MassIT's mission is to drive the digital business of state government to meet the continually evolving needs of constituents, schools, businesses, and local government.
Strategy Considerations – Current State

• Where are we today?

• Are our buildings connected?

• Is there a recognition of the important role technology now plays in day to day operations?

• Do we know how IT dollars are spent across the organization?

• Have we, or are we prepared to make IT investment a priority?

• Have we developed a strong IT foundation, or are we getting distracted by the “cool stuff” without getting our house in order?
Strategy Considerations - Organizational

• Regional Consolidation
  – Do you have in-house IT resources today?
  – How are your relationships with surrounding communities?
  – Is it sustainable?

• Municipal Consolidation
  – Are Town, School and Public Safety staff collaborative?
  – Do you have or are you an engaged executive sponsor?
  – What are the outcomes you’re looking for?
  – Are you ready to deal with the overlapping and divergent needs of these different groups?
Strategy Consideration - Pace

• You can take a big bang approach, but you don’t have to, incremental change is good too!

• How did you answer the previous questions?
  – What steps need to be taken encourage collaboration across departments?
  – How can we open the lines of communication with neighboring communities?
  – How are we going to wrap our arms around what we spend on IT as an organization?
  – Who will be our champion?
  – Have we defined our organizational priorities?
Backup and Recovery

**Good**
Data is consistently backed-up and backups are periodically tested

**Better**
Data is backed-up to a different location in or near town, following generally accepted industry standards, and backups are periodically validated

**Best**
Data is backed-up to a location at least 30 miles away that meets strong industry standards, backups are periodically validated and there are well defined service-level agreements.

MassIT recommends that reputable cloud solutions be considered for this purpose.
What is "The Cloud"?

The practice of using a network of remote servers hosted on the Internet to store, manage, and process data, rather than a local server or a personal computer.

-Oxford Dictionaries
The Cloud Computing Stack or Cloud Flavors

• **Infrastructure as a Service (IaaS)**
  - A way of delivering Cloud Computing infrastructure – servers, storage, network and operating systems – as an on-demand service. Rather than purchasing servers, software, datacenter space or network equipment, clients instead buy those resources as a fully outsourced service on demand.  

• **Platform as a Service (PaaS)**
  - A computing platform that allows the creation of web applications quickly and easily and without the complexity of buying and maintaining the software and infrastructure underneath it.

• **Software as a Service (SaaS)**
  - A computing platform that allows applications to be delivered directly to the end-user, typically through a web browser.

Cloud Considerations

• Do you know if you're in the cloud?
  – Email, Collaboration Tools, Social Media?

• Not all cloud services are created equal
  – Is it a reputable, standards-based service, or is this cloud in someone's basement down the street?

• Datacenter security
  – Does the provider follow industry standard security practices?

• Datacenter Redundancy & Location
  – Does the provider backup your data to a secure geographically dispersed site, and where are these sites?

• Data Ownership and Retrieval
  – Are you the clear owner of your data, and how do you get it back if you end the relationship with the provider?
The Evolving Role of “IT”

• Increasingly, IT professionals are getting more engaged in the user experience, for both internal staff and the public.

• Trends like moving to the cloud free up time to focus more attention on how we effectively use the technology and improve business process.

• During your next IT project, ask yourselves -- are we effectively engaging our core users and is “the way we’ve always done it” the best or only way?

Pilot.mass.gov is creating a new digital face to Massachusetts to better meet our users where they are and on the devices they use.
• Increasingly important as more and more essential functions move from paper and pen to computers.

• Basic cyber security begins by implementing minimum security standards across your entire network:
  – Consistent, enforced password policy with regular password changes
  – Licensed, updated anti-virus and anti-malware software
  – Written and enforced acceptable use policies for network usage
  – Written plan in place if a cyber security incident occurs

• Most important: employee cyber security awareness
  – Employees are front line protection against threats
  – Should know how to prevent and respond
  – Should exercise good “cyber hygiene”
Social Engineering

- Cyber criminals use ever-changing techniques to lure or trick you into giving up your confidential data.
- Organizations are beginning to take advantage of tools that can mimic these social engineering threats and provide training opportunities for staff.

