

Utah Communication Authority

Computer Aided Dispatch Restricted Account
Grant Request for the Salt Lake Integrated Public Safety Initiative

August 2016



CAD Grant Application Background Information



PSAP INFORMATION:

PSAP Name:

**Joint Application Salt Lake City 911 (SLC911) and
Salt Lake Valley Emergency Communications Center (VECC)
Salt Lake Integrated Public Safety CAD Technology Initiative**

Date of Application: **24 June 2016**

PSAP Contact Person:

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City:	Salt Lake City, Utah	West Valley City, Utah
ZIP:	84114	84118

1.0 Total amount of this request: \$6,570,158, to be drawn down over three years.

2.0 Describe the Component(s) of the Application

Component	Description	Cost	PSAP Match	Match Percent of Total
CAD Software:	Computer Aided Dispatch Platform (CAD) Software Includes One Year Extended Warranty	\$5,811,800	\$1,213,517	20.88%
Equipment:	Hardware and Operating System Software	\$1,764,038	\$123,483	7.00%
Professional Services:	Implementation Project Manager	\$330,000	\$0	n/a
Other:	S&H, Escrow	\$1,320	\$0	n/a
	Total:	\$7,907,158	n/a	n/a
	Applicable Grant Match:		\$1,337,000	100.00%
	Total Amount Of This Grant Application:	\$6,570,158		

<i>Funding Proforma</i>	<i>TOTAL PRICE</i>	<i>PAYMENT</i>		<i>BALANCE</i>	<i>CAD Funds Available</i>	
		<i>Amount</i>	<i>Date</i>		<i>FY</i>	<i>Balance</i>
<i>(Excluding RMS/FBR/MDS Software)</i>	7,907,158					
Salt Lake County CAD Allocation		(1,337,000)	10/2016	6,570,158	2016	2,449,334
Interest Charges		194,102	Accrued	6,764,260	2017	3,499,334
State 9-1-1 Restricted Fund -- Year One		(2,254,753)	8/2017	4,509,507	2018	3,344,580
State 9-1-1 Restricted Fund -- Year Two		(2,254,753)	8/2018	2,254,753	2019	3,189,827
State 9-1-1 Restricted Fund -- Year Three		(2,254,753)	8//2019	0	2020	5,289,827
State 9-1-1 Restricted Fund -- Year Four		0		0		

Intergraph CAD Proposed Funding/Draw Down

Funding Options

DRAFT

Terms	3 Years	5 Years	7 Years			
Project Cost:	7,907,158					
Salt Lake County	(1,337,000)	(1,337,000)	(1,337,000)		Current Market Municipal Bond	
StateCAD Restricted Account	6,570,158	6,570,158	6,570,158			
Interest Rate	1.470%	1.620%	1.760%		3 Year	1.47%
Annual Payments	(2,254,753)	(1,378,578)	(1,005,824)		5 Year	1.62%
Total Payments	(6,764,260)	(6,892,888)	(7,040,765)		7 Year	1.76%
Total Cash Outlay	(8,101,260)	(8,229,888)	(8,377,765)			2.01%



Administrative Services R174 Related to the Utah 911 Advisory Committee

R174. Communications Authority Board (Utah), Administration.

R174-1. Utah 911 Advisory Committee.

As in effect on June 1, 2016

R174-1-1. Purpose.

The purpose of this rule is to outline the operation of the committee and procedures whereby the committee shall award funds to Public Safety Answering Points (PSAPs) and Dispatch Centers throughout the State of Utah for the establishment and maintenance of a statewide unified E-911 emergency system, and to establish the framework to provide grants from the Computer Aided Dispatch (CAD) Restricted Account.

R174-1-6. Criteria for Determining Grant Eligibility.

(1) In order to be eligible for a grant, a PSAP shall comply with all of the requirements found in Title 63H Chapter 7a Part 3; Title 53, Chapter 10, Part 6; and Title 69, Chapter 2.

(2)(a) When determining which PSAPS may receive grants, the committee shall give priority to 911 projects that:

(b) enhance public safety by providing a statewide, unified 911 emergency system;

(c) include a maintenance package that extends the life of the 911 system;

(d) increase the value of the 911 system by ensuring compatibility with emerging technology;

(e) replace equipment which is no longer reliable or functioning; and

(f) include a local share of funding according to the following formula:

(i) PSAPs in a county of the first class that pay at least 30% of the total cost of the project;

(ii) PSAPs in a county of the second class that pay at least 20% of the total cost of the project; and

(iii) PSAPs in a county of the third through sixth class that pay up to 10% of the total cost of the project.

(3) Eligible CAD functional elements - Refer to Section R174-1-8, Attachment A -- Eligible CAD Functional Elements.

