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Fire Station Alerting System
Aurora, IL

Project Overview

BUSINESS CHALLENGE	The City of Aurora Fire Department is seeking a comprehensive modernized Fire Station Alerting System. This solution should increase dispatch efficiency, track critical firehouse metrics, and make quality-of-life improvements to the station.
PROJECT BACKGROUND	The Aurora Fire Department (AFD) consists of 210 firefighters and 13 other personnel, 49 vehicles consisting of engines, ladder trucks, ambulances, rescue squad and other vehicles, spread across 9 stations for a city of 200,000 residents and approximately 45 square miles. This includes both Fire and EMS services. Additionally, Aurora covers some unincorporated areas adjacent to the City.

Process Overview

The City of Aurora Fire Department is seeking a comprehensive modernized Fire Station Alerting System. This solution should increase dispatch efficiency, track critical firehouse metrics, and make quality-of-life improvements to the station.

- Created Market Landscape with 12 companies
- Created RFQ document based on Aurora Fire Department needs and industry best practices
- Based on the market landscape and City Stakeholder review, publicly posted and distributed the Opportunity and Scope Document for vendors to complete in order to be included in the reporting and selection process.
  - It was posted and distributed on 3/18/22 and closed 4/8/22.
- There were 3 responses completed by the deadline – Raw Data File Here

RFQ Summary

	Solution	Functional Questions		Technical Questions	Pricing & Model		Implementation	Other
	Please provide a 1-page overview of your solution.	**Do you provide an end-to-end solution for fire stations?**	**Please describe your approach to system support.**	**Does your solution track the following critical metrics?**	**Which model best describes your pricing model?**	**Based on Aurora's size and need, please provide Pricing for the City of Aurora.**	**What is the typical timeline for implementation?**	**Notes**
Bryx, Inc.	Solution Narrative	Yes	24/7/365	• Call-taken Time to Dispatch Time • Dispatch to Out-the-Door Time	Solution as a Service	One time price of $25,000-$30,000 per station. Or $6500 per station per year for 5 years (SaaS)	2-3 days per station for installation and configuring	• 2 potential pricing models • Emphasizes minimal hardware footprint • Solution integrates with Bryx 911 mobile app • Did not provide pricing documentation at this stage
PURVIS Systems Incorporated	Solution Narrative	Yes	24/7/365	• Dispatch to Out-the-Door Time	Software/Hardware Sale and Maintenance	PSAP System Price Range: $75k - $150k FSAS Pricing: $16k - $26k/station. Estimate does not include installation costs or CAD Interface. Additional information is needed to provide installation pricing.	The typical timeline for implementation is 8-10 months for an agency similar in size to AFD. PURVIS follows a structured approach to implementation that includes Project Management, Requirements/Configuration, Installation/Integration, Test/Evaluation, Training and Implementation/Cutover.	• Requires PSAP system on top of per-station price • PURVIS tracks “Turnout Time,” which may combine the two critical metrics we described
US Digital Designs, Inc.	Solution Narrative	Yes	24/7/365	• Neither	Software/Hardware Sale and Maintenance	Primary Dispatch G2 FSA System: $53,613.61 FSAS Per Station: Core Basic: $29,874.67 Standard: $46,271.24 Advanced: $136,354.57	• Detailed Design-30 days • Gateway Installation and Interface Checkout-30 days • CAD provider interface installation - undetermined • Gateway system software customization-30 days • Controller Installation and Checkout-10 days per station • System Startup & Configuration-10 days • System Acceptance-5 days	• US Digital Designs provided 3 quotes depending on which package of products/services AFD chooses, resulting in wide price range. • Price numbers were extracted from Quote, original vendor response simply pointed to the Quote document.

Process Overview

The City of Aurora Fire Department is seeking a comprehensive modernized Fire Station Alerting System. This solution should increase dispatch efficiency, track critical firehouse metrics, and make quality-of-life improvements to the station.

Chronological Process:

- Created Market Landscape with 12 companies
- Created RFQ document based on Aurora Fire Department needs and industry best practices
- Based on the market landscape and City Stakeholder review, publicly posted and distributed the Opportunity and Scope Document for vendors to complete in order to be included in the reporting and selection process.
  - It was posted and distributed on 3/18/22 and closed 4/8/22.
- There were 3 responses completed by the deadline – Raw Data File Here
- After reviewing the data, project leaders met with representatives of PURVIS and US Digital Designs to learn more about their solutions.
  - The third response, from Bryx, was deemed by project leaders not to be a comprehensive solution for Aurora Fire Department.
- Project Leaders conferred with Boston & Waukesha Fire Departments to glean insight into their PURVIS & USDD implementations – both also use Hexagon RMS in conjunction, mirroring Aurora's eventual setup.
- Based on the RFQ data, follow-up conversations, and remaining open questions, Marketplace.city drafted the RFP Document to be distributed to the two finalists – Raw Data File Here
  - It was distributed to PURVIS & USDD on 10/4/22 and closed 10/19/22.
- Project leaders reviewed final submitted data and submitted final scoring on 12/14/22.