**TIP:**
Err on the side of caution if the text of an email is unusual or out of character and think before you click. Hover over links to make sure they are sending you where you expected.
Data Standards

- Data standards can open opportunities to collaborate, integrate or analyze data with external organizations – but standards can also open opportunities for collaboration and analysis across departments within your organization.

- Parcels and Addressing

- Building & Land Development Specification (BLDS)

- Local Inspector Value-Entry Specification (LIVES)

- General Transit Feed Specification

- Open311 - GeoReport v2

- License Validation API
HOW DO WE GET THERE?
Regional IT Meetings

• We believe regional IT groups provide great value, we support their formation, and are happy to participate where we can add value.

• These groups typically meet regularly to discuss relevant municipal technology issues and collaboration opportunities.

• Current groups include:
  – Western Mass Regional IT Directors
  – South Shore Regional IT Directors
  – Barnstable County IT Directors
  – No. Central Mass (*first meeting last month*)
  – Metro West IT Directors (*first meeting expected in July*)
  – North Shore IT Directors (*first meeting being planned*)

• Interested in participating or starting your own group?
  – Send an email to omst@mass.gov and we can help.
Cyber Security

**MULTI-STATE**
Information Sharing & Analysis Center™

- Network monitoring
- Early threat warning and advisories
- Mitigation and Incident Response
- Education Opportunities

https://msisac.cisecurity.org
How can MassIT help?

The Office of Municipal and School Technology is focused on providing value for our cities, towns and school districts.

- Discuss Grant and Technical Assistance Opportunities
- Investigate Procurement Opportunities
- Provide Data and Recommend Standards
- Facilitate Collaboration
Governor Baker’s first executive order created the Community Compact Cabinet to increase partnership between state and local government.

- Best Practices Program
- Efficiency and Regionalization Grant Program
- IT Grant Program

http://www.mass.gov/ccc
CCC Best Practice Program

Nearly 300 communities have signed compacts and we’re working with more than 115 communities on IT Best Practices.

• Strategic Planning

• Transparency & Data Standards

• Business Continuity
  – Including Cyber Security

• Citizen Engagement

http://www.mass.gov/ccc
• Competitive grant program to support implementing regionalization and other efficiency initiatives that allow for long-term sustainability.

• Open to:
  – Municipalities
  – Regional school districts
  – School districts considering regionalization
  – Regional planning agencies and councils of governments

• You can submit both a local and regional application.

http://www.mass.gov/ccc
CCC IT Grant Program

- The CCC IT Grant is a competitive grant program intended to support one-time, capital investments in innovative and transformative technology.

- While it is a very competitive program, we were able to award 52 grants in the first year of the program and we just announced another 47 in year two.

- Applications for the next round of the program are expected to open next spring.

http://www.mass.gov/ccc
Examples of IT Grants Just Announced Include:

- Regional Document Management for Williamsburg and surrounding communities
- Grants to Pelham, Agawam and North Andover to support document digitization efforts
- Consolidation of multiple financial systems in Merrimac
- New Accounting and Cash Management software in New Salem and 12 surrounding communities.

http://www.mass.gov/ccc
Digital Connections Partnership School Grant

- A competitive matching grant program to improve school infrastructure and support next generation teaching, learning and assessment.

- 113 schools across 41 districts have received support for wiring and WiFi throughout their buildings, and we expect that to double soon.

- MassIT submits the E-Rate Category 2 application on behalf of awarded districts, handles all procurement, and provides project management.

See the results at:
https://www.youtube.com/user/MassInnov8/
We work very closely with MassGIS and are happy to help you access their resources.

- A huge library of data layers
- Google Ortho Imagery
- An evolving addressing standard
- StandardizedParcel Mapping
- MuniMapper GIS visualization tool for small towns
Please feel free to reach out anytime!