(a) In the case of an award from the Computer Aided Dispatch Restricted Account, PSAPs shall pay a grant match of 20% regardless of class.

(4) If a grant application includes equipment that utilizes geographical information systems or geo-positioning systems, the PSAP shall consult with the State Automated Geographic Reference Center (AGRC) in the Division of Integrated Technology of the Department of Technology Services.

(5) When economically feasible and advantageous to the individual PSAPs, the committee may negotiate with vendors on behalf of the PSAPs as a group.

(6) Where applicable, PSAPs shall provide evidence from the Bureau of Emergency Medical Services (BEMS) that they are a Designated Emergency Medical Dispatch Center.

Questions and Answers

It seems that the Salt Lake Initiative is very costly. Having contacted San Diego County, an Intergraph customer, I found that they paid significantly less than the Salt Lake Initiative (paraphrased).

This question was initially posed in an ex-parte communication, where the discussions and suggestions of “facts” appear to be incomplete and misleading because all parties are not represented and able to answer questions or disclose relevant and complete facts.

San Diego paid \$6.8 million for their CAD product, but the product only included law enforcement CAD software (no fire, no medical and no RMS for any discipline).

The Salt Lake Initiative CAD software cost is \$6 million and \$1.7 million for eligible hardware and hardware operational software (Microsoft). The project also will be procuring RMS, FBR and Mobile, however the cost of these products are not included in this grant funding request.



The Salt Lake Initiative is a multi-discipline, multi-agency multi-jurisdictional solution that replaces the existing disparate Computer Aided Dispatching (CAD) systems with a single robust CAD platform.

The CAD system being acquired is a shared data base that will be continually created and updated by all primary PSAPs, all law enforcement and fire agencies servicing the municipalities, township, unincorporated canyons and open spaces within Salt Lake County.



Members of the Committee were asked to sign a non-disclosure agreement prior to the phone conference meeting on August 2nd. What is the purpose of the agreement? Isn't all of this information public information?

The information provided in the Grant Application is public information, however, some of the discussions among and outside of the 911 Committee sought additional information.

Utah Code Annotated 63H-7a-302(4)(b) reads: *"In accordance with Subsection (4)(a) the 911 Division may request (ii) information from public safety answering points related to the computer aided dispatch system. (c) The information requested by and provided to the 911 Division under Subsection (4) is a protected record in accordance with Section 63G-2-305."*

Utah Code Annotated 63G-2-305(6) defines the circumstances where an entity may protect a record when the disclosure of information (record) "...*would impair government procurement proceedings or give an unfair advantage to any person proposing to enter into a contract or agreement with a government entity*". In this case 63H-7a-302 has declared this information to be protected, and disclosure of information to unauthorized individuals is a violation of law. In as much as negotiations are considered to be ongoing until all funding has been secured and contracts are fully executed, disclosure of information is limited.

Explain how the CAD Software Cost displayed in the 2.0 section matrix (row one column three) was calculated?

2.0 Describe the Component(s) of the Application

Component	Description	Cost	PSAP Match	Match Percent of Total
CAD Software:	Computer Aided Dispatch Platform (CAD) Software Includes One Year Extended Warranty	\$5,811,800	\$1,213,517	20.88%
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Professional Services:	Implementation Project Manager	\$330,000	\$0	n/a
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	Total:	\$7,907,158	n/a	n/a
	Applicable Grant Match:		\$1,337,000	100.00%
	Total Amount Of This Grant Application:	\$6,570,158		

Explain how the CAD Software Cost displayed in the 2.0 section matrix (row one column three) was calculated?

Description	Costs
CAD System Software & Eligible Hardware & Operation System	\$9,556,945
Software Warranty (one year)	1,598,867
Field Base Reporting	(140,056)
Mobile Data	(1,246,970)
Record Management System	(3,099,606)
Cash, Contributions & Discounts for Warranted CAD Software	(857,381)
Total Line One Section 2.0	\$5,811,800

Does the Grant Application meet the local match requirement?

Yes

CAD Software:	Computer Aided Dispatch Platform (CAD) Software Includes One Year Extended Warranty	\$5,811,800	\$1,213,517	20.88%
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R174-1-6. Criteria for Determining Grant Eligibility.

(3)(a) In the case of an award from the Computer Aided Dispatch Restricted Account, PSAPs shall pay a grant match of 20% regardless of class.

Equipment:	Hardware and Operating System Software	\$1,764,038	\$123,483	7.00%
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R174-1-8. Attachment A -- Eligible CAD Functional Elements.

