Pinellas County
Business Technology Services

Strategic Business Plan 2013
Version 1.0

Prepared by the Strategic Leadership Team

Partnering to provide the solutions most important to our Customers’ Business

April 2013
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Revision History

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<td>1.0</td>
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<td>Initial Version for BTS Board– Strategic Leadership Team</td>
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Introduction

The Business Technology Services (BTS) Department exists to enable the business with speed and scale, and to provide solutions to real business problems and opportunities in pursuit of customer satisfaction as a "Service Provider of Choice".

Under the direction of the BTS Board, BTS collaborated and partnered with Constitutional Officers, BCC Agencies, and the Courts to enable business strategies that have enhanced the mission of Pinellas County Government. We continue to leverage internal centers of competency to maintain and protect information assets, ensure business continuity, and leverage financial resources through shared business services. In answer to citizen demands for more responsive and self-service government, we implemented strategies that have enabled more ubiquitous access to public information. Business process disciplines in the areas of strategic planning, project management, and service management best practices continue to mature and add significant value to county operations in the form of cost effective service delivery and support. Major initiatives progressed in accordance with project schedules relating to Health & Human Services, Criminal Justice, GIS, Asset Management, Finance, Human Resources, Budgeting, and Purchasing.

As part of the Strategic Planning Process, BTS developed, updated, and refined a Common Requirements Vision (CRV) that documents current business trends and the collective interests of our customers. Trends including video conferencing, tablets, social media and mass collaboration and business intelligence continue to top the list. Additionally, organizational change management, business / workflow analysis and training have gained significant interest from our customers.

Primary Strategic and Recurring Priorities include: Application Portfolio Management and Modernization, Business Process Disciplines, Evolve and Maintain the Production Environment and Investing in Talent Management and High Performance Organization.

Major Projects include: JUSTICEccms, Public Safety Complex, Enterprise GIS (EGIS), Enterprise Asset Management (EAM) and Enterprise Wi-Fi.


The purpose of our Strategic Planning Process is to determine how we can provide the greatest business value to our customers. Our goal is to be the Service Provider of Choice, and we seek to identify and pursue only those opportunities that will enhance the mission of Pinellas County Government by enabling the business strategies of most importance to our customers.

To accomplish this, we recognize the critical need for effective collaboration and partnership to help us identify specific business requirements and industry trends that are affecting our customers' businesses. We use this valuable insight to determine how best to apply our resources to meet the business objectives and desired outcomes.
BTS remains committed to the success of our customers, and will continue to provide experienced professionals, innovative business solutions, and core enterprise technologies that enable the business to better serve the citizens of Pinellas County.

On behalf of the Business Technology Services Department, thank you for the opportunity to serve you and the citizens of Pinellas County.

Sincerely,

James Russell
Interim Executive Director, Business Technology Services
Vision & Mission Statements

**VISION**

Service Provider of Choice:  
Partnering in relentless pursuit of value-added service

**MISSION**

Specializing in leadership within Pinellas County Government, we are driven to ensure the total success of our customers through the provision of experienced professionals, innovative business solutions, and core enterprise technologies that meet their critical business drivers.

We value the contribution of our employees as a core competency, and are committed to recruit, develop, reward, and retain personnel of exceptional ability, character, and dedication.
## Enterprise Projects and Accomplishments

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Description</th>
<th>Accomplishments</th>
<th>Stakeholders</th>
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<tr>
<td><strong>OPUS</strong></td>
<td>The goal of OPUS is to implement an integrated countywide financial platform that supports all aspects of the County's financial and Human Resource operations to enable Enterprise Resource Planning. The OPUS project represents collaboration among stakeholders from all across the County and is governed and influenced by the Oracle Business Applications Executive Committee (OBAEC), the OPUS Project Sponsors Committee, and the Core Project Management Team under the guidance of the Business Technology Services (BTS) Board. BTS offered project management, organizational change management (OCM), technical and business architecture, implementation and support resources, and actively participates in OBAEC and OPUS Project Sponsors Committees.</td>
<td>Dramatically increased reporting efficiency, reducing calculations from taking days to taking minutes, by implementation of Hyperion 11.1.2.2 on an Oracle Exalytics In-Memory machine in March 2013.</td>
<td>OBAEC Committee, Board of County Commissioners, Human Resources, BTS, Clerk of Court</td>
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<td><strong>JUSTICE CCMS</strong></td>
<td>The JUSTICE CCMS replaces the legacy CJIS platform for the County. Project success will be measured by the new system’s ease of use, navigation consistency, ability to support and accommodate changing business needs and legal mandates, and the capability to interface with other databases and software. CJIS User Policy Board Members include the Pinellas County Clerk of the Court, the State Attorney-Sixth Judicial Circuit, the Public Defender-Sixth Judicial Circuit, the Chief Judge-Sixth Judicial Circuit, the Trial Courts Administrator-Sixth Judicial Circuit, the Pinellas County Sheriff, one Pinellas County Commissioner, and three local Law Enforcement Chiefs. In addition to the Board Members, the Justice Project is guided by the Justice Management Team, which includes representation of CJIS User Policy Board Members, Business Technology Services (BTS), and a Justice Project core team that is comprised of a Project Sponsor, Coordinator, Project Manager and Analyst.</td>
<td>Civil Courts went ‘live’ for citizens with Odyssey in September 2012, including Public Access online. Conversion of data, development and configuration activities are continuing for the Probate and Criminal Court phases of the project.</td>
<td>CJIS Policy Board, Courts, Clerk of Court, Public Defender, State Attorney, Sheriff, Board of County Commissioners, BTS</td>
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<td><strong>CHEDAS</strong></td>
<td>CHEDAS supports Health &amp; Human Services’ need to redesign business processes and replace their current case and medical management systems with a fully integrated suite of products that will: reduce manual processing time, reduce service delivery costs, maximize staff efficiencies, offer enhanced eligibility review, self-sufficiency planning, performance outcome tracking, ad hoc reporting, and interfaces to OPUS for</td>
<td>Successfully implemented NextGen and Carescope to promote, strengthen and support data collection and evaluation systems that allow for data-driven decision making and funding, improved operations, speed, organizational vitality,</td>
<td>Board of County Commissioners</td>
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Finance. The system also supports data-driven decision making, standardize data exchange with partners, and reduce risk for HIPAA compliance. BTS offers program management, technical and business architecture, implementation and support resources, and actively participates in the CHEDAS Management Team.

**Enterprise Asset Management (EAM)**

The goal for an Enterprise Asset Management offering is to upgrade and unify the work order and asset management systems currently on various platforms throughout the County to a common, vendor-supported version to ensure business continuity and agility to make improvements quickly. Current focus is on the Maximo platform. Maximo currently exists in 3 different versions (v4, v5, v6) in use in BCC departments. Enterprise Maximo would bring the entire platform to the current supported version 7+.

Conducted visioning sessions in March and December 2012 to establish a Vision and next steps for creating a holistic EAM approach that integrates Asset Management, Enterprise GIS and Business Intelligence platforms into final requirements vision and resulting solutions. Completed gathering requirements. Discovery phase of the project is now in progress until mid 2013.

