Providing Responsive Information Technology Services with Limited Staffing in Williamsburg, Virginia

By Adam Szumski

The city of Williamsburg, Virginia, is a small jurisdiction at the heart of the Virginia Peninsula. The city's technology needs are fulfilled by a small information technology (IT) department that strives to provide effective and responsive services to all city employees. Williamsburg is not alone in this sense; the median staffing of IT departments in FY 2012, measured in full-time equivalents (FTEs), was 2 FTEs for jurisdictions with a population of 25,000 or less. As Figure 1 suggests, these FTEs also comprise a smaller percentage of overall jurisdiction employment levels, requiring them to provide services to a larger share of jurisdiction employees than those in larger jurisdictions.

Williamsburg's IT department, which consists of a director and two additional staff members, fulfill the technology needs of 183 total FTEs across six facilities. The department provides two specific services to ensure that everyone else in the organization can do their job effectively. First, the IT staff prioritizes help desk response and resolution times. Second, the department maintains a central database system for performance data and train staff on the use of the city's performance dashboard software.

| CASE PROFILE |
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| **Williamsburg, Virginia** |
| **Population:**
14,256 |
| **Square miles:**
9 |
| **Median household income:**
$50,794 |
| **Form of government:**
Council-manager |

Figure 1: IT staffing by population cohort, FY 2012
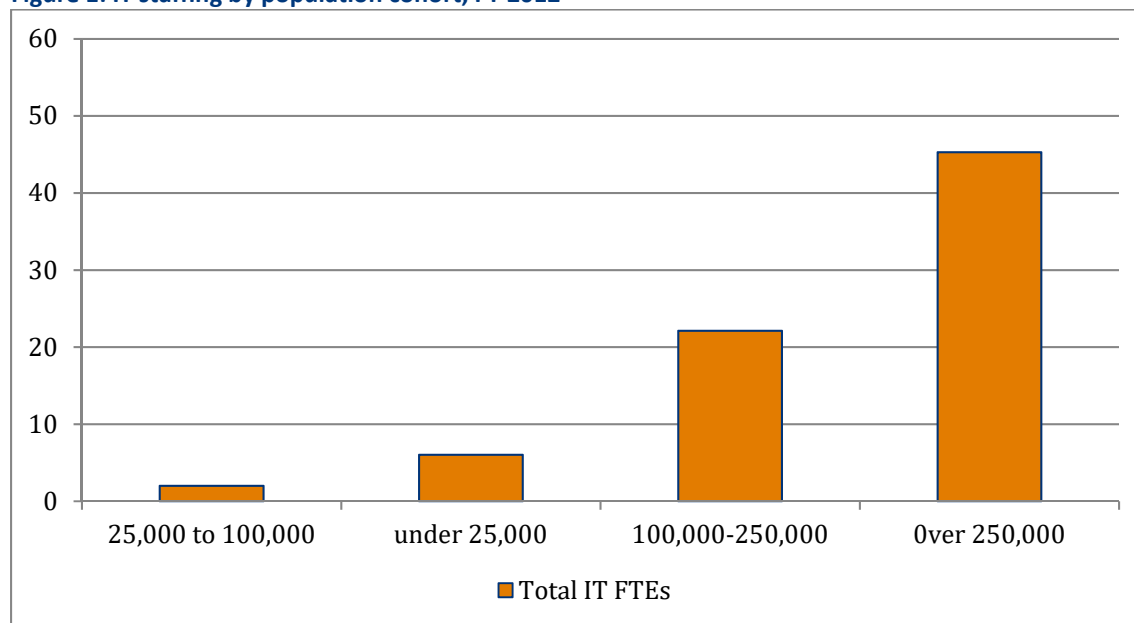
Help desk response and resolution

Balancing planned work and the unplanned nature of help desk requests can be challenging for small departments. Prior to April 2011, the Williamsburg IT department's average response time to requests would commonly exceed one working day. It was around this time that the department made a renewed commitment to response times, seeing it as a crucial step to informing jurisdiction staff of the work that was being done to resolve their issue. Several actions were taken to prioritize this initiative. Jurisdiction staff members are strongly encouraged to utilize the city's web-based help desk request system. Although Williamsburg employees often know which IT staff member will resolve their issue by the very nature of the problem, the web-based system will alert each IT staff member via smartphone and more accurately capture the request's time of origin compared to a phone call that might go to voicemail. In addition, one IT staff member oversees the initial help desk response process, diagnosing the issue and informing the applicable department member of the work needed to resolve the request. Lastly, the department has established targets for performance. It is the goal of the department to keep average response times under two hours and average resolution times under eight hours.

