

IT Assessment Annotated Summary of Recommendations

Prepared for



City of
HYATTSVILLE

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The City of Hyattsville, Maryland, engaged Lars DeSalvio to assess the city's Information Technology infrastructure and services. The primary objective of the engagement was to review the city's prior technology assessments to determine where the city currently stands regarding its technology infrastructure and operational capabilities. In addition, the city requested recommendations regarding in-house IT staffing vs. outsourcing and prioritized recommendations for future technology initiatives and operations. The following recommendations are based on the IT assessment, a review of existing system documentation, and interviews with key stakeholders. The recommendations are presented in the order recommended for implementation.

1. **Renegotiate the IT support contract with Dataprise.** Key negotiating points should include:
 - 1.1. The responsibilities and scope of work that Hyattsville will provide.
 - 1.2. Development of the working relationship and coordination between the city and Dataprise's staff.
 - 1.3. The sharing of system documentation, standard operating procedures, configuration files, system login credentials, and additional information the city will need to provide IT support.
 - 1.4. Access and permissions to Dataprise's support portal. Access by Hyattsville may not be allowed if the Dataprise support portal is in a multi-tenant environment. If access to Dataprise's support portal isn't permitted, the city will need to implement its own.
 - 1.5. Change the contract from a fixed price for service packages to a time and materials contract. If this isn't possible, the city should consider replacing or supplementing Dataprise with another technology provider.
 - 1.6. Project-based work should include a time clause that indicates complete performance, substantial performance, and available remedies if a project or assignment isn't completed according to the contract.
 - 1.7. Hardware and software purchase quotations must include Original Equipment Manufacturer (OEM) product numbers so the city can accurately compare quotes from multiple vendors.
 - 1.8. Quotations for IT services should be individually itemized, not bundled into categories, so that the city can evaluate the cost of the services provided by Dataprise.
 - 1.9. Purchases that include the resale of 3rd party products or services should include the 3rd service provider's name and the product name or description.
2. **Hire an Information Technology Consultant** who will lead the city in developing a functional IT program and provide guidance and recommendations for purchasing hardware, software, and IT services. The consultant will communicate this information to the City's IT Director and a newly

created Technology Steering Committee (TSC) for their consideration. The committee will submit significant policy decisions and purchase requests to the City Administrator for approval. The IT Consultant will also be a technical resource to the newly hired IT Support Technician and the IT Director.

3. **IT work and project prioritization.** A comprehensive list of IT work and projects need to be created and prioritized using a city-approved prioritization method. The prioritization method should give heavy weight to work and projects with security and risk implications, detailed in the IT Security Assessment Report. In addition, the IT Consultant will take input from Dataprise and senior staff to build the prioritized IT work and project portfolio, which will be maintained in Smartsheet. Based on the IT Assessment Report, the following areas should be considered high priority and addressed as

- 3.1. Anti-Virus, Anti-Spam (Malware Protection) – Add web content filtering to workstations. Content filtering is necessary to protect the city’s network and should be provided by the firewalls or through a cloud-based Secure Internet Gateway (SIG) platform. SIGs offer a line of defense external to the city’s network, which Dataprise doesn’t maintain, and the city’s IT staff could manage it. Additionally, a SIG would reduce the workload of the firewalls, thereby improving performance.

- 3.2 Policies & Compliance – Creation of policy and procedure documents. The city should create policies, procedures, guides, checklists, and incident response playbooks necessary to operate a safe and effective technology infrastructure. These documents should be stored in a readily accessible cloud-based environment in case the city’s network is inaccessible. Example policy templates might include:

- asset management
- audit policy
- awareness training
- business continuity and disaster recovery (currently in process)
- change management
- encryption
- identity and access management
- incident response
- information security
- network management
- remote work
- risk management
- system development
- vendor management
- vulnerability management

Example incident response playbooks might include:

- email compromise
- compromised credentials
- lost/stolen mobile devices

- malware incidents
- ransomware attacks

- 3.3 Software Updates – Update desktop software applications. Neither Dataprise nor the City of Hyattsville is updating or applying security patches to software applications. Not patching software applications is a considerable risk and needs to be performed regularly. This high-priority task needs to be part of a regular schedule, and city IT staff can do it. In addition, software should be upgraded to the latest version whenever possible.
- 3.4. Server Hardware – Replace end-of-life servers and operating systems with virtual servers. Additionally, the city should plan for the failure of its virtualized servers and, as part of an overall business continuity plan, have an alternative location to access virtual servers. This location could be another city facility or preferably a third-party disaster recover as a service provider.
- 3.5. Network Hardware and Infrastructure – Inventory and replace end-of-life hardware. The city should have a centralized list of all computer hardware, including the purchase date, estimated useful life, and replacement date. Additionally, the list should contain any equipment configurations to facilitate the rebuilding or replacement of equipment if necessary.
- 3.6. Uninterruptible Power Supply – Purchase UPS inventory and set up a replacement schedule. Additionally, the city should test the effects of a loss of power by conducting a whole-building shutdown test annually.
- 3.7. Disaster Recovery – Finish the Disaster Recovery plan and test scenarios according to the plan.
- 3.8. Physical Environment – Add redundant cooling to server rooms and add robust monitoring. The server rooms should be cleaned up and maintained regularly, and the cabling and devices should all be labeled. The city should install redundant AC systems to prevent the loss of critical infrastructure. As part of this project, the city should set up environmental monitoring with 24x7 notification so Dataprise or staff can shut down equipment before it overheats or becomes damaged due to excessive moisture.
- 3.9. Workstation Fleet – Replace end-of-life computer equipment.
- 3.10. Mobile Device Management – Set up a mobile device management program to reduce administration, improve end-user productivity, and reduce IT risks. City IT staff can manage Verizon cell phones and mobile devices to reduce Dataprise costs and provide faster service.
- 3.11. Cyber Security – Create an in-house cyber security program. Security training and phishing campaigns should be continuous, and the city's IT staff can run the program. The city should address potential network issues by having an internal vulnerability scan run as soon as possible.
- 3.12. Purchasing – Enhance purchasing guidelines. When requesting pricing for equipment, the city should require vendors to provide OEM part numbers so the city can accurately follow its purchasing guidelines and compare pricing. When requesting IT services from Dataprise or other

