

IT Service Sharing – December 16, 2008

Selecting Pilot Projects

- All towns surveyed and interviewed to assess needs and priorities
- Pilot projects will focus on projects that are both:
 - Good service sharing candidates
 - Good candidates for a “pilot” – can implement quickly, with a high probability of success, and set the stage for further projects
- Criteria developed for evaluating top candidates
- Finalists ranked against criteria
- Lots of excellent opportunities ... for now, more opportunities than funding

Criteria	Applications Server	On-Line Permits	Disaster Recovery	E-mail Archiving	Pet License	Document Management	Remote Backup
Responds to towns' priorities/needs	4	5	5	5	2	5	4
Show quick results	5	4	4	5	4	2	5
Low lifecycle cost	5	2	2	2	5	1	3
Increase revenue/reduce cost	4	4	3	2	3	4	3
Scalability	5	4	5	5	5	5	3
Sustainability/future projects	5	4	4	4	3	4	4
High probability of success	5	3	5	5	4	3	4
Amenable to shared approach	5	5	5	5	5	3	2
Community visibility	2	5	1	1	4	3	1
Buy-in from towns	4	5	3	3	3	4	3
Intangible benefits	4	5	4	2	1	4	4
TOTAL	48	46	41	39	39	38	36

1. Information and Applications Web Server

Description

The Information and Application Web Server would consist of a website, an ftp server, and a series of website tools to provide access to useful information to participating municipalities, including:

- Information on available software based systems provided by agencies such as State, Federal or by other municipalities for free or very low cost such as Pavement Management, Vital Records, Cemetery Management, and others.
- An ftp server that would provide a repository of available applications from the Public Domain, other municipalities, State Agencies, and Federal sources that would be free to download and use.
- A forum based system with categories setup based on common needs for area municipalities that would allow for participation and feedback from local expertise located in the participating municipalities. This forum would be available for purchasing suggestions, IT support, and Policy & Procedure information with options to add more.
- Frequently Asked Questions for common problems and issues that would be pre-populated with common questions and the corresponding answers. Frequent queries to the discussion forum would then be used to add to the FAQ database.
- Listings of useful regional vendors along with applicable contract references such as State, GSA, NJPA, Peppin, etc...

Implementation information:

Initial implementation Cost: Low

Ongoing management/maintenance cost: Low

Required commitment from towns: Commitments from Towns primarily would be IT expertise to the support forums to answer questions that are posed and willingness to create and update ongoing FAQ's. In addition a member town that has a good CMS system that could be extended to include as a separate domain the Website could be considered.

Likelihood of success: High

Major risks/stumbling blocks: Low participation by municipal IT technology experts in answering forum questions, keeping current with available low cost or no cost software applications, and maintaining the Regional Vendor List.

Benefits:

This system would augment all other initiatives by providing a central place to obtain and share information and software. During the needs assessment, it was found that a number of applications that towns are interested in are available to municipalities that are simply not presently advertized. The site would allow for shared information, and allow municipalities who have access to public domain software to share these resources. The site would provide a usable forum to continue the process of generating more ideas relating to shared services. It could be implemented quickly and at low cost and provide immediate benefits to towns. The site would provide a direct benefit to purchasing departments and information technology departments for quickly finding the most cost effective purchasing mechanisms and questions to problems relating to systems commonly in use in the Connecticut area.

2. Online Permitting System – Building Permits

Description

Online Permitting Solutions automate and simplify the permit application, review, re-submittal, approval and inspection processes. Some online permitting systems offer the ability for citizens and contractors to apply and pay for permits online as well as check on the status of permits.

Low-end: enable individual department(s) to improve workflow but may lack integration capabilities with other backend systems (Tax Collector, Assessor, GIS) and may not offer online or Internet capabilities.

Mid-end: enable department and enterprise-wide access to permitting information, integrate with other backend systems and provide accountability throughout permit application process. Internet components may be available for citizens and contractors access. Affordable but may lack certain enterprise-wide functions.