**Enterprise GIS (eGIS)**

This program focuses on a “One County” approach to citizen engagement and transparency of services using all County geographic information systems and geographic data sets to maximize County benefit. The establishment of a GIS Steering Committee, chaired by the Property Appraiser, and a GIS Services Bureau will set ongoing work priorities, GIS standards, provide guidance for GIS projects, and secure funding for GIS initiatives.

The new GIS ESRI infrastructure completed and in use by multiple stakeholders and citizens. The system offers high availability to a large number of users. New citizen-facing applications are Live: “Bikes and Trails”, “Aerials Viewer” and “Election Polling Place”. Scheduled to be live on April 15th are “Know Your Zone” (for hurricane evacuation) and Property Appraiser’s Parcel Viewer. Four years of Pinellas county aerial images have been consolidated on the eGIS infrastructure for share access.

**Stakeholder Projects and Accomplishments**

In addition to established Enterprise Services and Major Project efforts, BTS worked on focused business enablement efforts with our stakeholders. These accomplishments are viewable online here: [http://intraweb.co.pinellas.fl.us/bts/pdf/stakeholder-accomplishments.pdf](http://intraweb.co.pinellas.fl.us/bts/pdf/stakeholder-accomplishments.pdf)
BTS Major Business Strategies & Initiatives:

Each year, BTS works with County Agencies, Constitutionals, and the Courts to determine the business drivers, industry trends & best practices, and environmental trends that will affect them over the coming 1-3 years. The results of this analysis is a set of common requirements that BTS considers when planning its strategic response to what the County Agencies, Constitutionals, Courts, and BTS will need over that time frame.

BTS will also carry over strategic and recurring priorities from the previous year. We have dubbed these recurring priority and carry over items, “The Short List”.

### Primary Strategic & Recurring Priorities

<table>
<thead>
<tr>
<th>BTS PRIORITIES – “THE SHORT LIST”</th>
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<tr>
<td><strong>Major Projects</strong></td>
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<td>JUSTICE ccms, Public Safety Complex, Enterprise GIS (eGIS), Enterprise Asset Management (EAM), Enterprise Wi-Fi</td>
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<td><strong>Application Portfolio Management &amp; Modernization</strong></td>
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<td><strong>Business Disciplines</strong></td>
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<td>• Security Management</td>
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<td>• Service Management</td>
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<td>• Service Strategy, Design, and Continual Service Improvement</td>
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<td>• Organizational Change Management</td>
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<td>• Financial Management &amp; Cost Recovery</td>
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<td><strong>Evolve &amp; Maintain the Production Environment</strong></td>
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<tr>
<td><strong>Investing in Talent and High Performance Organization</strong></td>
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BTS Priorities – Short List Descriptions

Major Projects

- **Justice ccms** – Transforming and modernizing Pinellas County’s Consolidated Court Management System by partnering with and moving to a commercial-off-the-shelf offering.
- **Public Safety Complex** – Moving mission critical systems to the Category 5 Hurricane survivability location at the Public Safety Complex.
- **Enterprise Geographic Information System** – Collaborating and consolidating on GIS to simplify management and launch Pinellas into the next generation of mobile-enabled mapping applications.
- **Enterprise Asset Management** – Improving and unifying the work order and asset management systems to support strategic initiatives and sustainability practices.
- **Enterprise Wifi** – Enabling mobility throughout County staff locations by providing wireless connectivity.

Application Portfolio Management & Modernization

Enabling the County to advance to new platforms such as tablet PCs, mobile devices, and faster operating systems is imperative now and through the next three years. The entirety of the BTS-supported application portfolio must be analyzed and plans developed for transitioning to modern, sustainable technologies.

Business Process Disciplines – Driving Business Decisions:

BTS blends a series of best practice disciplines for leading and managing the County’s business technology investments. The combinations of these best practices is the foundation for enabling BTS to be agile, cost-effective, and achieve our vision of being the “Service Provider of Choice” for Pinellas County business technology services. New emphasis will be put toward Service Strategy, Service Design, Continual Service Improvement, and Organizational Change Management practices to support Cost Recovery on the ongoing evolution of Business Technology Services.

These Disciplines include:

- Information Technology Infrastructure Library (ITIL)
- Project Management Body of Knowledge (PMBOK)
- Enterprise Planning and Architecture Strategies (EPAS)
- Solution Development Life Cycle (SDLC)
- Enterprise Security Policy
- Service Level Agreements (SLA)
- Performance Management / Goals & Objectives
- Organizational Change Management (OCM)

Evolve & Maintain the Production Environment

Technology is a critical component of business optimization and quality service levels. As such, BTS considers building and maintaining quality technology environments as a top priority. Availability, business continuity, disaster recovery, security, and total cost of ownership are forethoughts in all system designs. New trends in technologies for mobility, tablets, cloud, data, and social media will necessitate evolving legacy platforms to enable Pinellas County Government to take advantage and enhance citizen experiences.
Investing in Talent and High Performance Organization

BTS values the contribution of our employees as a core competency, and we are committed to recruit, develop, reward, and retain personnel of exceptional ability, character, and dedication. We are a continually learning organization, continually evolving and staying apprised and ahead of business and technology trends. Our people are our service and to keep pace with constant changes in technology and the high level of expertise required, continual investment in education is imperative. Additionally, as the next wave of mobility and cloud technologies emerges, stakeholders and customers will require training to assure they get the maximum benefits from new business processes and efficiencies.
BTS Major Business Strategies & Initiatives Detailed Descriptions

Cost Recovery – The Transition from Cost Allocation to Cost Recovery

Previous Cost Allocation accounting methodologies were confusing to some customers and sometimes inadequate for transparently tracking consumption of business and IT services in a way that was easily understood.

Fiscal Year 14 will be the first year BTS is actively communicating in terms ‘Services’ and providing a budget in terms of ‘Services.’ Recovering in terms of services has already evolved within the 2011 and 2012 BTS Cost Plans. The 2012 Cost Plan implemented an allocation basis in terms of “Enterprise” and “Custom” services. Moving forward, consumption of each set of services and the complete actual cost of each service critically depends on the ability of BTS to effectively measure and manage in terms of services.

Over the last two fiscal years (FY12 & 13), BTS has worked with the BTS Board and Financial Sub Committee to define a portfolio of services that are consumed by Pinellas County Organizations and Citizens. The goal of Cost Recovery is not only to manage the budgeting, accounting, and charging requirements for IT, but also to quantify & qualify the value of IT services. The IT financial management discipline allows for BTS to balance the cost and quality of a service and to maintain the right balance of supply and demand between BTS and the customer.

Cost Allocation via the BTS Cost Plan effectively provided a financial mechanism to recover the costs of Pinellas County’s internal IT service organization (BTS) in a way that assumed maximum benefit from federal grant reimbursement and alignment with OMB circulars. Though a viable financial mechanism for this purpose, mapping ‘cost’ with measures of cost effectiveness and or value were difficult and not clear; customers were distracted by a cost allocation (a “bill”) that they could not understand. Cost allocation for some customers became a distraction and a deterrent from partnering with BTS.

The Cost Allocation methodology has three fundamental challenges:
1. Accounting for service usage was two years in arrears and this accounting was used for future state budget allocations and requests. With technology needs and technology possibilities changing rapidly, it was difficult to equate the usage from two years ago to future budget needs for each customer.
2. Metrics used for calculation relied on personal computing and/or staff counts to distribute costs across consumers rather than reflect actual service consumption per service and customer. This made it difficult for consumers to make decisions about changes in their service or service levels provided.

