2024 - 2026 IT Strategic Plan

Agency:	127 Department of Emergency Management (VDEM)
Date:	12/7/2023

Current IT State

In this section, describe the high-level strategy the agency will use to manage existing operational IT investments over the next year to 5 years. This section should align with identified Business Requirements for Existing Technology (BReTs). At minimum, please address the following questions in your description of your agencys strategy for managing existing operational IT investments:

Are there existing IT investments that will require additional funding over the next year to 5 years, such as license renewals, re-competition of current IT contracts, or system enhancements required by the Agency Strategic Plan?

If there are systems that will no longer support the agencys business needs, either through poor performance or excessive cost, how does IT leadership in the agency plan to address the issues?

If the agency does not have the staff or funding to meet increasing demand for IT services, how will IT leadership fulfill the requests?

VDEM is committed to a comprehensive strategy for managing our existing operational IT investments over the next five years. The overarching approach centers on three core pillars: standardization, sustainability, and continuous improvement. These pillars are intricately connected elements within our IT strategic vision. Standardization forms a robust foundation for ongoing efficiencies, sustainability guarantees the resilience and adaptability of our IT infrastructure, and continuous improvement propels us forward in an ongoing cycle of refinement. Collectively, they forge a cohesive and future-ready IT ecosystem, not only addressing the organization's current operational requirements but also positioning VDEM as a leader in emergency management technological innovation and excellence.

Overall, our strategy is to leverage VITA processes/services, reduce technological debt, complete transformation for last remaining system (phone), seek cloud opportunities, build resilience through user training/systems design, and shift sources of funding from instable grants to state general funds.

As part of our comprehensive strategy to manage existing operational IT investments over the next five years, four IT systems require additional funding. Aligned with the fundamental principles of standardization, sustainability, and continuous improvement, these projects are essential for fortifying the state's emergency management IT ecosystem.

•WebEOC Cloud Migration Project – WebEOC is a software product that provides real-time information sharing, collaboration, and coordination during emergencies.
The WebEOC Cloud Migration project will leverage cloud computing services to include robust disaster recovery solutions in the event of a system failure. The project will enhance the overall security posture of the system by leveraging the benefits of data encryption, firewalls, access controls, and automatic updates to the underlying infrastructure and services.

•Asset Panda Enterprise-wide Deployment Project – Asset Panda is a cloud-based asset tracking and management platform designed to help VDEM efficiently monitor and control physical assets. The solution is only deployed and configured for the IT organization.
The Asset Panda Enterprise-wide Deployment Project will allow VDEM to adapt the system to meet the diverse asset management agency-wide. This project will provide a centralized system for managing assets, it will provide for real-time visibility into the location, condition and status of various physical assets and will provide stakeholders with the ability to generate reports related to asset utilization, maintenance history, and other metrics. This initiative

will also enable VDEM to proficiently track physical assets through the integration of barcode scanning and RFID technology, thereby eliminating the reliance on manual methods.

•Website Modernization Project- The VDEM website is used by emergency management personnel and the public. The current website exhibits several shortcomings that hinder its effectiveness and user engagement.

The Web Modernization Project will improve navigation, responsiveness, and accessibility. The project will Incorporate state-of-the-art elements such as responsive design for mobile accessibility, interactive maps for real-time information visualization, and integration of multimedia content significantly elevating the site's functionality. Additionally, the project will enhance security features, streamline content delivery, and integrate with social media platforms ensuring that our website serves as a dynamic and reliable hub for critical information dissemination during emergencies.

•AV VTC O&M Funding – VDEM has deployed a video teleconference solution that seamlessly facilitates real-time interactive collaboration among geographically disperse emergency management stakeholders. The project was funded via a grant. Ongoing funding is needed to maintain the system.

The allocation of O&M funds for the AV VTC systems is crucial for maintaining reliability, security, and optimal performance to sustain communication, collaboration, and organizational efficiency especially during emergency activations.

Strategic gaps, seams, and funding shortfalls:
•The agency has been leveraging numerous grant sources to fund core agency IT requirements including the statewide emergency management coordinator, damage assessment, GIS, and other software packages. Federal grant funds are instable and current at risk for significant cuts in current Congressional budget bills. Stable funding sources will reduce management overhead and enable more seamless procurement actions.
•The asset management system under implementation will require additional funding to support agency-wide expansion. Current use of personally managed spreadsheets or other databases presents numerous challenges and reduces opportunities for proactive maintenance monitoring/forecasting, etc.
•The current agency operated VOIP system is end of life and planning with VITA for its transformation and replacement is underway. Initial capital and sustainment funding is required to support a new VITA approved telephone function agency-wide.
•The Situation Awareness Unit's mission has expanded and now supports 911 PSAPs statewide; however, the center lacks the necessary call handling, recording, and computer aided dispatch capabilities. Capital and sustained funding is required for these platforms.
•The agency IT division is undergoing an organizational structure assessment to determine any adjustments to staffing are required following transformation. Currently, staffing gaps to exist in website management, SharePoint/M365 administration, and information security officer. A complete assessment will be completed this year to identify specific needs. Until then, the agency is leveraging contract support to address certain needs.
•The state learning management system offered for use by state agencies does not meet agency requirements to deliver training to audiences outside of state government. This forces the agency to seek other opportunities which include high overhead. Funding and staffing support is a gap for this requirement.
The program 9-1-1 and Geospatial Services Bureau, or NGS— continues to work with stakeholders to build the Next Generation 9-1-1 digital network to provide better speed and functionality for Public Safety Answering Points in support of the citizens of the Commonwealth.   Another division within NGS, the Virginia Geographic Information Network (VGIN), manages the statewide metadata and clearinghouse portal. In addition, VGIN hosts data layers for public use to include base map imagery and a geocoding service.