RFP Summary

	Solution	Functional Questions	Technical Questions		Pricing & Model	Training	Implementation
	Please provide an updated 1-page Solution Overview describing why this is the right solution for Aurora and its Fire Department.	**Please describe the process for requesting maintenance when there is a malfunction.**	**Please confirm whether your solution is compatible with Hexagon RMS Version 9.3.**	**Do your speakers use low-voltage wiring?**	**Extracted 5-Year Project Total Pricing from Template**	**Will trainings occur remotely or on-site?**	**Normalized Implementation Timeline**
PURVIS Systems Incorporated	Solution Narrative	The PURVIS FSAS Help Desk takes calls 24x7x365. A PURVIS Support Engineer acknowledges the Customer's request within 2 hours and classifies the event as "Emergency Service Request" (critical operational failure resulting in no service at one or more locations) or "Non-Emergency Service Request" (non-critical operational failure). If on-site service is needed, support personnel will be there within 4 hours following receipt of request. PURVIS support personnel will troubleshoot, diagnose, and repair the system failure 24/7/365, including holidays, until resolved. PURVIS responds to non-emergency requests during standard business hours.	Confirmed. The PURVIS FSAS is compatible with the Hexagon CAD system Versions 9.3 and 9.4. Our FSAS Hexagon interface in DC has been live and operational for 10 years. The Hexagon CAD in DC was recently upgraded from V9.3 to V9.4 and there was no loss in FSAS alerting when that upgrade occurred. Our Hexagon interface in Boston has been live and operational for 8 years. Our Hexagon interface in DuPage County has been live and operational for 4 years.	Yes. PURVIS utilizes commercial, off the shelf speakers that use shielded 18/2 low voltage wire. Speakers with integrated lights use an additional pair of low voltage wires. In this instance shielded, 18/4 wire is used for the speaker/light combo. The primary benefit is that the speakers use standard wiring that is easy and cost effective to purchase, install and maintain. Also, shielded speaker wire reduces the risk of noise interference from existing electrical or other station wiring.	$495,400	Either	~8-10 Months
US Digital Designs, Inc.	Solution Narrative	No onsite support. Customer calls USDD customer service rep who collects & logs info to determine best USDD associate to handle incident. USDD associate calls back to handle incident. If System failure typical response time is 20 minutes Typical critical resolution time	USDD's Interface that will be used is dependent upon the interface Hexagon will provide. Hexagon has written an interface that is compatible with USDD's system, and USDD has developed an interface that is compatible with Hexagon's legacy systems. We will need to consult with Hexagon as to what interface is appropriate but are confident that a successful integration will be achieved. USDD has successfully interfaced all customers using CAD systems.	USDD uses 18/4 or 16/4 plenum rated cable that is designed for low voltage speaker systems but is also rated to 300 volts max. The speaker system used is 70 volts so use of described cable is appropriate. The ATX Station Controller powers all peripherals using PoE, connected by CAT 5e or CAT 6 cable resulting in only a single LAN cable needed to connect ATX and peripherals. No external power source required for peripherals.	Core Basic: $328,846.56 Standard: $437,751.53 Advanced: $1,074,870.18	On-site	~5-6 Months

*USDD provided three different "packages" of station build-outs

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- RFP data provided comparable, per-station pricing baskets
- This chart represents the USDD "Standard" basket–most similar to the PURVIS package
- Similar baskets for the USDD "Core" and "Advanced" can be found in the Appendix

USDD Standard Description	USDD Price	PURVIS Price	PURVIS Description
Per-Station Total	**$ 34,554.90**	**$ 30,720.00**	**Per-Station Total**
G2 VoiceAlert License	**$ 927.00**	**$ 300.00**	*Station Control Unit (SCU) FSAS Software License (Perpetual)*
G2 ATX Station Controller	**$ 19,575.00**	**$ 18,380.00**	*Station Control Unit (SCU)*
ATX UPS, Standard	**$ 830.70**		
Shelf/Bracket, Wall Mount for UPS	**$ 58.50**		
Audio Amplifier, External, Standard	**$ 888.30**		
Shelf Under Table or Wall Mount	**$ 68.40**		
Push Button x2 (Black & Red)	**$ 198.00**		
G2 Message Remote 2	**$ 1,282.50**		
G2 Message Sign - Standard Gamma Sign x2	**$ 1,890.00**	**$ 630.00**	*Message Board - 32" Monitor*
G2 Message Sign - Extended Gamma Sign - 36"	**$ 1,417.50**		
MS-G Adapter Plate, Double	**$ 58.50**		
MS-Mount Articulating Arm	**$ 292.50**		
G2 Room Remote 2	**$ 1,822.50**		
G2 Speaker - LED Illuminated Flush Mount x5	**$ 1,462.50**		
G2 Speaker - OmniAlert Strobe	**$ 787.50**		
		$ 1,470.00	*Text-to-Speech (TTS) Voice Module Software License (Perpetual)*
		$ 110.00	*19" Rack to Wall Conversion Bracket - 4U*
		$ 320.00	*Message Board Display Module*
		$ 240.00	*24 Port Unmanaged Network Switch*
		$ 840.00	*Unit Presence Detector*
		$ 250.00	*UPD Rotary Switch*
		$ 8,150.00	*Installation & Implementation*
Speaker - App Bay / Outdoor x3	**$ 877.50**		
Shipping	**$ 2,118.00**		

Scoring Overview

Scoring Criteria	Weight	Vendor Evaluation	
		PURVIS Systems Inc.	US Digital Designs, Inc.
Capabilities / Solution	*25%*	8.00	7.17
Experience and Qualifications	*20%*	8.67	8.50
Approach, Services, Implementation Methodology	*10%*	7.83	5.83
Pricing and Contract Model	*20%*	7.00	7.58
Additional Services / Innovation	*25%*	8.50	7.33
Weighted Scoring		8.04	7.43

Full Scoring Document Found Here

Summary & Final Selection – PURVIS Systems, Inc

Aurora Fire Department leadership along with project partners in Information Technology and the Aurora Police Department's Emergency Communications office have unanimously recommended PURVIS Systems as their new partner for fire station alerting systems & technology. Strong, streamlined station designs along with the *proven* capability to integrate with Aurora's exact version number of its dispatching system makes the PURVIS the right choice for Aurora's continuing public safety improvements.