3. Capturing projected funding needs for technology and Service upgrades was not reported or built into the ongoing costs of the technology or Service refresh, resulting in large capital investment requests at 3-5 year intervals.

The new Cost Recovery methodology begins the transition away from the challenges of Cost Allocation. Cost Recovery looks to address the three challenges above by:

1. Adding a multi-year projected budget and cost per service; recognizing variances and making adjustments within one year will have/could have a multi-year impact on the cost of a service regardless of which fiscal year service costs are recovered; In-arrears recovery for BTS services will remain as the primary mechanism for billing.

2. Implement a service consumption basis that aligns with industry standards (where possible); basis measures that are directly related to service consumption and will be continually compared to industry standards to assure cost effectiveness. The cost of the service and who consumes that service must be clear.

3. Include the cost of technology refresh & growth into the overall cost of the Service to level out ongoing cost; keep the Service up-to-date and competitive with industry standards and business needs.

Cost Recovery requires that BTS become more disciplined than ever with resource management, project management, and program/service budgeting to adequately and efficiently manage cost for Services provided by BTS.

Focus on Services: Service Strategy, Service Design, Continual Service Improvement, and Organizational Change Management

A key strategy in the evolution of Business Technology Services is to improve Service Management and business improvement processes. Initial success with ITIL best practices that focused on Incident, Change, and Configuration Management processes resulted in a 50% reduction of Priority 1 (Major) Incidents and these processes continue to add value in measuring performance. Following this success, a strategic focus will be placed on additional Service Management stages and business processes.

- **Service Strategy** – will focus on evolving strategy, business relationship, demand, service portfolio, and financial management improvements to better manage the pipeline of requests and service delivery for our customers by aligning business outcomes with each service.

- **Service Design** – will focus on the appropriate quality, capacity, security, and service level management practices to ensure we meet or exceed expectations while balancing sustainability of a service as forethought.

- **Continual Service Improvement** – will focus on continual improvement for all processes, activities, roles, services, and technologies.

- **Organizational Change Management** – will focus on the human side of change, including training plans and business analysis, to ensure successful outcomes.

**Service Strategy, Service Design, and Continual Service Improvement**

These stages in the ITIL framework are covered, in detail, in the Best Management Practice 2011 Edition books bearing their name. Our goal is to implement the practices that will streamline and improve our ability to deliver solutions to our customers.
Organizational Change Management

Organizational Change Management (OCM) is a vital element to successfully implementing and sustaining business technologies. During implementation projects, application upgrades, or new releases, Pinellas County departments and agencies experience changes in their business processes and the way County employees use and interact with systems. OCM activities minimize the amount of time people spend in a state of confusion and uncertainty while also minimizing the risks associated with the “human” aspects of transformation. This leads to increased adoption of new systems and processes, increased sustainability, and reduced backsliding to the old way of doing business.

Public Safety Complex Data Center Migration

The new Public Safety Complex (PSC) is a state-of-the-art Category-5 rated facility designed to protect infrastructure and staff, allowing critical operations to continue to function during many types of potential disasters. BTS will lead and manage the migration of critical Information Technology infrastructure maintained by BTS to the new data center within the PSC to improve disaster recovery and business continuity on behalf of our stakeholders.

Application Portfolio Management & Modernization

Enabling the County to advance to new platforms such as tablet PCs, mobile devices, and faster operating systems is imperative now and through the next three years. The entirety of the BTS-supported application portfolio must be analyzed and plans developed for transitioning to modern, sustainable technologies. A repeatable methodology has been developed to analyze the County’s application portfolio each year to assess what actions will be needed to manage the total cost of ownership versus business value of each application. Emphasis must be placed on this initiative to assure stakeholders are not held back from taking advantage of newer efficiencies and technology platforms.

Mobile Computing and Wireless Connectivity

Gartner and other leading IT research groups estimate that by 2015, smart phones and tablets will sell more devices than laptop and PC sales combined. As of 2012, PCs and laptops sold about 350 million units worldwide, while tablet devices were about 120 million. Business trends with “bring your own device” (BYOD) and cloud-based services will continue to heavily influence the trend away from laptop and PC productivity to a “work from any device, anywhere” culture in the next generation of workforce. A BYOD usage and security policy must be developed. Based on the policy, the ability to centrally manage devices may need to be put in place to ensure security for the network and County data assets are not compromised. Central management of devices may include the ability to remotely wipe a device containing sensitive data, the ability to have password policy enforcement, and to provision approved applications. Mobile computing will be essential to new initiatives such as the Enterprise Asset Management (EAM) and GIS projects.

In 2012, the BTS Board and the Board of County Commissioners approved funding for an enterprise scale Wi-Fi networking project to support the continuing influx of new, mobile wireless devices. This project will allow coverage of all County office buildings and is projected to be complete by the end of 2013.
Social Media & Mass Collaboration

Expertise in mass collaboration theory may emerge in County business areas and BTS should be poised to assist, guide, and take advantage of new ways to serve constituents. (See: “The Social Organization: How to Use Social Media to Tap the Collective Genius of Your Customers and Employees” by Anthony J. Bradley and Mark P. McDonald). Facebook, Twitter, and other social networking sites have brought “social media” and associated technologies to mainstream consciousness in recent years. Government sectors have struggled to take these platforms beyond marketing and communication tools to tap into the collective genius of the citizenry. To move from marketing via social media to fully realizing the potential of mass collaboration, where communities actively participate in government rather than just consuming government services, new business initiatives must emerge to define and drive ‘purpose’. Defining ‘purpose’ around mass collaboration efforts establishes ‘why’ a community would come together to collaborate using social media tools. Gov 2.0, Smart Government, and CRM/311 initiatives will have inevitable touch points into social media and mass collaboration efforts.

A Social Networking policy has been approved and established for BCC departments. It includes the specific roles and base strategy.

Cloud Computing

As public cloud offerings continue to grow, BTS will begin implementing and brokering contracts for cloud services as a strategy to reduce costs while increasing capabilities. The need to develop competency in cloud services brokerage is imperative to negotiate cloud service level agreements and protect the confidentiality, integrity, and availability of this method of delivering technology. In-house private cloud tools and streamlined service delivery should also be invested in to provide BTS customers with secure multi-customer and single-customer environments. Hosted services will also be considered, including offsite disaster recovery locations. Hosted services can include leased or owned infrastructure at a remote site.
Oracle Unlimited License Agreement - The Significance of Scaling Up by January 2014

To fully leverage the Oracle Unlimited License Agreement (ULA) negotiated as part of the OPUS Project implementation, BTS has formalized a plan to expand implementation and usage of Oracle products covered under that agreement. This will require time commitment from stakeholders to analyze future needs, investment dollars for hardware to support the products, and BTS staffing time to accomplish this effort before the terms of the ULA ‘lock-in’ and finalize coverage and ongoing maintenance costs in January 2014.

Business Intelligence

Business intelligence is a set of business practices and technologies that aim to support data-driven decision making. Pinellas County has invested in two market-leading business intelligence and performance measurement platforms for the enterprise: Oracle Business Intelligence Enterprise Edition (OBIEE) and Hyperion Financial Management. Fully engaging these tools and data-driven decision processes will be transformational in improving the information readily available to decision makers.

