



## APPLICATION FORM

All applications must include the following information. Separate applications must be submitted for each eligible program. **Deadline: June 1, 2018.** Please include this application form with electronic entry. If you do not receive an email confirming receipt of your entry within 3 days of submission, please contact [Gage Harter](#).

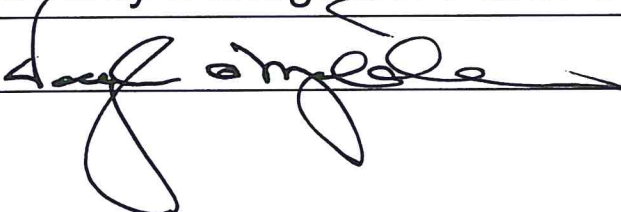
### PROGRAM INFORMATION

County: County of Henrico  
Program Title: CAD Passport-Accountability & Community Resource Tool  
Program Category: Information Technology

### CONTACT INFORMATION

Name: Victoria Davis  
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### SIGNATURE OF COUNTY ADMINISTRATOR OR DEPUTY/ASSISTANT COUNTY ADMINISTRATOR

Name: Douglas Middleton  
Title: Deputy County Manager for Public Safety  
Signature: 

## **Program Overview**

The Henrico County Division of Fire CAD Passport provides real-time personnel accountability, which bolsters firefighter safety, matches appropriate resources with community need, and increases organizational awareness of those personnel involved in high-stress and traumatic incidents.

Through the integration of available technology, tied to existing payroll and credentialing databases, response units are now categorized by the training levels and abilities of personnel to ensure the best resources are assigned to the community's immediate need.

Fire-ground commanders can quickly assess personnel information and account for those working in hazardous locations through a reliable and automated method. The information is available in mobile environments and easily collected.

After high-stress incidents, the organization's personnel greatly benefit from stress debriefing and counseling. CAD Passport identifies the specific names and the roles of the staff present at each critical incident, so they can participate in the debriefing process, if desired.

## **Problem/Challenge/Situation Faced by Locality**

Henrico County Division of Fire found it difficult to accurately track personnel with specialized training needed for infrequent, but critical medical incidents. Additionally, fire command staff were unable to quickly and accurately to account for on-scene personnel by relying on the use of an antiquated Velcro tag procedure. Quite often, accountability was absent as the manual tag process contained too many variables for failure.

The Division Leadership could not determine specific personnel locations on a particular fire apparatus without a lengthy, involved process. Also, after critical incidents which may lead to possible mental health implications, peer support personnel lacked a record of which staff members were exposed to trauma.

### **How Program Fulfilled Awards Criteria**

This in-house solution enhances the Division of Fire's ability to provide efficient and effective services to the community and increases the safety measures for the first responders. Being able to select (in real-time) the most appropriate resources to meet a particular need improves the Division's response capabilities. Finally, accountability of the firefighters and medics is greatly increased on incidents, which significantly mitigates potential hazardous personnel interactions on the fire-ground. CAD Passport provides life-saving benefits to the public and sworn personnel

### **How Program Was Carried Out**

Each individual assigned to one of 21 firehouses, administration sections, or training sections is accounted for daily as to their respective professional capabilities and apparatus or area assignment. More than 550 individuals are tracked 24 hours a day, and the data is archived. Fire-ground Commanders have complete operational understanding of the personnel assignments and locations. Additionally, this data creates opportunities for cancer risk reduction through documentation of personnel assigned to incidents of high risk for exposure to carcinogens, such as structure fires and hazardous materials incidents.

### **Financing and Staffing**

Only personnel time was used in the development, implementation, and sustainability of the program. County IT developers, who develop software solutions and support multiple county agencies, created the program during their normal workflow.

The data from which CAD Passport utilizes is pulled from existing databases within our organization.

### **Program Results**

CAD Passport now provides real-time personnel accountability, bolsters firefighter safety, matches appropriate resources with the needs of the community, and increases organizational awareness of those personnel involved in high-stress incidents.

The archived data will be useful in the future to help determine the experience of personnel over a given time period. As an example, recruit firefighters requesting to be released as an apparatus driver/operator, data can be assessed to understand how many incidents and hours of experience occurred in a specific position. As an example of matching community need, response units were experiencing an increased level of calls for service on January 25, 2017. At one point, no ambulance units were available. A critical medical call was received, and the dispatch system seamlessly chose the most appropriate fire truck to respond based on the training and skills of available firefighters. In this instance, even though an ambulance was delayed, service delivery to the patient was not affected.

