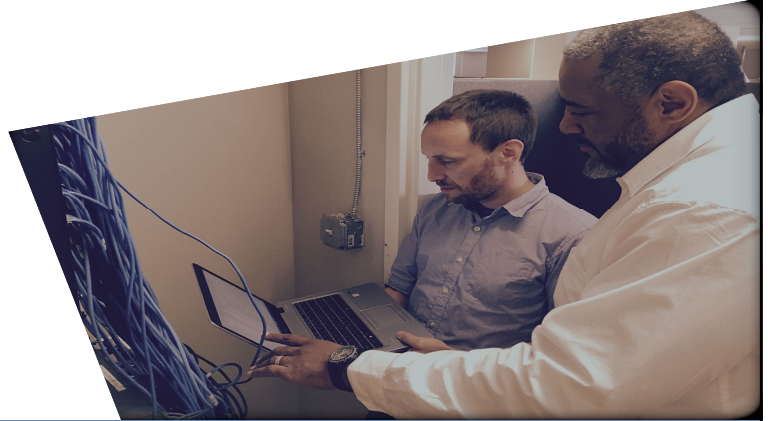




Providing services that support
County Departments and
Criminal Justice Partner
Agencies.

Information Technology :: Mission

Divisions **Collaborating** Together



IT Divisions

- Operational Services
- Software Services
- Security & Standards

OPERATIONAL SERVICES DIVISION



Network



Storage



Servers



Enterprise Support

- Radio
2 Support Staff
- Service Desk
11 Support Staff
- Infrastructure
6 Support Staff

5 | Operations: Radio

Radio

Implementing and maintaining critical wireless communication systems for community public safety agencies, 911 communication systems, and first responders so they can serve the public at their most critical time of need



6 | Operations: Radio



7 | Operations: Service Desk



Service Desk

The Service Desk serves as the single point of contact for all technology related questions, service requests, and other technology issues for the County

8 | Operations: Service Desk



3700+
People Supported



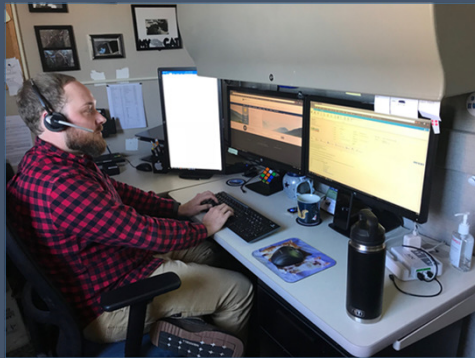
18K+
Annual Service Requests



12K+
Devices Deployed Annually

"I needed help on a Friday at five minutes until five o'clock on a holiday weekend and the support staff was awesome, they stayed late to insure that I was operational."

Buncombe County Sheriff's Office



"Our issue was addressed quickly and professionally. By responding so quickly, IT ensured that our customers didn't notice any issues with our systems."

Buncombe County Health & Human Services

10 | Operations: Infrastructure



Infrastructure

Networks. Servers. Storage.

None of the IT resources the county employs would be possible without an advanced information technology infrastructure serving as the foundation and backbone of all technology efforts.