(i) Hardware: Servers and other hardware are eligible for full reimbursement when the equipment is required to support the core CAD functionality. New CAD required hardware that also supports associated functions such as Records Management Systems is eligible for reimbursement at the apportioned rate of documented use.

R174-1-8. Attachment A -- Eligible CAD Functional Elements.

(i) Hardware: Servers and other hardware are eligible for full reimbursement when the equipment is required to support the core CAD functionality. New CAD required hardware that also supports associated functions such as Records Management Systems is eligible for reimbursement at the apportioned rate of documented use.

The SL CAD Initiative has determined that \$123,483 is the apportioned marginal hardware cost for RMS related components. The remaining hardware and computer operating system software have been determined to be eligible for full reimbursement as required for core CAD functions.

The hardware requirements for the Hexagon/Intergraph solution totals 10 actual physical machines distributed at two facilities, identified as the production and secondary sites. These brick and mortar devices are the platform for 77 virtual servers divided between the sites. Because virtual servers are a dynamic utilization of resources shared by these devices, it is extremely difficult to estimate or accurately quantify any type of distinction between a CAD core component and ancillary applications.

We have identified a reasonable and fair allocation based on current standards. Utilizing that information the cost for those resources has been reduced from the grant application and will be provided through other funding sources.



Should Mobile Public Safety training be eligible for reimbursement?

The real question that should be asked is what are the “core CAD functions and how are they defined or should be defined in the CAD Restricted Account Rules?

CAD Defined (APCO ANS 1.110.1-2015, Multi-Functional Multi-Discipline Computer Aided Dispatch (CAD) Minimum Functional Requirements)

“A Computer Aided Dispatch (CAD) system is the principal application used by public safety agencies to manage law enforcement, fire, and EMS incidents from the initial time an incident is reported to the conclusion of the incident. CAD is also used to track the status and location of resources, and for post incident analysis of the response.

This standard provides a master list of Functions for a CAD system, identifying those functions that constitute the minimum set of requirements that shall be included for a CAD system, as well as others that a CAD system should include as optional features/functions.

R174-1-8. Attachment A -- Eligible CAD Functional Elements.

(ii) Software: CAD software fulfilling the core missions of call entry, address verification, unit recommendation, dispatching and tracking of units, and mapping.

Eligible items include:

(a) Core System to support CAD (apportioned to actual cost of modules to support CAD)

(b) CAD application

(c) Geo-base address verification

(d) Mapping

(e) Automatic Vehicle Location

(f) Unit Recommendations or Response Plans

(g) E911 copy-over

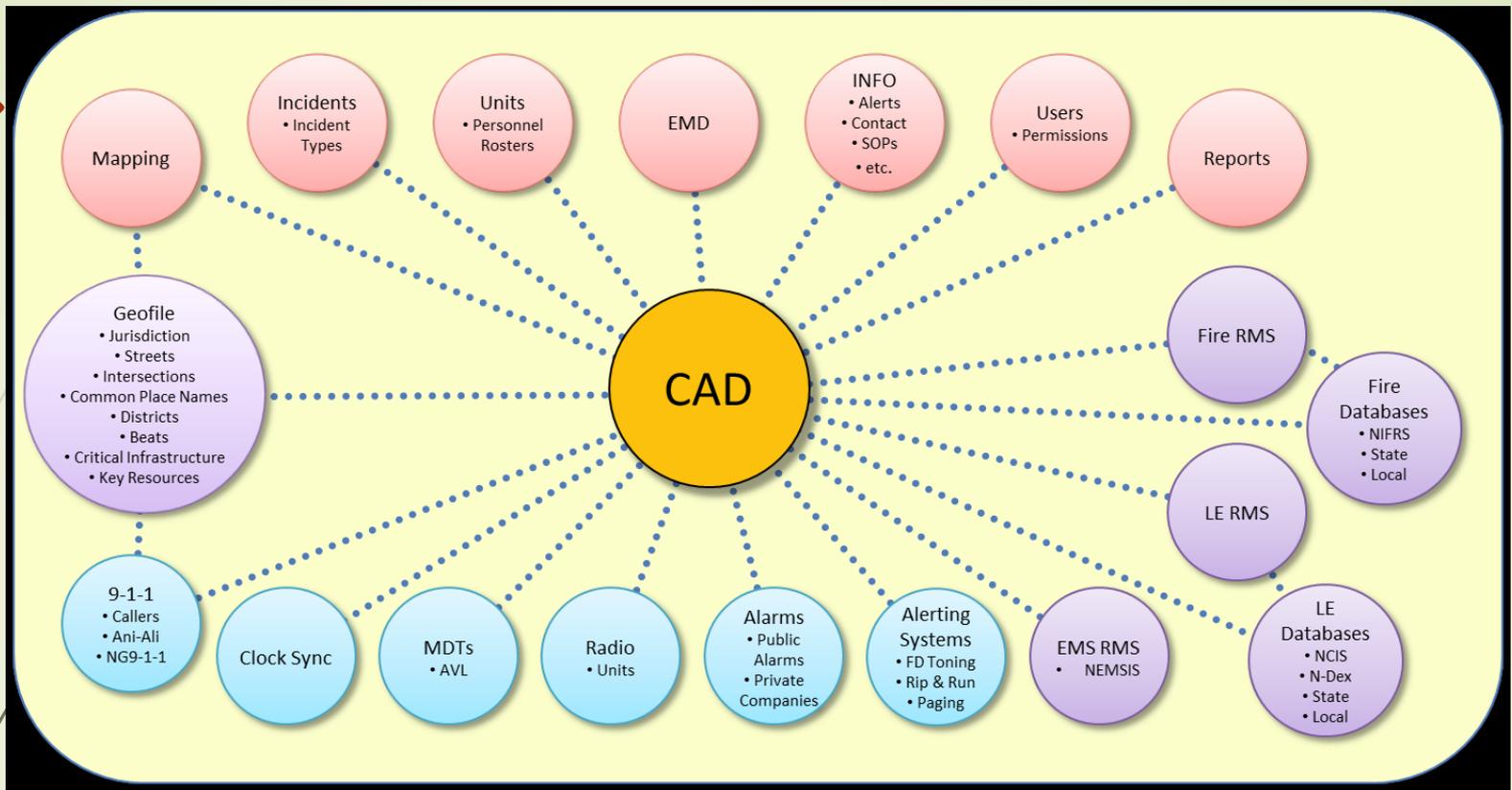
(h) Interfaces to closely related 3rd party applications (medical/fire/police card system, fire department paging system, or UCJIS)