Security Vulnerability Assessment Remediation and Ongoing Best Practices

Following recommendations from our 3rd party security assessment, BTS will increase dedicated security staff and our emphasis on security best practice enforcement. Protection of the County’s critical systems and sensitive data is paramount. In addition to ongoing security practices, new, disruptive technologies and policies such as Bring Your Own Device (BYOD) and cloud services adoption will require new security skill sets and training plans to assure continuity, integrity, and availability standards are defined and met.

Video Conferencing and Collaboration Tools

Video conferencing and collaboration tools adoption rate is increasing throughout the world as an ongoing business trend. Vendors, standards, and technologies in this space have been volatile and constantly changing as newer, cheaper, solutions become available. Over the last 5 years, BTS has seen a common requirement trend among agencies looking for ways to limit travel while increasing collaboration. Common goals are to increase productivity by removing travel time, ‘go green’ by reducing fuel usage and carbon emissions, and save money on travel reimbursements. As the market stabilizes video communication standards are ratified over the next year, BTS will work with agencies to come up with a common strategy that meets the needs of their business. This could be a two part approach that is encompasses a room to room solution and a desktop/mobile solution that in the future could integrate with a Unified Communications and Collaboration strategy.

Enterprise Content Management (ECM)

Encompassing ‘paperless’ efforts that include scanning, document management, records management, enterprise search, workflow/business process management (BPM), collaboration, and web content management, the goal for this program is to take a “One County” approach to how the County captures, manages, stores, retrieves, preserves, and delivers content internally and to citizens.

The top 5 business drivers for ECM efforts are:

1. Improving operational efficiencies.
2. Providing more efficient information sharing.
3. Improving the quality of decision making.
4. Reducing costs.
5. Ensuring records retention compliance, transparency, and effective reporting.

ECM is a business and management discipline with a tightly integrated software suite that requires input and participation from many stakeholders to be successful. As such, this strategy will require identification of key stakeholders and a governance body to guide and oversee the investment in this effort.

Real Estate Management, in partnership with many content management stakeholders and a 3rd party assessment group, studied current physical storage and records management practices in their “Records Management and Retention Study” (Feb. 2009 – July 2010). In their findings, the potential for significant savings was identified with an initial focus on eliminating physical storage needs in lieu of electronic equivalents. Current ECM-related projects include the Clerk’s Paperless Project that eliminates paper as well as improves and streamlines Clerk processes. Other enterprise projects such as OPUS, JUSTICE ccm, and CHEDAS intrinsically eliminate the need for paper records and may play part in the overall ECM effort.

Preparing to Replace Aging Cable Infrastructure

Planning has begun to develop a funding strategy to replace the aging network cabling infrastructure throughout the County enterprise. The need for additional speed and throughput to support newer technologies such as video-conferencing, distance learning, and mass collaboration coupled with a continuing increase of ‘connected’ devices across the enterprise will push and possibly exceed current capacities. Additionally, as copper and fiber optic cabling ages, the potential for unplanned outages and higher maintenance costs increases. Preparing to update and replace the network cabling (cable plant) infrastructure will become increasingly imperative over the next 1-3 years.

Refresh Enterprise Office and Collaboration Applications

A significant investment will be required in the next 2-3 years to update licensing for current Office Productivity and Collaboration software. To maintain vendor support and compatibility with other commercial-off-the-shelf products within the County, new software versions will be required. Planning and research has begun this year to explore business options leveraging cloud-based, mobile-friendly alternatives that may eliminate or reduce the overall total cost of ownership of this type of software.
Common Requirements Trends

Each year, Common Requirements gathering is done using BTS Business Relationship Managers (BRMs), via questionnaires and one-on-one interviews with our customers.

From these common requirements, BTS derives the future state and business strategies needed to achieve business goals for our customers. From the future state, BTS initiates the creation of processes, technologies, services, projects and programs to respond directly to customer needs.

Note that the future state is a guideline, or potential future state, that is not intended to be fully realized. Each future state item must be considered and justified via business case and/or customer approval. Steering committees such as the BCC Technology Steering Committee, Justice Management Team, Oracle Business Applications Executive Committee (OBAEC), and the Technology Steering Cooperative will provide additional guidance on which future state items provide the most value to their represented interests. As future state items become implemented, standard BTS policies and procedures will be followed to ensure quality and fiscal responsibility.

How to read the “Common Requirements Trends”:

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<thead>
<tr>
<th>Trend Name</th>
<th>Current State</th>
<th>Future State</th>
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<td>Mobile, virtual, and remote productivity</td>
<td>• VPN (Virtual Private Networking) Services</td>
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<td>• Cloud Services</td>
<td>• Telepresence Conference Bridge On-Demand</td>
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<td>• Network Connectivity Services</td>
<td>• Video Education and Training Service</td>
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<td>• Telepresence Services</td>
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<td>• Call Center Services</td>
<td>• Educational Services and Access</td>
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<td>• Internet Services</td>
<td>• Virtual Education and Training Services</td>
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<td>• Wireless Network Services</td>
<td>• Technical Assistance Services</td>
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High-level description of trend (why/where did the trend come from)

How BTS currently addresses this trend (services that are readily available for use)

How BTS will potentially address this trend in the future with new services/technology/processes
<table>
<thead>
<tr>
<th>TREND</th>
<th>CURRENT STATE</th>
<th>FUTURE STATE</th>
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<tbody>
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<td>Mobile, virtual, and remote</td>
<td>• VPN (Virtual Private Networking) Services</td>
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<td>productivity</td>
<td>• Email Services</td>
<td>• Web-based Virtual Education and Electronic Meeting Service</td>
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<td>• Network Connectivity Services</td>
<td>• Web-based Training</td>
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<td></td>
<td>• Telephone Services</td>
<td>• Increased Wireless Access</td>
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<td></td>
<td>• Internet Services</td>
<td>• Bring Your Own Device policy</td>
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<tr>
<td></td>
<td>• Wireless Network Services</td>
<td>• Handheld, Mobile Computing</td>
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<td></td>
<td>• Online Collaboration Services</td>
<td>• Thin Client and Web Client Services</td>
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<td>• Wireless and Broadband Connectivity Services</td>
<td>• Portal Services</td>
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<td>• Fixed Location Video Conferencing</td>
<td>• Expanded Collaboration Software Services</td>
</tr>
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<td>• Mobile Internet/Email/Calendar Services</td>
<td>• Expanded Telecommuting Services</td>
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<tr>
<td></td>
<td>• Telephone Conferencing Bridge Service</td>
<td>• Location Aware Services</td>
</tr>
<tr>
<td></td>
<td>• Software-based and IP Telephony</td>
<td>• Mobile Device Management</td>
</tr>
<tr>
<td></td>
<td>• Virtualized Application Services</td>
<td>• Mobile applications</td>
</tr>
<tr>
<td>DESCRIPTION</td>
<td>As part of their efforts to reduce operational costs and improve service</td>
<td>• HTML5 applications</td>
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<tr>
<td></td>
<td>efficiency, County agencies have identified the need to enable employees</td>
<td>• Unified Communications</td>
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<tr>
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<td>to easily and cost effectively work from remote, field-based and mobile</td>
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<tr>
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<td>locations with a variety of devices and platforms. Agencies also wish to</td>
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<td>reduce transportation, training, and meeting costs by using video, telephone,</td>
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<td>online meetings and other collaboration &amp; communication tools.</td>
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</tbody>
</table>
### TREND

