

Virginia Information Technologies Agency



## **E-GIFT (EMS Grant Information Funding Tool)**

**Improving State Operations**

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Completion Date: August 1, 2014**

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## Executive Summary

Applications from nearly 1,000 emergency medical services (EMS) agencies are accepted for funding from Virginia's Rescue Squad Assistance Fund. This includes EMS regional councils, community colleges, sheriff's offices, 911 centers and volunteer fire departments. Approximately \$9 million is allocated each year to nearly 250 recipients.

Developed by the Virginia Department of Health (VDH) Office of Information Management (OIM), the EMS-Grant Information Funding Tool (E-GIFT) is a Web-based grant system that has automated and integrated all phases of the grant process:

- Submission
- Grading
- Awards
- Payments
- Purchase verification

E-GIFT has reduced the amount of time required for grant preparation, maintenance, reimbursements and post-grant documentation by approximately 90 percent.

E-GIFT is highly innovative. It is an expansion of an existing infrastructure and database and is Web-accessible and mobile device friendly. This eliminates the need to download client software, upload application files, and import and export data between multiple systems. It reduces paper usage by converting the requirement of a physical signature and paper documentation into e-signatures and provides upload capabilities for required documentation. In addition, security measures were incorporated into the system to ensure necessary checks and balances are in place to maintain the separation of job duties among grant administration staff. An e-signature feature is provided eliminating the risk of forged print documentation.

From development to implementation, VDH was responsible for the project oversight, outcomes and management. The project has been in operation since June 2014 and has received grant applications since August 2014.

Best practices exemplified by this project include:

- Use of Agile Scrum methodology with involvement of business owners and stakeholders from the project initiation to closing.
- Alignment of modules and grant cycle phases.
- Role-based access to each function of the application was created.
- The model was built based on providing more control to users and minimizing the IT staff role in the day-to-day grant cycle process.

## Description of the Business Problem

Previously, Rescue Squad Assistance Fund (RSAF) applications were collected, processed and managed using outdated and disparate software systems.

- Grant applicants were required to download a software program from the Office of Emergency Medical Service (OEMS) website, save the software to their computer, and complete the application.
- Once completed, the user had to return to the OEMS website, transfer the data by selecting their agency name from a drop down list and enter a user password.
- This process transferred only the grant application, not other required documentation. Required attachment included an affirmation page with three different physical signatures, completed questionnaires and supplemental documentation that could be sent in a separate email or printed and mailed.

Administrative access restrictions made installation of software cumbersome. Information technology (IT) staff assistance often was required. Once the software was installed, all required data was entered by the applicant every cycle because the pre-population of information from OEMS was not possible. The applicant then uploaded the data file, which then was transferred to the client server application where all grant data was housed. This proved to be a time-consuming process and allowed for multiple errors.

On the receiving end, OEMS then scanned all information and combined the documents to create one file for each grant submission per agency for review.

Grant application evaluators faced similar software installation issues.

- Evaluators installed a separate software application and downloaded each grant application package.
- They entered the scores and sent them to OEMS, where the results had to be incorporated into another software application for the final award meeting.
- Award information was then entered into another database for management and payment purposes.
- Award and rejection letter data was downloaded from this application into a mail merge document, signed and distributed.

The number of manual file transfers, and software installations required many hours of staff time for grand applicants, OEMS and evaluators. Errors were a risk inherent in the process due to the amount of manual intervention required. Approximately \$9 million is allocated each year to nearly 250 recipients so these risks were substantial and a solution was needed as soon as possible.

## Solution

EMS-Grant Information Funding Tool (E-GIFT) addressed these problems by automating a grant application system that allowed all information to be processed automatically.

- Uploading required documentation
- Pre-populating specific EMS agency data from existing OEMS databases
- Verifying the agency's Federal Identification Number (FIN) through a third-party website
- Using e-signatures through an email notification system for each user
- Automating the memorandum of agreement (MOA), invoice submission and a final report submission by the grantees

Other solutions were considered as a replacement for the original RSAF system. Extensive research was performed to determine if there was an existing product that could be used as-is or with customization to meet Virginia's specific process. Commercial-off-the-shelf (COTS) products and "home-grown" applications used in other state agencies and other states were considered. No outside products met stated requirements without extensive customization and significant costs.

Ultimately, the decision was made to develop E-GIFT in-house. This leveraged existing infrastructure and closely integrated grant processes with other business program areas in OEMS. This approach was economical because there was no additional hardware or software purchases made for this project. VDH OIM developed prior OEMS applications so this permitted the use of existing hardware, software and knowledgeable staff resources to make this a successful project in very short time span with minimum investment beyond staff time.

