

Information Technology

Strategic Plan for Information Technology



Introduction

The Information Technology Strategic Plan for 2017-2022 is the product of an inclusive planning process involving staff from three large municipal departments, Police, Fire & Rescue and Community Services, a public body member / citizen representative and a vendor partnership representative. Municipal employees were chosen from a variety of management levels.

The review committee will consist of the following members:

1. Public Body Member – Jan Nedelka
2. Citizen – Jan Nedelka
3. Vendor – Steve Bond, Director of Operations, Oxford Networks
4. Department Head – Police Chief Colarusso
5. Employee
 - i. IT Liaison – Assistant Fire Chief Paul Haas
 - ii. Non- IT Liaison – Community Services Maint Mechanic III Dean Truax
6. IT Director - Annie Dove

As part of the City of Dover's Framework for Performance Excellence, each department develops its own strategic plan which works in conjunction with the City's Master Plan to guide the community. This Strategic Plan builds on the accomplishments from earlier strategic planning efforts. It presents a vision, mission, core values, goals and objectives developed in collaboration with staff and management. This plan includes a performance-based management framework that will ensure the continued success and effectiveness of work.

The Strategic Plan reviews identified issues and challenges for the Department organized around four major goals:

Goals

- A. **Public Information, Outreach, and Engagement** - Increased public awareness and understanding of issues and ensure public participation is vital to the continued success of all public organizations.
- B. **Workforce Development and Management** - Attracting, developing, and retaining a high-quality, diverse, professional staff with the ability to create innovative, implementable plans and the expertise to facilitate service delivery.
- C. **Organizational Excellence and Customer Service** – By maintaining effective internal systems and processes we enhance overall organizational performance and responsiveness to customer needs and expectations.
- D. **Infrastructure and Technological Assets** – Through the application of efficient and modern use of technology and infrastructure staff is able to accomplish high quality services delivery.

Each of these four Goals has a set of specific objectives, actions and performance measures to assess progress. These have been listed in an Action Plan that serves as a road map for action.

Vision Statement

The City of Dover Information Technology Office's vision statement as derived from the collective input of citizens, business owners and other key stakeholders interested in the long term future of the community is as follows:

"The Office of Information Technology (IT) is a trusted partner in creating solutions and by consistently providing accurate and responsive data to support decision making. IT Office leadership deploys forward-thinking and accessible technology for use by both municipal staff and the Dover community. The IT Office safeguards resources, actively listens at all levels of the municipal operation, transparently communicates and prioritizes Office of Information Technology work."

Mission Statement

The City of Dover Information Technology Office's mission statement reflecting the purpose to be served by the existence and ongoing efforts of our municipal operations is as follows:

"To promote the Dover community's connection to their local government services through the use of easily accessible and accurate information services. To support and assist municipal staff by providing access to responsive, easy-to-use, secure and reliable information technology systems and services."

- *Provide accurate and meaningful information to the Dover community via various media outlets including online communications, cable TV, social media, print and radio.*
- *To collect, maintain and distribute GIS-based information on infrastructure, facilities and features within the municipality.*
- *Manage the information technology systems and services lifecycle through design, implementation, maintenance and replacement."*

Core Values

The core values representing the beliefs and behaviors by which all members of the City of Dover organization shall conduct ourselves and providing a common basis for making and evaluating all decisions and actions are as follows:

Customer-Focused Service – We engage our customers, with a focus on listening to and supporting their needs, anticipating and delivering high quality services and ensuring their satisfaction.

Integrity – We conduct ourselves at all times in a manner that is ethical, legal and professional, with the highest degree of honesty, respect and fairness.

Innovation – We develop creative solutions and share leading practices that enhance the value of services provided for our customers.

Accountability – We promote openness and transparency in our operations ensuring that we are accountable for our actions at all times.

Stewardship – We serve as trusted stewards of the public's financial, environmental, social and physical resources always seeking to responsibly utilize, conserve and sustain for current and future generations.

Emerging Issues and Challenges

The Information Technology (IT) Strategic Planning Committee identified both areas of strength where ongoing processes and planned projects should continue as well as areas of opportunity to address current challenges.

The committee identified the opportunity of leveraging industry convergence of technology-driven services such as communications, systems, software and mapping. *(Issue 3 & 6)* Communications includes a large scope of both office and mobile voice and data as well as applications, systems and services. A second ongoing and important function is hardware and software inventory management and replacement planning. *(Issue 10)* Lastly, the committee noted that the Information Technology Office should complete current priority projects that provide value to the City of Dover. *(Issue 5)* An important function that requires ongoing effort of continuous data maintenance, refinement and controlled growth is asset management, with a requested focus on utilities. *(Issue 2)*

Today, the IT Office shares support request and project information via intranet site, quarterly meetings of IT committee and bi-weekly meetings of department heads. Our challenge is to ensure that all employees have an awareness of and a feedback mechanism for IT activities that relate directly to their job function. This work would improve the alignment of IT objectives and deliverables with the needs of the municipality. *(Issue 5)*

