Department of Information Technology

E-Gov / Web Public Access Technologies

Purpose

The e-government program is the official, centralized county-wide competency center for the County's public access, on-line government platform, Web venue, and standards for all County agencies. E-Gov develops and maintains systems that provide essential information and key services to citizens through publicly accessible online and mobile platforms, supporting the County's mission to provide convenient, efficient, effective and timely information and transactions with government, 24 hours a day, 7 days a week. Utilizing concepts of e-business and e-commerce, the e-government program facilitates the connection between citizens, the government, and back-end business systems. Further, e-government provides the County powerful and streamlined venues to improve efficiencies and meet the growing demand and expectations for constant interaction with the government.

Description

The e-Gov program, the Public Access part of DIT's overall strategy for 'Digital Government', provides the official county-wide platform for the County's Internet presence for interacting with citizens, businesses, and the general public for information and interacting with agencies. E-government provides the public with responsive and flexible alternatives for obtaining information and services and to allow residents to conduct business with the County at anytime from anywhere. The fundamental premise is to build a "government without walls, doors, or clocks" – that is, provide access to information and services 24 hours a day, seven days a week from the constituents' home, office or anywhere else.

The e-Gov/Web Public Access Technologies group in DIT work with County agencies and other public and private sector entities to improve County accessibility, business operations and accommodate the growing variety of services and needs. E-Gov provides the WEB infrastructure, search and content management technologies, application development standards and protocols, integration with Social Media channels, mobile apps development, URL administration, promotes the development of on-line services, and plans for next generation technologies. The team is the expert group within DIT to support and participate in reviews of the work of the analysts in working with County agencies to replace and/or improve their major systems capabilities, with nearly all IT projects requiring WEB based and mobile architecture. The team provides guidance and coordinates the work of over 250 agencies' based staff assigned to work on their agency's WEB pages and e-Services. The e-Gov team works closely with the Office of Public Affairs (OPA) for over-all look and feel, use of Social Media, and enhancements for customer experience.

The four key platforms comprising the County's e-government program are:

- The **Fairfax County Web Site**, located on the web at www.fairfaxcounty.gov. The County site currently includes over 23,000 pages and about 90 interactive applications, with more than 60 agencies participating and extensive integration with social media tools/applications. The website has on average 43,155 visitors per day and more than 1.5 million visits per month.

- **FairfaxNet**, the County's intranet portal for agencies internal information, forms and e-service.

- The official **Fairfax County Mobile App** is available to download for free on Apple's iTunes store, Android Market as well as from links through the county website. Since 2011, there have been 20,600 purchases (or downloads) of the app.

- **Interactive Voice Response (IVR)** is available 24x7 to interact with citizens and provide additional option for conducting business with the county after regular business hours. The telephone callers can select information and services from audio menus via mobile or landline. There are a total of 17 interactive voice response applications that serve 1.4 million people since FY 2005.

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In addition to the direct e-government channels, this group is responsible for the development of the County's application development methodology and advancement and lifecycle development methodology for all other DIT groups; County's intranet website FairfaxNET and applications; Service Oriented Architecture, meta data structures and business intelligence; CRM (Customer Relationship Management) strategy and projects; and contributes to regional and state interoperability and data sharing initiatives.

The e-Gov group also works with the Fairfax County Public Libraries (FCPL) and the Department of Cable Communications and Consumer Services (DCCS) for the overall view and strategy of all open-government channels, public computers, and video streaming the county has in its toolkit to facilitate access and information to the public. A steering committee of agencies reporting to the Deputy County Executive over the key information agencies including DIT, DCCS, OPA, and FCPL gives input to strategy and the development of new channels that further the value and effectiveness of the program. This long standing goal is further enriched with the County's mobile apps which place government in the palm of the constituents' hands enabling instant connectivity to their government from anywhere at any time in a conveniently accessible platform to reach a larger and wider user base.

The technologies are consolidated under one management team. Many of the same information look-ups and business transactions are available on all channels, integrated on a single platform architecture, with seamless connectivity to state and federal e-government programs and services. This provides a holistic solution to making service available to all constituents regardless of their ability to own technology. Capabilities also include secure electronic payments capabilities through certified third party payments portal, with consolidated payment services across the e-government channels.