VDH was able to leverage an existing database, expand on it and make it Web-enabled to achieve a modern, secure, user-friendly application and greatly reduce manual intervention of the IT department and user staff. In addition, the new E-GIFT application is Web compatible on all major browsers, including mobile devices, whereas the previous systems only used the Web to upload and download files and software releases.

E-GIFT is compliant with accessibility standards and the commonwealth security requirements in the [Information Security Standard SEC501 documentation](#). Access is role-based and monitored so external users have access to the system to submit, view, and manage their grants. External users are unable to access any sensitive data except for their own.

Development began in April 2014 with a pilot moving forward in June 2014. Grant submissions went live in August 2014.

The project management approach was overseen by VDH OIM with OEMS staff assisting in the development, beta testing and review of each module. User groups were formed to assist with beta testing for grant phases and defects were entered into an automated defect tracker database to track all issues, upgrades and fixed defects.

- The project methodology used was a customized version of the Agile Methodology/ SCRUM. This customized approach to standard SCRUM fit with existing business and IT department procedures, teams and work locations.
- Flexibility in processes (without sacrificing best practices) was encouraged throughout the project in order to meet project goals, user requirements and deadlines.
- The system was implemented in phases corresponding to the business phases of the regular grant cycle.

OEMS has provided awareness and adoption promotion for E-GIFT through user training at the 2014 EMS Annual Symposium; two trainings were conducted that reached approximately 100 users. OEMS conducted over 15 live webinars for approximately 250 users to explain the E-GIFT process and requirements for RSAF. Information and user guides have been developed and are available online for users to review at any time during the year. There is technical assistance available through the 11 EMS regional councils and the eight OEMS program representatives.

## Significance of the Project

The main scope of E-GIFT was to replace the outdated RSAF software with an automated Web-based approach that was user-friendly and secure. Features needed included uploading capabilities, grant review improvements, maintenance capabilities and use of e-signatures. E-GIFT accomplished all of these needs by providing user logins and passwords, consolidated questionnaires, document uploads, setting up super user account, providing for e-signatures for authorized users, including an automated payment system for invoice upload and award, and automating post-grant procedures.

E-GIFT has improved government operations by reducing the time to process and manage RSAF grants by approximately 90 percent. OEMS staff time alone has been cut from approximately 40 hours to four hours.

This is an excellent model for other agencies and other states that have implemented a grant program that need for an automated application. The system has decreased data transfers resulting in more accurate data, the enforcement of e-signatures has resulted in enhanced security measures, and centrally located data reduces the amount of time necessary to prepare the grants for the grading process by 90 percent.

E-GIFT is an innovative model of a healthcare grant application that improves the grant system for users allowing EMS agencies to obtain the latest medical equipment and transportation to increase overall patient

care. This application has increased the efficiency of the program by using EMS agency data from existing OEMS systems reducing EMS agency staff time by obtaining system data, delivering documents in a reduced time frame and creating a user-friendly application program. E-GIFT achieves this by streamlining the process through automation and less documentation so more EMS agencies can find time to apply for grants. During the second grant cycle of E-GIFT, OEMS received the highest number of grant applications submitted in the past 15 years.

E-GIFT supports many public policy goals, including:

- [Board of Health Priority](#): Improvement in the health and well-being of all Virginians.
- [Governor's Priorities \(Subcategories\)](#): Healthcare Innovation, Government Innovation, Cybersecurity and Upgraded Technology, Customer Service and Accessibility.
- [NASCIO Priorities from CIO Survey](#): Security, Consolidation/Optimization, Strategic IT Planning, Mobile Services/Enterprise Mobility Management and Customer Relationship Management.

## Benefits of the Project

E-GIFT has been extremely beneficial to all users of the system: grant applicants, grant e-signers, grant awardees, grant reviewers, program representatives, EMS regional councils, Financial Assistance Review Committee, RSAF meeting attendees and OEMS grant staff.

Significant benefits include:

- Reduced time to prepare grants to permit EMS and local government staff to perform other duties to serve citizens
- Enhanced security via e-signatures
- Decreased data transfers resulting in more accurate data
- Reduced time to process and manage grants to permit state staff to perform other duties to serve citizens by 90 percent
- More timely awards to purchase emergency equipment
- Statistical data for analysis and forecasting

E-GIFT reduces the amount of time spent on applying grant applications. As a result, state government staff, local government staff and emergency services workers have more time to perform other tasks in service to citizens. It's an IT win-win.