

OFFICE OF THE STATE INSPECTOR GENERAL
Report to State Coordinator Stern

PERFORMANCE REVIEW
VIRGINIA DEPARTMENT OF EMERGENCY
MANAGEMENT

June 2016



June W. Jennings, CPA
State Inspector General
Report No. 2015-PR-017



COMMONWEALTH OF VIRGINIA
Office of the State Inspector General

June W. Jennings
State Inspector General

Post Office Box 1151
Richmond, Virginia 23218

Telephone (804) 625-3255
Fax (804) 786-2341
www.osig.virginia.gov

June 23, 2016

Dr. Jeffrey D. Stern, State Coordinator
Virginia Department of Emergency Management
10501 Trade Court
North Chesterfield, VA 23236

Dear Dr. Stern:

The Office of the State Inspector General (OSIG), under § [2.2-309](#) [A](9) of the *Code of Virginia* (*Code*), is empowered to conduct performance reviews of state agencies to ensure that state funds are spent as intended and to evaluate the efficiency and effectiveness of programs in accomplishing their purposes. The Virginia Department of Emergency Management (VDEM) review covers the period of July 1, 2013 to June 30, 2015.

VDEM approached OSIG for assistance in September 2014 to evaluate their organizational structure of the finance and grants areas. Based on that request OSIG performed that evaluation and went further in conducting a performance review.

OSIG's review focused on:

- Public Assistance
- Hiring and Training Plan for Vacant Finance Division Positions
- Cardinal Implementation

The planning phase of the review consisted of conducting interviews with selected members of executive and divisional management, assessing the risks identified during those interviews, and creating a detailed review plan to accomplish the review objectives. The steps in the review plan were executed, and the results were discussed with VDEM management on May 26, 2016.

Overall OSIG staff found opportunities to improve efficiency and effectiveness within the VDEM's Public Assistance (PA) Program. OSIG also found that the hiring and staffing activities within the finance areas, as well as the preparation for the Cardinal transition, were satisfactory. No corrective

action plan is requested as that information was provided by VDEM within their response to the observations in this report.

OSIG review staff appreciates the assistance provided by the VDEM staff during this review.

Respectfully,

June W. Jennings, CPA
State Inspector General

CC: Paul J. Reagan, Chief of Staff to Governor McAuliffe
Suzette P. Denslow, Deputy Chief of Staff to Governor McAuliffe
Brian Moran, Secretary of Public Safety and Homeland Security
Senator Frank M. Ruff, Jr., Chairman of the General Laws and Technology Committee
Delegate L. Scott Lingamfelter, Chairman of the Militia, Police, and Public Safety Committee

TABLE OF CONTENTS

Executive Summary.....	i
Purpose and Scope of the Review.....	1
Background.....	2
Organizational Structure Review.....	3
Public Assistance.....	6
Vacant Finance Positions and Cardinal Implementation.....	10
Review Methodology.....	12
Review Results.....	14
Public Assistance.....	14
Observation No. 1 – Adhere to FEMA Guidelines Regarding Payments for Small Project Worksheets.....	19
Observation No. 2 – Improve Use of VDEM Public Assistance Grant System.....	20
Observation No. 3 – Evidence of Third-Party Control Environment.....	21
Observation No. 4 – Develop and Issue Applicant Satisfaction Surveys.....	21
Observation No. 5 – Improve Pre-Disaster Applicant Training.....	22
Observation No. 6 – Develop Internal Public Assistance Performance Goals and/or Measures.....	23
Hiring and Training Plan for Vacant Finance Division Positions.....	23
Cardinal Implementation.....	24
Exhibit I – Open Disasters as of July 27, 2015*.....	26
Exhibit II — Comparison of VDEM to Maryland Emergency Management Agency (MEMA).....	27
Exhibit III — Comparison of VDEM to Pennsylvania Emergency Management Agency (PEMA).....	28

Executive Summary

Overall OSIG staff found opportunities to improve efficiency and effectiveness within the Virginia Department of Emergency Management's (VDEM) Public Assistance (PA) Program. OSIG also found that the hiring and staffing activities within the finance areas, as well as the preparation for the Cardinal transition, were satisfactory.

OSIG staff reached these conclusions after:

- Conducting interviews with VDEM Executive and Senior Management as well as the staff from the Auditor of Public Accounts.
- Performing the following procedures related to the VDEM PA Program
 - Obtaining an understanding of the PA process.
 - Analyzing disaster data related to open projects that had not been reimbursed.
 - Reviewing a sample of unreimbursed projects from open disasters selected for review.
 - Benchmarking business processes, activities, and performance metrics to other Federal Emergency Management Agency (FEMA) Region III states' emergency management agencies and best practices for PA.
 - Evaluating the existence of best practices including training, objective damage evaluations, certification of data and acknowledgment of responsibility by applicants.
 - Determining whether internal performance metrics and goals existed.
- Evaluating the Hiring and Training Plan for vacant Finance Division positions.
- Consulting with the Cardinal Project Manager and the Cardinal Project Agency Readiness Liaison regarding VDEM's ability to implement Cardinal February 1, 2016.

OSIG staff identified the following matters within the VDEM PA Program that, if addressed, would improve operations:

- Treatment of small projects as large projects in providing required financial assistance.
- Limited use of the VDEM PA Grants Management System.
- No review of third-party internal controls related to the VDEM PA Grants Management System.
- No use of applicant satisfaction surveys.
- Decentralized notification to applicants of available training.
- No established performance measures or goals.

To improve current processes, OSIG recommendations include:

- Adhering to FEMA guidelines for payment of small projects,
- Improving the use of the VDEM PA Grant Management System,
- Confirming of third party internal controls related to the VDEM PA Grant Management System,
- Implementing use of applicant satisfaction surveys,

- Improving pre-disaster applicant training, and
- Developing performance measures and goals.

Purpose and Scope of the Review

The Office of the State Inspector General (OSIG) conducted a performance review of the Virginia Department of Emergency Management (VDEM) pursuant to *Code of Virginia (Code)* § [2.2-309](#) whereby the State Inspector General shall have power and duty to:

“Conduct performance reviews of state agencies to assess the efficiency, effectiveness, or economy of programs and to ascertain, among other things, that sums appropriated have been or are being expended for the purposes for which the appropriation was made and prepare a report for each performance review detailing any findings or recommendations for improving the efficiency, effectiveness, or economy of state agencies, including recommending changes in the law to the Governor and the General Assembly that are necessary to address such findings.”

This review was not designed to be a comprehensive review of VDEM. Dr. Jeffrey D. Stern, VDEM State Coordinator, requested OSIG conduct the review focusing on certain risk areas. The scope and objectives of the review were established through interviews with management concerning VDEM’s risks in these areas:

- Public Assistance
- Hiring and Training Plan for Vacant Finance Division Positions
- Cardinal Implementation

The review covered the period from July 1, 2013 to June 30, 2015. The review objectives were to:

1. Evaluate the efficiency of the manual processes in the VDEM PA Program and evaluate the flow of work for possible internal control weaknesses.
2. Determine whether a sufficient hiring and training plan was in place to fill vacant positions within the finance and grants area.
3. Determine whether the agency’s Cardinal implementation was on schedule and that the agency’s financial management was able to participate in required meetings and activities.

Background

The Virginia Department of Emergency Management (VDEM) is an agency of the Commonwealth of Virginia (COV) under the Secretary of Public Safety and Homeland Security, with primary responsibility and authority to provide the resources and expertise through the four phases of emergency management:

- **Emergency Preparedness**
VDEM develops and maintains state emergency plans as blueprints for response to a variety of scenarios and assists communities in developing localized emergency operations plans.
- **Incident Response**
VDEM coordinates the response efforts and provides status reports to the Governor on existing conditions. When the Governor declares a state of emergency, VDEM coordinates efforts with the Federal Emergency Management Agency (FEMA) to request a Presidential Disaster Declaration and provide assistance to those impacted by the disaster.
- **Disaster Recovery**
Following certain federally declared disasters, the VDEM Public Assistance (PA) Program provides federal funding to impacted state and local government agencies and qualifying non-profits that responded to the emergency. In most instances, the federal government pays 75 percent of the cost, and the state and localities cover the remaining 25 percent share.
- **Mitigation**
Mitigation is the effort to reduce the loss of life and property by lessening the impact of disasters. Preventive measures help mitigate or lessen future losses. Studies have shown that each dollar spent on mitigation saves an average of \$4.00 in disaster recovery costs.¹

VDEM's ultimate goal is to ensure Virginia families, communities, and key stakeholders are provided the tools they need to prepare for, mitigate against, respond to, and recover from the consequences of emergency and disaster events (man-made or natural).