(i) Premise (apportioned at 50%)

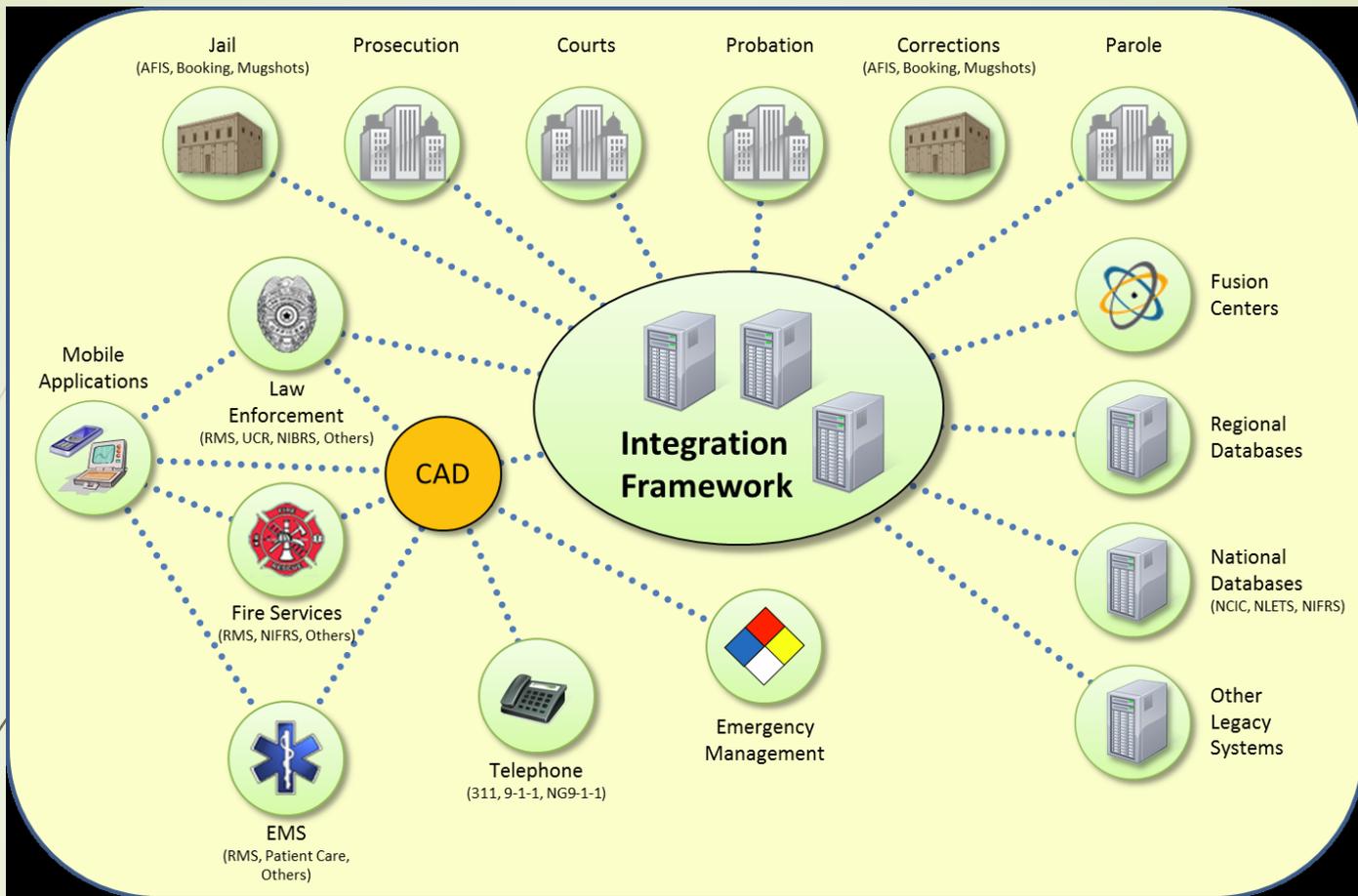
(iii) Professional Services: (installation, configuration, etc.) apportioned for eligible items.