Factors Impacting the Current IT

In this section, the agency will describe the changes in their business environment that will require or mandate changes to the agencys current IT investments. These are requirements and mandates from external sources, such as other agencies or business partners, the agencys customer base, product and service providers, or new federal or state legislation or regulations. The agency must identify the business value of the change, any important deadlines that must be met, and the consequences if the deadlines are not met. In your discussion, be sure to note whether the proposed enhancements are funded or not. If the agencys existing current IT investments will not need enhancement due to requirements or mandates from external sources in the foreseeable future, the agency should enter the following text rather than leave the Factors Impacting the Current IT section blank

For each mandated change, summarize your agencys response from your Agency Strategic Plan, and is it the opinion of agency IT leadership that the IT portion of the response is adequately funded?

Do the mandated changes effect IT in other Commonwealth agencies, or in other states? If so, how?

The agency is currently restructuring the internal agency IT group of ten staff based on prior technology capacity planning. Current recruitment efforts have been hampered by the current labor market for qualified IT professionals. The IT division is assessing post-transformation staffing needs and will submit the corresponding budget requests for new positions as identified. In the meantime, the agency makes extensive use of consultants and contractors to design, implement, and support new projects and capacity. As those new capabilities and technologies are integrated into the agency's growing portfolio, additional IT staff are necessary to support legacy and new technologies and assist with removing applications and systems from the VDEM infrastructure.

•Complete the existing project to upgrade the existing audio-visual system at the VEOC and Governor's Situation Room. Currently waiting on parts from the vendor to complete the project.
•Agency-owned statewide offerings, such as the Learning Management System (LMS), which state agencies need, now have limited capability and do not meet VDEM requirements, forcing the agency to find resources and funds to procure their own LMS solution driving overhead and other costs much higher. Such costs include eCOS and other fees due to mandates to leverage cloud based systems. VITA continues to maintain hosting capabilities which could be investigated if such a strategy is acceptable.
•Agency needs to implement Disaster Recovery for applications supporting mission essential functions (MEF).
•Agency requires a dedicated Information Security Officer (ISO) to engage with Commonwealth Security & Risk Management and to fulfill the agency information security program based on mandates in code.

Proposed IT Solutions

In this section, describe the high-level strategy the agency will use to initiate new IT investments over the next year to 5 years in support of the agency strategic objectives documented in your Agency Strategic Plan. The agency does not need to consider specific technologies at this time, however, the strategy should identify how the IT implementation will provide business value to the organization. This section should align with identified Business Requirements for New Technology (BRnTs). At minimum, please address the following questions in your description of your agencys strategy for initiating new IT investments:

What are the most important solutions, based on the priority assigned to the requirements by the business sponsors in your agency, and what is the approach to achieving these priority solutions?

If any new IT initiatives will be started in the upcoming budget biennium, is it the opinion of agency IT leadership that it is adequately funded?

Does the agencys current IT staff have the appropriate skill set needed to support future agency technologies? If not, what skill sets need to be acquired?

If the agency will be engaged in multiple new IT initiatives, how will agency IT staff and agency subject matter experts be used across the initiatives?

The agency's overall strategic roadmap is to complete digital transformation by 2025. Proposed IT solutions focus on documentation, re-engineering, and establishing workflows to minimize the loss of staff time to non-productive activities (searching for documents and information). The first phase is the document management strategy for the modern SharePoint and MS Teams sites. Implementing electronic signatures for signing ad hoc documents and integration into future automated workflows will increase staff efficiency. The strategic direction is to fully enable the Microsoft technology stack available to the Commonwealth and reduce the number of unique systems to be maintained by the agency as feasible.

Transformation implies a significant change to the roles and responsibilities of of the IT Division and its staff members. As the agency completes its IT staffing assessment, leaders will be able to make resources decisions and identify any shortfalls in funding and staffing. Given the number of critical systems operating at VDEM to support its mission, it is likely additional funding and staffing are required to properly manage, support, and secure the various databases. Related to staffing will be the establishment of revised IT Division policies and procedures to support the post-transformation environment.

Systems supporting functions for human resources, information technology, procurement, finance, training, and asset management will need to be assessed and implemented.

The review and documentation of all processes will allow for the creation of digital workflows by adopting authoritative documents and sources. Establishing efficient records management processes for the agency will reduce the time required to find and retrieve information for daily administrative work, activation activities, and discovery for Freedom of Information Act (FOIA) requests. Standardization of the authoritative sources allows the potential use of robotic process automation (RPA) for repetitive tasks to redirect staff to more productive activities. To support an electronic document management solution, the agency will need to digitize and index (tag) all current paper records. As data sharing is a primary tool to enable a single view across the agency, implementation of a business analytics/reporting platform for a one-stop shop of agency internal metrics or augmentation of current business analytics platforms will be essential.

To support the governance and business process documentation, the agency has engaged outside contractors to augment the agency's IT and subject matter experts. Additional ongoing funding is required to complete and stabilize governance and maintain newly acquired technology solutions.