High-end: enable enterprise-wide access to permitting information, integrate with other backend systems and provide accountability throughout permit application process. Cost prohibitive for some solutions.

Implementation information:

Initial implementation Cost:

Implementation costs could vary depending upon solution(s) selected. Some sites may require additional networking components (hardware, software) to completely deploy solution.

Ongoing management/maintenance cost:

Management costs could vary depending upon solution(s) selected. Typically, maintenance costs are 15-20% of purchase price.

Required commitment from towns: IT involvement on the hardware and networking components. Identification of a project leader(s) willing to work with multiple departments (building, fire marshal, health, zoning, etc.) to ensure that all business workflows are taken into account for a successful deployment.

Likelihood of success: High. A significant amount of towns are seeking a solution and identifying a vendor for all could lead to additional sharing of application and network resources between communities.

Major risks/stumbling blocks: Poor planning for workflow routing, workflow differences between towns and inadequate training of end-users.

Benefits:

The more simple elements of an online Permitting Systems can be procured and implemented relatively quickly and are available at varying price points. A regional acquisition of an Online Permitting system could lower the cost for such a purchase and allow for local communities to assist each other with deployment and support of like products. A system that allows for some level of on-line application and permit status information would be highly visible to citizens. The system could be scaled from very small to very large to meet the different needs of the towns. The Online Permitting system provides a direct, immediate benefit by providing specific capabilities to several town departments that have direct contact with citizens on a daily basis. The Online Permitting project was identified as a high priority for the towns, receiving 17 votes in the weighted category.

3. Disaster Recovery – Regional Backup Site(s)

Description:

One of the most important aspects of disaster recovery is to have a location from which the recovery can take place. This location is known as a *backup site*. In the event of a disaster, a backup site is where your data center will be recreated, and where you will operate from, for the length of the disaster.

There are three different styles of backup sites:

Low-end: Cold backup sites – Requires the most time to setup after a disaster.

Mid-end: Warm backup sites – Stocked with most items needed to begin recovery process after disaster.

High-end: Hot backup sites – Offer real-time or near real-time replication of production site(s).

Implementation information:

Initial implementation Cost:

Implementation costs will depend on the solution(s) selected to provide the region with a cold/ warm disaster recovery site and whether the site is hosted by a government entity or third party hosting provider.

Ongoing management/maintenance cost:

Management costs are expected to be minimal. The region has both public (town staff) and private (consultants) with subject matter expertise in this area. Hardware and software costs can be locked in for 4-5 year term. Typically, maintenance costs are 15-20% of purchase price.

Required commitment from towns:

The disaster recovery site(s) could be brought online with the use of either local town resources and/ or private firms.

Likelihood of success: Excellent

Major risks/stumbling blocks: Costs, accounting for the various backup solutions used within region.

Benefits:

The steps involved in disaster recovery are numerous and wide-ranging. Disaster recovery plans often fill multiple loose-leaf binders. This level of detail is vital because in the event of an emergency, the plan may well be the only thing left from your previous data center (other than the last off-site backups, of course) to help you rebuild and restore operations. The establishment of a regional disaster recovery site(s) is easily scalable and can adapt to different infrastructures. Most communities cannot afford to create their own cold, warm or hot disaster recovery site. A disaster recover site provides a direct, immediate benefit to each town by providing specific, fundamentally important and potentially sophisticated capabilities to several town departments that do not already have something in place. Disaster Recovery was identified as a high priority for the towns, receiving 19 votes in the weighted category. The establishment of a disaster recovery site(s) can be done as a moderately easy, highly visible ‘quick hit’ that can lead to economies and efficiencies in the day-to-day operations of town government, significantly enhancing the survivability of a town’s network infrastructure.

4. Remote Backup

Description

The critical task of network backups can be a challenging endeavor for any organization. Remote backup solutions allow you to backup key data to a remote location, allowing for the data to be restored in the event of hardware failure, deleted data, or when faced with a disaster. Most solutions offer the automated scheduling of backups as well as the ability to run a manual backup.