Core CAD functions recognized by national organizations are call input, call dispatching, call status maintenance, event notes, resource unit status and tracking, and call resolution and disposition.

Sources: APCO ANS 1.110.1-2015 Multi-Functional Multi-Discipline Computer Aided Dispatch (CAD) Minimum Functional Requirements; and APCO IJIS Institute 2012 Unified CAD Functional Requirements



CAD systems consist of several modules that provide a variety of services and functions at multiple levels with a public safety communications center. These services include call input, dispatching call status maintenance, event notes, resource unit status and tracking and call resolution and disposition.



Further CAD systems include interfaces that permit the software to provide services to dispatchers, call-takers, and field personnel with respect to control and use of radio telephone equipment, Emergency Medical Dispatch (EMD), external RMS, and other internal and external systems, as well as other services and functions.



In a draft version of the application, annual maintenance for each components was shown as a column to the right of the component cost. Is maintenance included in the request for reimbursement?

R174-1-8. Attachment A -- Eligible CAD Functional Elements.

(ii) Software: CAD software fulfilling the core missions of call entry, address verification, unit recommendation, dispatching and tracking of units, and mapping.

Eligible items include:

(iv) Maintenance: Ineligible other than CAD2CAD interface.

(v) Database Merging/Conversion: Eligible for CAD data merging/conversion, apportioned at 50% if RMS data is also included in the merge/conversion.

No maintenance is included in this grant request. As part of our negotiations, we required that all cost be detailed, including costs that are normally included in a lump sum price quotes. The warranty costs for each component was detailed and in subsequent years will be identified as maintenance and paid by the PSAPs.

Data base merging/conversion costs and apportionments are yet to be determined. All CAD conversion cost are included, however, whether RMS data is converted or not has not been fully valued and is not included in this grant.

R174-1-8. Attachment A -- Eligible CAD Functional Elements.

- (vi) Ineligible software items include, but are not limited to:
 - (a) RMS related modules
 - (b) System dashboards or monitoring
 - (c) Aerial photography
 - (d) Equipment tracking
 - (e) Personnel tracking
 - (f) Imaging
 - (g) Pin-mapping or statistics packages

We have acknowledged that the RMS system is ineligible for funding under the current rule 174 and in compliance to the rule, this application does not request funding for the RMS software costs, or the FBR and MPS software costs, the latter two cost not being specifically excluded but are commonly included as core CAD functions. As currently written, compliance with grant rules can only be subjectively applied given the phrase, "Ineligible software items include, but are not limited to:".

A legitimate argument could still be made that if a component is not specifically excluded, yet commonly recognized nationally as part of a CAD system, it is by default be eligible for grant funding.

And no, electricity should not be included as it is not found in any of the literature as a core CAD component.

R174-1-8. Attachment A -- Eligible CAD Functional Elements.

- (vi) Ineligible software items include, but are not limited to:
 - (a) RMS related modules
 - (b) System dashboards or monitoring
 - (c) Aerial photography
 - (d) Equipment tracking
 - (e) Personnel tracking
 - (f) Imaging
 - (g) Pin-mapping or statistics packages

There is significant ambiguity in these rules leaving several issues to subjective interpretation. Mapping and Automatic Vehicle Location components are specifically identified as eligible, but Aerial photography, equipment tracking and personnel tracking are ineligible leaving the distinction up for subjective and potentially inconsistent application.

