

Town of Branford Information Technology Strategic Plan

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Strategic Directions and Initiatives

1. STATEMENT OF DIRECTION

Continuing to keep up with the pace of change in technology and using technology effectively to meet end-user requirements and expectations are the most critical challenges facing information technology providers. Advances in technology can enable the workforce to provide better and faster services at a reduced cost, but changes in technology can be expensive and complex. New technology must be justified, adapted carefully and integrated wisely into the existing technology infrastructure in order to maximize the benefits in a cost effective manner. Departments and/or the public are the recognized “stake holders” in most all technology implementations. Key to the success of any technology based project is that stake holders be involved from inception of the idea through implementation.

The following initiatives address Branford’s objective to provide effective, efficient and customer-oriented access to data and services for constituents and for internal government customers on an enterprise scale.

2. OVERALL PLANNING AND DIRECTION FOR THE TOWN AND BRANFORD PUBLIC SCHOOLS (BPS) PRIMARY DATA CENTERS AND ORGANIZATIONS

The Town’s IT staff consists of a Director, two Senior Network Engineers and a GIS Analyst. BPS has a Director and Senior Network Engineer for “general” LAN/WAN support and several tech aids supporting labs, teachers and students, plus clerical.

Between the two IT organizations there are three data centers (Town Hall, High School and Police HQ). By the end of fiscal 2012 the following locations will be connected to a fiber optic network; all BPS buildings, Town Hall, Recreation Center, Registrar of Voters, Counseling Center, Water Pollution Control Authority (WPCA), Police, Fire (new building) and Canoe Brook Center. This “Town owned” fiber network is financially possible as the cable utilizes the “Municipal Gain” space as per State Statue (1994). There is no ongoing cost for utilizing this space once the fiber has been installed. The BPS fiber is presently leased as a result of a statewide initiative and is called CEN (Connecticut Education Network). The network has been in place for three years and connects schools and libraries throughout the State. The Town and BPS fiber networks come together at the High School inside a Town owned switch. There is a second State sponsored fiber network being installed to connect Municipalities and Public Safety organizations throughout the State. When this becomes available in Branford, we will connect.

These fiber networks have been built over the past three (3) years with (among other initiatives) communication’s savings derived from no longer needing to pay the utilities for internet access to connect to the servers and voice switch at the Town Hall. A

significant benefit to fiber other than reliability is the band width of the fiber makes it now possible to consolidate our three data centers into two. Plans call for moving the servers from the Town Hall to the Police and High School based server rooms during calendar 2012. Both locations will or already have standby power (generators) and space available. Additionally, moving to two data centers from the present three will make server/WAN management easier, save on energy costs and set the stage to one day go through the “cloud” should this become financially and operationally the right thing to do.

3. CUSTOMER RELATIONSHIP MANAGEMENT (CRM)

The expectations of government services continue to change dramatically. Citizens want to interact with government through the channels that best suit their needs, not the municipalities. Employees need the availability of the computer systems to deliver the services they are responsible for. Branford continues to enhance 24/7 services and remove “single points of failure” with technology. We will continue to focus on the delivery of services over the internet. Examples of services already in place include;

- Branford at www.branford-ct.gov has over 30,000 pages viewed on average every month. There’s a wealth of information contained in general and by department including;
 - Employment and bid opportunities
 - Meeting agendas, schedules and minutes
 - Town Charter, budget and contact information
 - Email notification system
 - Geographic Information System (GIS) maps and aerial photographs
 - Property cards, deeds and sales activity
 - The ability to look up online one’s taxpaying history has been identified as a significant benefit by users, especially at income tax time!
 - The online Recreation Registration System (70% of registrations are done over the internet)
 - Streaming video available over the internet for Board of Selectmen, Board of Finance, RTM meetings, Economic Development videos, etc. allow users to see these events on their schedule whenever and wherever they want.
- A set of ComDev application software (Community Development) tie the building, inland wetlands, engineering, planning and code enforcement areas of our business together. This application has improved efficiency, accuracy and service. Applicants can now check the status of an application 24/7. Plans call for applying for “simple” permits online in the future. The holdup is due to the present legal requirement of an applicant’s signature.
- Resident Sticker renewals are now available online, at the Town Hall or Transfer Station. We typically issue over 10,000 stickers every two years. In the past residents had to come to the Town Hall for renewals as well as initial stickers.
- There are a series of online forms that can be completed online and emailed such that citizens can request services in a more timely and efficient manner.
- Residents come from surrounding municipalities to use the State provided dog licensing system. One of the benefits of this system is the easy to use inquiry

function. Renewals of a dog license are to become available online when the rabies' shot is current during calendar 2012.