**Collaboration, sharing, and data integration**

### CURRENT STATE

- Email Services
- Website Hosting Services
- Network Connectivity Services
- Telephone Services
- Internet Services
- Wireless Network Services
- Collaboration Software Services
- File and Print Share Services
- Application Development Services
- Database Administration Services
- Document Management Services
- Instant Messaging Services
- County Justice Information System Services
- Project Management Office Services
- Online Community Subscribed Services (forums, newsgroups, mailing lists, wiki, blog, Twitter, social networking mash-ups)
- RSS/Atom Feeds
- Mash-up Application Services
- Web 2.0 Initiatives
- Unified Communications

### FUTURE STATE

- Expanded Video Conferencing Services
- Web-based Virtual Education and Electronic Meeting Service
- Web-based Training
- Increased Wireless Access
- Bring Your Own Device policy
- Unified Citizen Portal to County Services
- Application Integration Services
- Data Integration Services
- Enhanced mobile computing
- Public Safety Complex (PSC) Co-location
- Online Community Subscribed Services (forums, newsgroups, mailing lists, wiki, blog, Twitter, social networking mash-ups)
- RSS/Atom Feeds
- Mash-up Application Services
- Portal Services
- Expanded Collaboration Software Services
- Location Aware Services
- Constituent Relationship Management
- Unified Communications

### DESCRIPTION

County agencies are commonly looking for more ways to easily and seamlessly share information – within agencies, inter-agency, externally with other counties, and interacting with citizens. Agencies are asking for more ways to engage with each other and citizens via the Internet. Sharing information is called out as one of the most prolific trends across all agencies. Additionally, social networking is a common, worldwide trend where more citizens are interacting with each other via technology with an expectation that governments will follow suit.
<table>
<thead>
<tr>
<th>TREND</th>
<th>CURRENT STATE</th>
<th>FUTURE STATE</th>
</tr>
</thead>
</table>
| **Reduce Costs** | • Technology Consolidation  
• Server Virtualization Services  
• Service Management  
  o Change Management  
  o Configuration Management  
  o Business Continuity and Disaster Recovery Management  
  o Service-Level Management  
  o Financial Management  
  o Problem Management  
• Strategic Planning and Consulting Services  
• Enterprise Architecture Services  
• Identity Management Services  
• Extensive Utilization of Web Environment to Citizens  
• In-house PC Services, Leasing and Support, Remote Desktop Support  
• IP Telephony and Stipend Program  
• Application Virtualization Services  
• Telephone Conferencing Bridge Service  
• Metro-Ethernet Service  
• OPUS | • Cloud Services  
• Video Conferencing Service  
• Web-based Virtual Education and Electronic Meeting Service  
• Web-based Training  
• Bring Your Own Device policy  
• Rapid Application Development Tools  
• Service Management  
  o Release Management  
• Software License Compliance Management – Enterprise Service  
• Technology Asset Management – Enterprise Service  
• Identity-driven workflow and provisioning of services  
• Service-Oriented Architecture  
• Reusable/Modular/Object-Oriented Design and Development  
• Expanded Utilization of Web  
• Paperless initiative combined with PDF print driver on every machine  
• Technology Standardization  
• Automated Vehicle Dispatch Routing |

**DESCRIPTION**

Fiscal responsibility is a common priority and agencies need to balance budget constraints with the ability to deliver new services and maintain sustainability of existing services.
<table>
<thead>
<tr>
<th>TREND</th>
<th>CURRENT STATE</th>
<th>FUTURE STATE</th>
</tr>
</thead>
</table>
| **Green Initiatives** | • Server Virtualization Services  
• Pinellas County Government Green Local Government Distinction  
• Extensive Web Presence Distributes Government Information Electronically, On-demand.  
• All HP PC equipment is Energy Star Certified  
• Cell Phone Recycling Program  
• Cardboard for all PCs, Laptops and Servers Recycling Program  
• Batteries for UPS, Cell Phones and Laptops Recycling Program  
• Energy-saving Awareness Program  
• Technology Consolidation  
• Purchase EnergyStar Certified equipment and use via manufacturer recommendation  
• Printer Management  
• Recycle Toner Print Cartridges | • Paperless Office  
• Charge back printer management services (per page costing)  
• Free PDF Writer Initiative  
• Workstation power management profiles to reduce power consumption  
• Web-based Virtual Education and Electronic Meeting Service  
• Expand Opportunities to Deliver Information Paperless via the Web  
• Expand Collaboration and Mobile Computing Services  
• Continue Current Recycling Programs  
• Continue replacing older technology with more energy efficient technology  
• Continue Hardware/Software Consolidation/Virtualization  
• Work from Anywhere Mobile Offices  
• Automated Vehicle Dispatch Routing |

**DESCRIPTION**

Aligning with the Quality Pinellas Community programs, Green Initiatives are called out here that can explicitly reduce consumption, waste, and environmental impact. Pinellas County was the First Government in the State to Achieve the “Green Local Government” Distinction in 2007.
<table>
<thead>
<tr>
<th>TREND</th>
<th>CURRENT STATE</th>
<th>FUTURE STATE</th>
</tr>
</thead>
</table>
| Enterprise Content Management (ECM): Imaging, Document Management, Paperless Office | • Document Imaging Services  
• Document Workflow Services  
• Electronic/Desktop-based Fax Services  
• Extensive Utilization of Internet, Intranet and Collaboration Software Services for Electronic Sharing of Information  
• OPUS  
• JUSTICE ccms  
• CHEDAS  
• Electronic Timesheets and Payroll Remittance Advice  
• Electronic/Desktop-based Fax Services  
• E-Filing Services | • Document Imaging Services  
• Document Workflow Services  
• Image Heritage Village Archive/Collection for Public View  
• Image Human Resources files  
• Aerial Oblique Photographs for Property Appraisals  
• Document Storage and Retention Policies Documentation Needed  
• Potential Mandated Electronic Availability of County Records to Citizens  
• Paper on Demand  
• Free PDF Writer Initiative  
• Enterprise Workflow Solutions and Business Process Management Tools  
• Stored docs central repository  
• Expand Collaboration Software Services |

**DESCRIPTION**

County agencies and departments wish to replace traditional paper-driven processes with electronic equivalents. Electronic storage and retrieval may eliminate the need for expensive physical warehousing, record retention, and disposal. Electronic Filing (E-Filing) is a pending mandate coming from the state and other agencies where electronic interaction will be required to replace paper-based systems.
## Trend: Customer Self-Service / eGovernment