VDEM is a member of FEMA Region III, which also contains the states of Maryland, West Virginia, Delaware, Pennsylvania, and the District of Columbia. The region headquarters is located in Philadelphia, Pennsylvania.

For FY 2016, VDEM funding comes from the following sources:²

- Federal funds (83%)
- General Fund dollars (11%)

¹ 2005 study "Natural Hazard Mitigation Saves: An Independent Study to Assess the Future Savings from Mitigation Activities" published by the Multihazard Mitigation Council (MMC) of the National Institute of Building Sciences (NIBS), page 5. https://www.nibs.org/resource/resmgr/MMC/hms_vol1.pdf Accessed 2-10-2016.

² Department of Emergency Management 2014-16 Strategic Plan, https://solutions.virginia.gov/pbreports/rdPage.aspx?rdReport=vp_StratPlan102&selAgency=127&selVersion=2014-16&run=Run. Accessed 2-9-2016.

- Commonwealth Transportation dollars (2%)
- Dominion Power Radiological Emergency Preparedness (4%)
- Other sources (<1%)

VDEM is headquartered in Chesterfield County, with administrative offices at the Trade Court Facility and the state Emergency Operations Center located off-site at the Virginia State Police headquarters. VDEM is staffed by 135 employees, with seven regional coordinators maintaining offices within their respective regions to serve as a base of operations for the Local Services Division staff.

In September 2014, VDEM approached OSIG to conduct a special review of the current organizational structure of the VDEM Finance Division. Recent Auditor of Public Accounts (APA) and Joint Legislative Audit Review Commission (JLARC) findings identified issues related to financial management and staffing. In January 2015, OSIG began a two-part project to first address the organizational staffing and structure of the Finance Division, and second, to conduct a performance review as previously described in the Purpose and Scope section of this report.

A new VDEM State Coordinator was appointed in May 2014. This was the first new State Coordinator in 16 years. Upon his arrival, one of the first challenges was an immediate need to address the staffing in the finance areas. The staffing in those areas had been depleted due to employee turnover and a change in the Finance Division's management. The State Coordinator wanted to reorganize the finance areas, including implementing best practices from other states similar to Virginia.

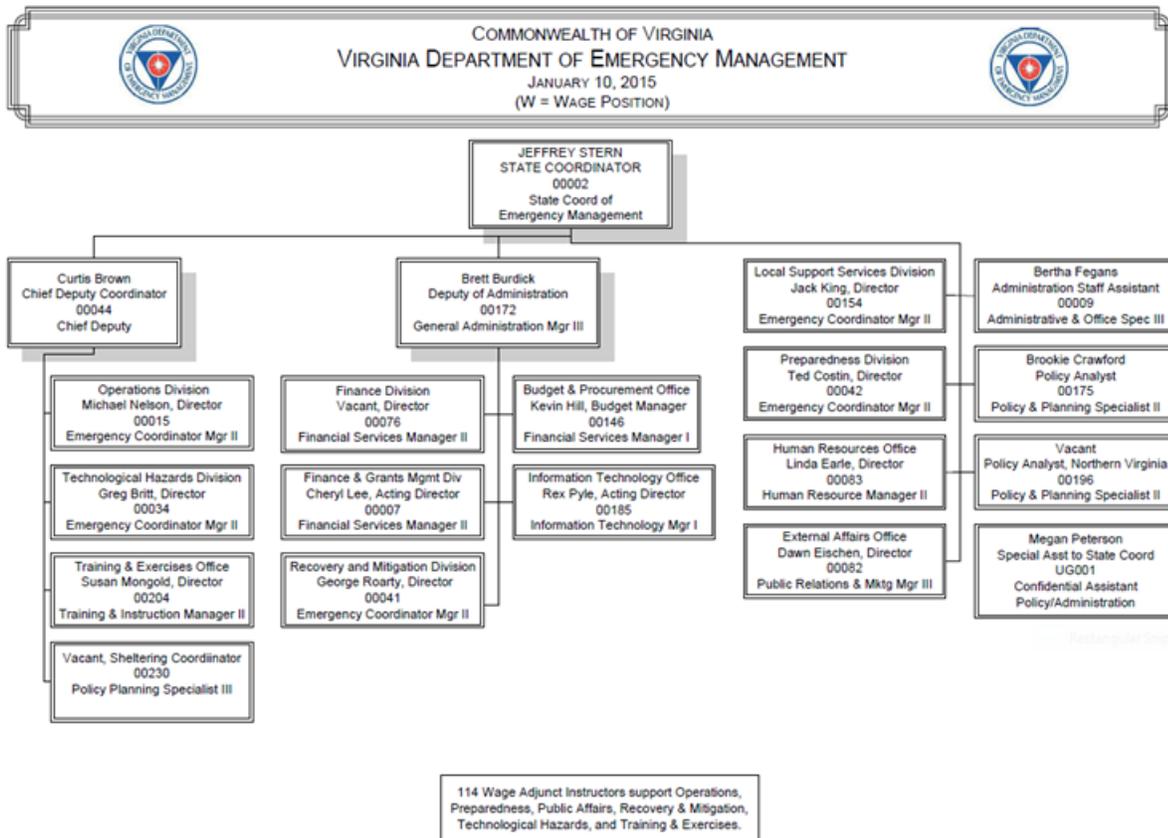
The State Coordinator also took a strategic approach to updating the organization and management of VDEM by initiating a Division Director Rotation Program that was in place from July 2015 to December 2015. During this rotation process, each division director served for a period of two months in a division other than their own. As a result, each division director worked in three different divisions. The Rotation Program provided the division directors experience in a wider range of VDEM operations and an opportunity to understand the problems that each division faces in carrying out its unique duties.

Organizational Structure Review

In advance of conducting the requested performance review, a study was conducted to assist VDEM Executive Management in developing a new financial organizational structure. The State Coordinator expressed to OSIG his desire to have a newly-created Chief Financial Officer (CFO) position oversee all financial operations at VDEM. The State Coordinator wanted an experienced CFO that would act as a central conduit of financial information and to also address the earlier APA and JLARC findings related to financial management and staffing. OSIG's objectives were to:

- Create a benchmark of financial organizational structures from other states' emergency management functions and from Virginia state agencies with similar functions as VDEM.
- Determine whether current VDEM financial positions have accurate EWP's and that persons filling those positions have the required KSA's, education and experience.

The organizational chart below provided by VDEM shows the overall structure including the finance areas under Administration when OSIG began the review.



To conduct the study, OSIG requested organization charts from all state emergency management functions in FEMA Region III and North Carolina that reflected the overall organization structure and the organization structure of the finance areas. OSIG also requested the same information from the following COV agencies:

- Department of Agriculture and Consumer Services (VDACS)
- Department of Labor and Industry (DOLI)
- Department of Forensic Science (DFS)
- Department of Rail and Public Transportation (DRPT)
- Department of Environmental Quality (DEQ)