A major component of CRM is the availability of the systems for constituent and employee use. Recent advances in technology have made "redundancy" for the sake of business continuity affordable and therefore a goal of this department. Redundancy at the Town Hall, Police and Board of Education based servers' means that with a server failure all local and remote users will no longer experience "downtime" while the failed unit is repaired and/or replaced. Were it not for redundancy these same users (constituents and employees) would be severely limited in their ability to conduct business as usual.

In the event of a building loss or accessibility at one of the three primary (soon to be two) locations where servers are based (High School, Town Hall and Police Dept. presently), the "down time to recovery" is now about a day whereas in the past it would have taken as much as two (2) weeks to rebuild and get back "online". This is all possible as we now have fiber optic cable between the High School, Police and Town Hall server locations. By the end of fiscal 2012 the following facilities will also be connected; Recreation-completed, Fire, WPCA, Canoe Brook Center, Counseling Center and Registrars.

Another area we continue to look at and act as appropriate for increased CRM is the replacing of personal computers with thin client or "zero client" type devices. These devices rely on the servers for some or all of their functionality. By shifting the serving up of these applications back to the server we accomplish;

- Fewer licenses for both operating systems and Microsoft applications due to;
 - Thin/zero client computers do not require licensing for either the operating system or the applications as everything is "server" based where the licenses already exist
 - Thin/zero client computers have no moving parts and use only 5% of the energy required by a PC.
 - Thin/zero client computers are immune to a virus as they lack a "fixed disk" and take up 1/4 the desk space of a personal computer.
 - Thin/zero client computers have a life expectancy in excess of ten (10) years as opposed to a regular computer at four (4) years.
- Centralizing back to our servers has positioned us to better support the end user as our availability will be greater due to reducing the need to "travel" to the desktop location.
- Our standard configuration for a personal computer with Microsoft Office Professional costs around \$1,200. A thin/no client costs around \$400-500.

The bottom line on CRM for our department is that "we will aggressively investigate and, where appropriate, implement technology to better serve constituents and employees". We are continuously looking to improve processes through the appropriate and cost justified application of technology.

4. e-GOVERNMENT

The e-Government initiatives use enabling technology for Branford to provide 24/7 services to our citizens. The Branford web site www.branford-ct.gov provides a “government without walls, doors or clocks”. In addition to the on-going efforts to enhance the look, feel and navigation of the web interface and deploying new services and transactions, Branford has achieved much success and acclaim for its e-Government focus.

Information and Services available from the Town’s web site (www.branford-ct.gov) now include;

- Annual Report
- Board/Commission meeting agendas/minutes/notices/members with contact information
- Budget Information and approved Budget
- Collection of household trash and recyclable schedules
- Department pages for all departments with contact and hours of operation
- Public meeting calendar
- Employment Opportunities
- Forms
- Town Charter
- Parks/Recreation information
- Pay taxes with a credit card/check
- Police, Fire & Rescue information
- Property Cards
- Recreation department event/activity on-line scheduling with a credit card
- School District map for elementary schools
- Senior’s information
- Walking Trail maps
- Email notification opt in for such things as meeting agendas, minutes and bid opportunities
- Streaming video of recent meetings of the Boards of Selectmen/Finance and RTM
- Dog owner lookup for licensed dogs
- Information for such current issues as; Tabor, Town Plan and revaluation
- Real estate transactions
- Deeds
- Links to Branford based businesses and the Chamber
- Geographic Information System (GIS) citizen access
- Building permit application status

For calendar 2011 e-commerce accomplishments include;

- Public access to the deeds with “original printing” ability for a fee. We continued the practice of providing for remotely printing a deed for no charge, but with a watermark “Not an Official Copy” appearing when the document is printed. This was done to preserve the budgeted revenue stream. Technology has now advanced to the point where we can preserve this State authorized revenue source without requiring the requestor come to the Town Hall.

