



# County of Fairfax, Virginia

## MEMORANDUM

December 14, 2017

**TO:** Bryan Hill  
County Executive

**FROM:** Edward H. Blum, Chairman *EHB*  
Information Technology Policy Advisory Committee (ITPAC)

**SUBJECT:** FY 2019 Budget Recommendations

During 2017, ITPAC has been briefed on County-wide infrastructure modernization, Website usability, Public Safety, Land Development and Human Services initiatives, as well as technology-related legislative matters. It was also briefed on the FY 2019 revenue forecast and the fiscal challenges facing the County. Recognizing the difficult budget challenges facing the County, ITPAC is submitting its traditional December County Executive letter to make strategic points that we deem important considerations in creating the FY 2019 budget.

### Critical Overarching Issues

**IT Security Demands Continual Investment** – Security of County information in cyberspace is a significant concern. It is critical to safeguard financial, telecommunication, healthcare, emergency response, and other essential services that are increasingly dependent on interconnected information technology systems. Data breaches set a record world-wide in 2016, and 2017 is seeing a significant number of disclosed major costly breaches such as those at Equifax and Blue Cross/Blue Shield. Cyberattacks will continue to increase as hackers identify and exploit security weaknesses in IT systems.

With County business increasingly IT-dependent, the County must continue to take proper precautions to protect its infrastructure, systems, information, and citizen data. As noted at recent Board IT Committee meetings, a significant uptick in phishing emails, both in volume and sophistication required DIT to make an unexpected procurement of additional technology to combat the threat. Such incidents are increasing in frequency, requiring DIT to react quickly to protect County assets. Although DIT is vigilant and capable, identifying available funds to absorb these unexpected costs is a major challenge. Additional funding directed toward further reinforcing the County's existing investment in security software, systems and personnel is money well spent.

**County Agencies Often Achieve Budget cuts Through Increasing Use of IT** – As agencies improve services and cut budgets, they often count on projected IT efficiencies to realize savings. This quite often results in expanding DIT workload. Year on year budget reductions have left DIT resources at dangerously low levels versus the increasing scope of responsibility. Also, IT support services and expertise needs are increasing rapidly. County-wide IT resource drivers include: staff

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mobility and internet use, data explosion, user demands for new support-intensive technologies, as well as cyber-security requirements. It is important to identify the impact on the County's IT department of agency budget cuts.

**County IT Acquisition Processes Should be Streamlined** – The County's IT acquisition process would benefit from greater agility. Far too often the acquisition of critically important hardware and software slows to a crawl to accommodate lengthy business and legal reviews of complex technical terminologies and concepts not associated with other products and services. For example, the contract to create the County's new website took more than 18 months to complete in large part due to multiple layers of procurement and legal reviews by County personnel unfamiliar with terms and concepts common in the IT industry. DIT would benefit from having procurement authority within the department itself along with having the ability to engage outside procurement and legal expertise to expedite the business, technical and risk reviews associated with an IT procurement.

**Human Capital Management & Structure for the Technology Profession** – Referring to the highlighted subjects mentioned previously, ITPAC encourages the continuous development of the applicable skillsets required to effectively plan, install, configure and maintain the technical infrastructure throughout Fairfax County Government. Additionally, the critical conduit of organizational opportunity exists within the role of the Chief Technology Officer (CTO) position. One of the most important responsibilities of a CTO is to monitor, evaluate, and select technologies that can be applied to future services. A significant investment in the active exploration of all relevant technical areas is required to identify opportunities buried amid all the market information available. It is with this dynamic area of knowledge, that a CTO position continually report to the top County Executive to ensure the technology leader has insight into all stakeholder's priorities and needs (at the executive levels).

## **Specific Key FY 2019 Programmatic Recommendations**

**Planning Land Use System (PLUS) project to achieve operational improvements and customer self-service** – Land use is key to advancing economic development in Fairfax County. The current aging series of land use systems is difficult to use which is slowing projects. The current systems reside on outdated unsupported technology and is hard to support. The strategic, multi-agency PLUS project replaces existing systems with a modern technology platform that meets business and customer needs. It is adaptable and eliminates the risk associated with legacy systems. Supporting five major land use agencies, PLUS enables seamless business-process integration while streamlining plan, permit and inspection processes.

The project will improve business processes for better customer service, increase reliability of information, and support continuous improvement and innovation for land use. It remains one of the key technology-related strategic initiatives for the County. Significant funding is needed as part of the FY 2019 budget to continue moving the PLUS project forward.

**Human Services (HS) Integrative Roadmap** – As discussed with the Board IT Committee, individuals and families served by the County's HS system frequently have needs which must be addressed by multiple programs and services. Clients working with multiple services often must

supply each with the same information. This major HS initiative aims to tie together the work of various health, housing, and human services agencies to deliver person-centered services to County residents. IT serves as an enabler of the reengineered, client-centered processes.