Future enhancements will include additional interactive and social media applications, modern information access with intelligent enterprise search capabilities and Web content management (WCM) which provides a set of tools to allow for more active content contribution from agency staff allowing agencies to quickly add or update information without the need for technical expertise. The pre-defined WCM templates will ensure consistency of the presentation layer (i.e., Web, Tablet, Smartphone, etc.) as well as automatically ensuring compliance with ADA and other mandates. Workflow components with the WCM software will ensure the integrity of the quality assurance and approval process. DIT is also incorporating voice recognition into the IVR system, where appropriate.

The e-government group is leading the countywide initiative for a centralized, accessible, and contextualized **Open Data** portal which will offer citizens a better way to access and use public information, making citizen and government collaboration easy. This portal will also provide a seamless system for government agencies to not only set goals, but measure their impact against data, perform broad analysis, and share results with the public. Because of the power of electronic data interchange and associated implications, these technologies are receiving more scrutiny of lawmakers to ensure privacy and protections. DIT expects additional requirements to avoid inappropriate penetration and attacks to maintain the security and integrity of the e-government environment as e-government initiatives are implemented.

The e-government staff is committed to adhering to both the dictates and spirit of Americans with Disabilities Act (ADA) accessibility guidelines and mandates. The addition of all new information areas and business functionality will include ADA compliance as a principal focus.

The County's e-government programs are provided by a combination of internal staff and contracting support with specialized expertise and skills. County staff performs approximately 80 percent of the work. Contract services are used on an as-needed or special projects basis. For example, County staff will use contract services to assist in the implementation of the new web content management system, and in converting approximately 23,000 pages to conform to the new information architecture and design. Contract services were also used for the development of several web applications. It is anticipated that this mix of internal staff with contract support as required will continue. The site is available 24x7 and the staff of the branch respond to emergency outages on an "on-call" basis.

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The increased reliance on e-government programs to deliver County services require 24x7 availability and support. Public Access Technologies began as one of the principle capabilities in DIT's Enterprise Systems Division in 1998, and evolved over the years to a strategic program as the utility of the Web became mainstream for government. Today the program is supported by a single staff shift on-call. The essential nature of the program demands hard examination of the staffing, budgetary and infrastructure implications to keep it vital.

Benefits

The County's e-government program is considered a best practice in government, being recognized by national organizations, and in government and technology publications and journals. The program directly contributes to the County being named Top Ten including the number One Digital County and Best of the Web multiple years since 2000. Officials from many Countries throughout the world have visited the County specifically to gain insight on how to establish a good e-government program.

E-government is the hallmark of the benefits obtained through solid planning and investment in information technology, providing the catalyst for a change in the way government operates, in many County agencies. Specific benefits include:

- Enable citizens instant connectivity to their government
- Empowers constituents' by providing them the benefit of getting services and information 24 hours a day, 7 days a week from anywhere at any time by delivering information in a more conveniently accessible platform
- Promotes better service delivery by engaging and encouraging collaboration with citizens
- Online streamlined processes improves County's efficiencies
- Convenience and flexibility of conducting online transactions
- Mobile apps enhance the adoption of online governmental services by citizens by reaching a larger and wider user base
- Agencies have achieved savings and increased productivity through e-services, and have been able to serve the growing population with fewer resources
- Funds have been collected faster and with greater accuracy
- Reduced the need for constituents to drive to the County Government Center to do business, thus also contributing to environmental stewardship goals
- Enables transparency and open-government
- Enables the County to be responsive to its digitally savvy citizen and business constituencies.

Mandates

This Line of Business is not mandated.

Trends and Challenges

Digital innovation is key to business priorities, in government similar to that of the consumer services industry. With explosive growth in IT technologies, there is a constant need to enhance the website and update the back-end systems and applications to keep up with changes.

- Incorporating and embracing social media trends has become essential. At the same time, ensuring security and data integrity on all e-government channel is crucial.

- The expectations that come with high performing, high visibility website/applications with no downtime increases both staff and budget resource requirements.

- Mobile technology is here to stay and DIT needs to keep "mobile first" when considering any development needs.

- Open Government and providing citizens with usable, accessible data.

- Engaging and encouraging collaboration from constituents to form a citizen-centric government through e-government channels and social media incorporation.

