

CAD GAP analysis January 27, 2010

Introductions: Robert Bustichi, Alex Buencamino, Michael Leach, Sam Barnett, Sue Anderson, Jason Sampson, Geoff Balton, Craig Denton, Brad White, Evelia Ilarraz (EPA), Doris Cohen (EPA), Al David (ISD), Joe Telles (SNB FD), Don Maynard, Lisa Lucett, John Garcia, Jaime Young

Why are we here? You are invited here because you have a vested interest in our CAD technology. Take some time to think about what you have now that is important to you and what you'd like to see in a future CAD. Based on your respective disciplines, what technologies exist that you would like to see integrated in the future.

What are the current trends and tools in your discipline? We want to use and incorporate those into a needs assessment list. We anticipate this committee to be a 18 month to 2 year project. Historically, it takes approximately 4 years in planning process for most large agencies to develop requirements for a CAD system. This group will work to determine if our existing CAD meet or be developed to meet these needs.

History of our current CAD:

The existing CAD was purchased in 1994. This purchase was not so much something we designed, but one of efficiency. The priority was to provide a CAD from the same vendor as the County's message switch, and one that could dispatch all three disciplines (Fire, EMS and Police). This purchase also provided redundancy if the CAD system went down. This was an efficient purchase at the time, and is still good technology. The Message Switch is currently being looked at for replacement to address some current issues and compliance with DOJ requirements.

Even if the current message switch is replaced for law enforcement, our CAD system would still likely use the old one as it routes messages to dispatch terminals, fire stations, desktops, etc.

Back in 1994, we customized this CAD to our operations. The open source design of the NG Cobol CAD allows for customization from the RFP process through current operations. CAD has grown as we have taken on new customers. The current CAD and Message Switch have been maintained by Robert and ISD. In 2003, when Homeland Security grant funds were available, we received a grant for hardware replacement. This was a significant hardware upgrade which allows our CAD to compete with "Current State of the Art" CADs of today. It improved our CAD reliability to 99.9%, an improvement from our 98% availability prior to the upgrade. This availability includes scheduled maintenance down times which is often removed from reliability figures in other computer systems to make them seem more reliable.

Identify Gaps:

In preparation for the Ambulance RFP project, the County wanted to make sure in the RFP document that the County's CAD was as competitive as any CAD that any of the vendor applicants might already have. The Alta Vista group was contracted to do a quick 2 month study to gather data and provided an "evaluation" of where the PSC CAD compared to other systems. AVL was identified as a significant missing component. The budgetary cost estimates provided by Northrup Grumman for this component were estimated at \$400,000-680,000. Additionally, there was a significant amount of GIS map work needed to be done to make the AVL maps effective. The \$250,000 costs for the GIS work was not separated from the budgetary estimate. It was decided that the additional cost added to the patient bill due to the possibility of the large price tag for the overall project was not feasible. It was the feeling of the County Manager's office that our CAD architecture seemed old was not the same as it's contemporaries and wanted to evaluate "Off the Shelf" CAD systems as a future consideration.

Additionally, in an unrelated study done by the Galena Group, it was recommended that the county establish a cad/message switch replacement fund, i.e. a sinking fund. This is difficult for the county to do with its rules for money management; generally large projects are done with "capital project" funding. Secondly, the need to determine who "owns" the CAD system was identified. A recommendation was made to look at a new ownership process through some type of formula and its governance.

Robert Bustichi spent a few minutes explaining the basics of the relationship between GIS maps (needed for AVL), our geofile and their relationships with CAD. GIS and geofiles are not CAD. They are interfaced with CAD.

Currently, the County's GIS Solutions group works as a conduit for improving GIS data throughout the county, including the relationship with cities to provide updated street and address information. They are nearing completion of a project in which they hired a contractor to collect and "munge" data from various sources including PSC, the Assessor, Elections and various cities using GIS. The data produced will be used to update the County's GIS basemap and will eventually be available to both cities and the general public in various forms.

Joe Telles asked about the CAD software used in fire vehicles and if this project had any relationship to issues they have with losing connections to CAD. Robert explained that fire departments are using software designed for a desktop. At the time this was done, it was cutting edge to put a laptop in a vehicle! While they work as long as they don't lose their connection, fonts are small and require a mouse to use effectively. Since then, the Sheriff's Office purchased Northrup Grumman's MDT's for their vehicles. The MDT's are designed to run in a vehicle and use touch screens with big fonts and on screen buttons that are more vehicle friendly. Despite the fact that they also run on cell phone signals, the reliability in cars is good except on the coast. Coming in/out of cell signal doesn't work as well with the "desktop versions" as well as with MDTs.

As we met today, Fire Net 6 is meeting about the process now of rolling out MDT's (PSI mobile) for fire. The plan is to put fire on a separate server that does not require the same DOJ requirements for encryption that Law Enforcement requires. This will allow a larger variety of vendors because they will no longer need to share the pipe with Law.

Housekeeping:

Meetings will be held on the 2nd Wednesday of the month, 10:00 a.m. -12:00 p.m. in the PSC Skybox.

Because of the detailed information and background needed to proceed with this process, it would benefit the project to avoid substitutions in department representatives.

At the next meeting or two, we will go into detail as to "What is CAD?". It is a dispatch tool. It isn't RMS. It doesn't generate reports. Essentially it is the Mothership of Technology that associates with other components. Most departments go out for CAD/RMS. That is not what we do here in the county.

Next, we will start trying to identify from the prospective disciplines what features and functions are desired. We will start setting up demos from Tier 1 CAD vendors to see how those features might relate to the project at hand.

We will work to identify what kinds of features come from an off the shelf system and what that costs. How do enhancements work, cost?

Next meeting: Wednesday, February 10th, 2010 10:00 -12:00 hrs. At the PSC Skybox.