Decision Factors

End-to-End Station Alerting Solution: State-of-the-Art touch screen displays, message boards, and customizable audio tones provide improved situational awareness data. Firefighters will receive unified information on incident type, priority, and location to coordinate response. Configurable audio allows for a broader array of tones and statuses, while the ability ramp-up decibel levels reduces the "startle effect" and associated negative externalities.

Metric Tracking: The automatic turnout timer will begin counting upwards once the incident is received and stop when it detects that an engine has left the station. This is logged and reported with no manual input required when all attention is focused on incident resolution. Without this data, AFD cannot submit its true turnout times to rating agencies, adversely affecting Aurora insurance rates.

Proven HxGN v9.3 Interface: Repeated due diligence with vendor meetings, submitted responses, and interviews with other joint users of the PURVIS – HxGN CAD interface (such as the Boston FD), provides necessary confidence in the connection between two critical public safety systems. While USDD also provided a strong solution and has interfaced with HxGN previously, only PURVIS confirmed a specific, proven interface with Version 9.3 (Washington, DC).

Prompt & Local Service : PURVIS Systems can have support on-site at an Aurora fire station within 4 hours of notification. Other vendors offered no on-site support. This critical distinction confirms PURVIS as the right partner to retrofit Aurora's existing fire stations and assist in building out planned future stations.

Contract Details

CONTRACT TYPE	Hardware & Software Sale & Maintenance
CONTRACT DURATION	8 Years
PRICING SUMMARY	Total Hardware: $297,630 Total Software: $54,010 Installation: $285,765 **Year 1 Total: $637,405** **Years 2 – 8** Cumulative Warranty/Maintenance/Support**: $456,731.18** (avg. ~$65,250 annually)
CONTRACT DOCUMENTS	Finalized Contract Signed by PURVIS PURVIS Revised Quote for Aurora PC2022-166R6 PURVIS FSAS SOW City of AuroraR6

Appendix

Functional Questions

Company	1-Page Solution Overview	Please describe the process for requesting maintenance when there is a malfunction.	Please describe your solution's relevant backup systems & processes in the case of malfunction or outage.
PURVIS Systems Incorporated	Solution Narrative	The PURVIS FSAS Help Desk takes calls 24x7x365. A PURVIS Support Engineer acknowledges the Customer's request within 2 hours and classifies the event as "Emergency Service Request" (critical operational failure resulting in no service at one or more locations) or "Non-Emergency Service Request" (non-critical operational failure). If on-site service is needed, support personnel will be there within 4 hours following receipt of request. PURVIS support personnel will troubleshoot, diagnose, and repair the system failure 24/7/365, including holidays, until resolved. PURVIS responds to non-emergency requests during standard business hours.	The PURVIS FSAS utilizes an active/active server configuration. There are 2 servers, both operating continuously at the same time. All alerts & FSAS communications flow through each server. If one fails, the system notifies designated personnel & simultaneously & seamlessly continues operations from the 2nd server. With a radio interface in place, if the City's IP network fails, the Station Control Units will detect the loss of communication between the stations and the Central Servers and each affected SCU will automatically default into Radio Bypass Mode. Automated radio alerts are automatically fed from the station radio through the SCU to the speakers. Optional UPS provides backup power to the FSAS in a power failure.
US Digital Designs, Inc.	Solution Narrative	No onsite support. Customer calls USDD customer service rep who collects & logs info to determine best USDD associate to handle incident. USDD associate calls back to handle incident. If System failure typical response time is 20 minutes Typical critical resolution time	• Communications Gateway redundant hot-standby server pair running custom Linux kernel • Multiple alerting paths used so alerts can reach stations during outage of primary alerting path • All 2-way alerting circuits monitored for integrity and results logged • Station Controller polls connected peripherals If failure detected sent to Gateway & configured Link Down actions execute (speakers on, routing audio, playing alert tone, displaying text) • 2-tone or DTMF tones played over radio to alert the stations if not reachable by IP • Successful alert acknowledgment sent to Gateway; unacknowledged alerts retried, move to next alert path. Status displayed on Active Alerts display of web application • Manual Alerting function provided on Gateway

