Town of SALISBURY

Report prepared By: Allison Poirier, Amelia Percentie, Michael Pineau, and Michael Hamel

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EXECUTIVE SUMMARY

The Town of Salisbury adopted the Business Continuity best practice in December of 2015 as part of a Community Compact agreement signed with the Baker-Polito Administration. The Town partnered with the Office of Municipal and School Technology (OMST) at MassIT to develop a Business Continuity Plan and leveraged a Community Compact grant to procure the services of Net Technologies, Inc. of Amesbury, Massachusetts to design a "turn-key" fiber network to connect all the Town buildings on a common, high speed network and perform several other technology enhancements. The Town chose this best practice because they are reliant on external vendors for technology support, which makes long-term technology planning a difficult and expensive exercise.

Community Profile

The Town of Salisbury is located in northeastern Massachusetts in Essex County. Modern Salisbury is highly diverse in geography and nearly 90% of the Town is open space. Historically, Salisbury has been known as a resort town, with Salisbury Beach State Reservation as a centerpiece. It's one of the most popular Commonwealth reservations, attracting over one million visitors a year.

Population is 8,283 residents*
Annual Budget is $22.9M (FY 2016)
Median Household Income is $49,310*
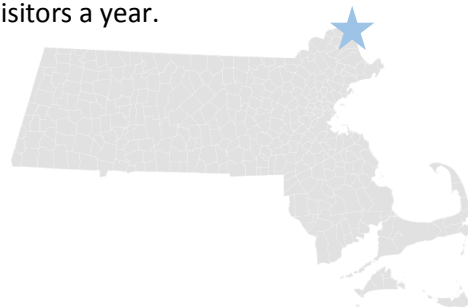*As of 2010 census*

In partnership between:

Office of Municipal and School Technology MassIT

BACKGROUND

The small Essex County community of Salisbury, like other communities of similar size, needs to balance the growing technology needs of the Town with the fiscal realities of its modest budget. With a population of over 8,000 which doubles during the summer months, having a solid technology environment in place is critical to deliver services that meet constituent expectations. Salisbury has no internal information technology department. Instead, it relies on third party vendors to perform all support functions. This makes planning a costly exercise and strongly informed the Town's decision to seek technical assistance and grant funding through the Community Compact.

In particular, the Town was concerned about their email system. At the time, email was being backed up offsite for a period of 30 days. To improve the ability to recover and maintain records in the event of a disaster, the Town sought to reevalutate and improve their existing processes. The Town also expressed interest in connecting their buildings with fiber, which would allow all municipal buildings to operate on a common, high speed network for greater productivity and security. Without an internal IT department, designing such a system would not be an easy task without assistance.

PROJECT PROCESS

MassIT's Office of Municipal and School Technology partnered with Town officials to develop a Business Continuity Plan. The Plan consisted of several elements: a Business Impact Analysis, Emergency Response Plans, and Disaster Recovery Plans. OMST also agreed to help Salisbury develop a required deliverables matrix and statement of work for the identified network vendor.

Salisbury's Business Impact Analysis (BIA) Overview

The first step of the process was performing a Business Impact Analysis (BIA) for the Town. The BIA process consists of four steps: (1) Identify Essential Functions, (2) Develop Findings for Each Essential Function, (3) Create an Action Plan for Functional Gaps, and lastly (4) Develop Detailed Remediation Plans. These four steps were repeated, cyclically, until the findings were complete and documented in a BIA master document.
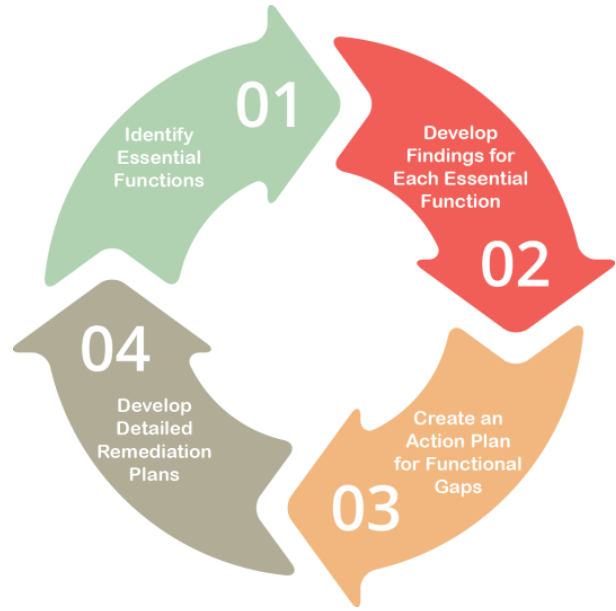
Step 1: Identify Essential Functions
In this first step, OMST partnered with Town officials to document essential functions (EF), or services, which residents depend upon. Following that, recovery time objectives (RTOs) were identified. An RTO is the maximum amount of time a business service can be unavailable without causing unacceptable consequences. In addition to RTO's, recovery point objectives (RPO) were also documented. An RPO is the maximum amount of data that can be lost before it becomes unmanageable to reconstruct.