The County is developing a comprehensive view of HS clients and their needs. It plans to remove information/data silos, improve service quality with accurate and timely data, increase data sharing among HS and Public Safety agencies for effective detection of at risk clients, increase visibility and accountability for client outcomes, and implement common standards for IT security and data confidentiality across HS agencies and programs. Similar to the PLUS project noted above, significant funding will be needed as part of the FY 2019 budget and beyond, to move this important plan forward.

## **Recommendations for Emerging Overarching Issues**

**Support for Audio/Video Teleconferences** – Audio/Video Teleconference capability is provided by various organizations across the County. Some options are provided by agencies where they are located, some are provided by facilities, and some are part of DIT-supported applications. Most users are unclear who is responsible for the systems they are using, especially when it is infrequently used. They often call on DIT for help when errors occur and DIT may or may not be able to help. Consolidating support for these services in DIT would lead to cost-effective purchasing, appropriate systems for each area, and clear understanding of repair service.

**The Internet of Things and Big Data** – The term Internet of Things (IoT) refers to the network of physical devices, vehicles, machinery, appliances and other items embedded with electronics, software, sensors, and network connectivity that enable these objects to connect and exchange data. The IoT allows anything from individual devices to complex systems to be observed, monitored or controlled remotely across existing telecommunications network infrastructure, creating opportunities for more direct integration of physical systems with IT systems. From ‘smart’ storm water management ponds to police-worn cameras, data will increasingly stress the County’s IT storage and processing infrastructure. The further proliferation of networkable devices will generate increasingly enormous amounts of complex data (Big Data) which the County must gather, securely store/manage and analyze for our citizen’s benefit. As the amount of and demand for analysis of IoT data grows, the County will need to invest in appropriate IT resources, advanced analytics tools and appropriately skilled personnel.

In closing, ITPAC appreciates the opportunity to have direct input in the County’s IT processes. As with other high performing organizations, the County’s reliance on technology continues to increase. With the need to protect against constantly evolving cyber threats and the rapid advance in the use of technology to deliver services, the County must stay abreast of the latest technologies to meet its goals. ITPAC looks forward to continuing to support Fairfax County’s best practices for technology governance and implementation strategies.

Attached is a one-page background paper that explains ITPAC's composition and mission.

Cc:

Information Technology Policy Advisory Committee  
David J. Molchany, Deputy County Executive  
Wanda M. Gibson, Chief Technology Officer  
Joseph M. Mondoro, Chief Financial Officer

# **Fairfax County Information Technology Policy Advisory Committee**

## **Mission and Functions**

### **Background**

In February 1997, the Board of Supervisors established the Information Technology Policy Advisory Committee (ITPAC), an advisory public body, to help ensure that County government keeps pace with beneficial IT trends and policy. ITPAC members are citizens of Fairfax County who have experience in information technology and who each represent one of the following: a member of the Board of Supervisors, the Fairfax County School Board, the Fairfax County Chamber of Commerce, the Fairfax County Federation of Civic Associations, the League of Women Voters of Fairfax, and the Northern Virginia Technology Council.

### **Operation**

With experience and knowledge of the IT market and IT implementations, ITPAC explores County IT requirements as well as new IT technologies and their application in government. This is done to advise the Board and the County Chief Technology Officer (CTO) on County IT requirements. ITPAC focuses on emerging information technology trends, opportunities, and risks as well as the application of technology changes to County services, and policies.

In preparation for finalization of the County's budget plan for the upcoming fiscal year, ITPAC develops letters with comments and recommendations to the County Executive in December, and the Board of Supervisors in March. The Board letter accompanies the County Executive's Advertised Budget to discuss areas of strategic importance in advance of the Board's Budget Committee work and final deliberations on the annual budget.

ITPAC, representing the community as well as IT best practices, looks for opportunities to use technology to enable effective agency operations in support of constantly evolving community needs and to improve service for expanding government demands. These objectives are pursued while working to protect investments and reduce costs.

Over the year, ITPAC discusses current challenges and technology options with DIT and various agencies during regular meetings. Important issues raised have included support for key projects in IT Investments Plan, effective organization and use of IT resources, the overall level of investment and change for business processes as a necessary part of IT projects. For example, in CY 2017, ITPAC was briefed on County-wide infrastructure modernization, the Website, Public Safety, Land Development and Human Services initiatives, as well as legislative matters that impact technology. ITPAC was also briefed on the FY 2019 revenue forecast and the fiscal challenges facing the County. We recognize the difficult budget challenges facing the County and will continue to make recommendations on the best ways to apply the IT budget to support the County.

Over the last 20 years while we have been advising the County, our work has proven valuable in summarizing key issues and keeping track of timing for needed investments.