Technical Questions

Company	Please confirm whether your solution is compatible with Hexagon RMS Version 9.3.	Are there any components of your solution that will not operate with Hexagon Version 9.3?	Aurora plans to upgrade their CAD-RMS in the coming years. Please describe how your solution will interact with a modern cloud-based CAD-RMS system?	Do your speakers use low-voltage wiring?
PURVIS Systems Incorporated	Confirmed. The PURVIS FSAS is compatible with the Hexagon CAD system Versions 9.3 and 9.4. Our FSAS Hexagon interface in DC has been live and operational for 10 years. The Hexagon CAD in DC was recently upgraded from V9.3 to V9.4 and there was no loss in FSAS alerting when that upgrade occurred. Our Hexagon interface in Boston has been live and operational for 8 years. Our Hexagon interface in DuPage County has been live and operational for 4 years.	There are no known gaps in PURVIS FSAS alerting functionality associated with the interface with Hexagon CAD V9.3.	PURVIS has extensive experience interfacing with new CAD systems in existing customer environments. PURVIS will work closely with the CAD vendor to implement a REST Application Programming Interface to communicate between the CAD and the PURVIS FSAS Central Servers in Aurora. To ensure a seamless transition, PURVIS will work closely with the City and the CAD vendor throughout the integration and implementation effort. PURVIS will provide integration and testing services during the implementation of the software interface. Test and integration activities include the software validation testing at the PURVIS facility in Middletown, RI, as well as integration and testing activities performed remotely with the CAD vendor and the City.	Yes. PURVIS utilizes commercial, off the shelf speakers that use shielded 18/2 low voltage wire. Speakers with integrated lights use an additional pair of low voltage wires. In this instance shielded, 18/4 wire is used for the speaker/light combo. The primary benefit is that the speakers use standard wiring that is easy and cost effective to purchase, install and maintain. Also, shielded speaker wire reduces the risk of noise interference from existing electrical or other station wiring.
US Digital Designs, Inc.	USDD's Interface that will be used is dependent upon the interface Hexagon will provide. Hexagon has written an interface that is compatible with USDD's system, and USDD has developed an interface that is compatible with Hexagon's legacy systems. We will need to consult with Hexagon as to what interface is appropriate but are confident that a successful integration will be achieved. USDD has successfully interfaced all customers using CAD systems.	All components of the Phoenix G2 System will operate with the Hexagon CAD interface.	USDD can support a cloud-based CAD system by using a HTTPS/REST API. However, the City will be required to provide a way for its CAD system to reach our on-premises servers. This can be achieved by using a VPN or opening a white-listed port to its firewall.	USDD uses 18/4 or 16/4 plenum rated cable that is designed for low voltage speaker systems but is also rated to 300 volts max. The speaker system used is 70 volts so use of described cable is appropriate. The ATX Station Controller powers all peripherals using PoE, connected by CAT 5e or CAT 6 cable resulting in only a single LAN cable needed to connect ATX and peripherals. No external power source required for peripherals.

Pricing & Model

Company	Please complete the Pricing Template.	Extracted 5-Year Project Total Pricing from Template	Please describe what warranties you offer and an estimated cost.	Please upload any standard pricing documents or quotes you wish to share beyond the documentation you provided in your original submission.
PURVIS Systems Incorporated	Pricing Template	$495,400	PURVIS offers the two options identified below for warranty and extended warranty support. The components covered by the warranty are the same with both options. Option 1: Remote and On-site: The coverage includes Software, Hardware, 24x7x365 Help Desk + Emergency Service Support + Remote Software Support + FSAS Software Version Upgrades + On-Site Maintenance. Option 2: A remote only extended warranty program that includes the above minus on-site Hardware Maintenance.	
US Digital Designs, Inc.	Pricing Templates	Core Basic: $328,846.56 Standard: $437,751.53 Advanced: $1,074,870.18	USDD has 1 level of warranty for 18 months that covers both hardware & software, including: • Remote support normal hours & 24/7/365 support for mission critical failure • Software updates • Advancement replacement of defective hardware • X24 Mobile App Licenses per each ATX purchased Upon expiration of warranty same service and support is continued through a Service Agreement. The annual cost of the Agreement is based on total price of all hardware and software purchased multiplied by.10	Pricing Documentation

Training

Company	Please describe your training program for in-station system components.	Please describe your training program for software features.	Will these trainings occur remotely or on-site?	Please describe the quantity of training offered for both in-station components and systems.	Please provide an estimated training cost.
PURVIS Systems Incorporated	Successful implementation is directly dependent on the quality of training. Our approach includes the preparation & delivery of a training schedule & training materials tailored to the configured PURVIS FSAS for the City. City personnel will have the opportunity to review & comment on all training materials prior to the conduct of the training. Training is conducted in a train-the-trainer format prior to any system or station cutovers, and can be conducted remote or on-site. For refresher use, remote training can be recorded by PURVIS through MS Teams & on-site training can be recorded by the City. Please see our response to Requirements 1.5.2 for an outline of a typical training course for station & dispatch personnel.	Below is an overview of a typical training course for dispatchers & station personnel: I. Welcome a. Introductions II. System Engineering Overview a. Discuss purpose and capabilities of the PURVIS FSAS i. Central Servers ii. Dispatch Management Console software iii. Radio Interface iv. SCU b. Connection to external systems i. power ii. audio radio iii. etc. III. Walk-thru of alerting scenarios using the FSAS equipment (as available) a. DM Console & SCU Touch Screen IV. FSAS Portal a. Manual alerting b. Adding, editing and deleting units & incident codes c. Updating SCU applications and configurations V. Informal part of session a. Participants are invited to “push the buttons” on the software and ask questions.	Either	PURVIS will conduct up to two training sessions. Sessions will be coordinated with the City to find the optimal time for maximum personnel participation. Training is done in a train-the-trainer format and sessions may be recorded for future use and later reference as needed. After go-live, the PURVIS Help Desk is available 24x7x365 to answer questions about the system, functionality, and software.	$1,600
US Digital Designs, Inc.	G2 ATX Station Controller configuration, programming & troubleshooting training (browser- based interface): [2-3 hours] This module instructs users on how to configure (operations), program (distributed I/O), and trouble-shoot the G2 ATX Station Controller and its related G2 Peripherals. This module also instructs users how to balance input audio (radio, scanner, intercom), modify station volume levels and program any desired audio switching (day/night, volumes, etc.). Training is best conducted your fire stations, due to the hands-on nature of the training. Suggested attendees include Technical Services / Field Service technicians.	G2 Communications Gateway Admin Training: [2 - 3 hours] This module covers both operational and administrative aspects of the G2 FSAS, including: • Adding, editing or removing stations; units; call types, etc. • Defining alerting methods and actions effecting how FSAS alerts stations & units (alert tones, unit ordering, stock alerts, call type definitions, 2-tone or DTMF programming, etc.) • Administration of users (passwords, permissions, etc.) • System monitoring (configuring alarms, reviewing alert & logs, status, etc.) In addition, training will be provided for use of the Dashboard, use of manual alerting client, use of radio control & how to use the G2 Voice Editor to edit customer words for the text-to-speech engine.	On-site	USDD utilizes a train-the trainer concept to train personnel on the System. Training consists of four modules and is generally completed in one business day. The modules include those described in 5.1 and 5.2, as well as Dashboard/Manual Alerting - 1 hour; & Voice Editor - 1 hour. The System Administrators and Dispatch Supervisors we train can provide training to other dispatch personnel working for the City upon completion of training. Additional on-site or remote training can be optionally added to the contract if necessary for an additional cost. A conventional meeting facility a computer projector and screen is needed. For live demonstrations of the System a network connection to the Gateway and a Station Controller is needed.	Total Training costs are $7,965. The costs includes on-site training for all the training modules described in 5.1 and 5.2.