A table of Salisbury's departments and essential functions is below:

DEPARTMENT	ESSENTIAL FUNCTIONS
Affordable Housing	**Works with developers to increase supply of units that are reserved for people who are of low to median income**
Assessor	**Determine values for all Real Estate and Personal Property, administer all motor vehicle, farm and boat excises, conduct inspections, determine annual new growth, maintain current and accurate records on all property; assist in determining sewer betterments and commit original and apportioned betterments; provide public information, administer and maintain records for personal, charitable and agricultural exemptions; assess, administer and defend State-owned land values; assist property owners and real estate professionals in obtaining information about properties located in Salisbury**
The Council on Aging and Elderly Affairs	**Transportation to medical appointments, therapy, and shopping; Hot nutritious meal served onsite daily; Home-delivered meals available to homebound elders; Ongoing social & education programs, such as crafts, bingo, computer classes, and health insurance counseling; Monthly health screening, such as blood pressure clinic, podiatrist services**

Emergency Management	Plan and respond to all catastrophic events including flooding, hurricanes, tornados, major snow storms, ice storms, etc.; work closely with both the Massachusetts Emergency Management Agency as well as the Federal Emergency Management Agency in planning, responding to events, disaster recovery efforts, as well as regular training events related to the Seabrook
Finance	Supervise Financial Services Department; perform daily administration of the Town's financial affairs; coordinate and manage the budget; prepare revenue forecasts; plan for capital expenditures; supervise cash management and investment programs; responsible for long-term debt financing
Fire Department	Provide fire protection, rescue, medical assistance and emergency aid to the community; perform fire hazard related inspections; perform community education and outreach and enforce by-laws and state regulations
Harbormaster	Supervise the activities on the tidal community waters to ensure boater safety and compliance with by-laws and state regulations
Health Department	Investigate health problems and hazards; participate in epidemic and disease prevention programs; respond to disasters and assist in recovery operations; Inspect school and business food processes; monitor Title V (septic system) compliance; enforce federal, state, and local health laws and regulations; inform, educate, and involve residents in health protection matters
Human Resources	Manage employee HR need; manage all town insurances, develop policy and procedure manuals for employees; assist Town Manager in administrative tasks
Inspectional Services	Conduct all construction permit related inspections to ensure public safety and compliance with local, state and federal by-laws, building codes and regulations
Library	Provide services to meet the informational, educational and cultural needs of the community; provide access to holdings at more than 40 local libraries as well as libraries outside the region; assist with genealogy research; conduct programs for children and adults
Planning and Development	Provide advice and guidance on opportunities with development matters; facilitate responsible and quality development; provide information on planning and conservation issues; assist the business community with their development, permitting and operational needs