A key challenge is addressing the concern that new technologies will increase workload or otherwise negatively impact an already busy operation. Getting buy in on change and new technology at all levels of the organization requires communication. IT must remain open-minded and adaptable while educating, informing and working cooperatively with departments. IT must balance speed of new service delivery with comprehensiveness of service delivered. *(Issue 5)*

Public safety services have noted a significant increase in their reliance of technology within a 7x24 environment. *(Issue 7)* Examples of this are field-based laptops and tablets, VoIP services, an explosion of technology incorporated within building systems and infrastructure. As a result, the IT office reports a significant increase in supported systems and services. *(Issue 9)* The committee identified both increased staffing levels and additional training would allow better IT service delivery. *(Issue 5)* Specific roles mentioned were a business analyst, office secretary and Fire & Rescue Department IT technician. Also mentioned was the opportunity of delegating select IT administration and management work to departments thereby empowering them to improve response time and offload work from core IT staff. *(Issue 7)*

Two issues raised focus on the area of accessibility. Making infrastructure information and work orders more accessible as well as easy to use both in the office and in the field. *(Issue 1)* Improve public accessibility, search-ability of public records and better integration of public bodies with municipal operations. *(Issue 8)*

Lastly, the challenge of vendors' rapid upgrade cycles, which drive change, as well as annual cost increases for systems and services was an area of concern. *(Issue 4)*

Action Plan: Goals, Objectives, Actions & Outcome Measures

The responses to the Issues and Challenges listed in Section 2 are provided in the following Matrix. The Matrix lists the four Goals and their corresponding Objectives, Actions and Outcome Measures.

The four Goal areas are:

- A. Public Information, Outreach, and Engagement
- B. Workforce Development and Management
- C. Organizational Excellence and Customer Service
- D. Infrastructure and Technological Assets

The Matrix also:

- Identifies the timeline for implementing each Action
- Identifies the responsible person or people tasked with performing the Action
- Indicates which Issue or Challenge is being addressed by the proposed Action

Goal Area: A. Public Information, Outreach, and Engagement

- Objective 1: Improve accessibility and searching of City of Dover public records.
Objective 2: Communicate methods of engagement available when working with/for public bodies.

Goal Area: B. Workforce Development and Management

- Objective 1: Ensure the Information Technology Office is current in their industry knowledge and skills.
Objective 2: Ensure municipal employees have baseline office productivity and appropriate enterprise application skills.
Objective 3: Provide services to empower departments in making data driven decisions in a timely manner. Easy to use by department administrators.

Goal Area: C. Organizational Excellence and Customer Service

- Objective 1: Communicating current priorities, schedules, plans.
Objective 2: Managing change, collective decisions, advanced communications.
Objective 3: Identify areas of ownership of IT administrative procedures.

Goal Area: D. Infrastructure and Technological Assets

- Objective 1: Identify and prioritize information needed by staff in the field. Develop processes for collecting initial data and following data changes in the above information sets
Objective 2: Hardware and software inventory management and replacement planning.
Objective 3: Align Information Technology Office services and funding with organization needs.

Appendix

SWOO Analysis

The SWOO Analysis below was conducted to support the creation of Issues and Challenges identified in Section 2.

	Helpful	Hurtful
Internal Origin (Within the City of Dover, NH Municipality)	<p>STRENGTH</p> <ul style="list-style-type: none"> • Trust • Transparency • Collaboration • Attention to detail • Organizational skills • Accessibility of IT Staff, Accessible / approachable, Open door • Willingness to help / find solutions • Resourceful and creative problem solvers • Knowledge of Staff • Recent addition of more staff • Training and orientation of new employees • Low staff turnover, years of shared IT and Dover knowledge • Finance system that provides delegation of work, appropriate checks & balances, timely, accurate reporting. 	<p>WEAKNESS</p> <p>ACCESSIBILITY</p> <ul style="list-style-type: none"> • Keeping information easy to understand for everyone • Accessibility to end user (employee) • Bridging the gap between knowledge bases (employee v IT) • Fear of information technology • Resistance, due to changing things, due to assumption of increased workload. • User-friendly public access • Better search tools • Outlook / calendar integration with outside users (i.e. scheduling with iCal or Google users) • Ease of integration for citizen volunteers <p>GROWING SERVICE NEEDS / FUNDING</p> <ul style="list-style-type: none"> • Shifting priorities • Change management • Added areas of responsibility. • How to support a 24x365 with IT resources • Lack of support staff for office admin tasks • Lack of training personnel • Future planned space not compatible with office needs. • Lack of funding to enhance all areas <p>BALANCE OF ENTERPRISE SOLUTION AND NEW SERVICE DELIVERY TIME</p>