Figure 2: Average response time for help desk requests in hours, Williamsburg, Virginia
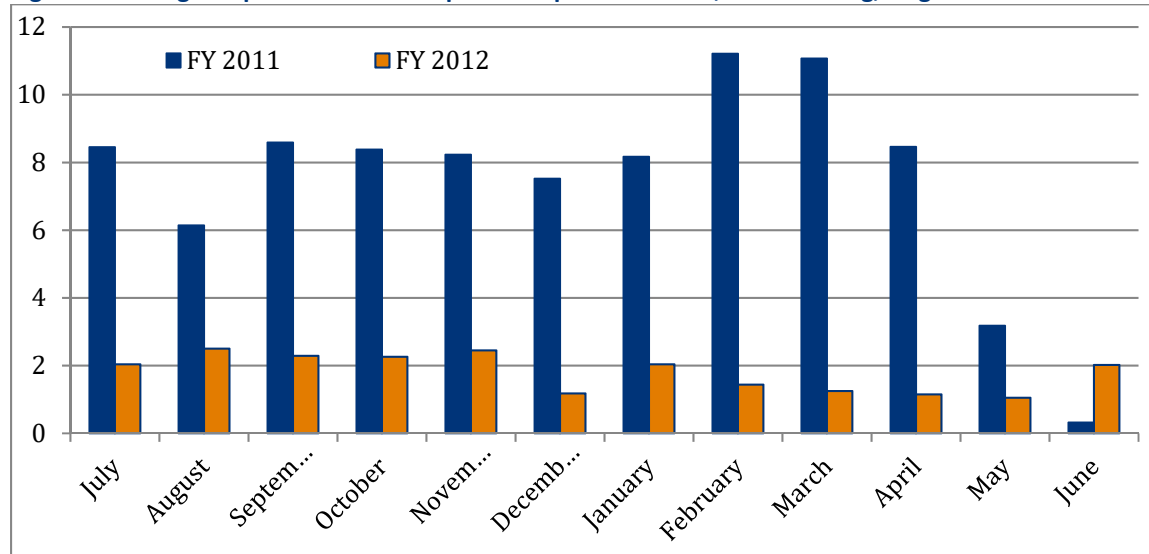
Since adopting these targets and prioritizing the process, Williamsburg's IT department has notably improved help desk performance without any substantial change in technology. Monthly response time averages routinely meet or exceed the two hour target while monthly resolution time targets were met in three of the first four months of Williamsburg's 2013 fiscal year.

Database management, staff training, and data element creation

In addition to help desk performance, the services of the Williamsburg IT department are a crucial component to the city's performance management system. The department maintains a central database system with SQL Server technology that acts as the foundation for evidence-based management. In 2009, the city worked with its financial software provider to create a user-friendly performance dashboard that takes full advantage of the city's data infrastructure. Since the dashboard's inception, the IT department has provided data services to Williamsburg employees through trainings and data element creation.

Dashboard training began in August 2010 when department heads and senior management staff were introduced to the new software. Common data elements (data tables and graphs created from the back end of the database system through SQL programming) used by management staff include revenue and expenditure tables, account information, and performance metric graphs. For instance, the IT director's dashboard includes 20 data elements including account tables, e-government revenue figures, and help desk statistics. Use of the dashboard, however,

is not limited to management staff. At the time of this publication, nearly 100 city employees had been trained in the use of the dashboard tool, including a recent training session for 20 police and fire department personnel.

Part of the work that makes extensive use of the dashboard possible is the creation of data elements. Through the work of the city's database specialist, city employees have easy access to over 200 data elements. When an employee has an idea for a data element that is not readily available, it can be requested through a help desk request. As new data become available, the elements update in real time. Last but not least, the city has created a public component to their dashboard, allowing citizens to track key city performance indicators that align with Williamsburg's biennial goals, initiatives, and outcomes.

Conclusion

The technology demands of a local government are extensive, particularly for smaller jurisdictions with limited staffing. However, establishing performance targets that balance the various tasks that compete for the department's time (while explicitly assigning initial help desk response duties) can forge the path towards high performance. Using available technology to its fullest extent can improve the use of performance data throughout an organization. As a service-oriented team, the Williamsburg IT department addresses technology problems for fellow staff members and provides them with the tools to make evidence-based decisions in their daily work.

For more information on Williamsburg's performance, please contact Mark Barham, information technology director, at mbarham@williamsburgva.gov. To see the online component to the city's performance dashboard, visit http://www.williamsbur gva.gov/index.aspx?page=1127 (link to launch the dashboard is found at the bottom of the page).