11 | Operations: Infrastructure

Unique
Locations

78

Hours of Stored
Camera Footage

270K

CDs of Worth of
Data

1.1M

Phone Calls in
the Past Year

1.5M



12 | Operations: Infrastructure

Servers
Supported

350

Workstations
Supported

2500

Emails Processed
Annually

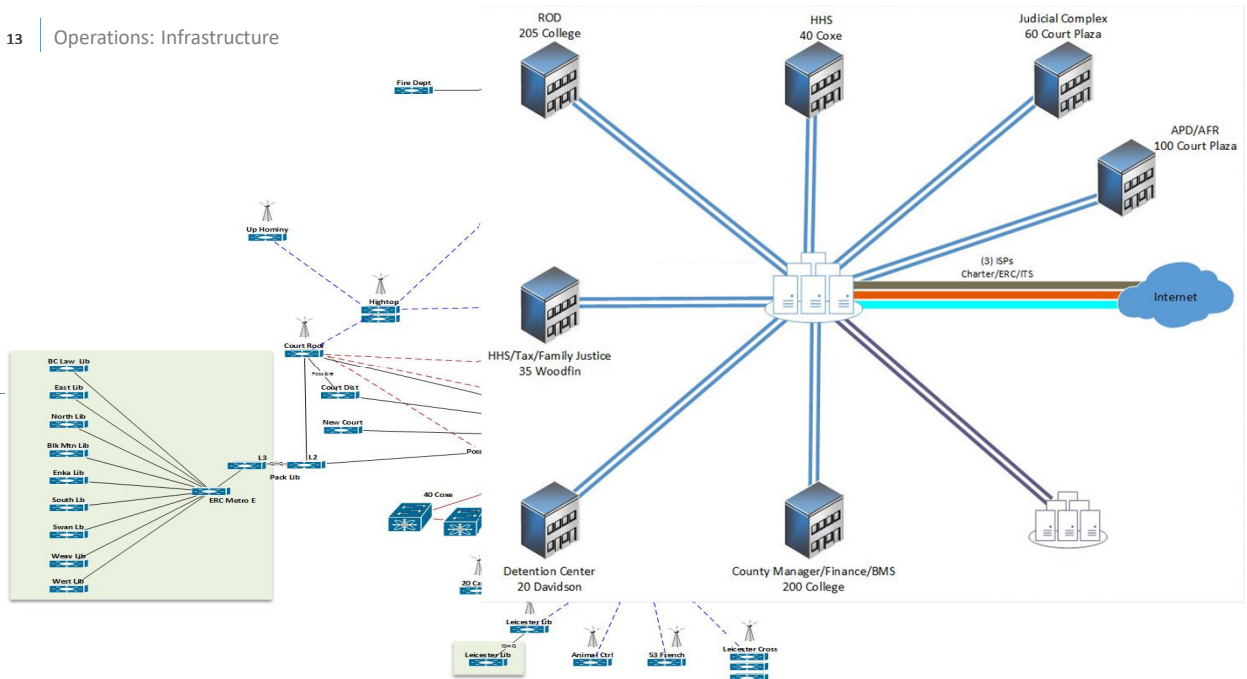
8M

Recorded
Documents

8M



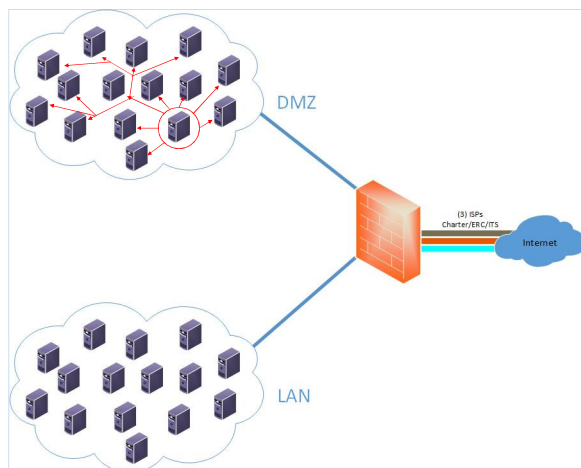
13 Operations: Infrastructure



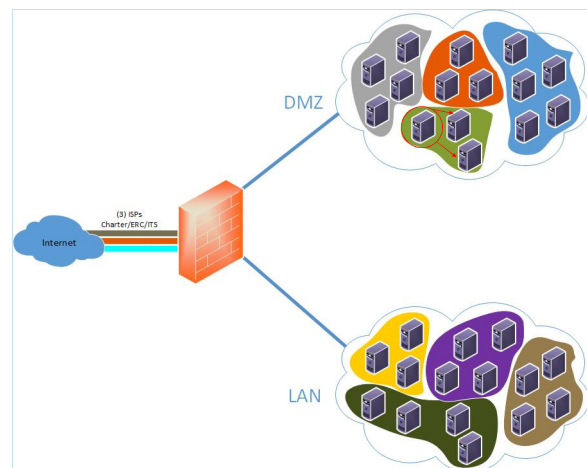
14 Operations: Infrastructure

Major Projects

- Today
 - Any server in a particular zone can reach any other server in the same zone
 - Same-zone network traffic must go to the core



- Tomorrow
 - Servers can only reach other servers in their logical grouping
 - Network traffic is able to remain within each logical grouping



To increase energy efficiency and reduce costs, BCIT has virtualized over 315 of the 350 servers currently in use:

	Physical	Virtualized	Savings
Energy Savings:			
Annual Server & Cooling Energy Usage (kWh)	2,379,983	297,498	2,082,485
Cost Reduction:			
Physical Hardware ¹	\$ 1,260,000.00	\$ 189,000.00	\$ 1,071,000.00
Annual Energy Cost ²	\$ 237,998.00	\$ 29,750.00	\$ 208,248.00
Environmental Impact:	Planting Trees	Cars off the highway ³	Annual CO2 Emission(lbs/kg) ⁴
These savings are equivalent to	4,942	279	3,296,574 lbs
			1,495,301 kg