IT research firms predict that by 2018, more than 25 percent of new IT projects in the traditional enterprise will be built on Web-scale architectures. Trends include:

- Open Any Data strategies

- Web hosting and platforms for digital innovation will continue to go toward 'cloud', the government trend is the 'hybrid' cloud strategy

- Citizen e-ID

- Advanced, pervasive and invisible analytics for actionable insights to customers

- Blending physical and virtual worlds

Challenges:

- Restructuring resources to allow for 24x7 support

- Integrating Open Government concepts into agencies' core mission and operations

- Obsolete legislation that prohibit or limit digitalization

- Obsolete IT acquisition that is not agile

Resources

Category	FY 2014 Actual	FY 2015 Actual	FY 2016 Adopted
LOB #139: E-Gov / Web Public Access Technologies			
FUNDING			
Expenditures:			
Compensation	$1,931,623	$1,540,488	$2,011,385
Operating Expenses	293,110	294,368	224,496
Total Expenditures	$2,224,733	$1,834,856	$2,235,881
General Fund Revenue	$0	$0	$0
Net Cost/(Savings) to General Fund	$2,224,733	$1,834,856	$2,235,881
POSITIONS			
Authorized Positions/Full-Time Equivalents (FTEs)			
Positions:			
Regular	13 / 13	13 / 13	13 / 13
Total Positions	13 / 13	13 / 13	13 / 13

Metrics

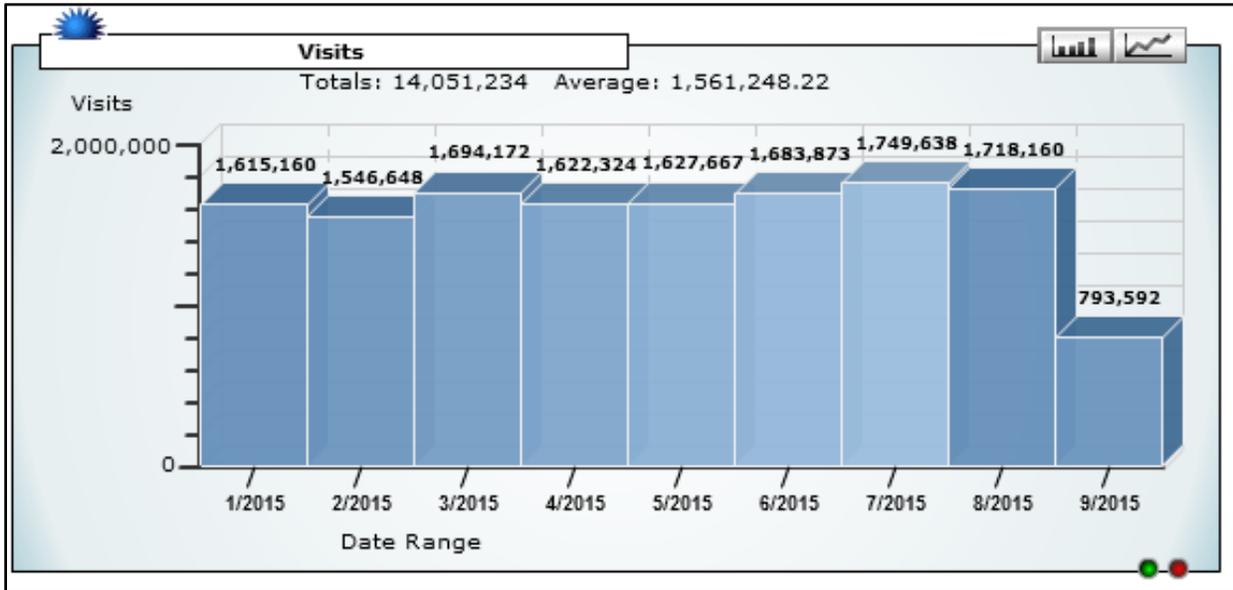| Metric Indicator	FY 2013 Actual	FY 2014 Actual	FY 2015 Actual	FY 2016 Estimate	FY 2017 Estimate
Number of Hits on Public Website	678,400,000	606,900,000	625,700,000	655,900,000	698,400,000
Number of Visitors on Public Website	19,060,000	18,860,000	19,840,000	20,150,000	20,890,000
Number of Transactions on Public Website	1,101,036	3,774,408	2,420,738	3,581,556	$3,868,080
Percentage of revenue collected	7%	17%	14%	10%	10%

Strategically, DIT employs a broad strategy that uses technology and policy to enable cohesive public access to information and services through the use of contemporary web-based and communication solutions. People and groups also have many options and forums in which to engage with County government and programs. The e-Gov LOB also supports the County's mission to provide convenient, efficient, effective and timely information and transactions with government, 24 hours a day, 7 days a week through publicly accessible online and mobile platforms. Further, e-government provides the County powerful and streamlined venues to improve efficiencies and meet the growing demand and expectations for constant interaction with the government. New concepts of e-business and e-commerce platforms for citizen interaction with the county is continually implemented to support and encourage the explosive growth of online engagement.