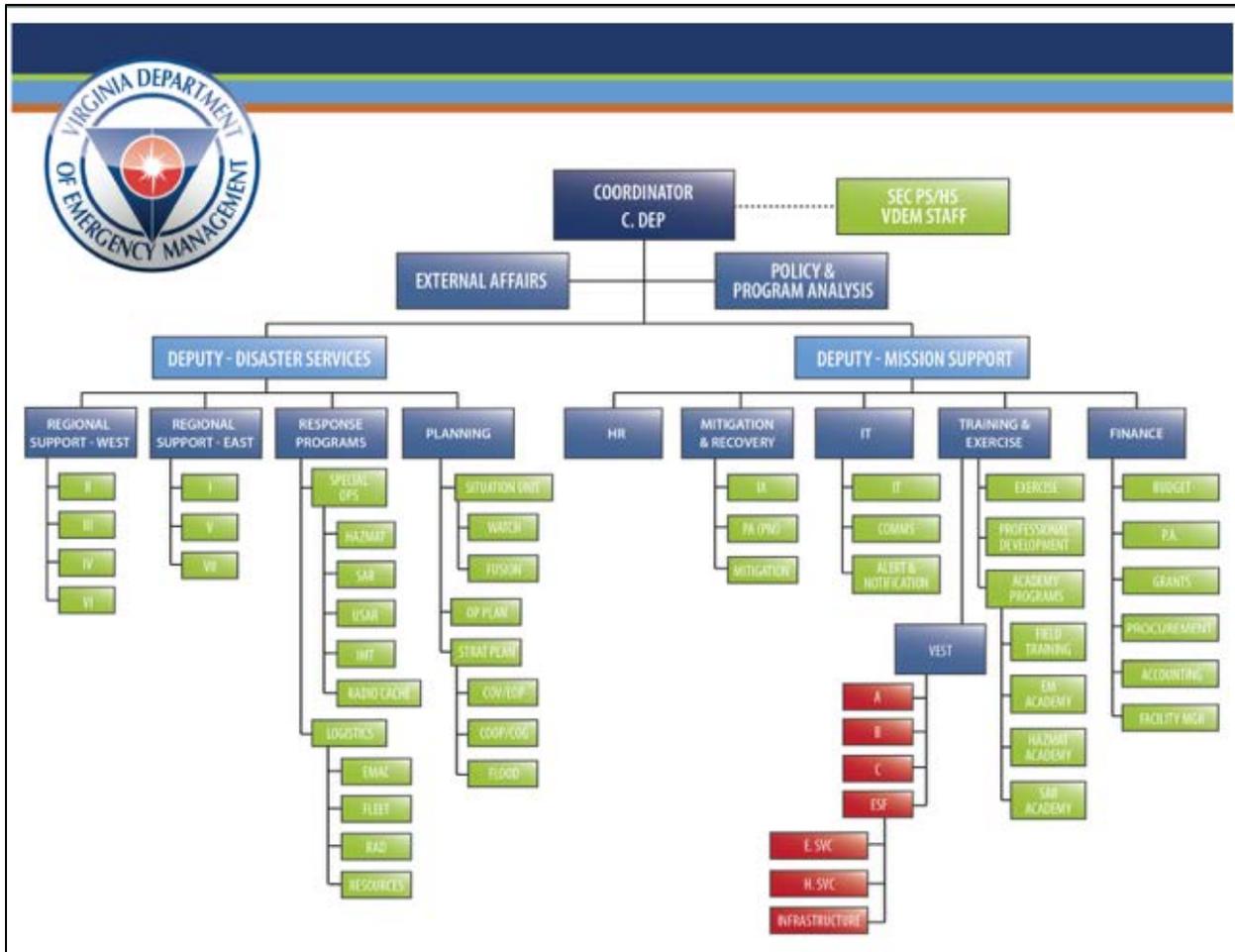
OSIG received and reviewed the overall organization structure and the organization structure of the finance areas from Delaware, Maryland, and Pennsylvania. In addition, OSIG received and reviewed

the same information from all of the listed COV agencies. OSIG compared the organization structures of the received information to the current overall organization structure and the finance organization structure in place at VDEM as of January 10, 2015. OSIG developed “pros” and “cons” of the reviewed organization structures and how they could or could not benefit VDEM. The results of OSIG’s review were presented to VDEM on March 30, 2015. In summary, the OSIG review identified the following organization structures that could benefit VDEM:

Organization	Aspects for VDEM Consideration
Maryland Emergency Management Agency (MEMA)	<ul style="list-style-type: none"> • Three distinct & identifiable directorates for the overall agency • Distinct & identifiable branches under the Administration Directorate • Plan to centralize financial functions for all grants under a single Grants team
Pennsylvania Emergency Management Agency (PEMA)	<ul style="list-style-type: none"> • Two distinct & identifiable directorates for the overall agency (Operations & Administration) • Director for Bureau of Financial Management acts as a CFO & reports to the Deputy Director for Administration • Clear separation of duties performed by the Divisions under the Bureau of Financial Management
Department of Rail & Public Transportation (DRPT)	<ul style="list-style-type: none"> • CFO reports to the Deputy Director, which is one level below the Agency Director • Two distinct areas for DRPT: Finance & Administration; Programs • Interacts with federal & state agencies, as well as local governments & general public
Department of Environmental Quality (DEQ)	<ul style="list-style-type: none"> • Agency mission similar to VDEM • Office of Financial Management divided between two distinct areas: Budget & Grants; Fiscal • Interacts with federal & state agencies, as well as local governments & general public.

Since the March presentation, VDEM has completed a reorganization (effective July 1, 2015) and hired a CFO (effective September 10, 2015). The new overall organization structure is included on the following page:³

³ Virginia Department of Emergency Management.
http://www.vaemergency.gov/webfm_send/1071/VDEM_org_chart_divisions083115-01.png, Accessed 2-18-2016.



Public Assistance

The mission of FEMA’s PA Grant Program is to provide assistance to eligible applicants that are state, tribal, and local governments, and certain types of private non-profit (PNP) organizations. The purpose is to allow communities to quickly respond to and recover from major disasters or emergencies declared by the President. The Recovery and Mitigation Division of VDEM is responsible for administering the FEMA PA Grant Program.

The FEMA PA Grant Program provides supplemental federal disaster grant assistance through the states for debris removal, emergency protective measures, and the repair, replacement, or restoration of disaster-damaged, publicly-owned facilities and the facilities of certain PNP organizations. This program also encourages protection of these damaged facilities from future events by providing assistance for hazard mitigation measures during the recovery process.

In Virginia, the federal share of assistance is not less than 75 percent of the eligible cost for debris removal, emergency measures, and permanent restoration of infrastructure. VDEM, serving as the grantee/recipient, determines how the non-federal share (up to 25 percent) is split with the sub-

grantee/sub-recipient (eligible applicants including state agencies, localities and PNP organizations). For state agencies, the state pays the entire non-federal share (up to 25 percent). For local governments and their political subdivisions, the state shares the cost of the remaining 25 percent based on the Commission on Local Governments Economic Index stress factor for individual localities, with a minimum contribution of at least 10 percent. At the time of our review, tribal governments were not applicable to Virginia for these purposes.⁴

As soon as practicable after a Presidential declaration, VDEM, assisted by FEMA, conducts the Applicant Briefings for state, local, tribal, and PNP officials to inform them of the assistance available and how to apply for it. A Request for Public Assistance must be filed by the applicant with VDEM PA Program within 30 days after the area is designated eligible for assistance. Following the Applicant's Briefing, a kickoff meeting is conducted where damages will be discussed, needs assessed, and a plan of action put in place. A combined federal/state/applicant team then proceeds with Project Formulation. This is the process of documenting the eligible facility, the eligible work, and the eligible cost for fixing the damages to every public or PNP facility identified by the applicant. The team then prepares a Project Worksheet, also known as FEMA Form 90-91, for each project that is used to document the scope of work and cost estimate for a project. Each individual Project Worksheet must be reviewed and approved by VDEM PA Program before submission to FEMA for review and approval. Once the Project Worksheet has been reviewed and approved by FEMA, federal funds are then obligated for that particular Project Worksheet.

Each Project Worksheet is classified according to a FEMA PA Project Category of Work. FEMA defines Emergency Work under Categories A & B and Permanent Work under Categories C through G. The types of Categories and definitions are:⁵

Category	Name	Definition
A	Debris Removal	Clearance of trees & woody debris; certain building wreckage; damaged/destroyed building contents; sand, mud, silt, & gravel; vehicles; & other disaster-related material deposited on public and, in very limited cases, private property
B	Emergency Protective Measures	Measures taken before, during, & after a disaster to eliminate/reduce an immediate threat to life, public health, or safety, or to eliminate/reduce an immediate threat of significant damage to improved public & private property through cost-effective measures
C	Roads & Bridges	Repair of roads, bridges, & associated features, such as shoulders, ditches, culverts, lighting, & signs
D	Water Control Facilities	Repair of drainage channels, pumping facilities, & some

⁴ VDEM 2015 Public Assistance Administrative Plan, <https://virginiapa.org/site/PAAdminPlan.cfm>. Accessed 2-16-2016.