The agency discovered significant staffing gaps within SharePoint/M365 administration (knowledge management) and information security. The agency requires dedicated funding to fill these roles.

A major pending transformation project is the replacement of VDEM's end of life and inadequate VOIP telephone system and other technologies at the emergency operations center. The project requires mission critical VOIP, call handling, and computer aided dispatch solutions to meet agency mission requirements. The project also services as an opportunity to investigate new soft phone technologies as a cost savings and efficiency initiative.

VDEM continuously strives to improve its readiness by planning for all hazards and improving our statewide response system. We accomplish this by providing training, equipping teams with the best technology, and exercising together as a team comprising local, state, and federal governments, private sector partners, and non-governmental organizations. Recognizing that the Commonwealth's #1 hazard is flooding, VDEM created a brand new Flood Intel Unit with the goal of preventing and reducing the loss of life and property through providing accessible and reliable real-time flood intelligence, which will enh

An attachment with additional information regarding VDEM's proposed IT solutions, was uploaded to the documentation site in Planview.

Business Requirements For Technology

Agency:	127 Department of Emergency Management
Date:	12/7/2023

BReT Grants Management Systems Support and Hosting

BRT Type:	Business Requirement for Existing Technology
Requested Start:	11/16/2023
Mandate:	
Mission Critical:	Yes
Description:	

VDEM uses three externally hosted Grants Management Systems. Two of these manage Public Assistance and Mitigation grants, which are coordinated through FEMA programs. Together, support and hosting for those two systems costs $45,000/year and is handled through the vendor, MB3, Inc. The third system, whose vendor is TetraTech, Inc., manages our other Grants and costs $18,400/year.

BReT Internal HR and Learning Management System

BRT Type:	Business Requirement for Existing Technology
Requested Start:	11/16/2023
Mandate:	
Mission Critical:	
Description:	

The Virginia Department of Emergency Management (VDEM) is making an investment in fostering the long-term professional success of a critical Commonwealth asset, emergency management professionals representing every corner of the state. The Virginia Department of Emergency Management is seeking to acquire a comprehensive, robust, and adaptable learning management system (LMS) to support a wide-variety of learning experiences. These learning experiences are essential to providing emergency management and public safety professionals with the knowledge, skills, and abilities needed to anticipate, respond, and recovery from disaster. The learning management system must be able to support instructor-led training as well as other program delivery formats and learning experiences (e.g., virtual, Classroom). System's capabilities should include: admissions, enrollment, and registration functions; course catalog and curricula development and management; student records, learning plans, skills/competency management, and certification management; program and course resource requirements and tracking; content management; learner collaboration; e-commerce; survey and assessment tools; and tracking, reporting, and analytics. The system should support workflow management and communications capabilities from start to end, from idea to outcomes. Further, the system should support the Agency's human resource management functions to include performance management, competency and goal attainment, performance and development planning, performance reviews, performance calibration, pay for performance, and workflow management and communications. VDEM currently uses the Commonwealth of Virginia Learning Center (COVLC). However, this system does not include the full range of capabilities required and, therefore, leaves the Agency and its constituents in the wobble with many unmet specialized needs. VDEM plans to release an RFP seeking an LMS solution and provider that specializes inthe public safety space. VDEM seeks a cloud-hosted COTS solution that will be fully supported by the vendor. VDEM is conducting RFIs to inform a competitive procurement via this RFP.   As part of the RFI, the Agency will collaborate with other state agencies to identify any potential solutions that can leverage existing GSA contracts. The agency is fully aware of the ECOS approval process and has previously completed this process with the Planning Software Project.

BReT Support/Maintenance Contract Renewals	
BRT Type:	Business Requirement for Existing Technology
Requested Start:	11/16/2023
Mandate:	
Mission Critical:	Yes
Description:	

VDEM requires the renewal of multiple support and maintenance contracts for software and hardware technologies that are required for business operations and agency mission completion. These include: WebEOC, WebFUSION, WebEOC Mapper, ArcGIS, FMS, Ipswitch, CA Arcserve, Kiwi CatTools, What'sUp Gold, Enterasys, Logi Analytics, and Entrust SSL certificates.

BReT VDEM 2016 Overall Audit Program ORI

BRT Type:	Business Requirement for New Technology
Requested Start:	11/16/2023
Mandate:	
Mission Critical:	
Description:	

VDEM has hired Assura to assist us in analyzing our IT Security Program and to develop a Compliance Action Plan. Based on their recommendations, VDEM plans on developing a three-year audit plan and hiring a third-party auditing firm to implement the audits.

BReT VDEM 2016 Overall Risk Program ORI

BRT Type:	Business Requirement for Existing Technology
Requested Start:	11/16/2023
Mandate:	
Mission Critical:	
Description:	

VDEM has hired Assura to assist us in analyzing our IT Security Program and to develop a Compliance Action Plan. Based on their recommendations, VDEM plans on engaging a third-party contractor for future risk program activities as needed, though the hope is that we will be able to support these activities internally.

BReT VDEM Website and App Hostng and Maintenance

BRT Type:	Business Requirement for Existing Technology
Requested Start:	11/16/2023
Mandate:	
Mission Critical:	Yes
Description:	

VDEM's website, www.vaemergency.gov, is hosted by AIS Network.   Annual hosting and maintenance costs $28,500 per year. Note that it is expected that the VDEM website will undergo a complete redesign in 2016. This is expected to cost approximartely $130,000. VDEM also has a mobile app for Ready Virginia. The vendor is VERT Mobile. Development costs for the past year were $20,000, but will vary from year to year based on development needs.