While this application does not ask for funding for aerial photography, built into the CAD is the capacity to pull-in third party overlays such as Pictometry and Google maps, as well as, the capacity to track both vehicles and field personnel on dispatched calls and active detail.

Defining "core CAD functions in the Grant Rules?

2.1 Multi-Discipline (Law, Fire & EMS) CAD Systems

- 1 = Mandatory – a CAD system shall have these functions
- 2 = Nice to have – a CAD system should have these functions
- 3 = Above and beyond

APCO ANS 1.110.1-2015

2.1 MultiDiscipline (Law, Fire & EMS) CAD System



Main Functional Area Function - Multi-Discipline CAD Systems (Law, Fire, EMS)

Call Handling / CAD Event Creation	1	Call Handling
	1	CAD Incident / Event Types
	1	Update Call for Service Event Data
	1	Determine Dispatch Need
	1	Utilize Incident Disposition
	1	Assign Incident Classification and Priority
	1	Check for Duplicate Incidents
	1	Incident Information
	1	Determining Capture Locations*
	1	Location Verification*
	1	Retrieve Incoming Calls
	1	Involved Person Information
	1	Involved Vehicle Information
	1	Premises Hazards and Previous History

See the complete list at the end of the slide show



Should Mobile Public Safety training be eligible for reimbursement?

Map Roll Consulting for I/CAD Systems (IPST8004)	\$11,970	All nine class-types pertain to CAD-only features.
MPS Reassessment (IPST2007)	\$35,910	
MPS Workflow and Configuration Workshop 1 (IPST2502)	\$71,820	
MPS Workflow and Configuration Workshop 2 (IPST2502)	\$35,910	
MPS Workflow and Configuration Workshop 3 (IPST2502)	\$35,910	
MPS for Trainers (IPST2503)	\$21,735	
MPS Administration and Configuration (IPST3112)	\$10,395	
I/Incident Analyst Configuration and Administration (IPST6001)	\$10,395	
I/Incident Analyst User Training (IPST6002)	\$8,820	



Observation: Considering grant applications in isolation as they come in may not be the best practice in allocating funds to the highest public safety needs.

From our perspective this observation is absolutely on target. Utah Code Annotated at 63H-7a-302. 911 Division duties and powers, which includes the responsibilities of the 911 Advisory Committee includes the following:

- (5) The 911 Division shall recommend to the executive director, for approval by the board, rules in accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, to:*
 - (a) Administer the program funded by the Unified Statewide 911 Emergency Service restricted account created in Section 63H-7a-304, including rules that establish the criteria, standards, technology, and equipment that public safety answering point in Utah must adopt in order to qualify for goods or services that are funded from the restricted account; and*
 - (b) administer the Computer Aided Dispatch Restricted Account created in Section 63YH-7a-303, including rules that establish the criteria, standards, technology, and equipment that a public safety answering point must adopt in order to qualify as a recipient of goods or services that are funded from the restricted account.*



Included in the Grant Application for funding are the following:

- *I/Informer*
- *EdgeFrontier*

I/Informer: The *I/Informer* application is an integral part of Core CAD components. It is the middle-ware that handles the entire CAD required third party interfaces. These interfaces are utilized every day in call handling and dispatching of field units. One of the primary interfaces is the UCJIS/CIJS communications very similar to the Spillman *StateLink* interface. There are many other interfaces as identified in the grant application.

EdgeFrontier: The *EdgeFrontier* application is also an integral part of Core CAD components. This application allows its users to modify and configure core CAD functions internally and not rely on costly support and technical assistance from the vendor. *EdgeFrontier* also allows the users to create modify and deploy additional interfaces with third party vendors, thus saving time and money as those interfaces are identified.

The Grant Request duplicates interface with Polaris. Is this a core CAD function?

Rule 174-1-8. Attachment A – Eligible CAD Functional Elements (ii)(h) identifies as eligible:

“(h) Interfaces to closely related 3rd party applications (medical/fire/police card system, fire department paging systems, or UCJIS).”

Core CAD functions are not clearly defined in the CAD Restricted Account Rule 174. Without a definition of Core CAD Functions, the determination becomes subjective and open to interpretation by the applicant and the Grant Reviewer which is very likely to be different.

In preparing this Grant we searched for widely accepted definitions of a Public Safety CAD and carefully crafted our application to comply with Rule 174.

Our research showed that the interfaces with third parties are essential and considered core functions. The CAD is merely a database and of little use unless the information is accessed and shared with public safety responders.