⁵ Federal Emergency Management Agency. <https://www.fema.gov/public-assistance-eligible-work> Accessed 2-17-2016.

		irrigation facilities. Repair of levees, dams, & flood control channels fall under Category D, but the eligibility of these facilities is restricted
E	Buildings & Equipment	Repair or replacement of buildings, including their contents & systems; heavy equipment; & vehicles
F	Utilities	Repair of water treatment & delivery systems; power generation facilities & distribution facilities; sewage collection & treatment facilities; & communications
G	Parks, Recreational Facilities, & Other Facilities	Repair & restoration of parks, playgrounds, pools, cemeteries, mass transit facilities, & beaches. This category also is used for any work or facility that cannot be characterized adequately by Categories A-F.

For Categories A and B, FEMA requires the Project Worksheet to be physically completed in six months, and for Categories C through G, the Project Worksheet must be physically completed within 18 months of the Presidential Disaster Declaration date. Time extensions may be granted for extenuating circumstances, first by VDEM, with additional extension requests requiring FEMA approval. For a facility to be eligible for FEMA PA Grant Program, it must be located in a designated disaster area and be under the legal responsibility of an eligible applicant. The facility should have been in active use at the time of the disaster; and open to the general public.

To facilitate review, approval, and funding, Project Worksheets are divided by dollar amount into small and large categories. FEMA stipulates Project Worksheets falling below a certain threshold are considered “small.” The threshold is adjusted annually for inflation, and for federal fiscal year 2016, the threshold is \$121,800. FEMA considers projects equal to or greater than the threshold as “large.” FEMA also has different rules for the reimbursement process for small and large Project Worksheets.

The FEMA PA Grant Program is a reimbursement grant and provides funding to applicants after expenses have been incurred. FEMA and VDEM share responsibility for making the PA Program funds available to the applicant. FEMA is responsible for determining eligibility, conducting environmental/ historic preservation review, approving projects, and making the federal share of the approved grant available to VDEM through a process known as obligation. Funds that FEMA has obligated are available to VDEM via electronic transfer, but reside in a federal account until VDEM is ready to award grants to the appropriate applicants. Without justification, VDEM cannot request funds more than three business days before the day it disburses them. VDEM is responsible for providing the state share of the eligible costs and for notifying the applicant that funds are available. VDEM must use methods and procedures for payment that minimize the time between the transfer of funds to them and disbursement of the funds to the sub-recipient in accordance with federal cash management requirements.

The applicant must follow certain procedures to obtain the reimbursement for project expenses. For **small projects**, FEMA allows payment to be made on the basis of the **estimate** prepared at the time of project approval. As the grantee, VDEM is required to make payment of the Federal Share

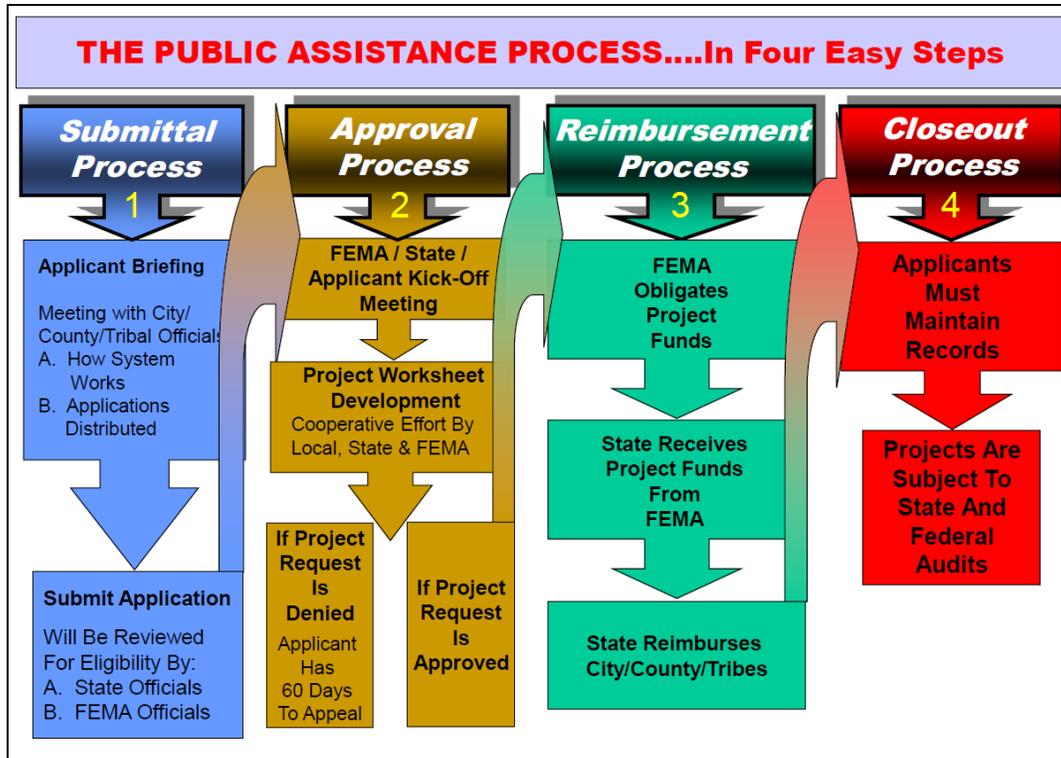
(75 percent portion) to the sub-grantee (applicant) as soon as practicable after FEMA has obligated the funds for the project. This allows the applicant to get the money upfront when the project is considered small, rather than having to wait until after the grantee can process documented proof of costs incurred and submitted by the applicant.

Once all small projects are complete, the state must certify that all work has been completed in accordance with the approved scope of work on the Project Worksheet, in compliance with FEMA standards and policies, and that all payments due have been made. This certification does not specify the amount spent on the projects, only that the projects were completed. If a small project, including any mitigation work, was not started, or was not completed, funds will be de-obligated.

Large projects are funded based on documented actual costs. Because of the nature and complexity of most large projects, work typically is not complete at the time of project approval; therefore, FEMA obligates the PA grant funds based on an estimated cost. Grant funds may not be immediately drawn down by VDEM. Instead, progress payments (reimbursements) are made to the applicant as actual costs are documented and submitted to VDEM for processing. Upon completion of a large project, an applicant must submit documentation to VDEM to account for all incurred costs. VDEM is responsible for ensuring that all incurred costs are associated with the approved scope of work and for certifying that work has been completed in accordance with FEMA standards and policies. VDEM then submits documentation of project costs to FEMA for review. FEMA may conduct a final inspection as part of this review. Once the review is complete, FEMA determines whether funds should be obligated or de-obligated for the project.

The FEMA Public Assistance process is summarized on the following page⁶:

⁶ Federal Emergency Management Agency.
<http://www.fema.gov/disaster/4046/updates/public-assistance-operations-continue> .,
Accessed 5-18-16



Vacant Finance Positions and Cardinal Implementation

Cardinal is the new Enterprise Resource Planning (ERP) statewide financial management system that is being implemented by the Virginia Department of Accounts (DOA) to replace the legacy Commonwealth Accounting and Reporting System (CARS) currently in use by more than 150 State agencies.

“Role Mapping” is a key step in the ERP implementation process. A role is the part an employee plays in completing work and is a subset of tasks (system and non-system) carried out by an employee. Role mapping defines how roles are connected to the business process activities and which roles are connected to employees in the organization. Role mapping also results in the assignment of security roles and other user-specific settings to the employees that will use the ERP system being implemented. It is also a critical input for developing a training curriculum based on the roles that have been developed and the development of training content.

Due to the staffing shortage in the VDEM finance areas, and since employee staffing and training is critical to a successful ERP implementation, OSIG decided to make this a separate review objective in addition to the Cardinal implementation.

At the time OSIG began the review, VDEM was considered an “Agency of Concern” by the Cardinal Project Team regarding VDEM’s ability to successfully implement Cardinal by February 1,

2016. OSIG's initial review indicated the following issues that were confirmed by the Cardinal Project Team:

- Vacant finance positions critical to Cardinal were not filled.
- Role mapping assignments for current staff were causing segregation of duties issues (reviewer role and approver role mapped to same employee).
- Exceptions for segregation of duties issues would have to be granted by the DOA.
- If vacant finance positions are filled, ability to attend required Cardinal training prior to Cardinal implementation was questionable.