<table>
<thead>
<tr>
<th>CURRENT STATE</th>
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</thead>
<tbody>
<tr>
<td>- Internet Web Sites</td>
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<tr>
<td>- Public Records View Services</td>
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<tr>
<td>- Self Service Payment Websites</td>
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<tr>
<td>- Interactive Voice Response Systems</td>
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<tr>
<td>- Payment kiosks</td>
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<tr>
<td>- Third-party Payment Providers (such as paying traffic tickets at Amscot)</td>
</tr>
<tr>
<td>- Internet Web Sites with extensive self-service capabilities for transactions, reservations, subscription services, video on-demand, mapping on-demand, automated request/feedback forms, access to data deeds, etc</td>
</tr>
<tr>
<td>- OPUS</td>
</tr>
<tr>
<td>- JUSTICE ccms</td>
</tr>
<tr>
<td>- CHEDAS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FUTURE STATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Unified County Citizen Web Portal Integrating All Agencies’ Services</td>
</tr>
<tr>
<td>- Outward-facing Web Services for Self-service Functionality for 3rd Party Usage</td>
</tr>
<tr>
<td>- Web 2.0 Initiatives and Online Community Services (forums, newsgroups, mailing lists, wiki, blog, Twitter, social networking mash-ups)</td>
</tr>
<tr>
<td>- RSS/Atom Feeds</td>
</tr>
<tr>
<td>- Mash-up Application Services</td>
</tr>
<tr>
<td>- Potential Mandated Electronic Availability of County Records to Citizens</td>
</tr>
<tr>
<td>- Service Catalog</td>
</tr>
<tr>
<td>- Expanded Public Record View/Print</td>
</tr>
<tr>
<td>- Common Point-Of-Sale and Online Shopping Cart Services, PCI requirements, and ePay overhaul</td>
</tr>
<tr>
<td>- Constituent Relationship Management\311</td>
</tr>
</tbody>
</table>

### Description

County agencies are asking for additional options to allow internal and external customers to help themselves to County services. Emphasis is on more citizen engagement mechanisms and transparency of all County services. Self-service web-based portals and new, expanded data access methods will allow anyone requiring services or information new ways to access those services. This may further reduce costs and aligns with pending legislation mandating electronic access to County information sources.
## TREND

**Data mining, data analysis, and performance measurement**

### CURRENT STATE

- Report Writing Services
- Localized and Ad Hoc Web-based Analytics
- Localized and Ad Hoc Web-based Reporting (Application Specific)

### FUTURE STATE

- Business Intelligence Services
- Data Marts
- Data Warehouse
- Executive Dashboards
- Data Analysis Tools
- Predictive Analysis Tools
- Increased Utilization of Web Analytics to Support/Validate Paperless and Self-service Initiatives
- Expanded Ad-hoc Reporting Capabilities
- Data Catalog

### DESCRIPTION

Information is our most valuable asset. Business Intelligence provides the tools and systems that play a key role in the strategic planning processes of an organization. New and better ways to interrogate and report information is required for better, faster business decisions.
<table>
<thead>
<tr>
<th>TREND</th>
<th>CURRENT STATE</th>
<th>FUTURE STATE</th>
</tr>
</thead>
</table>
| Automation, workflow, and business process optimization | • Identity Management Services  
• Service Catalog Services  
• Process Improvement Projects and Services | • Business Process Analysis/Reengineering  
• Business Process Management Systems  
• Business Process Modeling  
• Continual Service and Process Improvement Program  
• Identity-driven workflow and provisioning of services  
• Enterprise Workflow Solutions and Business Process Management Tools  
• Improved Process Metrics-gathering and Reporting  
• Rapid Application and Solution Development Methods  
• Smaller Solution and Development Focus Teams |

**DESCRIPTION**

County agencies need new, better ways to improve work processes and increase efficiency. Business process analysis and automation of key processes are required.
Future State Technical Architecture

The Enterprise Planning and Architecture Strategies (EPAS) process used by BTS creates architecture viewpoints. Architecture viewpoints are simplified perspectives and views of the composition of complex systems. EPAS recognizes four different architecture viewpoints:

- **Business Architecture** – this viewpoint puts business processes in visual form to describe how the business process works with information and technology to deliver business capabilities. Example documents include business process swim lane diagrams, business and functional requirements documentation, organization charts, business units interaction diagrams and unified modeling language (UML) documentation.

- **Information Architecture** – defines information assets, the flow of information (origin and destination), and the composite views of information required for decision making. Example documents include information flow diagrams, entity-relationship modeling and diagrams (ERMs and ERDs), and unified modeling language (UML) documentation.

- **Technology Architecture** – defines standard technology products, configurations and services, and how they interoperate. Example documents include future state technical architecture, topology drawings, unified modeling language (UML) documentation, and configuration management database(s).

- **Solution Architecture** – this view considers where relevant subsets of business, information, and technology intersect with one another to describe the overall solution.

For the 2013/2014 planning cycle, BTS developed an updated future state technical architecture one-page diagram to describe a high-level technical target state. This diagram provides guidance to various stakeholders, including staff participating in gap analysis, to develop a road map to the future state.

The diagrams on the proceeding pages are presented with two views. The first Technical Architecture view, titled “BTS Future State Technical Architecture (2-3 years Target)”, uses the technology product name with the vendor or manufacturer specific terminology. The second view, titled “BTS High-Level Future State Architecture (2-3 years Target)”, maps directly to the first view but uses the generic technology terminology to describe the type or intent of product.

*Note: The Enterprise Project technologies are typically composed of multiple technology components or suite of products that could occupy entire pages on their own, so these are presented by their project names rather than the underlying parts.*
BTS Future State Technical Architecture (2-3 years Target)

Enterprise Projects
- Odyssey
- Maximo
- Hyperion Business Intelligence (BI)
- Enterprise Content Management (ECM)
- Esri, Enterprise Geographic Information System (GIS)
- Service Desk r12
- CA CMDB r12
- Spectrum
- SolarWinds/Splunk
- Clarity r12, Oracle Project Manager

Business Technology Tools
- Java EE 7
- JDeveloper, Visual Studio & CSS, Dreamweaver, FlexBuilder
- Oracle Application Development Framework
- ivy/Maven, Hudson, Weblogic Deployment Tool
- Subversion (SVN)
- Oracle Application Testing Suite, Siteimprove, Browsera
- Oracle Service Registry/Enterprise Repository
- Oracle 11g, 12c, SQL Server 2012, ESBase 11
- OBIEE 11g, 12c, Hyperion
- Crystal Reports, BI Publisher, SSRS, SQLPlus, Oracle App Exp
- SharePoint 2010
- Weblogic 11g, 12c, IIS 8, Oracle HTTP Server

Application Development
- Oracle SQL Dev, SQL Dev, Data Modeler, SQL Plus, SQL Studio
- PL/SQL, SQL, T-SQL
- Oracle E-Business Suite R12
- ESR! ArcGIS Server 10, ArGIS Online, Pictometry-EFS
- eTX HEMI, Oracle Data integrator, SSIS
- Automate BPA, Server, Campaign Enterprise

Additional roadmap detail on scripting and other tools can be found in the BTS Technology Roadmap at http://intraweb.co.pinellas.fl.us/bts/BTSRoadmap.pdf

Networking/Security
- NetIQ Identity Manager (IDM)
- Active Directory
- eDirectory (Novell's IAM)
- RADIUS
- Oracle Internet Directory (OID)
- Oracle Access Manager (OAM)
Guiding Principles

1. Promote “One County” Collaboration.

*Rationale:*
- BTS is committed to the success of others and promotes this philosophy for all.
- Promote a “One County” holistic approach to service provision while respecting the autonomy of Constitutionals, Agencies, and the Courts.
- Autonomy at the local and state levels is necessary to facilitate the unique purpose of an Agency, Constitutional Officer or the Courts.
- A holistic approach promotes trust, collaboration and cooperation throughout the enterprise.
- This approach minimizes redundancy and complexity and simplifies citizen interaction with government.
- This approach is consistent with the BTS Board Interlocal Agreement.
- Be common when you can … be different when you need to be.