Low-end: Software agent installed on workstation/ server. Usually do not offer local backup solution to go with remote capabilities. Limited support for non-windows operating systems and lack the ability to backup open files.

Mid-end: Software agent installed on workstation/ server. Support multiple encryption standards for data. Some solutions offer local and remote backup capabilities as well as bare metal system restore in the event of hardware failure or disaster.

High-end: Software agent installed on workstations/ servers. Support multiple encryption standards for data. Solutions offer local and remote backup capabilities. Some solutions offer incremental snapshots of backups every 15 minutes and bare metal system restore for servers in the event of hardware failure or disaster.

Implementation information:

Initial implementation Cost:

Implementation costs are dependent on the solution(s) selected. Some solutions require local system monitoring while others provide full/ automated monitoring and alerts.

Ongoing management/maintenance cost:

Management costs are expected to be minimal. Initial setup and deployment services are offered by some vendors.

Required commitment from towns:

Participating towns would need to be able to commit to any multi-year contracts.

Likelihood of success: Excellent

Major risks/stumbling blocks: Internet access needed from to allow for remote backups.

Benefits:

Data backups are an essential part of any organizations day to day operations. Some communities may not have the in-house staff required to ensure that daily backups are configured properly and that data can be restored if needed. Some organizations may not have any type of backup solutions in place. The remote backup project is easily scalable and can adapt to different infrastructures. The remote backup project provides a direct, immediate benefit to each town by providing specific, fundamentally important and potentially sophisticated capabilities to several town departments that do not already have something in place or are looking to augment backup procedures. Remote backup was identified as a high priority for the towns, receiving 16 votes in the weighted category. The selection of a remote backup solution can be done as a moderately easy, highly visible 'quick hit' that can lead to economies and efficiencies in the day-to-day operations of town government, significantly enhancing the survivability of a town's network infrastructure.

5. Email Archiving

Description

A hosted service, software application or appliance that allows email to be stored away from the actual email server and indexed for ease of retrieval and searching by user defined criteria similar to Google advanced search. Email Archiving is based upon a community's business rules / policy for data retention and can take place either before or after mail delivery. The main reasons to establish an email archiving system are: FOI compliance; Federal Rules of Civil Procedure compliance; greatly enhancing an end-user's search capability; minimizing the main mail storage needs of a community; improving mail server performance; forestalling the need to purchase new mail support hardware; reducing IT workload and cutting down on back-up and restore time.

Low-end: Archives and indexes mail for both an administrator to retrieve mail documents from across the enterprise mail storage system as well as allowing an end-user to retrieve only mail addressed or created by the particular end-user. Most archives use a web type interface and on low end use some of the mail server's journaling capability.

High-end: All capabilities mentioned above, but also: minimizes impact on mail server by not needing a journaling function; keeping only a single instance of an attachment for access by all appropriate users; adds compression to minimize stored data needs; removes work from the user by automatically archiving to the central archive data store and consequently saves space to the user's personal storage space by removing the need for PST or other mail backup files.

Implementation information:

Initial implementation Cost: Low to high depending upon model and selection chosen. Please see appendix "A" below for a price feature comparison of possible solutions.

Ongoing management/maintenance cost: Low

Required commitment from towns: Towns would need to establish a mail handling policy and set of user access rights.

Likelihood of success: High

Major risks/stumbling blocks: depending upon type of system or systems selected some local hardware or communication line commitment may be needed.

Benefits:

An email archive is something each community will eventually have to address to be compliant with the law. The true benefit of email archiving is in time savings to the end user when searching for mail based information. Implementation is very flexible. It can be centralized to a single (CRCOG could be the provider) or multiple service providers or be hosted locally by each municipality. Additionally it appears possible to buy licensing even with local implementations that would allow communities to join at later time, simply by installing the software as the need for archiving presents itself, that is to say a single license can cover all regional communities, activate the license when you need to at the local level.