VDEM informed us at the end of the project that:

- Many of the critical positions have been filled and VDEM successfully transitioned to Cardinal on February 1, 2016.
- Standard Operating Procedures have been updated to provide clarity of duties for those working in Cardinal
- A Budget Manager was hired in May with extensive Cardinal background. He is actively streamlining the Cardinal coding which will improve VDEM's processing in FY17.

Review Methodology

OSIG staff planned for this review by:

- Evaluating pertinent documentation found on VDEM’s website, which is located at <http://www.vaemergency.gov>.
- Evaluating pertinent documentation found on the VDEM PA Grant Management website (<https://virginiapa.org/>).
- Conducting interviews with the following management and staff to gain insight into risks and concerns associated with VDEM’s key processes:
 - State Coordinator of Emergency Management
 - Chief Deputy State Coordinator
 - Deputy State Coordinator for Administration
 - Director of Recovery and Mitigation Division
 - PA Supervisor
 - Finance and Grants Management Director
 - Budget Manager
 - Director of Information Technology
 - Auditor of Public Accounts (APA) staff

As a result of the evaluations and interviews, OSIG staff identified associated risks for each of the risk areas, established performance review objectives (as presented in the Purpose and Scope section of the report), and developed detailed review procedures to address these objectives.

The performance review procedures included:

1. Conducting interviews and observations/walk-throughs, and examining policies and procedures to gain an understanding of review areas processes.
2. Related to VDEM PA
 - a. Obtaining an understanding of the VDEM PA process,
 - b. Analyzing by open disaster the following:
 - Percentage of open applicants
 - Percentage of open large Project Worksheets
 - Percentage of open small Project Worksheets,
 - c. Selecting a sample of open Project Worksheets from open disasters for review,
 - d. Obtaining read-only access to the VDEM PA Grant Management System to gain an understanding of the reimbursement process for the selected open Project Worksheets,
 - e. Benchmarking business processes, activities, and performance metrics to other FEMA Region III states’ emergency management agencies and best practices for the VDEM PA,
 - f. Checking with VDEM PA management to determine if:

- Pre-disaster applicant training/education is done throughout the year with the intention of reducing misunderstandings during times of disaster recovery and restoration.
 - Uniform damage assessment checklists are used in the development of Project Worksheets to make damage assessments less subjective.
 - Applicants are required to sign and submit a certification of accuracy statement with each grant application to ensure accuracy and a full understanding of submitted data and assertions.
 - Applicants are notified that they are responsible for maintaining all records and will be responsible for repayment of any federal funds received that FEMA deemed were improperly used.
 - There are any internal performance goals and/or measures the VDEM PA is trying to achieve regarding the delivery of disaster grant payments, services, etc. to the applicant.
3. Related to the Hiring and Training Plan for vacant Finance Division positions
 - a. Discussed hiring and training strategy for vacant positions with acting CFO
 - b. Reviewed training schedule documentation for current and vacant positions
 - c. Discussed hiring and training strategy for vacant positions with Cardinal Project Agency Readiness Liaison
 4. Related to the Cardinal implementation
 - a. Consulted with the Cardinal Project Manager and the Cardinal Project Agency Readiness Liaison from the Cardinal Project team regarding VDEM's ability to implement Cardinal on February 1, 2016.

Review Results

Overall OSIG found opportunities to improve efficiency and effectiveness within the VDEM PA Program. OSIG also found the hiring and staffing activities within the finance area, as well as the preparation for the Cardinal transition, were satisfactory. Specifics regarding the review performed and applicable observations are reported by objective below.

Public Assistance

As discussed in the Background Section of this report, the VDEM PA Program is only available to eligible applicants for major disasters or emergencies declared by the President. Eligible applicants are: state government agencies, local governments, federally recognized Indian tribes, and private non-profit (PNP) organizations. Applicants develop a Project Worksheet form to document the scope of work and cost estimate for each project. This form provides FEMA with the information necessary to approve the scope of work and itemized cost estimate prior to funding the project. Each project must be documented on a separate Project Worksheet. The approved Project Worksheet will be the basis for funding under the VDEM PA Program. Project Worksheets are classified as either “small” or “large”, depending upon the threshold in place at the time of the Presidential Disaster Declaration. The federal share of assistance is not less than 75 percent of the total eligible costs, and the state is responsible for the remaining 25 percent share of the total eligible costs.

The review objective for this risk area was to evaluate the efficiency of the manual processes in the VDEM PA Program and the flow of work for possible internal control weaknesses.

REVIEW OF OPEN PROJECTS

Based on data provided by the VDEM PA Program, as of July 27, 2015, there were eight open disasters from 2009 to 2012 comprised of 1,097 Project Worksheets for 708 applicants with a total federal obligation of \$198,680,714 (see details in Exhibit I).

Using information from the VDEM PA Grant Management System at www.virginiapa.org, we selected a sample of four open large Project Worksheets and four open small Project Worksheets from two of the eight open disasters (Hurricane Irene and Tropical Storm Lee) for review. The purpose of reviewing the selected Project Worksheets was to determine why the Project Worksheet was still open, if reimbursements were made to the applicant, and the length of time for the reimbursement process. Our access to the online grant system also allowed us the ability to view and navigate the various functions/screens of the PA grant system as if we were an applicant accessing the system.

The open Project Worksheets selected for review are shown below:

Disaster #	Title	Declaration Date	Applicant	Fed #	Title	Category*	Size
4024	Hurricane Irene	9/30/2011	Prince George County	870	Debris Collection: 8/29/2011-10/26/2011	A	L
4024	Hurricane Irene	9/30/2011	The College of William & Mary	857	Buildings – Campus Wide	E	L
4024	Hurricane Irene	9/30/2011	Norfolk, City of	832	Street & Sidewalk Repair	C	S
4024	Hurricane Irene	9/30/2011	Virginia Department of Conservation & Recreation	107	Cabin 5	E	S
4045	Tropical Storm Lee	11/17/2011	Alexandria, City of	128	Sanitary Sewer	F	L
4045	Tropical Storm Lee	11/17/2011	Virginia Department of Transportation	134	Road Wash-Outs	C	L
4045	Tropical Storm Lee	11/17/2011	Fairfax County	19	Softball Parks, Lighting & Irrigation System	G	S
4045	Tropical Storm Lee	11/17/2011	Virginia Department of Conservation & Recreation	18	Westmoreland State Park - Debris	A	S
*Refer to the Background Section for definitions of Category							

OSIG’s review of the selected Project Worksheets indicated all projects were physically complete. However, the reimbursement process for all projects was not complete. Although there were a number of issues contributing to the delay, including delays by the applicants, staff turnover at VDEM and delays by FEMA, the main contributor to the delay was that VDEM PA Program required small projects to be handled similar to large projects and require documentation to be submitted to support payments for actual costs incurred.

As previously mentioned in the Background Section, the VDEM PA Program is a reimbursement grant and provides funding to applicants after expenses have been incurred. The applicant must follow certain procedures to obtain the reimbursement for project expenses. However, for **small projects**, FEMA allows payment to be made on the basis of the **estimate** prepared at the time of project approval. The grantee is required to make payment of the Federal Share (75 percent portion) to the applicant as soon as practicable after FEMA has obligated the funds for the project. This allows the applicant to get the money upfront when the project is considered small, rather than having to wait until after the grantee can process documented proof of costs incurred and submitted by the applicant.

Discussions with VDEM PA management as well as review of the 2015 Administrative Plan for the PA Program⁷ revealed the VDEM PA Program does not follow the FEMA procedure for the reimbursement of expenses for small projects (Project Worksheets). The Administrative Plan states: “In Virginia, small projects are handled similar to large projects and require documentation to be submitted to support payments. Applicants wishing to receive partial payment of funds after federal funds are obligated are required to submit the request in writing for documentation purposes.”⁸ (See Observation No. 1)

COMPARISON WITH OTHER STATES

OSIG created a comparison analysis of the VDEM PA Program to the Maryland Emergency Management Agency (MEMA) and the Pennsylvania Emergency Management Agency (PEMA), noting by identical disaster:

- The percentage of applicants open,
- The percentage of large Project Worksheets open, and
- The percentage of small Project Worksheets open.

MEMA and PEMA were chosen because both agencies were:

- Working multiple disasters;
- Working disasters common to Virginia; and
- Responded to our inquiries regarding size of the PA staff.