*Implications:*
- It is essential that Constitutionals, Agencies and the Courts collaborate, participate and commit to the discipline and guiding principles of a Federated Governance Model.
- Regulatory compliance is a top priority.
- A holistic approach requires open and constant communication that may result in longer decision-making cycles that extend the implementation time for solutions.
- Consistency and commonality will allow for agility, minimizing integration complexity.
- Trust, communication and credibility are critical to success.
- Commit to the success of others.

2. All Decisions Must Be Fiscally Responsible.

*Rationale:*
- Cost Recovery discipline must be applied to all BTS efforts.
- The Cost Allocation Method should be discarded for a model shaped from the current enterprise, in alignment with ITIL Finance Management best practices.
- Transparency of the cost of all investments and services provided is imperative.
- When stakeholders can clearly see the cost of services they can take a more active role in cost savings and make informed choices.
- All initiatives should be supported by a business case and if the solution or service is not aligned to the business, it should not be done.
- Negotiations around costs, efforts to reduce costs wherever possible, and the lowest prices for the best solutions are expected.
- Notional billing will allow for stakeholders to take advantage of common enterprise investments without additional cost and enable more equitable accounting for costs.

*Implications:*
- A BTS Finance sub-committee is established to report to the BTS Board and provide guidance and collaboration with BTS Finance staff.
- All BTS staff must diligently and accurately track all costs for investments and services provided.
- All BTS staff must be actively involved in budget, finance, and cost recovery processes with a focus on cost reduction and best pricing.
- Based on long-term viability and fiscal responsibility, specific projects may not be eligible to begin or continue to completion based on financial analysis.
• Business sponsorship involvement is required to identify and justify business value of new and ongoing investments and services.
• The expense of ongoing maintenance and technology refresh costs will be incorporated into the cost recovery model to guarantee budgetary funds are available.
• Combine and collaborate whenever possible to realize economy of scale savings.
• Legacy solutions and technology will be replaced when financially viable equivalents that may reduce total cost of ownership are available.


Rationale:
• We must be the best we can afford to be while avoiding incurring additional ongoing cost, where possible, to avoid negatively impacting a sustainable future.
• Excellence is expected in everything BTS does.
• Excellence does not mean perfect.
• In the face of competition, BTS desires to distinguish itself and to be recognized by our customers as the Service Provider of Choice.
• Quality of workmanship in products and services is the distinguishing factor in business.
• The public expects more efficient and responsive government with quality services.
• Agencies demand quality, customer-centric service and business solutions.
• Quality encourages a favorable public image.

Implications:
• Accountability for excellence to ourselves and to our customers must be entrenched in our culture.
• Establish a culture of quality and continuous process improvement.
• Commit to the success of others.
• Internal and external cultural changes are required.
• The pursuit of excellence and the desire to be progressive comes with a price. All personnel must be responsible for effectively using resources and leveraging assets for achieving appropriate levels of competency.
• Don’t let “perfection” get in the way of “better”. – Roger Goodell

4. Simplify and Reduce Complexity.

Rationale:
• Reduction of unnecessary complexity or duplicity may make solutions easier to use, maintain, and support, potentially reducing costs.
• Easier to understand and communicate.
• Allows focus on core competencies.
• Provides consistency, stability, and helps improve continuity.
• Reduces unnecessary redundancy.

Implications:
• Combine what should be combined, separate what should be separated, and eliminate what can be eliminated.
• Simplicity requires the reduction or elimination of the unessential.
• Simplifying solutions must be balanced against purpose, goals, and functionality to ensure we deliver usability.
• Reduce abstract language, jargon, or wordiness internally and especially with customers.
• Internal and external cultural changes may be required.
• Focus on what is probable or likely, not all possibilities.
• Customize as a last resort.
• Retire legacy solutions when outdated or overly complex.
• Re-engineer and challenge the ‘status quo’ to reduce complexity and duplication of effort wherever it occurs throughout the County.

5. C.I.A., Continuity, and Recovery in All Solutions.

Rationale:
• Confidentiality, Integrity, and Availability (CIA) of information assets are vital security issues for the enterprise.
• Availability, responsiveness, and protection of mission-critical systems are to be embedded in all solutions.
• Continuity of business services and timely recovery of services are expected for all solutions.
• Customers expect more efficient and responsive government that is there when called upon for service - building trust through BTS responsiveness, reliability and agility.

Implications:
• BTS support and delivery foundation needs to be in place.
• A combination of processes and tools are needed.
• Internal and external collaboration is required.
• C.I.A., Continuity, and Recovery discipline must be embedded in all solutions as a forethought.
• Accurate and detailed Risk Management is required, with a comprehensive inventory of our assets.
• Disaster Recovery plans need to be fully developed, communicated, and funded.
• Business Continuity plans need to be defined and funded for all solutions.
• Operational redundancy needs to be in place and funded where required.
• This strategy can potentially involve more complex design and cost for redundancies - slowing down system upgrades and product deployments.
• All hardware and software systems require a defined “Maintenance Window”.
• Change Management maturity is required to mitigate unnecessary risk to the production environment.

6. COTS Over Custom (Reuse, Buy, then Build).

Rationale:
• When planning a project or defining a solution: analyze reuse, then buy, then build.
• Analysis before reusing solutions or components must ensure that reuse is the best option, especially when options for reuse involve technologies or processes that no longer align with future state plans.
• This approach should minimize duplicity and complexity, enabling enterprise transparency and agility.
• Leverage commercial off the shelf (COTS) packages that incorporate industry standards and best practices.

Implications:
• Customize as a last resort.
• The Reuse option should be based upon sound analysis and require minimal customization. Plan for reuse as a forethought, not an afterthought.
• Reusing existing solutions or components should be considered for technologies or processes that are aligned with future state architectures, but reuse should not occur for solutions or components that are identified as outdated or costly to continue maintaining.
• Retire legacy solutions when outdated.
• This approach will exercise efficiencies, shorter time to market and fiscal responsibility.
• Preparation of a detailed business case will be provided as justification for an intended solution.
• BTS staff must become integration specialists, creating middleware options for connecting disparate systems.
• COTS applications must have API, web service, and/or other service-oriented architectures to allow interoperability and integration.
• The analysis required for building a solution is pre-empted if reuse or the buy options are viable.

7. Go Green.

Rationale:
• Reduce paper, consumables, waste, energy consumption, and environmental impact to save costs.
• Aligns with Pinellas County Sustainability principles and Pinellas “First Green County” achievement (http://www.pinellascounty.org/sustainability/history.html)
• Protects health and global standard of living.
• Positive leadership role for coworkers and citizens that shows good financial stewardship.