3.0 Please include all applicable quotes or estimates germane to this request.

3.1 This is an integrated CAD project that includes the two Salt Lake County PSAPs (SLC911 and VECC) and the following public safety agencies:

3.1.1 Salt Lake City 911 serving:

- 3.1.1.1 Salt Lake City Police Department
- 3.1.1.2 Sandy City Police Department
- 3.1.1.3 Salt Lake City Fire Department
- 3.1.1.4 Sandy City Fire Department

3.1.2 Salt Lake Valley Emergency Communications Center (VECC) serving:

- 3.1.2.1 Town of Alta Marshall
- 3.1.2.2 The City of Cottonwood Heights Police Department
- 3.1.2.3 Draper City Police Department
- 3.1.2.4 Murray City Police Department
- 3.1.2.5 South Jordan City Police Department
- 3.1.2.6 South Salt Lake City Police Department
- 3.1.2.7 Unified Police Department serving:
 - 3.1.2.7.1 Copperton Township
 - 3.1.2.7.2 Granite Township
 - 3.1.2.7.3 Herriman City
 - 3.1.2.7.4 The City of Holladay
 - 3.1.2.7.5 Kearns Township
 - 3.1.2.7.6 Magna Township
 - 3.1.2.7.7 Midvale City
 - 3.1.2.7.8 The City of Millcreek
 - 3.1.2.7.9 Riverton City
 - 3.1.2.7.10 The City of Taylorsville
- 3.1.2.8 West Jordan City Police Department
- 3.1.2.9 West Valley City Police Department

- 3.1.2.10 The City of Bluffdale Fire Department
- 3.1.2.11 Murray City Fire Department
- 3.1.2.12 South Jordan City Fire Department
- 3.1.2.13 Unified Fire Authority serving:
 - 3.1.2.13.1 The Town of Alta
 - 3.1.2.13.2 Copperton Township
 - 3.1.2.13.3 The City of Cottonwood Heights
 - 3.1.2.13.4 Draper City
 - 3.1.2.13.5 Granite Township
 - 3.1.2.13.6 Herriman City
 - 3.1.2.13.7 The City of Holladay
 - 3.1.2.13.8 Kearns Township
 - 3.1.2.13.9 Magna Township
 - 3.1.2.13.10 Midvale City
 - 3.1.2.13.11 City of Millcreek
 - 3.1.2.13.12 The City of Riverton
 - 3.1.2.13.13 The City of Taylorsville
- 3.1.2.14 West Jordan City Fire Department
- 3.1.2.15 West Valley City Fire Department

Salt Lake City 911 and VECC are the two primary PSAPs answering all 911 and a significant portion of non-emergency calls for all law enforcement, fire and emergency medical services serving 1.1 million residents plus more than 1 million visitors each year.

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- ▶ TWO PSAP's (receives 911 calls directly)
 - ▶ VECC and SLCPD process more than 1.2 million calls per year and transfer 150,000 calls to secondary PSAPs
 - ▶ 5 Secondary PSAP's (Receives transferred 911 calls from PSAP)
 - ▶ Unified Police Department (member of VECC), Salt Lake City Airport Authority, Utah Highway Patrol TOC, University of Utah, Granite Police Department, Utah Transit Authority

The real question should be how is the "core CAD functions defined, or should be defined in the Rules?

2.1 Multi-Discipline (Law, Fire & EMS) CAD Systems

1 = Mandatory – a CAD system shall have these functions

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3 = Above and beyond

APCO ANS 1.110.1-2015

2.1 MultiDiscipline (Law, Fire & EMS) CAD System

Main Functional Area Function - Multi-Discipline CAD Systems (Law, Fire, EMS)

Call Handling / CAD Event Creation	1	Call Handling
	1	CAD Incident / Event Types
	1	Update Call for Service Event Data
	1	Determine Dispatch Need
	1	Utilize Incident Disposition
	1	Assign Incident Classification and Priority
	1	Check for Duplicate Incidents
	1	Incident Information
	1	Determining Capture Locations*
	1	Location Verification*
	1	Retrieve Incoming Calls
	1	Involved Person Information
	1	Involved Vehicle Information
	1	Premises Hazards and Previous History

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	1	Determining Capture Locations*
	1	Location Verification*
	1	Retrieve Incoming Calls
	1	Involved Person Information
	1	Involved Vehicle Information
	1	Premises Hazards and Previous History
	1	CAD Event Creation
	1	Determining Response Agency & Service Area
	1	Alarm Processing
1	CAD Event Routing	
2	Ability to Route to a "Decision Dispatcher"	