OSIG’s comparison analysis of VDEM to MEMA is available in Exhibit II. In summary, the analysis revealed:

- VDEM was working eight open disasters.
- MEMA was working six open disasters, five of which were common to VDEM.
- MEMA had more applicants than VDEM in four of five common disasters, yet the percentage of open applicants was significantly lower.
- MEMA had more large Project Worksheets than VDEM in three of five common disasters, yet the percentage of open large Project Worksheets was significantly lower.
- MEMA had more small Project Worksheets than VDEM in three of five common disasters, yet the percentage of open small Project Worksheets was significantly lower (See Observation No. 1).

OSIG’s comparison analysis of VDEM to PEMA is available at Exhibit III. In summary, the analysis revealed:

⁷ VDEM PA Administrative Plan. <https://virginiapa.org/site/PAdminPlan.cfm>. Accessed 2-10-2016.

⁸ VDEM PA Administrative Plan. Section V-Direction, Control and Administration, Part E-Project Funding Requirements, Item #2-Small Projects (p.25)<https://virginiapa.org/site/PAdminPlan.cfm>. Accessed 2-10-2016.

- VDEM was working eight open disasters.
- PEMA was working five open disasters, three of which are common to VDEM.
- PEMA had more applicants than VDEM in all three common disasters, yet the percentage of open applicants was significantly lower.
- PEMA had more large Project Worksheets than VDEM in one of three common disasters, yet the percentage of open large Project Worksheets was significantly lower.
- PEMA had more small Project Worksheets than VDEM in all three common disasters, yet the percentage of open small Project Worksheets was significantly lower (See Observation No. 1).

PUBLIC ASSISTANCE GRANTS MANAGEMENT SYSTEM ([WWW.VIRGINIAPA.ORG](http://www.virginiapa.org))

During our discussions with VDEM’s Recovery and Mitigation Director and the PA Program Manager, OSIG noticed a high volume of manual files stored in the VDEM PA Program offices. According to both individuals, the manual (hard copy) Project Worksheet files maintained in the VDEM PA Program Office are considered the “official records of the PA grant program” (See Observation No. 2).

Currently, applicants are not required to submit reimbursement requests and documented proof of expenses incurred via the VDEM PA Grants Management System at www.virginiapa.org. VDEM PA Program staff receives applicant documentation:

- As email attachments,
- Physical mail delivery (USPS, FedEx, UPS, etc.),
- Uploaded to the PA Grants Management System by the applicant.

Documentation received as email attachments by VDEM PA Program staff or uploaded to the PA Grants Management System by the applicant are printed out by VDEM PA Program staff and then placed in the manual files.

As previously discussed, OSIG’s initial data request to VDEM PA Program was a summary report showing only the total number of open applicants and open Project Worksheets by disaster as of July 27, 2015. It took the VDEM PA Program Manager three weeks to fulfill this request. Further inquiries revealed the source of data for this request came from the FEMA Emergency Management Mission Integrated Environment (EMMIE) system and not the VDEM PA Grants Management System at www.virginiapa.org. The inability to provide summary data timely demonstrated that the VDEM PA Program would have difficulty fulfilling any additional detailed-orientated data retrieval requests. OSIG staff discussed this issue with the Chief Deputy and it was agreed OSIG would:

- Receive “read-only” access to www.virginiapa.org,
- Have the ability to create a database copy of the system,
- Run database queries to create reports for use in our review,
- Select the sample of Project Worksheets for review, and

- See the functionality of www.virginiapa.org, as if we were an applicant, but with “read-only” access.

It was also agreed that OSIG would first attempt to review selected Project Worksheets using the data contained in the PA Grants Management System. If this did not meet our needs, VDEM PA Program would have to retrieve the data from the manual files.

Subsequent discussions with the Chief Information Officer (CIO) and the IT Project Manager revealed the VDEM PA Grants Management System has been in use since April 2009. MB3 Incorporated is the developer and software vendor of the VDEM PA Grants Management System. As of January 2016, the purchase and maintenance costs paid to the VDEM PA system’s vendor since implementation total \$791,125 (See Observation No. 2.). Rackspace (www.rackspace.com) is the vendor that MB3 uses to host the VDEM PA system. OSIG was unable to obtain any evidence of review of Rackspace’s processes or control environment by VDEM (See Observation No. 3).

APPLICANT SATISFACTION SURVEYS

Surveys collect quantifiable statistical data that can be used to identify possible improvements to a process or service. Surveys also collect qualitative data to assess underlying reasons behind the survey respondents (customer) satisfaction or dissatisfaction with the process or services that are provided by a particular organization. Once the results of the survey have been analyzed, an organization can gain further knowledge on where improvements could be made to a process or service.

Inquires of the VDEM PA Program’s management revealed the VDEM PA Program does not issue applicant satisfaction surveys or use any other means of assessing the VDEM PA Program’s performance during the disaster recovery process to applicants once all Project Worksheets have been completed for the applicant and the applicant status is “closed” (See Observation No. 4).

Inquiries of other FEMA Region III states’ emergency management agencies revealed none currently issue any type of surveys to the applicant once the applicant status is “closed”. However, Pennsylvania Emergency Management Agency (PEMA) stated they are considering implementing a survey in the future for this purpose.

PRE-DISASTER APPLICANT TRAINING

An interview was conducted with the VDEM PA Program Manager to determine if pre-disaster applicant training/education is done throughout the year with the intention of reducing misunderstandings during times of disaster recovery and restoration. OSIG was provided copies of emails announcing various training opportunities. However, the available training opportunities were not organized or in a centralized location that could be easily accessed by an applicant inquiring about pre-disaster training/education training opportunities (See Observation No. 5).

With the restructuring of the entire VDEM organization effective July 1, 2015, the acting Recovery and Mitigation Director has made the following changes regarding pre-disaster applicant training:

- All training will now be scheduled by the Training Education and Exercise Division (TEED).
- VDEM PA training will use the Commonwealth of Virginia Knowledge Center (COVKC) on the Department of Human Resource Management (DHRM) website.
- The hiring of a dedicated PA subject matter expert that would work with TEED and adjunct instructors, with the goal of providing training on topics all year long, will be advocated.

PERFORMANCE GOALS AND/OR MEASURES

An interview was conducted with the VDEM PA Program Manager to determine if there are any internal performance goals and/or measures the VDEM PA Program Manager is trying to achieve regarding the delivery of disaster grant payments, services, etc. to the applicant.

OSIG was not provided any performance measures or aspects that the VDEM PA Program Manager was using specifically to the VDEM PA grant program that would measure quality, timeliness, efficiency, economy, results and satisfaction of the applicant (See Observation No. 6).

OBSERVATION NO. 1 – ADHERE TO FEMA GUIDELINES REGARDING PAYMENTS FOR SMALL PROJECT WORKSHEETS

VDEM is not closing small disasters as quickly as other states similar to Virginia. VDEM PA Program is currently working on eight open disasters. Of these open disasters, five are common to the Maryland Emergency Management Agency (MEMA) and three are common to the Pennsylvania Emergency Management Agency (PEMA). OSIG's comparison analysis for these common disasters indicated both MEMA and PEMA had more total small projects, yet the number of open small projects was significantly lower.

FEMA PA Guidelines state: "Payment for **small projects** is made on the basis of the estimate prepared at the time of project approval. The grantee is required to make payment of the Federal share (75% portion) to the sub-grantee as soon as practicable after FEMA has obligated the funds." However, the VDEM Administrative Plan for the PA Grant Program states: "In Virginia, **small projects** are handled similar to large projects and require documentation to be submitted to support payments". Both MEMA and PEMA follow the FEMA Guidelines in handling small projects.

OBSERVATION NO. 1 RECOMMENDATION

OSIG recommends the VDEM PA Program consult with MEMA and PEMA to identify potential efficiencies for closing small projects. The VDEM PA Program should also follow the FEMA PA Guidelines for payments for small projects and pay the Federal share (75 percent portion) to the sub-grantee (applicant) as soon as practicable after FEMA has obligated the funds which will aid VDEM PA Program in closing out the small projects in a more reasonable time period.

OBSERVATION NO. 1 MANAGEMENT RESPONSE

VDEM Management agreed with the observation and recommendation as written. VDEM has completed the revision to the public assistance guide in order to comply with federal guidelines and to process small projects in a more timely fashion.