### **Brief Summary**

Developed in partnership with Henrico County's Information Technology resources, in early 2017 the Division of Fire implemented an accountability and community impact program with tangible outcomes. For three years, the Division worked with internal and external resources to develop an accountability system that reflected best practices. In the years leading to the 2017

implementation, several other systems were developed or updated to support the planned implementation of CAD Passport.

The term “CAD” refers to Computer Aided Dispatch, the foundation system that allows unit recommendations to emergency responses.

CAD Passport’s primary objectives included the following:

- Fire Scene Accountability
- Tracking Personnel with Specialized Medical Training
- General Personnel Accountability on Fire Apparatus
- Integration with 911 Dispatch to Match Resource to Community Need
- Data Retention for Identifying Personnel for Critical Stress Debriefing

Full development and implementation of the CAD Passport program relied on a variety of software elements to mature and align with existing systems. The puzzle pieces involved updates to personnel records, timecard and leave data tools, dispatch software, and mobile computers. Through almost three years of work on different pieces, the puzzle started to come together to create the CAD Passport the organization uses today.

The supervisors of the more than fifty response units staffed each day update CAD Passport’s personnel roster each morning. They are able to pick from a list of available personnel and indicate their “riding assignment” for the day. As staffing changes throughout the shift, the roster is updated to remain current. Shift commanders use the roster, almost hourly, to determine current staffing and locate specific personnel.

Since the CAD Passport program is tied to multiple systems personnel with specialized training on the roster allows the response units to be dispatched according to their level of service.

# CAD Passport - Accountability & Community Resource Tool

## Main User Interface – Each Response Unit Requires Personnel Assignment

The screenshot displays the CAD Passport user interface. At the top, there is a navigation bar with four buttons: "Henrico County Fire Passport – All Stations", "Admin", "Status Report", and "...with Photos". Below this, a message reads: "Units at 22. Select your current unit or click **Unassigned** if you are not yet assigned to a unit:". Underneath the message are five buttons: "E22", "F22", "T22", "BT1", and "Unassigned". The "F22" button is selected, and a dropdown menu is open below it, showing a list of personnel names. The list includes: "[A] Skinner, John", "[D] Wescott, David", "-- Station Personnel --", "Campbell, Michael", "Canales, Carlos", and "Chellie Lauren".

## Sample Incident Response Record – CAD Interface for Real-time Updates – Personnel Listed

C0896 - 237 LETHARGIC (ASSIGNED)

**██████████** GAYTON RD btwn DALEWOOD DR and GAYTON CENTRE DR

Details

Caller	Caller Location	See	911 Call	Entered	Timer	PD	FD	SRA	R
<b>██████████</b>	Cell Plots	true	14:57:27	01/26/2018 14:58:05 by KLI001	999	83	13	861.00	N

Units

Unit	Dispatched	Enroute	On-Scene	Transport	To	Arrived	Cleared	Dispo	Responders	All
F22	14:58:17	14:58:51	15:07:05	15:31:21	HDF				[A] Skinner, John [D] Wescott, David	
S13	14:58:17	14:58:52	15:01:54				15:31:44	63	[A] Myers, William [B] Wright, Andrew [D] Weinstein, Nathan	

Comments

Is the patient awake?: Yes //Is the patient breathing normally?: Yes //Does the patient also have chest pain?: No //Is the patient confused or having difficulty speaking or moving their arms or legs?: Yes // ALS: Y sendFire: Y	KLI001	14:58:05.66
confused and lethargic	KLI001	14:58:11.97
speech slurred	KLI001	14:58:16.54
CALL ASSIGNED TO TAC 04	GAI10	14:58:17.51



**LETHARGIC** – 12401 GAYTON RD

**F22**

**A: Skinner, John**



**D: Wescott, David**



Personnel pictures are available by incident to allow commanders to know, by face, who is assigned to incidents. Each incident is also listed with or without images.

**AUTOMOBILE** – THREE CHOPT RD & HILLSIDE AVE

**E09**

**A: Goodman, Taylor**

**B: Clarke, Ashanti**

**D: Carr, Brien**

**GENERAL ILLNESS** – [REDACTED] WICKER MEADOWS CIR

**F04**

**A: Clary, Michael**

**D: Lanham, Russell**

**S18**

**A: Stone, Kenneth**

**B: Alford, Steven**

**D: Messerle, John**

**HEADACHES** – [REDACTED] MICHAELS RD, [REDACTED] (LITTLE SISTERS OF THE POOR)

**F05**

**A: Moncure, Paul**

**D: Twisdale, Carl**

**E08**

**A: Jacyshyn, Justin**

**B: Elmendorf, Matthew**

**D: Jennings, Julie**