BRnT 9-1-1 Data Analytics Procurement

BRT Type:	Business Requirement for New Technology

Requested Start:	11/16/2023
Mandate:	
Mission Critical:	
Description:	

The E-911 Services Board needs to be able to analyze local call detail data for the purpose of assuring NG9-1-1 implementation does not negatively impact system performance. This is local data currently not accessible by the Board. The proposed procurement will provide a method for localities to share their data with the Board and will allow the Board to perform analytics.

BRnT Agency Radio and Telecommunications Integrati

BRT Type:	Business Requirement for New Technology
Requested Start:	11/16/2023
Mandate:	
Mission Critical:	Yes
Description:	

This project will provide a continuity of operations solution that will enable remote access to our radio consoles, creating a virtual state warning point from anywhere. The project does not require a phone upgrade; costs are related costs of the server, telecommunications infrastructure integration at the server location, and associated licensing and implementation services. Our main contact number, instaphones, medevac, and STARS capability would be integrated into one screen. This project would provide dispatch-style software for COOP operations that would be capable of monitoring all existing pathways into the VEOC (phones, NPS nuclear instaphones, VAWAS, NAWAS, WAWAS, Medflight channels, and STARS) from desk phones located at the Trade Court Facility, which functions as our alternate emergency operations center.

BRnT Budget System and Cardinal Interface

BRT Type:	Business Requirement for New Technology
Requested Start:	11/16/2023
Mandate:	
Mission Critical:	Yes
Description:	

A key aspect of the agency's financial strategy is the setting of financial risk. Risks are embedded in the optimism of revenue forecasts and the size of contingencies. Budget risk should be aligned with the agency's tolerance for risk, the current financial condition of the agency, and the apparent stability of the financial environment. VDEM has a very complex budget, with the majority of our funding being federal formula grants received each year, with multiyear period of performance. VDEM currently does not have a budget system that does enough to make budget risk evident. Currently, the budget is not being built from a budget projection (five years in the future is normal these days) that allows the testing of assumptions about the impact of new policies and changes in the financial environment (decrease of federal funding). VDEM has conducted an analysis of Cardinal's budget tool and has determined that it does not fit the needs of the agency. Where there are budget controls in Cardinal, these are not effective tools to manage the agency's budget ($30m) and pass through funding ($85m).   Finally, once implemented VDEM will be able to sustain, this is a one-time request.

BRnT Communications Upgrades in the State Warning

BRT Type:	Business Requirement for New Technology
Requested Start:	11/16/2023
Mandate:	
Mission Critical:	
Description:	

· Upgrading cooling, cable management, lighting and ergonomics in the VEOC Watch Center. $80,000.00. Purpose-built dispatch furniture to update the Watch Center. The original furniture was designed to meet the needs of the Watch Center at that time but did not allow for much expansion or modification. Over time, additional functionality and responsibilities have required the addition of new systems in the Watch, but the current furniture has presented ergonomic and spatial challenges. This upgrade also introduces industry-standard component cooling, cable management, lighting, and ergonomics.

· Implementing remote talk/listen access to radio systems in Hampton Roads and Northern Virginia. $55,000.00. This gives us the capability to monitor first responder networks in Hampton Roads and Northern Virginia. This product integrates directly into our existing interoperability platform, allowing VDEM personnel to talk on a local jurisdiction's radio system, not only via STARS but from a smart-phone or tablet. Capability to remotely control the radio to the correct talkgroup is included.

· Evaluating a three-in-one portable radio to become the fleet-wide standard. $12,000.00. This request is for a radio and vehicle adapter for the purposes of evaluating a three-in-one radio as a potential fleet-wide standard. This portable radio eliminates the need for field personnel to carry multiple radio devices in their vehicles. Inserting the radio into a vehicle adapter eliminates the need for a duplicated mobile radio in the vehicle. This is one full-featured radio (encryption, P25, trunking, conventional) that takes the place of three mobiles and three portables. As a reference point, our current STARS portables are $5,500 for just one radio in one band. Buying one for each public safety band (VHF, UHF, 800) would cost us $16,500, not including the vehicle adapter.

· Upgrading the monitors and other A/V equipment in the VEOC Watch Center to improve monitoring capabilities. $30,000.00. Allows for six monitors at each station, doubling the current configuration. This procurement will allow the addition of two static monitors at each workstation to provide dedicated monitoring access to products such as WebEOC and Mapper, as well as a third display agile to the users' needs at the time. The remaining three monitors would remain the same as the current configuration. All monitors will have sound cards built in to eliminate desktop computer speakers, keeping the work space are less cluttered.

· Transitioning from leased lines to control stations for operating the medflight program. $18,000.00. Our leased lines to operate the medflight program cost the agency roughly $2,100 per month. Eliminating the leased lines and procuring control stations to communicate with our partners would take approximately nine months for the ROI.

· Backup Medflight alerting capability. $12,000.00. VDEM receives calls from localities and dispatches the Virginia State Police medevac helicopter from the Chesterfield County airport. We average roughly 600 medevac missions per year. Currently, VDEM's only way of alerting Medflight to calls is via telephone. From time to time, telephone service in that area goes down, and we have to rely on calling the duty crews' personal cell phones. The requested funds would be used to develop a paging system for the alerting first responders to missions. Adding the capability to do this via radio also adds a primary means to make notifications, meaning that the unreliable phone method would become the backup method.