OBSERVATION NO. 2 – IMPROVE USE OF VDEM PUBLIC ASSISTANCE GRANT SYSTEM

While at the VDEM PA Program office conducting the review, OSIG noticed an inordinate amount of manual/paper files. According to VDEM’s Recovery and Mitigation Director and the PA Program Manager, the manual (hard copy) Project Worksheet files maintained in the VDEM PA Program office are considered the “official records of the PA grant program.” It was also revealed that reimbursement source documentation submitted by applicants requesting reimbursement would not be in the VDEM PA Grant Management System at www.virginiapa.org, but would be located in the manual files. The CIO and the IT Project Manager confirmed the system has the ability to allow applicants to upload reimbursement documentation without having to submit documentation via email attachments or other manual mail methods (USPS, FedEx, UPS, etc.).

OSIG’s Data Retrieval Request #1 from the VDEM PA Program was a summary inventory listing by disaster showing the total number of applicants (open and closed), total number of large Project Worksheets (open and closed), and the total number of small Project Worksheets (open and closed). This request took three weeks for the VDEM PA Program to complete and the source of the data provided was from the FEMA Emergency Management Mission Integrated Environment (EMMIE) system and not the VDEM PA Grant Management System.

The home page of www.virginiapa.org states, “This site is for the online application and management of the Public Assistance grant.” However, sub-grantees are not submitting requests for funding, time extensions, final inspections, Project Worksheet documentation, etc. via the VDEM PA system. As of January 2016, the purchase and maintenance costs paid to the PA system’s vendor since May 1, 2009, totaled \$791,125.

Adequate use of the system could improve the efficiency of the VDEM PA system and the localities in managing grant awards and associated projects through improving communication and document access, and by ensuring adequate backup of documentation is maintained.

OBSERVATION NO. 2 RECOMMENDATION

OSIG recommends that the VDEM PA Program Manager increase the use of the PA system to improve efficiency. To start the increased use, all applicants receiving PA grants should be required to submit all documentation via www.virginiapa.org.

OBSERVATION NO. 2 MANAGEMENT RESPONSE

VDEM Management agreed with the observation and recommendation as written. In fact, VDEM has implemented this recommendation with the January 2016 snowfall that resulted

in a federal declaration for public assistance. The virginiapa.org system is being used fully for the management of the grants related to this disaster.

OBSERVATION NO. 3 – EVIDENCE OF THIRD-PARTY CONTROL ENVIRONMENT

MB3 is the developer and software vendor of the VDEM PA Grants Management System accessible at www.virginiapa.org. Rackspace (www.rackspace.com) is the vendor that MB3 uses to host the PA system. OSIG was unable to obtain any evidence of review of Rackspace’s processes or control environment by VDEM.

OBSERVATION NO. 3 RECOMMENDATION

Because safeguarding the information contained within the VDEM PA Grants Management System is crucial to VDEM’s operation and reputation, VDEM should ensure that the information is appropriately safeguarded from unauthorized external users. If Rackspace has had a third-party perform an independent controls attestation report for the current period, VDEM should obtain a copy of the report and review the report to ensure that Rackspace’s controls are operating effectively.

OBSERVATION NO. 3 MANAGEMENT RESPONSE

VDEM Management agreed with the observation and recommendation as written. VDEM has tasked the Information Technology division with implementation of this in order to ensure that all VDEM data is maintained in a secure environment. This work will be completed no later than August 1, 2016.

OBSERVATION NO. 4 – DEVELOP AND ISSUE APPLICANT SATISFACTION SURVEYS

Inquiries of the VDEM PA Program’s management revealed they do not issue applicant satisfaction surveys or use any other means of assessing the VDEM PA Program’s performance during the disaster recovery process to applicants once all Project Worksheets have been completed for the applicant and the applicant status is “closed.” Inquiries of other FEMA Region III states’ emergency management agencies revealed none currently issue any type of surveys to the applicant once the applicant status is “closed.” Pennsylvania Emergency Management Agency (PEMA) stated they are considering implementing a survey in the future for this purpose.

Surveys would collect quantifiable statistical data the VDEM PA Program could use to identify possible improvements. In addition, surveys collect qualitative data to assess underlying reasons behind applicant satisfaction or dissatisfaction with the services provided by the VDEM PA Program during the disaster recovery process. Once the results of a survey have been analyzed, the VDEM PA Program personnel could meet with a focus group of applicants to gain further knowledge on where improvements could be made.

By analyzing and acting on the feedback received, the VDEM PA Program could implement changes that would enhance two of VDEM’s 2014-16 Strategic Plan goals:

- Ensure that all activities reflect best practices of the profession.
- Provide the highest quality of customer service.

OBSERVATION NO. 4 RECOMMENDATION

OSIG recommends the VDEM PA Program develop and issue applicant satisfaction surveys once all Project Worksheets have been completed for the applicant and the applicant status is “closed.” After analyzing the survey results, meet with focus groups as needed to gain further knowledge on where improvements could be made.

OBSERVATION NO. 4 MANAGEMENT RESPONSE

VDEM Management agreed with the observation and recommendation as written. Because of this audit and the immediate changes to the processing that VDEM was able to implement, the applicants involved in the January 2016 federal declaration should have all of their paperwork submitted by August 2016. At that time we will issue our first customer evaluation to examine the processing of this disaster to date. We anticipate a follow-up survey once each applicant has had their project worksheet paid out.

OBSERVATION NO. 5 – IMPROVE PRE-DISASTER APPLICANT TRAINING

VDEM PA Program provides pre-disaster training opportunities to applicants. However, the pre-disaster training opportunities were not organized or centralized in such a way that applicants could determine what training was available, when the training was available, or the location of the training.

Managing the complex duties and activities associated with a disaster can be overwhelming for an applicant. Inadequate pre-disaster training for applicants could lead to potential procedural inefficiencies, increased errors, and delays in receiving needed financial support for disaster recovery and restoration.

The acting Recovery and Mitigation Director notified OSIG that they were taking action to improve the delivery of their training including the following:

- All training will now be scheduled by the Training Education and Exercise Division (TEED).
- PA training will use the Commonwealth of Virginia Knowledge Center on the Department of Human Resource Management (DHRM) website.
- The hiring of a dedicated PA subject-matter expert that would work with TEED and adjunct instructors, with the goal of providing training on topics all year long, will be advocated.

OBSERVATION NO. 5 RECOMMENDATION

The VDEM PA Program should follow through with their plans to improve the delivery of their training using the available tools to include the Knowledge Center training portal (available from the VDEM website to all Emergency Management professionals) for online training and classroom delivery registration/certifications for recovery and PA courses.

OBSERVATION NO. 5 MANAGEMENT RESPONSE

VDEM Management agreed with the observation and recommendation as written. VDEM has already begun this process by holding three, three-day training sessions around the state on the public assistance and individual assistance programs. In addition, the training conducted to prepare the applications eligible to receive federal assistance from the January 2016 snowfall was rated as the best applicant briefing and training delivered on this topic to date.

OBSERVATION NO. 6 – DEVELOP INTERNAL PUBLIC ASSISTANCE PERFORMANCE GOALS AND/OR MEASURES

The VDEM PA Program does not have internal performance goals and/or measures for the delivery of disaster grant services to applicants.

It is the responsibility of VDEM PA Program to administer the federal PA grant program that will aid applicants in returning a disaster area to pre-disaster conditions and address the repair and restoration of public facilities, infrastructure, or services that have been damaged or destroyed. Determining the effectiveness of delivering these critical services would assist the VDEM PA Program in improving the operation from disaster to disaster.

OBSERVATION NO. 6 RECOMMENDATION

The VDEM PA Program should develop internal performance goals and/or measures that would allow accurate measurement of how effective the VDEM PA Program is being administered. The use of key performance indicators would potentially give the VDEM PA Program insight as to where goals are being exceeded and where improvements could be made.

OBSERVATION NO. 6 MANAGEMENT RESPONSE

VDEM Management agreed with the observation and recommendation as written. VDEM has identified performance measures for each program and will begin in July 2016 to collect baseline information and track performance against that baseline.

Hiring and Training Plan for Vacant Finance Division Positions

The review objective for this risk area was to determine whether a sufficient hiring and training plan is in place to fill vacant positions within the finance and grants area.