Implementation

Company	Please estimate (in months) the timeline from signature to installation in the nine existing AFD fire stations.	Normalized Implementation Timeline	Please provide an estimated per-station implementation cost.	Please describe the process & timeline for installing your system in potential new fire stations that Aurora plans to build over the next five years?
PURVIS Systems Incorporated	Typically 8-10 months for agencies similar in size to AFD. PURVIS follows a comprehensive & structured approach to implementation to provide a tailored, reliable solution that meets requirements. There are several customer & outside vendor dependencies that are critical to the project timeline and success. The timeline can often be reduced if dependencies, such as customer-defined system requirements & CAD vendor interface delivery, are met within an expedited timeframe.	~8-10 Months	The estimated per station Installation & Implementation cost is $8,150.	PURVIS has significant experience installing the PURVIS FSAS in newly constructed or renovated fire stations. We recommend bringing PURVIS into the process as early as possible. Whether repurposing/remodeling an existing structure, or building a new station from the ground up, we can assist your engineers and planners in identifying equipment and electrical needs. A typical station install takes between 1-5 days, depending on the cabling requirements and # of devices to be installed. Installation can be performed entirely by PURVIS through our trained local installer or we can work with the City's existing construction or electrical firm to train them on how to install the cabling and/or devices as part of their overall SOW for the station.
US Digital Designs, Inc.	The project will take 5 to 6 months to complete. Installation commences upon approval of designs and shipment of components. The timeline is based upon the following: • Detailed Design - 30 days • Communications Gateway Install & Interface Checkout - 10 days • CAD provider interface installation - undetermined • Communications Gateway software customization - 30 days • Station Installation and Checkout - 10 days per station • System Startup and Config - 10 days • System Acceptance – 30 days	~5-6 Months	Core Basic Station Implementation Costs: $8,414.71 Standard Station Implementation Costs: $13,889.67 Advanced Station Implementation Costs: $40,120.71 Implementation costs include a cost to off-set the required 7% of the gross total amount sold per the MOU with Marketplace.	Station installations/cutovers generally take 10 days. USDD designers can get involved in a project as soon as station floorplans are available. USDD designers consult with customer to determine equipment and quantities, provide initial design, and revise as needed for final approval by customer. For new builds, architect and GC generally want early involvement for planning and budgeting purposes. USDD will work with project managers, installers and GC's to plan and schedule shipment & installation that is appropriate to the construction schedule.

Pricing Baskets

We asked both PURVIS & USDD to break out their per-station pricing with a component list in the RFP pricing template.

Since USDD provided three station packages (Core, Standard, and Advanced) of varying components and component quantities, there are many price permutations and comparisons.

The Following Slides provide:

- USDD Core/Standard/Advanced Comparison Matrix
- USDD Core vs. PURVIS Matrix
- USDD Standard vs. PURVIS Matrix
- USDD Advanced vs. Purvis Matrix

You can also find the Pricing Basket Matrices Here.

USDD Comparison Matrix

- Grey Fill indicates missing component
- Yellow Fill indicates change in component Quantity.

Description	Advanced	Standard	Core
Per-Station Total	**$ 100,358.10**	**$ 34,554.90**	**$ 23,416.20**
G2 VoiceAlert License	**$ 927.00**	**$ 927.00**	**$ 927.00**
G2 ATX Station Controller	**$ 19,575.00**	**$ 19,575.00**	**$ 19,575.00**
G2 Expansion Kit	**$ 6,592.50**		
ATX UPS, Standard x2	**$ 1,661.40**	**$ 830.7 (x1)**	**$ 830.7 (x1)**
Shelf/Bracket, Wall Mount for UPS x2	**$ 117.00**	**$ 58.5 (x1)**	**$ 58.5 (x1)**
Audio Amplifier, External, Standard	**$ 888.30**	**$ 888.30**	
Shelf Under Table or Wall Mount	**$ 68.40**	**$ 68.40**	
Push Button x2 (Black & Red)	**$ 198.00**	**$ 198.00**	
G2 HDTV Remote x6	**$ 5,265.00**		
Flat Panel Monitor - 40-43" - x6	**$ 5,940.00**		
Flat Panel Montior TV Mount x6	**$ 621.00**		
G2 Message Remote 2	**$ 1,282.50**	**$ 1,282.50**	
G2 Message Sign - Standard Gamma Sign x14	**$ 13,230.00**	**$ 1,890 (x2)**	**$ 945.0 (x1)**
G2 Message Sign - Extended Gamma Sign - 36"		**$ 1,417.50**	
MS-G Adapter Plate, Double x2	**$ 117.00**	**$ 58.5 (x1)**	
MS-Mount Articulating Arm x3	**$ 877.50**	**$ 292.5 (x1)**	
G2 Room Remote 2 - x12	**$ 21,870.00**	**$ 1,822.5 (x1)**	
G2 Speaker - LED Illuminated Flush Mount x28	**$ 8,190.00**	**$1,462.5 (x5)**	
G2 Speaker - OmniAlert Strobe	**$ 787.50**	**$ 787.50**	
Speaker - Standard Flush - x15	**$ 1,417.50**		
Speaker - App Bay / Outdoor x7	**$ 2,047.50**	**$ 877.5 (x3)**	
Shipping	**$ 8,685.00**	**$ 2,118.00**	**$ 1,080.00**

Notes on USDD vs. PURVIS Baskets

A Few Notes:

- I tried to identify equivalent package components where clear. Those items without a clear equivalent are given their own line.