BRnT Fleet Management Software	
BRT Type:	Business Requirement for Existing Technology
Requested Start:	11/16/2023
Mandate:	

Mission Critical:	
Description:	

VDEM has requested an analysis of its Fleet Management operations and recommendations to improve efficiency in tracking relevant information and improve collaboration by a analytics contractor.

BRnT Open Source Communications Analysis Platform

BRT Type:	Business Requirement for New Technology
Requested Start:	11/16/2023
Mandate:	
Mission Critical:	Yes
Description:	

VDEM requires one or more social media monitoring software products to assist with numerous functions, including homeland security intelligence gathering and monitoring (Virginia Fusion Center), situational awareness and "heads up" notifications (VEST, Planning and VEOC Watch Center), andrumor control (Joint Information Center and External Affairs).

Some functional requirements identified include the ability to:

· Monitor multiple social media channels
· Add new or emerging social media platforms
· Save and share profiles/views
· Monitor geo-located data, non-geo-located data, or both
· Easily save multiple searches, export/save search results and share search results
· Easily generate geospatial data feeds and mapping layers, to automate such processes, and ingest them into multiple, interoperable systems
· Enable tracking social media at both the macro level of trending topics and widely followed users and the micro level of specific subjects

VDEM expects that no single social media monitoring tool will meet all of these requirements and that more than one software-as-a-service solution will be needed to meet these needs.

BRnT VDEM Digital Transformation

BRT Type:	Business Requirement for New Technology
Requested Start:	11/16/2023
Mandate:	
Mission Critical:	
Description:	

There is a business need for digital transformation at VDEM which will address a lack of processes and necessary, related, technological capabilities in the areas of emergency & preparedness systems; procurement and budget systems; asset management systems; approval process automations and IT service management.
These areas require necessary process improvements and associated technology to ensure we can retire outdated and inefficient capabilities, contributing to furthering the effort to becoming an effective, best-in-class agency.

BRnT VEOC Disaster Preparedness

BRT Type:	Business Requirement for New Technology
Requested Start:	11/16/2023
Mandate:	Yes
Mission Critical:	
Description:	

There is a gap in VDEM's Emergency Operations Center readiness capabilities. In order to carry out agency responsibilities identified in the Virginia Code, as well as Executive Order 41, the Virginia Emergency Response Team (VEST) comprised of executive branch agencies utilizes space at the Virginia State Police headquarters. ; however, only the space is provided. VDEM is responsible for all other costs associated with the day to day operations. The VEST also utilizes crisis management tools for situational awareness and GIS capabilities. Historically, the VEST has identified capabilities during disasters that assist with real-time situational awareness, but unable to resource technology solutions outside of a Governor's Executive Order for a State of Emergency (not funded).

BRnT VEOC Technology Assessment

BRT Type:	Business Requirement for New Technology
Requested Start:	11/16/2023
Mandate:	
Mission Critical:	Yes
Description:	

The current Virginia Emergency Operations Center (VEOC) has been in operation for over a decade. During that time, the operational scope of the Virginia Emergency Support Team (VEST) has broadened, with the VEST leaning forward to better anticipate the needs of those stakeholders who we support and an increased presence at the VEOC during declared and non-declared emergency incidents as a result. During this time, also, technology has advanced greatly, with technology products such as Geospatial Information System playing and ever-increasing role in providing situational awareness and facilitating operational decision-making. At the same time, the technology infrastructure – servers, network, security, audio-visual capabilities, etc. – has not been systematically assessed or refreshed. With VDEM now actively working with VITA and the MSI to move to the COV shared network. It is an opportune time to perform such an assessment to holistically identify gaps in technological capabilities and opportunities to improve the technology infrastructure underpinning the VEOC. We request these funds in FY2020 in order to assure that all technology improvements that are in-scope to Transformation have been completed and that we are working from a solid baseline.

BRT - WEBEOC Disaster Recovery

BRT Type:	Business Requirement for Existing Technology
Requested Start:	11/16/2023
Mandate:	
Mission Critical:	Yes
Description:	

Re-assess current technology for existing WebEOC application in terms of disaster recovery options. The process of following specific advance arrangements and procedures in response to a disaster, resumption of the critical business functions within a predetermined period of time, minimizing the amount of loss, and repairing or replacing the damaged facilities as soon as possible. The Disaster Recovery Services consist of the Disaster Recovery related Services and include support and coordination with the Business Continuity Services.

BRT Iflows System Upgrade & O&M

BRT Type:	Business Requirement for Existing Technology
Requested Start:	11/16/2023
Mandate:	Yes
Mission Critical:	Yes
Description:	

