



# Town of Duxbury

## Business Continuity Best Practice

Prepared By: The Office of Municipal & School Technology

EOTSS | Executive Office of Technology Services & Security



Image: Duxbury Town Offices<sup>1</sup>

## Introduction

Founded and incorporated in 1637, the Town of Duxbury is in Plymouth County, Massachusetts. Today, the Town is primarily a residential community with a population of 15,059 and a median household income of \$123,613<sup>2</sup>. Located on the Atlantic coast, Duxbury is well known for its beaches, cranberry bogs, oyster beds, and shipbuilding era homes. The Town is also known for excellent educational opportunities, recreational activities, and town services. Like many other Massachusetts communities, Duxbury does their best to implement technology best practices within budgetary constraints. The Town has made great strides to improve its IT capabilities and provide enhanced municipal services using technology. Recognizing the importance of maintaining public safety capabilities and critical communication in the event of a possible disaster, the Town signed a Community Compact agreement to implement Business Continuity best practices. To support these efforts, the town received Community Compact grant funds to complete a comprehensive IT assessment. This report contains a summary of the work that was done to complete the initiative.

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<sup>1</sup> ToddC4176. "Duxbury Town Offices, Duxbury, Massachusetts". Wikimedia Commons. Accessed on January 15, 2019. [https://commons.wikimedia.org/wiki/File:Duxbury\\_MA\\_Town\\_Offices.jpg](https://commons.wikimedia.org/wiki/File:Duxbury_MA_Town_Offices.jpg)

<sup>2</sup> "Community Facts". United States Census Bureau. American Fact Finder. [https://factfinder.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml](https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml)

## Project Overview

In the Fall of 2013, the Town of Duxbury and the Town of Plympton entered into an agreement, creating the Regional Old Colony Communications Center (ROCCC), an effort focused on regionalizing their respective public safety dispatch operations. The ROCCC was expanded in 2017 to include the Town of Halifax and the Town of Rochester was added in the spring of 2018. Interest in joining the ROCCC grew rapidly and several new communities announced their intention to join the Center in the near future.

While the rapid expansion of the ROCCC was exciting news for Duxbury and the other member communities, it also brought on several challenges that had to be addressed to ensure seamless onboarding of new communities and stable long-term operation. Policies, Standard Operating Procedures (SOPs), technical standards and Disaster Recovery/Business Continuity (DR/BC) plans are integral elements to any successful IT operation, and the Town recognized that it needed assistance toward mitigating any significant gaps in these areas.

Leveraging Community Compact grant funds, Duxbury hired Norwell Technology Group, LLC (NTG) to perform a comprehensive assessment of their IT environment with a focus on Resiliency, Recovery and Contingency. The scope of the assessment was based on the existing state of shared IT infrastructure and services between the Town of Duxbury and the ROCCC. The Town's core infrastructure has been used by the Town and the ROCCC since the group was formed, and the Town's IT Department has since provided management and support of all shared technology assets and services.

This arrangement was fully expected to continue after the ROCCC's upcoming proposed facility's expansion and reconstruction. However, the ROCCC's strategy on IT service evolved from a shared IT services model to one that included a complete separation of infrastructure and services. This shift had an impact on the value of some of the findings produced by NTG due to the unforeseen diversion from the group's original approach toward the assessment. NTG conducted its discovery and approach of the following project deliverables based on the original scope.

1. Perform comprehensive review of existing IT governance, assets, processes and services. This review included the collection and examination of all existing artifacts, including plans, policies, SOPs, Service Level Agreements (SLAs), as-builts and previously conducted studies.

2. Document the findings of the study in a report that includes the following:
  - a. IT best practices related to Resiliency, Recovery and Contingency
  - b. Gap analysis and risk assessment of the Town's existing environment
  - c. A high-level Disaster Recovery plan for essential IT functions
  - d. Recommendations for improvement and remediation
  
3. Conduct a meeting with the IT Director to discuss changes to the document; revise and finalize the document as requested.

## Discovery & Analysis

### ORGANIZATION

NTG analyzed Duxbury's organizational policies, structure, and connection to the ROCCC. They documented key stakeholders and technology solutions that contribute to the regional group's success. NTG also documented the Town of Duxbury's future goals as they relate to the ROCCC and evaluated the Town's current best practices to determine if there were any gaps in need of remediation.

### INFRASTRUCTURE

The NTG reviewed the group's plan for IT infrastructure and documented their findings. They particularly focused on Duxbury's fiber network, servers and storage, personal computers, telecommunications, power protection, and climate controls, and identified any best practice gaps.

### NETWORK & DESKTOP SERVICES

In addition to IT Infrastructure, the NTG evaluated the following services, making note of any best practice gaps.

- Windows Server Services
- Security (i.e. virus, malware, ransomware protection)
- Office Automation, Email and Collaboration
- Domain Hosting
- Internet
- Network Management
- Remote Access/VPN
- Backup/Disaster Recovery (Cloud & On-Premise)
- Border Security/Firewall
- Telephone

## **OPERATIONS & SUPPORT**

Pending the successful acquisition of E911 Grant funding, it is understood that the ROCCC will engage an IT Managed Services Provider (MSP) to provide maintenance and support of all IT systems and services in the new ROCCC facility. These services will be transferred from Duxbury ITD to the new MSP including Help Desk, Desktop Support, Network Management, Server Management, Backup & Disaster Recovery.

## **PRODUCTION APPLICATIONS**

The reliability and performance of production applications is largely dependent on infrastructure, network service, and support. For this reason, the scope of the engagement also included the identification of applications in use and documentation of their functions. Examples of applications include the organization's financial, dispatch, and incident report writing systems.

## **RISK & CONTROLS**

The NTG reviewed the ROCCC's risk and controls processes with focus on Duxbury's Criminal Justice Information System (CJIS), Police Department, and documented backup and recovery procedures. Once the review was complete, the NTG documented any gaps that were found and provided best practice recommendations.

## **RECOMMENDATIONS**

Based on their assessment of the ROCCC, the NTG provided 14 recommendations that could also be applied to the Town of Duxbury. The recommendations touched on different areas of IT, such as Backup & Disaster Recovery, CJIS, the Fiber Network, formal IT policies and procedures.

## **Conclusion**

The scope of this project was largely based on the existing state of shared IT infrastructure and services between the Town of Duxbury and the ROCCC. During their engagement with the Town, the NTG performed a comprehensive review of existing IT governance, assets, processes and services. They documented their assessment findings in a report and met with the Town's IT Director to finalize the document. Today, the Town of Duxbury has a better understanding of their shared IT environment with ROCCC after completing the engagement with NTG, as well as a list of best practices going forward.