As previously mentioned in the Background Section, staffing in the finance and grants area had been depleted due to employee turnover and a change in the area's management. OSIG's main concerns were:

- Vacant finance positions critical to Cardinal implementation were not being filled.
- Cardinal role-mapping assignments for current finance and grants staff were causing segregation of duties issues (reviewer role and approver role mapped to same employee).

- If vacant finance positions are eventually filled, the ability for new-hires to attend required Cardinal training prior to Cardinal implementation date of February 1, 2016, was questionable.

Interviews were conducted during July 2015 with the acting Finance and Grants Manager as well as the Budget Manager who was also acting Chief Finance Officer (CFO) to ensure hiring and training plans were in place to address the vacant positions within the finance and grants area. They indicated:

- The planned hiring of a Chief Financial Officer.
- The most important positions critical to the Cardinal implementation would be filled first. These individuals would be essentially responsible for the day-to-day operations and would have role-mapping assignments of reviewer or approver.
- At the time of the interviews, 13 of 23 positions were vacant in the finance and grants area. Depending upon available skill sets, some of the vacant positions will be filled by employees transferring from the Recovery and Mitigation division, and the Preparedness division.
- Vacant position Employee Work Profiles (EWPs) were being reviewed and updated as needed. EWPs for employees transferring from other divisions were being reviewed and updated as needed.

Subsequent discussions held in November 2015 with the Cardinal Project Agency Readiness Liaison from the Cardinal Project team revealed the progress VDEM had made since OSIG's discussions at the beginning of the review:

- A new CFO was hired, but for personal reason left the agency. VDEM has re-advertised the position and plans on filling the position in early FY17. Note that as we have filled the leadership positions that report to the CFO, VDEM's needs have changed slightly and we feel this new direction/needs should be part of the recruitment.
- All fiscal positions at VDEM were filled with the exception of the Accounting Manager and the Procurement Manager.
- All fiscal users had been assigned to appropriate Cardinal roles. There were no segregation of duties violations on the current role mapping assignments.
- All fiscal users had started the required Cardinal pre-requisite web-based courses and had enrolled in the required instructor led courses.

Cardinal Implementation

The review objective for this risk area was to determine whether the agency's Cardinal implementation is on schedule and that agency financial management is able to participate in required meetings and activities.

As previously mentioned, OSIG had concerns that vacant positions critical to the Cardinal implementation were not being filled. Early review results indicated the following issues:

- State Comptroller issued a memo to the State Coordinator expressing concern regarding the staffing issues and VDEM's ability to implement Cardinal, as well as segregation of duties issues for current staff roles in Cardinal.
- VDEM appeared on the "Cardinal Agencies of Concern" list prepared by Cardinal Project Agency Readiness Liaison for July 16, 2015; August 8, 2015; and September 22, 2015.

Subsequent discussions held in November 2015 with the Cardinal Project Agency Readiness Liaison revealed VDEM was removed from the Cardinal Agencies of Concerns list as of September 30, 2015, due to VDEM's progress discussed in addressing our early concerns in Risk Area 2 – Hiring and Training Plan for Vacant Finance Division Positions discussed previously.

Exhibit I - Open Disasters as of July 27, 2015*

Disaster Number and Title (Declaration Date)	Total Obligated	Number of Applicants	Number of Applicants Open	Number of Large PWs	Number of Large PWs Open	Number of Small PWs	Number of Small PWs Open	Total PWs Open
1862 — Severe storms & flooding associated with Tropical Depression Ida & a Nor'east (12-9-2009)	\$7,566,787.16	37	3	41	1	301	0	1
1874 — Severe winter storm & snowstorm (2-16-2010)	\$22,850,238.92	143	13	87	2	364	12	14
1905 — Severe winter storms & snowstorms (4-27-2010)	\$27,614,013.96	130	16	84	26	493	19	45
4024 — Hurricane Irene (9-3-2011)	\$60,772,243.20	150	64	206	135	1,021	296	431
4024 — Earthquake (11-4-2011)	\$41,994,902.66	19	8	17	14	72	22	36
4045 — The remnants of Tropical Storm Lee (11-17-2011)	\$6,189,355.89	16	8	25	24	116	74	98
4072 — Severe storms & straight-line winds (7-27-2012)	\$21,365,834.40	152	70	100	89	537	263	352
4092 — Hurricane Sandy (11-26-2012)	\$10,327,337.54	61	35	37	30	201	90	120
Totals	\$198,680,713.73	708	217	597	321	3,105	776	1,097

**Note this table does not include the federal declaration received for the snow/winter weather experienced in January. This declaration is disaster number 4262 and is predicted to exceed the obligations in any previous disasters. VDEM will be tracking the information presented on this table as one way to track the new performance measures.*

Exhibit II – Comparison of VDEM to Maryland Emergency Management Agency (MEMA)

Disaster Name	Declaration Date	Federal Disaster #		Total Applicants		Open Applicants		Open Applicants %		Total Large PWs		Open Large PWs		Open Large PWs %		Total Small PWs		Open Small PWs		Open Small PWs %		Total Open PWs	
		VA	MD	VA	MD	VA	MD	VA	MD	VA	MD	VA	MD	VA	MD	VA	MD	VA	MD	VA	MD	VA	MD
Severe Winter Storms & Snow Storms	4/27/2010	1905	1910	130	704	16	0	12%	0%	84	169	26	0	31%	0%	493	1,003	19	0	4%	0%	45	0
Hurricane Irene	9/3/2011	4024	4034	150	230	64	9	43%	4%	206	57	135	5	66%	9%	1,021	718	296	5	29%	1%	431	10
Remnants of Tropical Storm Lee	11/17/2011	4045	4038	16	113	8	11	50%	10%	25	37	24	12	96%	32%	116	323	74	5	64%	2%	98	17
Severe Storms and Straight-line Winds	7/27/2012	4072	4075	152	64	70	1	46%	2%	100	18	89	1	89%	6%	537	112	263	0	49%	0%	352	1
Hurricane Sandy	11/26/2012	4092	4091	61	292	35	23	57%	8%	37	147	30	37	81%	25%	201	648	90	23	45%	4%	120	60

Notes

1. Source: VDEM
2. Table reflects open items only.
3. Data is as of July 27, 2015
4. MEMA has 6 open disasters, 5 of which are common to Virginia:
 - Severe Winter Storms and Snowstorms (#1905)
 - Hurricane Irene (#4024)
 - The Remnants of Tropical Storm Lee (#4045)
 - Severe Storms and Straight-line Winds (#4072)
 - Hurricane Sandy (#4092)
5. MEMA is also working one post-Hurricane Sandy disaster.
6. MEMA has 2 full-time staff dedicated to PA Program management.
 Temporary staff hired as needed to assist.

Exhibit III – Comparison of VDEM to Pennsylvania Emergency Management Agency (PEMA)

Disaster Name	Declaration Date	Federal Disaster #		Total Applicants		Open Applicants		Open Applicants %		Total Large PWs		Open Large PWs		Open Large PWs %		Total Small PWs		Open Small PWs		Open Small PWs %		Total Open PWs	
		VA	PA	VA	PA	VA	PA	VA	PA	VA	PA	VA	PA	VA	PA	VA	PA	VA	PA	VA	PA	VA	PA
Hurricane Irene	9/3/2011	4024	4025	150	581	64	28	43%	5%	206	63	135	11	66%	17%	1,021	1,404	296	62	29%	4%	431	73
Remnants of Tropical Storm Lee	11/17/2011	4045	4030	16	1,188	8	215	50%	18%	25	532	24	78	96%	15%	116	5,045	74	918	64%	18%	98	996
Hurricane Sandy	11/26/2012	4092	4099	61	332	35	20	57%	6%	37	59	30	3	81%	5%	201	539	90	29	45%	5%	120	32

Notes

1. Source: VDEM
2. Table reflects open items only.
3. Data is as of July 27, 2015
4. PEMA has 5 open disasters, 3 of which are common to Virginia:
 - Hurricane Irene (#4024)
 - The Remnants of Tropical Storm Lee (#4045)
 - Hurricane Sandy (#4092)
5. PEMA is also working one post-Hurricane Sandy disaster.
6. PEMA has 5 full time employees dedicated to the PA Program. Director oversees those employees and others in the Mitigation section as well. Director will act as a PA person in times of disaster.