Dispatch Support	1	Run Cards / Response Plans
	1	Adjustable Dispatch Levels
	1	Additional Attributes
	1	Mutual Aid Function
	1	Automatic Aid Function
	2	Unit Rotation (aka: Unit Load Balancing)
	1	Conditional Availability of Apparatus
	1	Special Dispatch Areas
	1	Emergency Medical Dispatch / Incident Triage
	1	Channel Designations
	1	Be On the Look-Out (aka: Attempt to Locate)
	1	Dispatch Units
	1	Resource Alerting
	Resource / Unit Management	1
1		Staffed vs. Unstaffed Units
2		Cross-Staffing / Crew Counting / Shared Staffing Crew Accountability / Contingent Staffing
1		System Status Management (aka: Dynamic Resource Deployment)
1		Additional Unit Status
2		Strike Team / Task Force Designations
1		Rostering
3		Scheduling
2		Mileage Tracking
1		Hydrant Location and Status
2		Additional Unit Dispositions
2		Exception Reason Tracking
3		Public Safety Flight Tracking
2		Geo-fencing
1		Station Dispatch
1		Pre-Release or Pre-Alerting
1		Vehicle / Unit Change
2		Automatic Driving Directions / Routing
2		Bypassed Units
3		Post-Dispatch Response Re-evaluation

Call / Incident / Event Management

1	Display of Incident / Event Data
1	Update Incident Status
1	Dispatch Resource Decision
1	Update Assigned Resources
1	Update Supplemental Resources Tracking
1	Assign Units
1	Update Incident Data
1	Assign Records Management System Incident / Case Number
1	Transfer Basic Incident Data to the Records Management System
1	Display Additional Incident Data
1	Reopen Incident
1	Add Destination Locations
1	Hospital Status / Availability and Hospital Recommendation
3	Patient Tracking
3	Linking an Audio File to a CAD Event
1	Multiple Simultaneous Incidents to Single Unit
1	Scheduled Events
1	Secondary Incident Location
1	Single Discipline Incident to a Combined Discipline Incident
1	Timers
1	User Defined Status Timers Supplemental Resource Request and Tracking
1	Request Supplemental Resource
2	Request Supplemental Resource Rotation List
2	Notify Supplemental Resource Service
2	Enter and Update Supplemental Service Record Incident Disposition
1	Determine Incident / Event Status
1	Utilize Incident Management
1	Determine Report Functionality

Call / Incident / Event Management	1	Display of Incident / Event Data
	1	Update Incident Status
	1	Dispatch Resource Decision
	1	Update Assigned Resources
	1	Update Supplemental Resources Tracking
	1	Assign Units
	1	Update Incident Data
	1	Assign Records Management System Incident / Case Number
	1	Transfer Basic Incident Data to the Records Management System
	1	Display Additional Incident Data
	1	Reopen Incident
	1	Add Destination Locations
	1	Hospital Status / Availability and Hospital Recommendations
	3	Patient Tracking
	3	Linking an Audio File to a CAD Event
	1	Multiple Simultaneous Incidents to Single Unit
	1	Scheduled Events
	1	Secondary Incident Location
	1	Single Discipline Incident to a Combined Discipline Incident
	1	Timers
1	User Defined Status Timers	

Supplemental Rsource Request and Tracking	1	Request Supplemental Resource
	2	Request Supplemental Resource Rotation List
	2	Notify Supplemental Resource Service
	2	Enter and Update Supplemental Service Record
Incident Disposition	1	Determine Incident / Event Status
	1	Utilize Incident Management
	1	Determine Report Functionality
	1	Record Disposition
	1	Send Data to Records Management System
	1	Assign Agency-Specific Report Numbers
Business Function: CAD System Administration	1	Geofile Maintenance
	1	Security
	1	Logging
	1	Configuration
	1	Table Maintenance
	1	Communication Center / PSAP Relocation
	1	CAD Catch-Up

System Functions	1	Notifications
	1	Contact List
	1	Premises Information / Hazards
	1	Communications Center / PSAP Standard Operating Procedures
	1	Agency-Specific Incident / Location / Unit Standard Operating Procedures
	1	Remote Access
	1	CAD Workstation-to-CAD Workstation Messaging
	1	Incident Command Support
	2	Narrative Field "Shorthand" / Auto Text
	1	Command Line / GUI
	1	Date/Time Stamps
	1	Unit Status Transitions Matrix
Reporting and Monitoring	1	Dispatch Supervisor Support
	1	CAD Management Reporting
	1	Training and Testing
	1	Snapshot / Incident Replay
Interfaces	1	Essential Interfaces
	1	1 Additional Interfaces
	1	1 Locational Systems Interfaces
	1	1 Administration Interfaces
	1	1 Communications Interfaces
	1	1 Integration / Interfaces with Other Systems
	3	3 National SAR Initiative Functionality
	2	2 Emergency Operations Center Interface