		<ul style="list-style-type: none"> • Interdepartmental knowledge • Processes that are disconnected, not documented. • Department may not look at entire municipality in order to get task accomplished quickly • Schism between school / municipality • IT viewed as an obstacle to bringing new services online quickly • Not able to be cutting edge of technology due to funding / time constraints • Disconnect between IT project goals and field employees' needs • Get more people to buy into asset management
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">External Origin (Outside the City of Dover, NH Municipality)</p>	<p>OPPORTUNITY</p> <ul style="list-style-type: none"> • Very good projects in place that need to be finished • Awareness of available tools & opportunities • Clarity of what is and is not available • Better and clearer communication of municipal services • Feedback • Increase efficiency • Allowing Departments to take charge of their own data • Leveraging existing vendor relationships to solve / meet goals • New technology • Robust backups <ul style="list-style-type: none"> a. Phishing protection b. Ransomware c. General awful things breaking • Cloud-based opportunities • Internally managed cloud • Convergence of resources: technology, communications, maps, software, systems • Rapid development of mobile applications and technology • Stable broadband connections. Municipal fiber campuses. 	<p>OBSTACLE</p> <ul style="list-style-type: none"> • Annual increases in subscription, license, and maintenance costs. • Cloud-based costs • Cybersecurity; expertise, staff, time • Keeping up with changing security • Phone services continue to rate low on employee survey. • Outside changes that cannot be controlled • New Technology • Vendor development cycle • Outdated software • Anti-change • Staffing, outside talent, recruiting • No front-end filter for sales cold calls.

Issue and Challenge

Additional Issues and Challenges were identified within the organization in support of the IT Strategic Planning Committee's work.

From IT Strategic Plan Review Committee

1. Ease of use to access to infrastructure information and work orders in the both the office and the field. Public Works still has the old books. Would like solution similar to Police car computers.
2. Attention to detail, the right information for the people in the field. Some infrastructure assets are not showing in correct location. Asset management staff continuing to refine location information for utilities.
3. For Opportunity the convergence of mapping, technology, communications, etc. as well as Rapid development of Mobile Communications.
4. For Challenge, Clearly annual Increases and Cost as well as outdated and continually changing software (keeping up with changes such as Windows 7 to 10 to the next version)
5. I believe it is important to not lose focus on your current opportunities: Projects that are ongoing and provide value need to be completed.

Furthermore, aligning IT objectives and deliverables with the needs of the municipality is extremely important to your success and is identified in weaknesses as: Disconnect between IT project goals and user needs. Obviously, IT has some internal needs as well, staffing, training, achieving efficiency,... that may not directly correlate to internal client needs but in the end allow IT to provide better services.

There are a number of issues and challenges that are common and not surprising. I am referring to user acceptance of technology vs. IT ability to deliver technology. You as IT need an adaptable, open minded, change-accepting user base. However, you cannot expect the user base to be tech savvy. Users will be reluctant to change to new tools and technology if they don't see how the change benefits them. The dilemma for IT is how to deliver change that is not seen as negative, inefficient, difficult to implement, too complex to understand or is perceived as just 'not my job'. Success in overcoming these obstacles usually is directly attributable to getting buy in on change and new technology at all levels of the organization. Buy in requires communications, and requires IT to sell rather than dictate change.

6. Convergence of resources: Technology; Communications; Software; Systems
7. Allowing Departments to take charge of their own data. This isn't to say that we are being restricted by IT, but I think Fire/Inspection Services could use a designated IT person to manage all of our needs. This includes Admin driven projects, and the day to day needs of a Department with almost 65 employees, approx 25 workstations, 3 separate facilities and a growing use of both fixed and mobile technologies.
8. Improved public accessibility, search-ability of public records and better integration of public bodies with municipal operations.
9. Ever increasing selection of services to support.

10. Hardware and software inventory management & replacement planning.

From IT Office

1. Greater technical divide in employee base.
2. Data clutter, Duplication, Orphaned, and Maintenance. (Disconnect of information. Opportunity to flesh out procedures, correct workflow, get buy in.)
3. Prioritization of tasks, projects and services.
4. Opportunities - backups, new solution
5. Understaffed.
6. Backups - New solution.
7. Targeted training
8. PR for IT. Bolster role of IT liaisons in sharing technology.
9. Delegation of data input and maintenance.
10. Greater awareness of technologies and their application in other communities.

From IT Director and Deputy IT Director

Work that is moving in a positive direction that need to keep going.

1. Department collaboration and information sharing
2. Information in the hands of field workers
3. Radio communications network upgrade
4. Hardware and software inventory management & replacement planning.

Emerging issues / challenges that are preventing success.

1. Different and continually changing priorities. Often work in a reactive manner.
2. Phone System. Risk of convergence of voice/data, service loss impacts both. Poor service quality. Lack of management / insight of this network.
3. Ever increasing selection of services to support
 - a. Time clocks, access control, online evaluations, cameras, panic buttons, customer traffic counters, radio communications for water meters, traffic counts and cameras, wireless.
 - b. Finer granularity & larger set of asset management data
4. Training, for IT Staff and employees. Finding the time.
5. Limited success with some vendor applications; permit management, CAMA, Govern.
6. Increased network and security complexity with wireless WAN, mobile devices, cloud-based applications, contract review.