6. Document Management

Description

Town-wide electronic filing cabinet, able to search thousands of documents from all offices on a completely *ad hoc* basis as different town officials may need from time to time to support the day-to-day work of board/council policy-making, management and operations. Responds to both expected and unexpected needs or requests for information from citizens, agencies, vendors, officials, etc. by using Boolean or "Fuzzy Logic" searches to locate documents which contain, for example, "Word or phrase 1 **and** Word or phrase 2" or "Word or phrase 3 **but not** Word or phrase 4," etc. Provides security by individual user, controlling viewing access or editing and markup capabilities to specific types of documents. Individual town offices have their own desktop scanners to scan and classify incoming, outgoing or internal documents. Town needs to set up a very specific classification/indexing scheme for all documents in order to maximize ease of use and value of the Document Management system.

Low-end: provides search capabilities limited to a small number of town offices and subjects, not incorporating all town offices and documents. Has limited value in town policy-making, management and operations.

High-end: enables enterprise-wide search of broad range of documents on virtually any subject which may arise from the work of almost any town office. Has substantial value in supporting town-wide policy-making, management and operations. May be able to be interfaced to other applications used by the town in such areas as financial management, payroll/human resources or permitting and inspections. May be able to accommodate oversized documents such as site plans.

Implementation information:

Initial implementation Cost: Moderate

Ongoing management/maintenance cost: Moderate

Required commitment from towns: Have one person who is the key user with advanced knowledge of the management and operation of the Document Management system. Need to train and equip end-users in various town offices.

Likelihood of success: High

Major risks/stumbling blocks: Poor planning for classification/indexing of documents; inadequate training of town's system manager and end-users.

Benefits:

Document Management systems can be procured and implemented relatively quickly at moderate cost. They can be scaled from very small to very large to meet the different needs of the towns; an individual town can also grow its system over time with relatively little effort at relatively low cost. The Document Management system provides a direct, immediate benefit to each town by providing specific, fundamentally important and potentially sophisticated capabilities in policy-making, management and operations which cannot be met in nearly the same way with any other technology. Towns and schools, multiple towns or other public bodies could cooperate in sharing a single Document Management system, achieving economies of scale and facilitating implementation, management and operations. Towns could have a regional user-group to share knowledge and experience, enabling the towns individually and collectively to maximize their benefit from this investment. The Document Management project was a high priority for the towns, receiving 17.5 votes, the most of any software-based application. Document Management can be done as a moderately easy, visible "quick hit" that can lead to economies and efficiencies in the day-to-day work of town government, including enhanced service to citizens.

7. Pet Licensing

Description

A standardized program for tracking pet licenses. The low end version would simply be a back office utility used internally to maintain records on licensing. The higher end would include an on-line component so that citizens could license their dogs on-line. It would also link to data from veterinarians so that information regarding vaccinations could be confirmed.

Implementation information:

Initial implementation Cost: Low; a number of towns already have applications that do this and have indicated a willingness to share.

Ongoing management/maintenance cost: unknown – program development time limited.

Required commitment from towns: Towns would participate in selection and development of the program and would have to implement it individually.

Likelihood of success: Very High if regionalized – High if constrained to a back-office application for the Town Clerks and Animal Control Department using the existing developed application without adding new functionality.

Major risks/stumbling blocks: 1) Management of new function development: Requirements Definition for web resident use, design meeting the Requirement Definition and 2) Implementation in an environment that could handle potentially high peak web traffic volumes. Success requires cooperation by key stakeholders, such as veterinarians and animal owners.

Benefits:

Dog licensing is a relatively simple function that all towns undertake, but where there is little coordination. It is also highly visible to citizens who are required to travel to city halls to register or renew licenses. This program would be highly suitable for a “shared approach” because the process is relatively consistent from town to town. An on-line component would be a visible, tangible benefit for citizens and would reduce Town Hall Traffic and increase revenue from licensing as a beneficial service. This function was identified as high priority by towns, and national surveys of two years ago had this as a Web applications very high on the Municipal service list but going unmet by practically all municipalities in Connecticut.