

# Bell County 9-1-1 Communications Case Study



Unify Recording, CAD Data Capture and  
Quality Assurance for Superior Quality and Efficiency

*“Simply set up call selection rules that choose what you want to evaluate and they just run. This has saved us a lot of time with our Quality Assurance.”*

Angela Fine  
CAD Administrator, Bell County 9-1-1

## About Bell County 9-1-1 Communications Center

Bell County 9-1-1 Communication Center’s mission is to provide consolidated and integrated communications for public safety entities within Bell County, Texas, to provide the basis for interoperability with neighboring public safety agencies, and to act as the primary Public Safety Answering Point for Bell County. The center serves over 60 public safety agencies, from the smallest community in Bell County to several agencies of the State of Texas and even the US Federal Government maintaining offices in Bell County.

This extensive experience and a focus on the consistent quality of emergency communications is a testament to the Center’s commitment to citizen safety and security.

## Challenges

- Call search for review, export and evaluation required laborious interaction with various systems
- Employee motivation and retention
- Efficiency and scope of quality evaluations needed improvement

## Solution

VPI EMPOWER 911™ recording and QA suite:

- Reliable unified recording of emergency and administrative calls with centralized, personalized browser based access
- Automated tagging of CAD data to recordings to boost the speed and precision of call searches
- Integrated quality assurance system with process automation
- Unified administration to manage access permissions and security

## Benefits and Results

- Management efficiency improved with fast insights and easy access to important recordings
- Time savings gained due to process automation
- Improved employee accountability and morale
- Boosted service quality

## Challenges with the Efficiency of Access to Recorded Information

When Bell County updated its telephony environment and adopted a new VoIP based system Emergency Call Works, it was time to rethink recording and access to calls and data as well. The recording system in place was inefficient – communications personnel had to look for information in many different places and assemble results manually. The new recorder would have to speed up call search and retrieval, while also enabling more efficient quality evaluation. The goal was to implement an open-architecture based system that would be easy to integrate with the County's CAD system for automated data sharing. This would remove one step in the call search and retrieval process – looking up data in the CAD system and then searching for matching call recordings in the recording system.

## Solution: Integration & Automation

The pursuit of internal efficiency led Bell County Communications to the award-winning VPI EMPOWER 911 suite, which was implemented to record, monitor, and evaluate emergency and non-emergency communications. *"We switched to VPI last summer and it has been a world of difference from our previous system. The system can record both phone and radio traffic. We are currently doing phone recording and we also have it tagging data from our CAD system so when we look at calls, we have the incident data from CAD right there with the recordings, all on one screen and use a Web browser to access,"* said Angela Fine, the County's CAD Administrator.

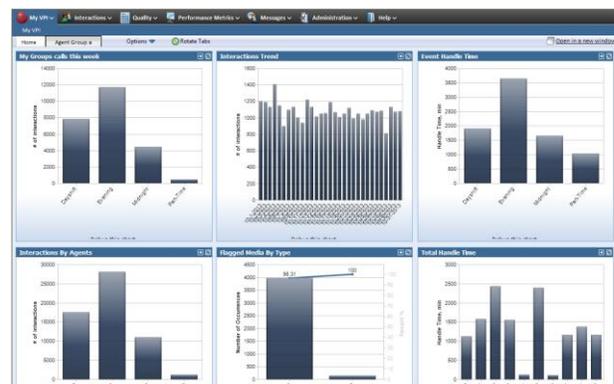
Every CAD incident type and associated data is now automatically tagged to the corresponding voice recording, including all 9-1-1 and EMS calls. This improves the speed and precision of call retrieval. The County's most frequently used parameters for call searches are ANI/ALI position information, as well as incident types, such as the Priority One call category that includes calls on cardiac attacks, structure fires, major multi-vehicle accidents, and other life threatening events. The center is required to respond to Priority One calls within 60 seconds with dispatch, so these calls must be monitored far more closely than non-emergency or administrative

calls. The County also owns Priority Dispatch system for the management of call taking communication protocols, which provides additional information on events. Bell County is planning to implement the integration between VPI recording system and Priority Dispatch to achieve even higher efficiency.

