permissions.
- Depending upon the data quality from CAD, and if map-centric reporting is desired for unit performance & incident performance, a historical CAD upload will be required to operationalize the tools; with a weekly load of incident & unit data (to account for any missing transactions from the near real time CAD feed).
- Intterra assumes there will be departmental staff support sufficient to interact with Intterra in order to configure, deploy, train, and utilize the Intterra modules during the implementation period and there will be one central client project manager/lead to represent the agencies during implementation.
- A single point of contact will be responsible for working with the Intterra Account manager for the ongoing Customer Success of the products implemented. It is the responsibility of the client project manager/point of contact to unify the thoughts/ideas/issues for the region (establishing an MOU/operating norms if necessary). Similarly, any changes/updates that Intterra initiates will be communicated to the single client point of contact who will share with all counterparts/partner agencies using the modules.
- The client agency(ies) administrator(s) will be responsible for creating and managing users using the Intterra Portal.
- Standard training materials about the Intterra products are available to be leveraged by the agency(ies).