1. Create and maintain the highest possible (>95%) network reliability especially during extreme flood events through robust and timely data transmission, data quality assurance and O&M
2. The ability of VDEM staff to track and manage O&M, view detailed field observations and deployed equipment through an online management system; enable trends analysis and proactive (instead of reactive) maintenance operations
3. Access a highly reliable, user-friendly, open website that displays current stream and rainfall observations
4. Provide context and analysis to current stream and rainfall observations through the use of tools such as interactive hydrographs, customizable dashboards, real-time analytics, auto-generated reports, flood inundation mapping, etc.
5. Create "one stop shopping" for stakeholders by integrating other relevant hydrologic data sources (ex. USGS gauges, NWS current conditions/forecasts/watches/warnings/flash flood guidance, etc.) to enable situational awareness and decision making in emergency management applications
6. On-demand/asynchronous and in-person training to stakeholders on gauge maintenance and software/website functionality
7. The ability for anyone to access a comprehensive, flexible and user-friendly database of hydrologic observations
8. Provide flexibility to refine, upgrade or expand hardware and/or software/website functionality based on continuous improvement initiatives, stakeholder feedback, funding opportunities, new technology or as required by VDEM staff
9. Alert users when certain rain/stream thresholds are reached through texts, emails and/or other means

BRT VDEM PROCUREMENT - IPADS

BRT Type:	Business Requirement for Existing Technology
Requested Start:	11/17/2023
Mandate:	
Mission Critical:	Yes

Description:

VDEM is requesting replacement of end-of-life equipment that supports and enhances the agency's disaster response and recovery field operations. The IPADs are used for situational awareness to allow field, headquarters staff and Virginia Emergency Operations Center to coordinate and collaborate with local, regional, tribal, state and federal partners.

Radio Cache Replacement for localities and VDEM

BRT Type:	Business Requirement for Existing Technology
Requested Start:	11/15/2023
Mandate:	
Mission Critical:	Yes

Description:
Replacement of VDEM portal radios within the VDEM communications cache program. The program transitions from localities procuring radios and supporting equipment under a SHSP grant to VDEM providing the appropriate equipment to the locality caches. The goal is to provide 500 multiband radios to locality caches and have 100 multiband radios with VDEM over several fiscal years.

VDEM BRT - PROCUREMENT FOR eCAT FY24

BRT Type:	Business Requirement for Existing Technology
Requested Start:	11/15/2023
Mandate:	
Mission Critical:	Yes
Description:	

One-time costs in the amount of $584,500.00 that will cover a 5-year refresh of the data collection devices at each of the 9-1-1 centers in Virginia. VDEM is responsible for replacing these on a recurring basis.

VDEM - Agency Data Analytics Platform

BRT Type:	Business Requirement for New Technology
Requested Start:	11/16/2023
Mandate:	
Mission Critical:	
Description:	

VDEM requires the ability to consolidate metrics for review by agency executive leadership and staff in the MS SharePoint environment. This will allow for an overview of activities and performance metrics for data-driven visualization of strategic goals.

VDEM - asset management system(s)

BRT Type:	Business Requirement for Existing Technology
Requested Start:	11/1/2023
Mandate:	
Mission Critical:	
Description:	

VDEM requires the ability to consolidate, as much as feasible, tracking of assets (computers and peripherals, radio equipment, equipment used for hazardous material response, agency vehicles) from procurement to surplus. Some equipment is temporarily loaned out to assist in emergency response activities.

VDEM - BRT - Grants Consolidation

BRT Type:	Business Requirement for Existing Technology
Requested Start:	11/16/2023
Mandate:	
Mission Critical:	
Description:	

VDEM is consolidating two separate grants systems into an existing grants system. The agency has been supported by Civix grants management systems for federal and hazard mitigation grants since 2009. In August 2020, the two separate systems were consolidated into vdem.emgrants.com. Two existing preparedness grants, State Homeland Security Grant Program (SHSP) and Emergency Management Performance Grants (EMPG), are hosted by TetraTech. in a system called eGMS. The goal is to move the SHSP and EMPG to modules supported by Civix. This will streamline the process for local governments to manage their funds in one system instead of three.

VDEM - BRT - Learning Management System (LMS)

BRT Type:	Business Requirement for New Technology
Requested Start:	11/15/2023
Mandate:	Yes
Mission Critical:	Yes
Description:	

Learning Management System for Training

VDEM - BRT - SAU Phone System

BRT Type:	Business Requirement for New Technology
Requested Start:	11/16/2023
Mandate:	
Mission Critical:	Yes
Description:	

The agency VOIP system is on two physical servers in the Emergency Operation Center server room. These servers are agency owned and are not supported by VITA or the MSI. The hardware and operating system on the servers are beyond end of life and are not being maintained. The software on the server is end of life with support ending in Q2 2024 with multiple reported vulnerabilities that have not been addressed. An upgrade is required to maintain operational effectiveness for effective communication .

VDEM - BRT CAD Project

BRT Type:	Business Requirement for New Technology
Requested Start:	11/16/2023
Mandate:	
Mission Critical:	Yes

Description:

VDEM operates a 911 like call center which operates mission critical communications and databases to support emergency response and recovery management. Computer-aided dispatch (CAD) systems are used by dispatchers, call-takers, and 911 operators to prioritize and record incident calls, identify the status and location of responders in the field, and effectively dispatch responders. Responders in the field can receive messages initiated by CAD systems via their mobile data terminals, radios, and cell phones.

VDEM - BRT for VBMP Program

BRT Type:	Business Requirement for Existing Technology
Requested Start:	11/15/2023
Mandate:	Yes
Mission Critical:	

Description:

The Virginia Geographic Information Network (VGIN, § 44-146.18:6) manages the Virginia Base Mapping Program (VBMP). VBMP updates and serves out commonwealth-wide datasets annually. This BReT is to support the contract renewals for the VBMP data, an established program with a twenty year history.