vendors, the vendor should itemize the services offered with pricing.

3.13. CJIS Compliance – Create policies and procedures for CJIS (Criminal Justice Information Services) compliance. This includes limiting access to only personnel with appropriate clearances and keeping virtual machines that process criminal justice information data separate from other virtual machines that are Internet-facing. Remote access control software installed on some of the computers in the police department should be removed or restricted.

3.14. Application and Data Security – Upgrade software and remove non-approved applications. The city should encrypt all laptop hard drives, followed by desktops, and then the virtual server storage partitions, if by so doing it does not cause performance issues.

3.15. Information Technology Governance – Create an IT governance structure.

4. **Create a Technology Steering Committee.** The TSC will consist of senior staff who, under ultimate approval of the City Administrator or Mayor and Council as appropriate, will direct, review, and approve IT strategic plans, oversee major initiatives, and allocate resources. The TSC is an essential part of the IT governance structure and is necessary for effective IT governance.
5. **Hire a full-time IT Support Technician** to supplement the work that Dataprise currently performs. The work to be performed by the IT Support Technician will include managing the helpdesk system, end-user hardware and software support, troubleshooting network and server issues, configuration, and setup of desktop computers and cell phones, account creation, and onboarding and offboarding of staff. Support tickets that the IT Support Technician can't resolve will be submitted to Dataprise for resolution. The Technology Consultant can assist when the IT Support Technician and Dataprise aren't available and may review tickets that have been escalated to Dataprise so the IT Support Technician can be trained to handle these issues in the future. The IT Support Technician will need to become CJIS certified so they can provide IT services for the police department.

Skilled IT staff are in demand in the labor market. There are several strategies that the city can use to retain its IT staff, including the offering of a competitive salary and benefits package, fostering a positive and challenging work environment, encouraging professional development, recognizing and rewarding good work, and offering flexible work arrangements including remote work and flexible work schedules. It's common for technology employees to change jobs frequently, and if this happens, the city can utilize administrative staff as a backup until technology staff is available. Additionally, the city can develop system documentation and standard operating procedures to reduce risk and ensure continued support during staff transitions.

6. **Development of a comprehensive IT strategic plan.** The plan may include the following key components:

6.4. Executive summary: This is a brief overview of the plan's key points.

- 6.5. Situation analysis: This section summarizes the organization's current IT environment, including its strengths, weaknesses, opportunities, and threats.
 - 6.6. Goals and objectives: This section outlines the goals the organization hopes to achieve with its IT efforts and the specific objectives that will help achieve them.
 - 6.7. Strategies and initiatives: This section outlines the specific actions that will be taken to achieve the goals and objectives outlined in the plan. These may include projects to implement new systems, initiatives to improve security or efficiency, and efforts to align IT with business goals.
 - 6.8. Budget and resources: This section outlines the financial resources required to implement the plan and any other resources (such as personnel or equipment) that will be needed.
 - 6.9. Implementation plan: This section outlines the timeline and specific steps that will be taken to implement the various strategies and initiatives outlined in the plan. The city will utilize Smartsheet to track and manage the strategies and initiatives.
 - 6.10. Performance metrics: This section will outline the key performance indicators (KPIs) used to measure the plan's success and achieve the goals and objectives of the plan.
 - 6.11. Document and prioritize work and IT projects. Major work tasks and projects will be managed using Smartsheet.
7. **Establish an IT internship program.** After the IT Support Technician has been established (3-6 months), the addition of an intern will be a valuable resource to the city and the IT Support Technician. The IT Support Technician will benefit by having an extra set of hands to assist with more basic tasks and repetitive processes.

In summary, the City of Hyattsville's IT program needs to improve its IT governance and business processes. Additionally, more staff and 3rd party support are needed to run the IT program effectively. Relying solely on an outside company to provide IT services is not cost-effective and won't provide the level of support and service that the city needs. The steps outlined and recommended in this report will address many of these deficiencies and help the city achieve its IT goals and objectives.