- USDD placed all station costs in Year 1. PURVIS included $1,545 annual warranty & software costs after Year 1, bringing the 5-year per-station total to $36,900. For ease of comparison, I have only included first year costs here summing to $30,720.

- PURVIS included both a per-station installation cost and a system-wide installation cost. Since they are not equivalent and do not add up to one another, I am treating them as separate costs.

USDD Core vs. PURVIS Matrix

USDD Core Description	USDD Price	PURVIS Price	PURVIS Description
Per-Station Total	**$ 23,416.20**	**$ 30,720.00**	**Per-Station Total**
G2 VoiceAlert License	**$ 927.00**	**$ 300.00**	*Station Control Unit (SCU) FSAS Software License (Perpetual)*
G2 ATX Station Controller	**$ 19,575.00**	**$ 18,380.00**	*Station Control Unit (SCU)*
ATX UPS, Standard	**$ 830.70**		
Shelf/Bracket, Wall Mount for UPS	**$ 58.50**		
G2 Message Sign - Standard Gamma Sign	**$ 945.00**	**$ 630.00**	*Message Board - 32" Monitor*
		$ 1,470.00	*Text-to-Speech (TTS) Voice Module Software License (Perpetual)*
		$ 110.00	*19" Rack to Wall Conversion Bracket - 4U*
		$ 320.00	*Message Board Display Module*
		$ 240.00	*24 Port Unmanaged Network Switch*
		$ 840.00	*Unit Presence Detector*
		$ 250.00	*UPD Rotary Switch*
		$ 8,150.00	*Installation & Implementation*
Shipping Cost	**$ 1,080.00**		

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USDD Standard vs. PURVIS Matrix

USDD Standard Description	USDD Price	PURVIS Price	PURVIS Description
Per-Station Total	**$ 34,554.90**	**$ 30,720.00**	**Per-Station Total**
G2 VoiceAlert License	**$ 927.00**	**$ 300.00**	*Station Control Unit (SCU) FSAS Software License (Perpetual)*
G2 ATX Station Controller	**$ 19,575.00**	**$ 18,380.00**	*Station Control Unit (SCU)*
ATX UPS, Standard	**$ 830.70**		
Shelf/Bracket, Wall Mount for UPS	**$ 58.50**		
Audio Amplifier, External, Standard	**$ 888.30**		
Shelf Under Table or Wall Mount	**$ 68.40**		
Push Button x2 (Black & Red)	**$ 198.00**		
G2 Message Remote 2	**$ 1,282.50**		
G2 Message Sign - Standard Gamma Sign x2	**$ 1,890.00**	**$ 630.00**	*Message Board - 32" Monitor*
G2 Message Sign - Extended Gamma Sign - 36"	**$ 1,417.50**		
MS-G Adapter Plate, Double	**$ 58.50**		
MS-Mount Articulating Arm	**$ 292.50**		
G2 Room Remote 2	**$ 1,822.50**		
G2 Speaker - LED Illuminated Flush Mount x5	**$ 1,462.50**		
G2 Speaker - OmniAlert Strobe	**$ 787.50**		
		$ 1,470.00	*Text-to-Speech (TTS) Voice Module Software License (Perpetual)*
		$ 110.00	*19" Rack to Wall Conversion Bracket - 4U*
		$ 320.00	*Message Board Display Module*
		$ 240.00	*24 Port Unmanaged Network Switch*
		$ 840.00	*Unit Presence Detector*
		$ 250.00	*UPD Rotary Switch*
		$ 8,150.00	*Installation & Implementation*
Speaker - App Bay / Outdoor x3	**$ 877.50**		
Shipping	**$ 2,118.00**		