VDEM - Digital Signatures

BRT Type:	Business Requirement for New Technology
Requested Start:	11/11/2023
Mandate:	
Mission Critical:	

Description:
VDEM requires digital signature capabilities for signing documents as a stand alone (ad hoc) to be routed manually or as part of an automated workflow.

VDEM - EOC AV upgrade

BRT Type:	Business Requirement for Existing Technology
Requested Start:	11/13/2023
Mandate:	
Mission Critical:	Yes
Description:	

The agency emergency operations center has an audio-visual system that has reached the end-of-life for the equipment and system installed. An upgrade is required to maintain operational effectiveness for effective communication during activations due to emergency declarations.

VDEM - Next Generation VEOC network

BRT Type:	Business Requirement for Existing Technology
Requested Start:	11/15/2023
Mandate:	
Mission Critical:	Yes
Description:	

As VDEM has moved to fully operate in a hybrid model of on-site and virtually connected responders, the network supporting the communications and primary crisis management systems needs to be modernized for better throughput, true geographic and vendor diverse circuits and resilient connections.

VDEM BReT - Security Plan

BRT Type:	Business Requirement for Existing Technology
Requested Start:	11/16/2023
Mandate:	
Mission Critical:	
Description:	

Review and assess, make improvements to Agency Security Plan.

VDEM BRT - Annual Contract Support

BRT Type:	Business Requirement for Existing Technology
Requested Start:	11/15/2023
Mandate:	
Mission Critical:	Yes
Description:	

VDEM contractors with CAI for special project work to include asset management,, agency specific network engineers and other IT specialty disciplines

VDEM BRT - Flood Intel Unit Gauges

BRT Type:	Business Requirement for Existing Technology
Requested Start:	11/10/2023
Mandate:	
Mission Critical:	Yes
Description:	

This is the next iteration of the previous IFLOWS. The business requirement is to modernize and create a reliable and sustainable network of gauges to provide early flood intelligence and warning to support enhanced state, regional and local decision making and resource allocation

VDEM SD-WAN Upgrade

BRT Type:	Business Requirement for Existing Technology
Requested Start:	11/16/2023
Mandate:	Yes
Mission Critical:	Yes
Description:	

Configure existing routers to support SD-WAN capability across all agency locations. This approach prepares agency location(s) with the ability to add additional network capabilities (multiprotocol label switching (MPLS), broadband, wireless (i.e., Cradlepoint)) to take advantage of application -aware routing over private and public networks.

Three step process:

Remote internetwork operating system (IOS) software upgrade on the router.

Remote SD-WAN deployment

Circuit deployment as needed

VDEM Website Modernization

BRT Type:	Business Requirement for New Technology
Requested Start:	11/15/2023
Mandate:	
Mission Critical:	Yes
Description:	

The primary objective of the COV Website Modernization and the CMS Virginia.gov projects are to ensure all state sites are on a single common platform and are following required VITA, COV and 508 standards

IT Strategic Plan Budget Tables

Agency:	127 Department of Emergency Management (VDEM)
Date:	12/7/2023

Current IT Services				
	Costs Year 1		**Costs Year 2**	
Category	GF	NGF	GF	NGF
Projected Service Fees	$870,225.91	$1,317,186.00	$896,332.68	$1,356,702.00
VITA Infrastructure Changes				
Estimated VITA Infrastructure	$870,225.91	$1,317,186.00	$896,332.68	$1,356,702.00
Specialized Infrastructure				
Agency IT Staff	$1,100,311.92		$1,133,321.28	
Non-agency IT Staff	$365,984.00	$220,069.00	$376,964.00	$226,671.00
Cloud Computing Service				
Other Application Costs	$1,360,379.90	$9,013,084.17	$1,371,191.30	$9,255,175.24
Total:	$3,696,901.73	$10,550,339.17	$3,777,809.26	$10,838,548.24

Proposed IT Investments				
	Costs Year 1		**Costs Year 2**	
Category	GF	NGF	GF	NGF
Major IT Projects:				
Non-Major IT Projects:	$49,741.16		$49,741.16	
Agency-Level IT Projects:	$178,000.00		$77,309.00	

	GF Year 1	NGF Year 1	GF Year 2	NGF Year 2
Major Stand Alone IT Procurements:		$1,137,068.80		$637,068.80
Non-Major Stand Alone IT Procurements:	$65,484.00			
Agency-Level Stand Alone IT Procurements:		$637,068.80		$637,068.80
Procurement Adjustment for Staffing:				
Total:	$293,225.16	$1,774,137.60	$127,050.16	$1,274,137.60

		Projected Total IT Budget		
		Costs Year 1		**Costs Year 2**
Category	**GF**	**NGF**	**GF**	**NGF**
Current IT Services	$3,696,901.73	$10,550,339.17	$3,777,809.26	$10,838,548.24
Proposed IT Investments	$293,225.16	$1,774,137.60	$127,050.16	$1,274,137.60
Total	$3,990,126.89	$12,324,476.77	$3,904,859.42	$12,112,685.84

Commonwealth Projects >= $250,000.00

Agency:	127 Department of Emergency Management (VDEM)
Date:	12/7/2023

VDEM - EOC AV upgrade Project	
Category 4	Project Initiation Approval

VDEM requires an upgrade to the audio visual system at the Virginia Emergency Operations Center and at the Governor's Situation Room to ensure better communications during emergency activations. This upgrade will include requirements for connectivity outside of the two locations to support a large number of participants for conference calls.