Recordings are searched and retrieved to either confirm call handling accuracy and following the right communication protocol or to respond to a question from a DA or from citizens. Pack-and-go functionality is used when multiple calls related to the same incident need to be grouped and exported – either by email or by saving the file onto a CD. The manner of export depends on who is to receive the recordings. Internally, people simply email hyperlinks to the calls, to avoid exporting and sending files to each other.

When recordings are to be used for general public or as training materials, they are "scrubbed" to prevent release of personal or otherwise protected information. Managers use VPI's Redaction feature to accomplish this. This enables the creation of a copy that is appropriate for public release, while the original recording remains intact.

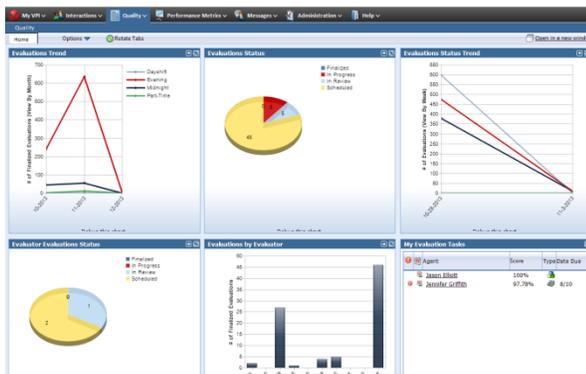
Bell county managers love VPI CAPTURE's ease of use and the level of convenience in centralizing all data that can be quickly accessed via customized, personalized user interfaces. *"If you are looking for calls and related information, it's just a few clicks and you are there!"* said Angela Fine.



*Most important data is visualized in VPI's browser-based portal, personalized for managers and supervisors.*

## New Quality Assurance Processes

The Center evaluates samples of all types of recorded emergency communications. The objective is to randomly select, review and rate three calls per call taker per week. VPI business rules help the Center to automate the process of call selection and assignment to evaluators. Once set up, the process runs automatically and evaluators simply find these calls ready to be evaluated in their To-Do widget – a personalized list that is conveniently located right within the system dashboard, with the right QA form already associated to each call recording. The Center uses three types of QA rating forms – basic call taker evaluation, dispatch evaluation and EMS evaluation.



*VPI Quality Assurance dashboard view presents information on status and progress of evaluations, on the same screen as a To-Do list of recordings to be evaluated.*

Quality evaluations are performed by the County's QA analyst. Once completed, they are forwarded to the appropriate supervisors for review, finalization, and follow-up with call takers or dispatchers.

Supervisors pull additional calls for evaluation – it's a combination of both random selection and event-driven focus, especially Priority One calls. This provides supervisors with a good overall idea of where the call taker team as well as individual call takers stand with their knowledge, attitudes and compliance. Insights from QA and all other data collected with recordings are accessible in one place. This is conducive for focused, personalized employee coaching and development.

## Engaged, Motivated Team

From the time of implementing VPI's QA system, the morale among call takers improved, which was also reflected in improved employee retention.

*"Now that hunting and pecking for calls and data is gone thanks to VPI's automation, supervisors have more time to focus on QA's and on working with the staff. Call takers became more engaged and more perceptive. Work of the entire team became more cohesive and quality-driven,"* said Angela Fine.

The Center recently deployed VPI calibrations to help all quality analysts and supervisors ensure evaluation consistency. This will further enhance employee coaching from the initial training period to actual handling of live calls.

## QA Criteria in Employee Training

The Center uses QA evaluation criteria from the initial training stages to make the requirements absolutely clear to the rookies. *"Training involves both, simulator and best-practice call recordings to help illustrate real life experiences, because simulators can only convey so much,"* explained Angela. Additionally, new call takers "shadow" a more experienced employee to learn on the job. Call evaluation by a mentor who participates in training is a part of the training process.