It should be noted that the FY 2014 Actual Number of Transactions on Public Website was impacted by automated programs causing one-time data irregularities which have been addressed through additional security measures.

Public Website Yearly Usage Totals & Future Projections

	2012	2013	2014	2015	2016	2017
Traffic (TB)	26.6	32.71	33.27	38.72	44.69	49.35
Hits (Million)	540.1	678.4	606.9	625.7	655.9	698.4
Visitors(Million)	16.73	19.06	18.86	19.84	20.15	20.89

Legend: Traffic (TB), Hits (Million), Visitors(Million), Linear (Traffic (TB)), Linear (Hits (Million)), Linear (Visitors(Million))
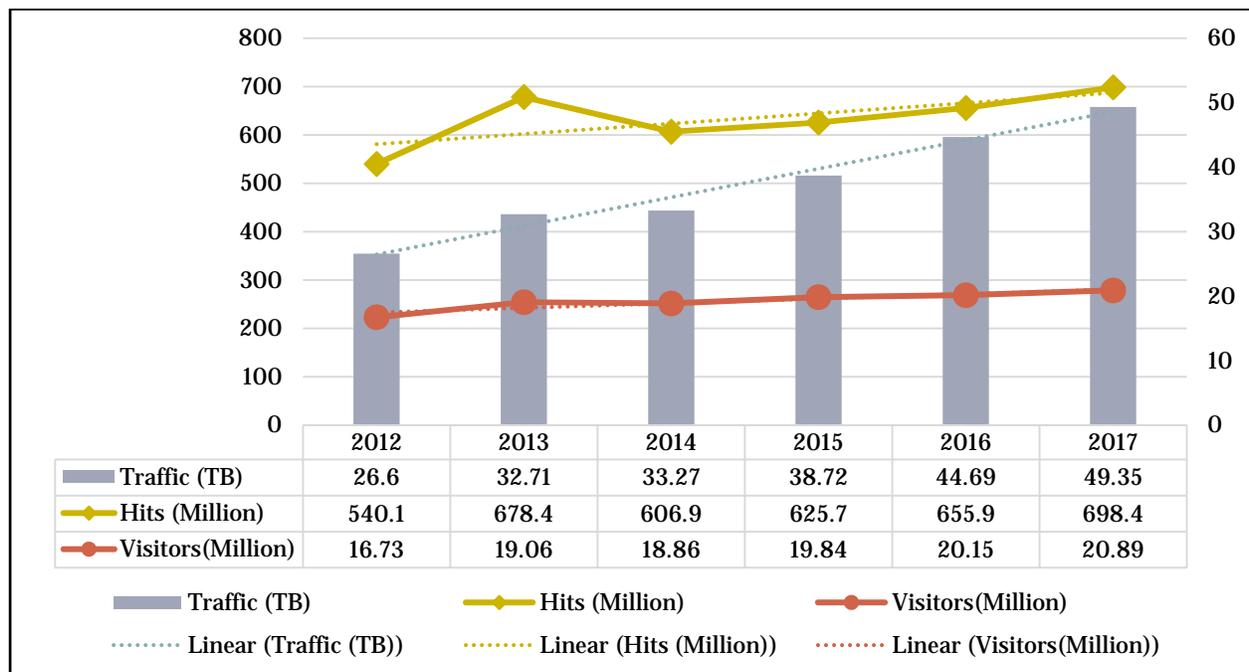
Public Website Unique Visitors – 2015

Visits
Totals: 14,051,234   Average: 1,561,248.22

Visits

2,000,000

1,615,160 1,546,648 1,694,172 1,622,324 1,627,667 1,683,873 1,749,638 1,718,160

793,592

0

1/2015 2/2015 3/2015 4/2015 5/2015 6/2015 7/2015 8/2015 9/2015

Date Range

Digital Service Encounters - 2015

6,000,000

5,000,000

4,000,000

3,000,000

2,000,000

1,000,000

0

FY 2006 FY 2007 FY 2008 FY 2009 FY 2010 FY 2011 FY2012 FY 2013 FY 2014 FY2015