Mike Hamel
Director, Office of Municipal & School Technology
michael.hamel@mass.gov or OMST@mass.gov
http://www.mass.gov/massit/omst
Local Government IT Trends

Mary MacKinnon
Project Manager, Technical Assistance Bureau
www.mass.gov/dor/local-officials/technical-assistance-bureau/
Agenda

• What is the Technical Assistance Bureau (TAB)?

• IT Modernization
  – Website
  – E-government
  – Citizen Engagement

• Vendor Relationships
What is Technical Assistance Bureau (TAB)?

• Best Practices through the *Community Compact Program*

• Consult and advise cities and towns on: **FREE OF CHARGE**
  – Financial Management Reviews
  – Government Structure-Shared Services
  – Self-service tools and calculators (www.mass.gov/dls)

• Whether your community is facing a particular issue, would like to implement a best practice, or could benefit from a general assessment of its financial condition, TAB can assist.

  **Zack Blake, Bureau Chief**  617.626.2358  blakez@dor.state.ma.us
IT Modernization

- Hardware, Software, Infrastructure
- 24 x 7 x 365 access
- Transparency
- E-government services
- Citizen Engagement and policy development
Website

- **Online Presence**
  - Up-to-date
  - Easy-to-use
  - Strong content management
  - Task or Process Oriented
    - How do I...?
    - Where do I...?
    - When do I...?

http://www.
E-government and Citizen Engagement

- Pay bills and tickets
- Obtain permits, licenses
- Report potholes, etc.
- Social Media
- Collaborate on projects
Open Data: Budget Visualization

- Build trust
- Transparency
- Communicate quickly and easily
- Interactive experience
- Reduce questions
Open Data: Budget and Checkbook

- Detailed transactions on how tax dollars are spent

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**Spending by Vendor (Total: $763,612.42)**

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**City of Springfield, MA Non-Payroll Disbursements FY 2017 YTD as of 6/8/2017**

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Strong Vendor Relationships

• Support Agreements
  – Ease the burden on internal IT resources

• Improve supportability and assist with staff turnover

• Vendors should know your business - extension of your office

• Advanced notice of new features and functionality

• Influence product improvements
Thank you!

Any questions, feel free to contact me at:

Mary MacKinnon
Project Manager
617.230.2320
mackinnonm@dor.state.ma.us
Implementing New Technology

- Request for Information (RFI)
- Strategic Sourcing Team (SST)
- Request for Proposal (RFP)
- Apparent Successful Bidder
- Contract
- New Solution
- Business Process
- Communication
Request for Information (RFI)

• What is out there?
• What are your options?
• Draft a better Request for Proposals
• Non-binding
• No Cost

• https://www.commbuys.com

• http://www.mass.gov/ig/procurement-assistance/
Strategic Sourcing Team (SST)

- Subject Matter Experts
- Tech Savvy
- Cheerleaders
- Nay-sayer
- Availability
- Commitment
Request for Proposal (RFP)

- Information gathered from RFI
- Balance between clarification and over specifying
- Follow procurement rules
- Manageable timeline
Awarding the Contract

- Individual or consensus scoring
- Document process
- Best and Final Offer
- Apparent Successful Bidder
- Contract negotiations
Finding the Solution

• Needs Assessment
  – Determine the requirements of the new system

• Inventory of Assets and resources
  – Computer equipment
  – Internet access
  – Technical competency of staff
  – IT resources

• Budget
Business Process

- Assess the current process
- Determine changes to software or changes to process
- Improvements to the current system
- Training, training, training
  - This should be done before, during and after implementation
  - Use super users to help out
Communication

• Keep the flow of information going

• Make sure the flow of information is going both ways...listen for the rumors

• The more you communicate, the less chance of rumors

• Keep a positive outlook – keep smiling
Questions and Contact

Cathy Marques

Office of Municipal and School Technology

Catherine.Marques@mass.gov

617-626-4634