For calendar 2012 e-commerce plans (assuming budget approval for some of the following) include;

- Internet based application for simple permits. A simple permit would be one where there is no review process required prior to the permit being issued. Permits of this nature include; septic tank pump outs, electrical service upgrades when the applicant is a licensed electrician whose insurance and license are on file and current, roofing, siding, replacement windows, water heater/boiler replacements, HVAC replacements, etc. Permit requests that are not simple include; structures (homes, commercial buildings, decks, sheds, etc.) NOTE The present law has to change to allow for an electronic signature in place of the now required one.
- Possible Public Works/Recreation/GGB work order application solution with a web component to support citizen reporting, tracking and status updates.

5. DOCUMENT MANAGEMENT SCANNING/FILMING/INDEXING

Branford is strategically approaching content and document management from an integrated, enterprise approach. Content management becomes the foundation for organizing and using information from structured data (through business applications), and unstructured data in electronic or imaged documents (word processing documents, spreadsheets, e-mail and reports). The Town has embraced a technology (SmartSearch) for the electronic storage and easy retrieval of this type of information. The rich document management capability provided by SmartSearch allows for more efficient management flow and storage of vast amounts of data that here to fore was all paper based. By conforming to Connecticut record retention requirements (**Connecticut State Library Municipal Records Retention Schedule M-1**) and using SmartSearch technology, we have implemented processes and procedures which, when fully implemented, will significantly reduce the volume of stored paper. At the same time the security of the documents will have been assured through off site film and data storage. This enterprise document management initiative with incorporated workflow solutions will improve business process efficiency and productivity while meeting the needs to view hard copy records. In addition to fast and reliable business processes, this will minimize the demand for additional paper records' storage space, protect against mounting storage costs, and reduce human and physical plant asset risks associated with handling of the voluminous units of paper.

In addition to continued work described above, the following have been accomplished in the area of electronic storage;

- All Information Technology processes have been documented and electronically stored
- All welfare paper records have been replaced with electronically indexed images
- Over 6,000 commercial drawings have been filmed and replaced with indexed images
- Over 50,000 vital records have been scanned and electronically indexed. This activity alone has reduced the time to produce a birth certificate from over 10 minutes to approximately 2 minutes.
- All contractors' insurance and license information has been electronically stored in preparation for the same contractor's to be able to apply for simple permits over the internet.

- Improved access and security through utilization of the 9 levels of security associated with our electronic indexing system has allowed for us to provide for public access kiosks in the Town Clerk's, Assessor's and Building areas of the Town Hall.
- Fifteen filing cabinets containing 75 file drawers worth of building information (over 200,000 documents) have been scanned, indexed and filmed. This not only has safeguarded these irreplaceable records, but made access to them much more efficient. Valuable office space was also recovered due to the redeployment of the empty filing cabinets.
- Scanning completed in 2011 includes; Tax Collector (sewer assessment cards and agreements) and HR records (employment applications, employee records, etc.)
- Scanning in fiscal 2012 included the completion of the HR project and scanning of EMS records at the Fire HQ such that they won't have to take up space at the new Fire HQ.
- Scanning, Filming and Indexing plans for Fiscal 2013 include departments such as; Public Works, Finance, P&Z and Inland Wetlands.

6. GEOGRAPHIC INFORMATION SYSTEMS (GIS)

Branford's GIS has continued its growth in the number of direct GIS users as well as indirect users, working with applications that now include GIS embedded data as part of their operation. Additionally during 2011 we upgrade the Access based system to SQL under using Arc Server technology. This upgrade has allowed for automatic/scheduled data file updates such that important information like owner's names, new addresses (lot splits and developments) and more complete auditing of changes was all made possible.

Having key town data available digitally through the GIS provides a range of benefits to constituents as well as staff. The orthoimagery is widely used within GIS as well as over the web. Because the parcel and zoning data is now maintained digitally, production of key reports and maps has been greatly accelerated.

7. TELECOMMUNICATIONS AND DATA COMMUNICATIONS

Voice communications is a bedrock technology in today's technology architecture. As government is asked to do more with less, stretching limited financial and human resources, it relies on efficient voice communications to improve efficiencies and improve the growing needs of citizens. Whether it is citizen access via e-Government, efficient management of government information, the advancement of education, the safety of our children on school buses, or most recently, homeland security, voice and data communications play a critical role.

Integrating voice, video and data communications onto a common structure, which has been envisioned by the industry since the 1980's, is now becoming a reality. One of telephony's major vendors announced an agreement with VMware that removes the requirement for a physical voice switch as the switch can now be "VMware server"

based. This provides tremendous redundancy opportunities, especially for our more critical services departments.

A handwritten signature in black ink, appearing to read "Peter R. Tugnet". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Director, Information Technology