AURORA ILLINOIS
CITY OF LIGHTS

USDD Advanced vs. PURVIS Matrix

USDD Advanced Description	USDD Price	PURVIS Price	PURVIS Description
Per-Station Total	**$ 100,358.10**	**$ 30,720.00**	**Per-Station Total**
G2 VoiceAlert License	**$ 927.00**	**$ 300.00**	*Station Control Unit (SCU) FSAS Software License (Perpetual)*
G2 ATX Station Controller	**$ 19,575.00**	**$ 18,380.00**	*Station Control Unit (SCU)*
G2 Expansion Kit	**$ 6,592.50**		
ATX UPS, Standard x2	**$ 1,661.40**		
Shelf/Bracket, Wall Mount for UPS x2	**$ 117.00**		
Audio Amplifier, External, Standard	**$ 888.30**		
Shelf Under Table or Wall Mount	**$ 68.40**		
Push Button x2 (Black & Red)	**$ 198.00**		
G2 HDTV Remote x6	**$ 5,265.00**		
Flat Panel Monitor - 40-43" - x6	**$ 5,940.00**		
Flat Panel Montior TV Mount x6	**$ 621.00**	**$ 30.00**	*Wall Mounting Bracket, Tilt, 22" to 42" Monitor*
G2 Message Remote 2	**$ 1,282.50**		
G2 Message Sign - Standard Gamma Sign x14	**$ 13,230.00**	**$ 630.00**	*Message Board - 32" Monitor*
MS-G Adapter Plate, Double x2	**$ 117.00**		
MS-Mount Articulating Arm x3	**$ 877.50**		
G2 Room Remote 2 - x12	**$ 21,870.00**		
G2 Speaker - LED Illuminated Flush Mount x28	**$ 8,190.00**		
G2 Speaker - OmniAlert Strobe	**$ 787.50**		
Speaker - Standard Flush - x15	**$ 1,417.50**		
		$ 1,470.00	*Text-to-Speech (TTS) Voice Module Software License (Perpetual)*
		$ 110.00	*19" Rack to Wall Conversion Bracket - 4U*
		$ 320.00	*Message Board Display Module*
		$ 240.00	*24 Port Unmanaged Network Switch*
		$ 840.00	*Unit Presence Detector*
		$ 250.00	*UPD Rotary Switch*
		$ 8,150.00	*Installation & Implementation*
Speaker - App Bay / Outdoor x7	**$ 2,047.50**		
Shipping	**$ 8,685.00**		

Solution Overview

Company	Please provide a 1 page overview of how your solution fits the City's need	What is your product's greatest differentiation?	Please provide a link to a video showcasing your solution.
Bryx, Inc.	Solution Narrative	Bryx offers the only true cloud based station alerting system in the world	https://www.youtube.com/watch?v=fZoPF-0g1H0
PURVIS Systems Incorporated	Solution Narrative	We tailor our solution to each client's specific needs. Additionally, our use of commercially-available-off-the-shelf components, combined with our approach to service & support, ensures longevity.	Video 1: https://vimeo.com/380516855 Video 2: https://vimeo.com/380516346?embedded=true&source=vimeo_logo&owner=106557176
US Digital Designs, Inc.	Solution Narrative	Software is superior to any other FSAS on market; easy to use & configure and provides critical stability. All System features are built into software - no up-sales. FCC, TUV & UL compliant.	https://stationalerting.com/ Videothe video is on the home page, and you can also link to other videos. We invite you to explore our website for more information regarding our System and products.

Functionality

Company	Do you provide an end-to-end solution for fire stations?	Does your solution provide automated audio call-outs?	Does your solution provide ramped audio tones during dispatch?	Describe the your solution's lighting design for firehouses, if applicable.	Please describe your approach to system support.
Bryx, Inc.	Yes	Yes	Yes	We utilize the philips hue lighting system in most cases. We also have available PoE led panels.	We offer 24/7 support 365 days a week to our station alerting customers. We also offer a lifetime warranty on our control unit.
PURVIS Systems Incorporated	Yes	Yes	Yes	Our solution offers station speakers with integrated red/white LED light rings. With ramped (low to high) volume and light intensity, these lighted speakers can be configured to reduce the startle effect of nighttime alerts and preserve night vision for responding personnel.	Support requests are initiated via the PURVIS Help Desk, which is staffed 24/7/365. We respond to emergency service requests within 4 hours, and non-emergency requests during standard business hours.
US Digital Designs, Inc.	Yes	Yes	Yes	G2 LED Speaker provides ramping low-voltage lighting alert is active. Typically used in dorm rooms and exit pathways to apparatus room. LED Message Signs provide soft lighting & visual alert. Other peripherals available for use in high-noise areas providing visual alert.	USDD provides 1 level of support including 24/7/365 support for critical failures remote support during business hours software updates advanced replacement of defective hardware & mobile app licenses

Technical Overview

	Will your solution integrate with Aurora's NG911 Center (Intrado Viper 7.0 & Power 7.0)?	Will your solution integrate with the Aurora's existing CAD system (Hexagon RMS)?	AFD plans to transition to the P25 radio standard in the near future - will your solution accommodate this standard?	Does your solution track the following critical metrics?	What additional metrics does your solution track that were not listed in question 3.4?	Describe how metrics & data are delivered to AFD management.	What components of metric tracking and delivery are automated?	Please provide an image or example of the metric-tracking interface or deliverable.
Bryx, Inc.	Yes but we do not place any physical hardware at the 911 center. [Yes]	Yes. We are very familiar with that CAD and have interfaced with it many times. [Yes]	Yes	Call-taken Time to Dispatch Time,Dispatch to Out-the-Door Time	We would like to know more about these needs of the department. Can we schedule a call together?	We have many options for this. We would like to learn more about this need	This is detailed and would like to schedule a time for a call.	Interface Example
PURVIS Systems Incorporated	Our FSAS can seamlessly interface with the existing Hexagon CAD system to automate the flow of incident data between the CAD and fire stations. The FSAS does not integrate with Intrado Viper & Power. [No]	Yes. Hexagon has an existing interface to the PURVIS FSAS. The PURVIS FSAS is interfaced with a Hexagon CAD in Boston, Washington DC and DuPage County, IL. [Yes]	Yes	Dispatch to Out-the-Door Time	All system activity is logged in the database and third party reporting tools can be used to report on data available in the database.	AFD management can access standard reports via the PURVIS FSAS DM Console. Reports can be exported as CSV files for use in Excel and 3rd party reporting tools such as Crystal Reports & Pentaho can be used to create custom reports using data from the PURVIS FSAS database..	The Unit Presence Detector available with our solution will automate the reporting of "out-the-door" (turnout time) time tracking for each unit within a station.	Interface Example
US Digital Designs, Inc.	Additional information and clarification are needed to determine the interaction between the Intrado system and Hexagon CAD before we can determine if our System can integrate to the Intrado system [Need Clarification]	We have interfaced to Hexagon CAD. Our standard XML API is used allowing the CAD integrator access to System & generates alerts by sending XML Alert Message to Gateways with details of alert. [Yes]	Yes	Neither	All coms saved in logs: status failures overcurrent etc. Info saved in Alert Log & System Log. Controllers have diagnostic log. Info used to analyze performance, operating stats and create reports.	The System has a Log Viewer Utility built into the web-based configuration app on each platform. The System Administrator selects personnel authorized to access logs, which is restricted by password. All logs are stored in simple text and can be saved to any file storage attached to the workstation	Logging is done automatically by the System. Access / delivery is done on demand by authorized personnel	Interface Example

