County of Barnstable
Information Technology Department

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Overview

In the first half of Fiscal Year 2016, the County’s IT Department has continued to build internal efficiencies in order to reduce operating costs, and increase regional service capabilities.

Regional IT Service efforts have expanded as predicted, but are limited by staffing levels in most areas. In order to compensate temporarily, special revenue accounts have been established to broker services from outside vendors for projects as needed. To further balance and redistribute the additional workload, additional measures have been taken to streamline or selectively reduce service levels for internal operations.

The recognized value of this strategy is that it ultimately provides revenue to the County and builds economies of scale for participating municipalities throughout the region.

Additional funding is required in order to continue operational effectiveness as well as expand and develop services provided internally and externally.

**Information Technology Systems and Environment**

Previous investments in the County’s IT infrastructure have paid off immeasurably. Current platforms not only allow for the safe and continuous operation of County systems, but also provide enough headroom to service other municipalities as tenants.

Currently 131 servers are hosted in a fully virtual environment. Server and storage infrastructure is running at 37% of total capacity, with 4,623 kilowatt-hours of electricity consumed monthly.

Registrations for 55 domains (.org, .com, and .gov) are held and managed centrally. Security certificates (SSL) for websites are also managed in this fashion.

The IT Department is responsible for the hosting and management of 29 active websites.

Available bandwidth for general Internet and inter-municipal traffic is 1 Gigabit symmetrical, delivered through Regional Wide Area Network contract over OpenCape fiber.

Additional dedicated fault-tolerant Internet connections are provided for critical services, with a contiguous block of 254 public IP addresses.

Between 120 and 150 devices are connected to the County’s wireless networks daily.

On an average week, the County receives 108,509 email messages, and sends 14,786.

Spam accounts for approximately 48% of all messages received at the perimeter.

The County’s email environment is home to 997 accounts, and 3 tenants, including the County.

Currently, 332 workstations and laptops are supported, with a 21% annual refresh cycle.

Approximately 72 public meetings are recorded, streamed, edited and archived annually.
Regional IT Services

Efforts to formalize the IT Department’s approach to regional service offerings have been underway for most of 2015 calendar year. Steps taken include the vetting of proposed strategies and draft materials through third parties and other outside resources, including research and advisory firms as well as peers throughout the Country.

Materials pertaining to regional services submitted to national awards programs yielded positive results; the County was placed in the top 10 Digital Counties for the second consecutive year by the Center for Digital Government. Second, we received a Technology Solutions award for Regional IT Services from the Public Technology Institute.

Of the 15 towns on Cape Cod, 10 have directly expressed interest in Regional IT Services from Barnstable County.

Of the 10 interested parties, four have produced letters of intent, and have subsequently contracted with the County for services.

Discussions continue as time allows with a number of other towns on an informal basis.

On average, the IT Department provides between 70 and 80 hours of services to towns.

Revenue generated by existing contracts: $214,125.10 (annual recurring)
Expected new revenue: $59,398.00 (annual recurring)
Total projected revenue: $273,523.10 (annual recurring)

Additional revenue generated through one-time engagements: $93,780.00

Positive Trends

In October of this year, Truro and Chatham’s email operations were migrated to County systems. With regards to Chatham, migration was expedited due to server outages in the town. IT staff and outside engineers worked around the clock to migrate systems and restore service. This outage proved to be a great real-time test of the regional fiber network, allowing systems to interoperate as though they were directly connected.

Work on unified communications hosting is also well underway. We are currently in the process of migrating Chatham to the County’s shared platform, and plans are being finalized to do the same for Truro and Wellfleet.

Apart from hosted services, Falmouth, Truro, and Wellfleet all have ongoing commitments for general IT assistance through the County. While there has been no shortage of this type of request, the IT Department’s capacity to deliver such services at an increased volume is of great concern. For this reason, all future requests must be approached with caution.

Page 3 of 3