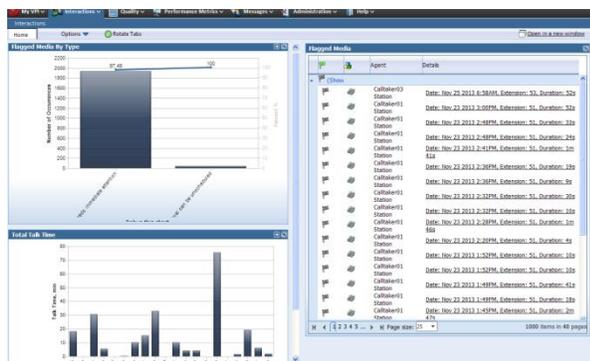
The training is modularized, a benefit of the County's participation in the Training Academy program. The County intends to adopt VPI's Coaching software that would automate the process of automatically distributing coaching modules to call takers based on their QA scores.

## The Power of Business Rules

*"VPI's system is very user friendly and we have found it to be very customizable for our different levels of users. We have set up widgets for quick previews of different call information on the dashboards. We were also able to set up business rules to automate tagging of recordings for the type of each call, data the call includes, and also for more efficient evaluations,"* said Angela Fine.

Everyone at Bell County Communications Center who has a need to interact with recordings and related data is liberated from laborious effort, courtesy of VPI's personalized interfaces and business rules such as automated identification of important call types or the assignment of right calls for evaluation. *"You set up call selection rules for what to evaluate and they just run! This alone saves a lot of time with our Quality Assurance process,"* said Angela. Automatically selected recordings and other important information automatically arrives to the system homepage that serves as a portal into the application and serves up the charts, reports and to-do lists that are most important for each user.

VPI business rules are leveraged to tag data to recordings and flag selected recordings based on that data. For example, there are unique, dedicated flags for 9-1-1 calls, EMS calls and Priority One calls. Managers can now identify and review these recordings very quickly, simply retrieving them by flags. The Center has set up a widget on their dashboard where flagged calls are pulled up automatically according to the type and need of various users, to help them save even more time.



*The Center's VPI Dashboard shows information in a combined view: 1) graphical to visualize the number of Flagged Recordings by Type and Total Talk Time by call taker and 2) tabular with a list of high-priority recordings for fast access to their playback and evaluation.*

## Favorite Capabilities

Communications team at Bell County appreciates the efficiency and accuracy of VPI systems implemented thus far and looks forward to expanding the use of VPI software further. Some of the features stand out as favorites:

1. **Automation of 'call type' tagging** – it saves a great deal of time by helping the Bell County team sort out the calls based on their emergency or non-emergency types. This then helps with more precise reporting and quality evaluation.
2. **User administration with defining roles and permissions** – *"The multitude of user levels that you can define and assign is fantastic"* commented Ms. Fine. Bell County's system administrator can easily name each role and associate a specific set of rights to it. Once the roles are defined, assigning users to roles is just a click away.
3. **Efficiency of user interface with everything essential in one place** – Bell County users only need one interface to access their recordings, incident recreation tools, CAD data tagged to recordings, evaluations, reports, and even the user administration with the right login. *"We no longer have to search in many places to get all pieces of information together"* said Fine.
4. **The quality customer support** – *"VPI's support has been excellent! Our positive experience with VPI has been a world of difference from our previous recording vendor,"* concluded Fine.

## About VPI

Founded in 1994, VPI is the world's leading provider of mission-critical communications recording, speech analytics and quality assurance systems. VPI EMPOWER 911™, VPI's intuitive Web-based software, is Next Generation 9-1-1 ready, supports digital, IP and P25 recording, and is fully open standards for hardware platform flexibility and ease of integrations. For more information, visit [www.VPI-corp.com/Public-Safety](http://www.VPI-corp.com/Public-Safety) or call 1-800-200-5430.



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