CIO Email:
The following Investment Business Case has been submitted for your review and approval as a Strategic Planning entry by ITIMD. The Virginia Department of Emergency Management (VDEM) is planning a project (separate PBA and PGR is CIO approved) with procurement to purchase audiovisual equipment. The current A/V and VTC capabilities at the Virginia Emergency Operations Center (VEOC) are outdated. Many critical components of the existing systems are no longer manufactured and current replacement hardware is through refurbished equipment, if available. The agency is seeking to replace end-of-life hardware and implement current technologies, through the enhancement, replacement, and/or installation of A/V and VTC system solutions at VEOC and the Governor's Situation room. And additional phase will include a network assessment to ensure that sufficient bandwidth is for effective externally hosted communications (WebEx, MS Teams) for stakeholders at the locations and connecting virtually.
The agency does not has an approved 20 22 ITSP on file. The agency has no agency head approval on the 22 24 ITSP and has not submitted it; internal review is underway
Proponent Agency: VDEM
Planned Completion Date: 2022-5-31
Project Cost: $2,250,000 FY22 Mixed Funds, Federal/General

Project Start Date		12/1/2022	Project End Date	10/1/2023
Estimated Costs:	Total		General Fund	Non-General Fund
Project Cost		$2,711,500.08	$1,104,285.00	$1,500,000.00

Estimated first year of biennium:	$0.00	$0.00		$0.00
Estimated second year of biennium:	$2,250,000.00	$750,000.00		$1,500,000.00

Project Related Procurements

VDEM - EOC and Governor's Situation Room AV Prj

VDEM Prj - Flood Intel Unit Gauges	
Category 4	Project Initiation Approval

 VDEM continuously strives to improve its readiness by planning for all hazards and improving our statewide response system. We accomplish this by providing training, equipping teams with the best technology, and exercising together as a team comprising local, state, and federal governments; private sector partners; and non-governmental organizations. Recognizing that the Commonwealth's #1 hazard is flooding, VDEM created a brand new Flood Intel Unit with a goal of preventing and reducing the loss of life and property through providing accessible and reliable real-time flood intelligence which will enhance and support planning and risk-based decisions at the state, regional and local level.

To directly support that mission, the agency is in the beginning phases of constructing a new statewide flood monitoring network that'll consist of water-level gauges, precipitation sensors and weather stations which will provide real-time hydrologic situational awareness. The ultimate goal of the network of gauges and sensors is that of being RAD (reliable, accurate and dependable) for all stakeholders, and also replace the now defunct Integrated Flood Observation and Warning Network which proved to be unreliable with poor ROI. Each jurisdiction across the Commonwealth will have at least one (1) flood gauge whether it be owned and operated by VDEM, USGS, NOAA or a jurisdiction.

Project Start Date		7/17/2023	Project End Date		12/31/2028
Estimated Costs:	Total		General Fund	Non-General Fund	
Project Cost		$1,193,490.00	$1,759,946.68		
Estimated first year of biennium:		$0.00	$0.00		$0.00
Estimated second year of biennium:		$0.00	$0.00		$0.00

Project Related Procurements

There are no procurements for this project

Commonwealth Procurements >= $250,000.00

Agency:	127 Department of Emergency Management (VDEM)
Date:	12/7/2023
Stand Alone Procurements:	
Procurement Name:	VDEM PROCUREMENT - FLOOD INTEL GAUGE
Procurement Date	6/28/2024
Procurement Description:	Purchase additional flood/rain gauges across the Commonwealth, implement new software.
Procurement Name:	VDEM Procurement - eCATS 9-1-1 Analytics (FY23-28)
Procurement Date	12/31/2027
Procurement Description:	On behalf of the 9-1-1 Services Board, VDEM is procuring continued monthly subscription of "9-1-1 CHE MIS Call Handling Reporting and Text to 9-1-1 Reporting & Enhanced Reports" as listed in the contract. Statewide pricing for this line item is as follows: • Per the contract, there are 1085 positions across Virginia • The MONTHLY Per Seat pricing set by the contract is $48.93 per position per month • The MONTHLY total cost is set by the contract at $53,089.05 for all 1085 positions • The ANNUAL total cost is $637,068.60 for January 2023 – December 2023 • Expected 5-year total life of the contract pricing - $3,185,343.00 (Calendar Year 2023 – 2027)

Procurement Name:	VDEM PROCUREMENT - IPADS
Procurement Date	6/30/2023
Procurement Description:	VDEM is requesting the procurement of 107 new IPAD Pro tablets to replace existing end of life equipment. The procurement supports and enhances the agency's disaster response and recovery field operations. Cost includes the total cost of ownership for 3 years of wireless service and accessories.
Procurement Name:	VDEM VGIN - VBMP 2022 - 2025
Procurement Date	12/30/2022
Procurement Description:	The Virginia Geographic Information Network (VGIN, § 44-146.18:6) manages the Virginia Base Mapping Program (VBMP). VBMP updates commonwealth-wide orthoimagery production on a four (4) year cycle. This is completed using a Statewide IT Contract (VA-200922-SURD). The VGIN operating budget is resourced to complete statewide acquisition of the base product (12", 4-band). Virginia localities may acquire 'buy-up' products from the contract. VGIN manages technical production and quality control for these products. VGIN bills localities for these products fifty percent on confirmed acquisition of aerial imagery, and fifty percent on delivery.