Police Department	**Engage in crime prevention; participate in neighborhood crime watch program; conduct criminal investigations; supply accident and incident forms; issue firearms permits; provide driving manuals; perform community education and outreach**
Public Works	**Stormwater management; drinking water management; wastewater operations; water and sewer billing; improvements to Town infrastructure; snow & ice operations; operate and maintain Recycling Center; maintain Town buildings and grounds; maintain parks and ball fields; administer and oversee community recreational activities; provide seasonal beach services; engineering review and approval of all plans to construct, extend or improve roadways, sidewalks or install utilities within a right-of-way; review new subdivision and site plans; assist with special town projects; assist with special town projects**
Town Clerk	**Register voters, conduct elections; Issue licenses and permits, such as marriage licenses, birth and death certificates and dog licenses; conduct census; issue reports**
Town Manager	**Responsible for overall fiscal management of the Town, including development of annual Town budget; appointment of all department heads and other Town employee; appointment of members of the Board of Health, Conservation Commission and Zoning Board of Appeals; personnel administration; rental, use and maintenance of all town-owned property except schools; purchasing; negotiating all collective bargaining agreements; grant writing**
Treasurer and Collector	**Bill and collect all taxes, fees and fines; manage all Town bank accounts; oversee Tax Title accounts and property auctions; prepare Municipal Lien Certificates and inform Town Officials of financial matters**
Veterans Services	**Provides services to veterans in Amesbury, Merrimac, Newburyport, and Salisbury**
Wastewater (Sewer)	**Manage and maintain all aspects of the Sewer Treatment Plant including the office building, aeration system, lagoons, disinfection units and outfall; operate and maintain all pump stations; perform hookup, distribution and lateral inspections for property owners and contractors; review plans for development projects and perform various aspects of engineering and planning**

Step 2: Develop Findings for each Essential Function
Salisbury identified gaps for the essential functions identified in the previous step.

For example, the Town Clerk identified the email backup window of 30 days as a gap for the essential function of fulfilling public records requests.

EF#	DEPARTMENT	ESSENTIAL FUNCTIONS	GAP IDENTIFIED	GAP FINDING
1	Town Clerk	Register voters, conduct elections; Issue licenses and permits, such as marriage licenses, birth and death certificates and dog licenses; conduct census; issue reports	Email discoverability is potentially impacted by a limited backup window	Commonwealth requirements for discoverability of public records potentially conflicts with backup period for Salisbury's email system, creating a legal risk for the Town

Step 3: Create Action Plan for Gap Findings

Salisbury created an action plan for remediating the backup window to improve their ability to comply with the Commonwealth's Public Records Law in the event of a disaster.

EF#	DEPARTMENT	ESSENTIAL FUNCTIONS	GAP IDENTIFIED	GAP FINDING	ACTION PLAN
1	Town Clerk	Register voters, conduct elections; Issue licenses and permits, such as marriage licenses, birth and death certificates and dog licenses; conduct census; issue reports	Email discoverability is potentially impacted by a limited backup window	Commonwealth requirements for discoverability of public records potentially conflicts with backup period for Salisbury's email system, creating a legal risk for the Town	The Town will increase the backup period for the email system, mitigating the potential discoverability risk for public records

Step 4: Develop Detailed Remediation Plans
OMST staff provided Salisbury with emergency response plan and disaster recovery application templates. Informed by the BIA findings, Salisbury leveraged MassIT's tools and developed detailed remediation plans for all the gaps identified.

IT Assessment and "Turn Key" Network Design Overview

Salisbury leveraged a Community Compact grant to hire Net Technologies, Inc. to complete several network enhancements for the Town, including:

REQUIRED TASKS	DELIVERABLES
Design and create a "turn-key" fiber network design which will connect all Town buildings. This will allow all municipal data to be securely shared, stored and backed up on servers in locations that are geographically separate from the primary source. It will also allow for satellite offices to house their data on servers to reduce hardware redundancy by eliminating the need to replace some of the existing local workstations.	
Create a backup plan for the municipality where a centralized server will manage all backups in all buildings. The plan would include a disk array which would mirror all the backups from the Town servers. An additional server ("hot server") will be purchased for operation offsite in the event the primary site is impacted.	• **Network design documents** • **Backup solution with documentation** • **Email retention policy** • **New municipal firewall and routing rules**
Implement a new email retention policy and backup solution.	
Upgrade the Town's firewall for real-time monitoring of the entire Town network and provide rerouting of internet traffic in the event of outages in any of the buildings.	

Net Tech completed all required tasks to the satisfaction of the Town. The fiber network construction is now complete and all hardware and software have been purchased and installed. The activation in each building began in July 2017. The final step is the implementation of the new/revised data use and retention written policies and employee training which is ongoing.

Recommendations and Conclusion

MassIT recommends that Salisbury continue to revisit the emergency response and disaster recovery application materials on a regular basis. Business continuity plans are most effective when they are regularly updated as changes are made to the environment or as new threats to operations emerge. Regular BIA updates are also recommended as departments take on new or revised functions or implement new systems. MassIT commends Salisbury for their efforts to ensure that Town operations will continue in the event that unforeseen circumstances arise.