Vendor Experience

	How many installations do you currently have for your proposed Solution?	Is your proposed solution currently being used in Illinois?	Please provide up to 3 similar engagements based on size and scope of Aurora and its Fire Department.	Please Provide References for the City of Aurora
Bryx, Inc.	100+	Yes	Baytown FD Texas, Erie FD Pennsylvania, Rochester FD New York	References
PURVIS Systems Incorporated	100+	Yes	Our references on the Excel sheet in the next question include these five projects, which are similar or larger in size and scope to Aurora. • City of Naperville, IL. • DuPage County, IL. • High Point, NC. • Pittsburgh, PA • Charleston County, SC	References
US Digital Designs, Inc.	100+	Yes	The System is implemented in 68 stations/dispatch centers in Illinois. Those similar to Aurora include: McHenry Co ETSB-Woodstock,IL- went live August 2018 Regional Emergency Dispatch (RED) Center-Northbrook,IL - went live December 2018 Rockford Fire Department-Rockford, IL – went live June 2020	References

Pricing Overview

	Which model best describes your pricing model?	Please describe your proposed pricing model.	Based on Aurora's size and need, please provide Pricing for the City of Aurora.	Please upload any standard pricing documents or prices for additional services that are related that you would like to share.
Bryx, Inc.	Solution as a Service	We have a traditional pricing model and a yearly SaaS model	One time price of $25,000-$30,000 per station. Or $6500 per station per year for 5 years (SaaS)	
PURVIS Systems Incorporated	Software/Hardware Sale and Maintenance	PURVIS utilizes a line-item pricing model. Hardware and software prices are based on PURVIS list prices. The hardware and software components required for each project are determined by each customer with consultation by PURVIS. The PURVIS FSAS is a flexible and scalable solution.	PSAP System Price Range: $75k - $150k FSAS Pricing: $16k - $26k/station Estimate does not include installation costs or CAD Interface. Additional information is needed to provide installation pricing.	Pricing Documents
US Digital Designs, Inc.	Software/Hardware Sale and Maintenance	USDD's pricing is 10% off of its List Price which is uniform to all customers. Project management configuration services are based on size & complexity of Project. Service Agrmts are calculated based on cumulative price of hardware and software purchased multiplied by a factor between .09 to .12.	Quote attached below. Quote allows for Dispatch System & opt Backup Dispatch System; 3 opts for Station Systems. Visit our website at www.stationalerting.com for descriptions of components proposed ---- Primary Dispatch G2 FSA System: $53,613.61 FSAS Per Station: Core Basic: $29,874.67 Standard: $46,271.24 Advanced: $136,354.57	Pricing Documents

Implementation Overview

	What is the typical timeline for implementation?	Please list any required information from the City of Aurora or AFD to fit your solution to their need.
Bryx, Inc.	2-3 days per station for installation and configuring	Are the amplifiers and speakers in working order? Does AFD want tones and text to speech played over the radio? Does AFD want zoning of tones? Does AFD want bay doors to open and close automatically?
PURVIS Systems Incorporated	The typical timeline for implementation is 8-10 months for an agency similar in size to AFD. PURVIS follows a structured approach to implementation that includes Project Management, Requirements/Configuration, Installation/Integration, Test/Evaluation, Training and Implementation/Cutover.	We tailor our solution to each customer's needs. We will need additional information on the City's specific processes, requirements, desired functionality and fire station environments in order to fully tailor a solution for the City of Aurora's specific needs.
US Digital Designs, Inc.	Detailed Design-30 days Gateway Installation and Interface Checkout-30 days CAD provider interface installation - undetermined Gateway system software customization-30 days Controller Installation and Checkout-10 days per station System Startup & Configuration-10 days System Acceptance-5 days	City PM, AFD personnel, IT/Network & radio personnel will need to be part of the planning process and provide info & support involving station design & City equipment to be integrated with the System. USDD requires USDD requires provision of VPN using SSH protocol for remote access to the System

Other

	Link to your Marketplace.city Profile Page	Anything else you want to tell us?
Bryx, Inc.	https://marketplace.city/c/bryx-inc/	Bryx was incorporated in 2013 by David Earl Thomas, a former 20-year Vice President and Managing Director at Intel Capital, one of the largest venture programs in the world. After extensive market research, David assembled a group of engineers to develop products for the public safety market.
PURVIS Systems Incorporated		Our solution is not one-size-fits-all. Features and functionality can vary across stations, and we work with our clients to tailor the most cost-effective solution that meets their needs and goals. We would welcome the opportunity top work with the City to tailor our solution to your specific needs.
US Digital Designs, Inc.		We understand AFDs interest in cloud-based systems but are concerned of mission-critical applications reliant on internet or WiFi Redundancy is key & multiple communication paths w/hard wired station systems provide the most effective and efficient mission critical system needed by Public Safety