Implications:
• Reduced power consumption saves on electricity bills, reduces heat in the workplace and data center, and decreases air pollution.
• Reduced printing can save significant tax payer dollars spent on paper, ink/toner, and waste disposal.
• Purchase devices that are EnergyStar compliant. Consider power consumption and power management for all electronic devices.
• Leverage or reuse existing equipment before considering new purchases based on cost analysis for effective use.
• Consider options for reuse and disposal methods when products have reached end-of-life for business purposes.
• Recycle paper, manuals, and packaging whenever possible.
• Make more resources electronically available, replacing manual and paper-based methods when possible.
• Must measure and monitor use for accountability.

<table>
<thead>
<tr>
<th>High-Level Guiding Principles</th>
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<tbody>
<tr>
<td>1. Promote “One County” Collaboration</td>
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<tr>
<td>2. All Decisions Must Be Fiscally Responsible</td>
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<tr>
<td>3. Balance Quality with Sustainability</td>
</tr>
<tr>
<td>4. Simplify and Reduce Complexity</td>
</tr>
<tr>
<td>5. C.I.A, Continuity, and Recovery in All Solutions</td>
</tr>
<tr>
<td>6. COTS Over Custom (Reuse, Buy, Build)</td>
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<tr>
<td>7. Go Green</td>
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</tbody>
</table>
## Appendix A: BTS Technology Roadmap (Example)

Legend

<table>
<thead>
<tr>
<th>Category</th>
<th>Invest / Deploy</th>
<th>Maintain / Support</th>
<th>Migrate / Eliminate</th>
<th>End of Sustainability</th>
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<tbody>
<tr>
<td>desktop/laptop operating system</td>
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<tr>
<td>Desktop</td>
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<td>Windows XP</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3 Q4</td>
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<tr>
<td>Windows 7 32-bit</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3 Q4</td>
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<tr>
<td>Windows 7 64-bit</td>
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<td>Q1 Q2 Q3 Q4</td>
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<td>iOS</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3 Q4</td>
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<td>Android</td>
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<td>Mobile device mgmt</td>
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<td>Q1</td>
<td>Q2</td>
<td>Q3 Q4</td>
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<td>Q1</td>
<td>Q2</td>
<td>Q3 Q4</td>
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<td>Q1 Q2 Q3 Q4</td>
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<td>web browser</td>
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<td>Internet Explorer</td>
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<td>MS office</td>
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<tr>
<td>enterprise email, IM, compliance</td>
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<tr>
<td>Exchange</td>
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<tr>
<td>MS office 2007</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3 Q4</td>
<td></td>
</tr>
<tr>
<td>MS office 2013</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3 Q4</td>
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<tr>
<td>Instant messaging</td>
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<tr>
<td>MS office Comm 2007</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3 Q4</td>
<td></td>
</tr>
<tr>
<td>MS office Lync TBD</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3 Q4</td>
<td></td>
</tr>
<tr>
<td>Compliance</td>
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<tr>
<td>MS office C2C</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3 Q4</td>
<td></td>
</tr>
<tr>
<td>Server virtualization</td>
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<tr>
<td>VMware</td>
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<tr>
<td>ESXi</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3 Q4</td>
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</tr>
</tbody>
</table>

Appendix B: Enterprise Business Services

The BTS Board has promoted and approved the following set of Business Services aligned with the Cost Recovery model, thus far, to allow for transparent accounting of Enterprise and Customer Services provided by the BTS Department.

<table>
<thead>
<tr>
<th>Service Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Support Center (CSC)</td>
<td>Includes incoming contacts, infrastructure monitoring, ticket creation, first level resolution or escalation, Incident tracking, tape management and loaner equipment services.</td>
</tr>
<tr>
<td>EGIS Bureau</td>
<td>EGIS Service Bureau maintains EGIS data for Pinellas County.</td>
</tr>
<tr>
<td>EGIS Technical</td>
<td>Includes In-house developed and COTS GIS applications, databases and associated hardware.</td>
</tr>
<tr>
<td>Enterprise Asset Management (EAM)</td>
<td>Includes In-house developed and COTS (Maximo and Agile Assets) applications, databases and associated hardware.</td>
</tr>
<tr>
<td>Email</td>
<td>Includes individual, group and facility Email and calendar accounts, Sunshine law compliance for archiving and retrieval and Business Continuity.</td>
</tr>
<tr>
<td>Justice</td>
<td>Serves the Pinellas portion of the 6th Judicial Circuit for the Criminal, Civil, Juvenile, Probate &amp; Traffic Courts.</td>
</tr>
<tr>
<td>Network</td>
<td>Includes Internet Access, Wide Area Network (WAN), Local Area Network (LAN), 100Mb at the port and Business Continuity.</td>
</tr>
<tr>
<td>Business Intelligence</td>
<td>Includes OBIEE/Hyperion</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Includes all hardware and OS software for Custom IT Services. Also includes all SAN storage and backup equipment for every BTS service.</td>
</tr>
<tr>
<td>Service Name</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Security</td>
<td>Includes Anti-Virus, anti-Spam, Firewall, Content filter, Identity Management, Directory services, Forensics, Risk assessments, Remote Access, PCI quarterly scans and Log Management</td>
</tr>
<tr>
<td>Telephone</td>
<td>Includes phones, phone numbers, voicemail, caller ID, call waiting, local and LD calling and Business Continuity</td>
</tr>
</tbody>
</table>

**Appendix C: Custom Business Services**

<table>
<thead>
<tr>
<th>Service Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCC Custom IT Service</td>
<td>Includes development and database labor support for In-house developed and COTS applications</td>
</tr>
<tr>
<td>DEI Custom IT Service</td>
<td>Includes IT field services and development and database labor support for In-house developed and COTS applications</td>
</tr>
<tr>
<td>Clerk Custom IT Service</td>
<td>Includes development and database labor support for In-house developed and COTS applications</td>
</tr>
<tr>
<td>Community Development</td>
<td>Includes development and database labor support for In-house developed and COTS applications</td>
</tr>
<tr>
<td>Courts Custom IT Service</td>
<td>Includes development and database labor support for In-house developed and COTS applications</td>
</tr>
<tr>
<td>JWB Custom IT Service</td>
<td>Includes IT field services and infrastructure labor support</td>
</tr>
<tr>
<td>MedExam Custom IT Service</td>
<td>Includes development and database labor support for In-house developed and COTS applications</td>
</tr>
<tr>
<td>SOE Custom IT Service</td>
<td>Includes IT field services, database, and infrastructure labor support</td>
</tr>
<tr>
<td>Sheriff Custom IT Service</td>
<td>Includes development and database labor support for In-house developed and COTS applications</td>
</tr>
</tbody>
</table>
Appendix D: Governance – Successful Leadership Through Collective Guidance

Background
BTS is the champion for a formal, business-led Executive Leadership framework that ensures technology projects are business driven, collaborative, foster partnerships, and give guidance and communication around Business and Information Technology investments. The BTS Governance framework is designed to increase collaboration and partnerships between all stakeholders. Governance provides Senior County Executives with a formalized management structure that enables them to ensure that investments and the engagement of limited staffing resources are aligned with stakeholder business objectives. Governance encourages Executives to consider implications both vertically within their own domain and horizontally across the broader County organizational landscape to make the best possible investments on behalf of our citizens.

Pinellas County Governance Overview
The following diagram illustrates the overall BTS Governance framework and identifies the key Governance committees that have been established to date.