\$2M

Saved every 5 years



SOFTWARE SERVICES DIVISION



Software Support



Integrations



Automation



Data Expertise

- Custom Development

7 Support Staff

- Content Management

4 Support Staff

- GIS

2 Support Staff

- Vendor Systems

6 Support Staff

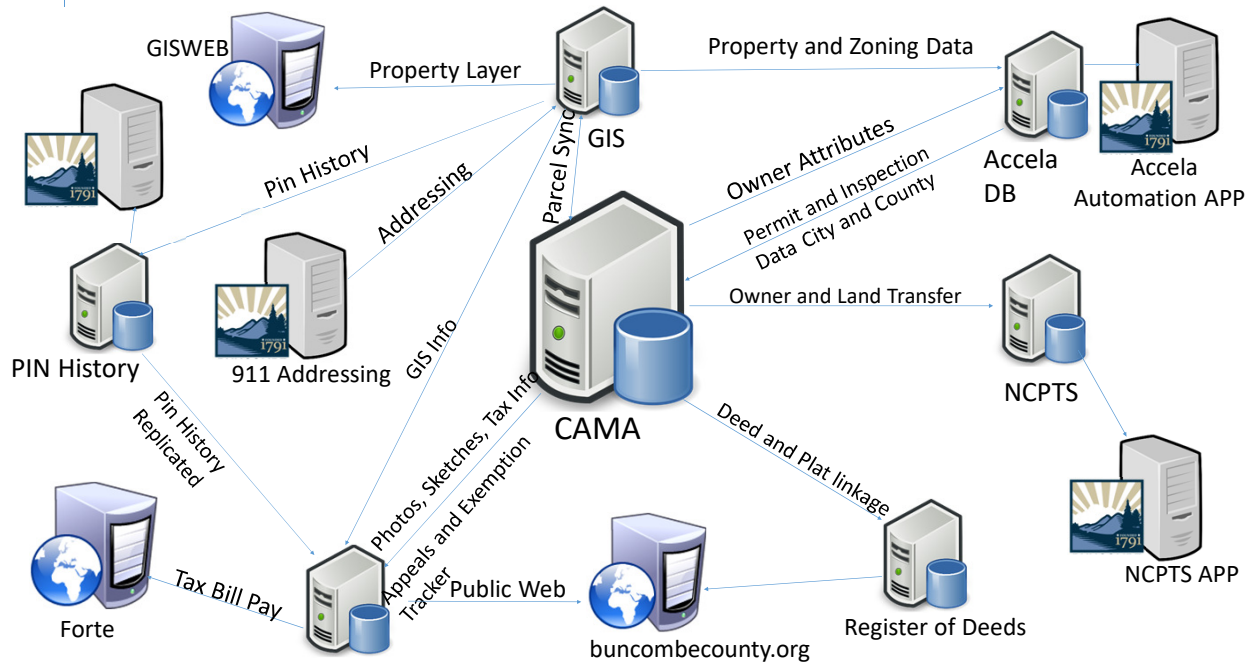
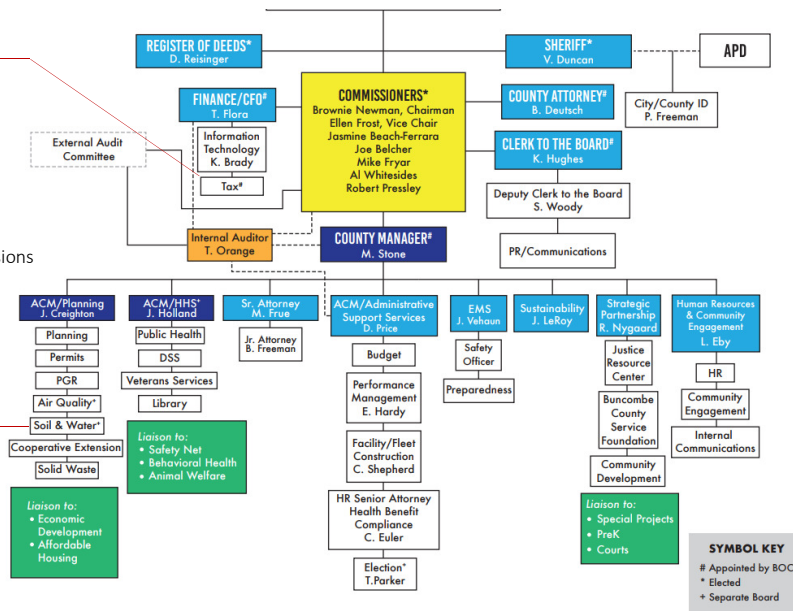
Government & Software

Tax

Assess Pro
North Carolina Property Tax System
Vehicle Tax System (State)
Gross Receipts
Online Appeals
Online Exemptions
Online Business Listing Extensions
ArcGIS
And More!

Solid Waste

Waste Works
Credit Card Processing
Integration to ERP





19 | My Canceled Presentation



Vendor Systems
Vendor systems do not just mean turn it on and it runs. Have to manage the business / Technical / and functional components of the applications.

The Numbers

- 66 Vendor Applications
- 9 State Systems

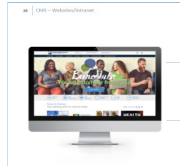
Technical Support	Vendor Management	Functional Knowledge
 159  72  14	  	  



Content Management Systems

The Numbers

- 62 Custom Applications
- 1,000+ Interactions



Websites/Intranets
on SharePoint/WordPress

- Gather Content
- Schedule Updates
- Monitor Analytics
- Daily Support

SharePoint
on Microsoft Office 365

- 35 Site Collections
- Internal and External
- 134 GB Stored Data



Digitization / Automation / Interfaces

The Numbers

- 3.4+ TB of Storage
- Over 8+ Million Documents



Custom Development

The Numbers

- 62 Custom Applications
- 1,000+ Interactions



Custom Applications
High Technical Proficiency



20 | Bridging the Physical Divide

Deed Transfer Project

Stakeholders

R Register of Deeds

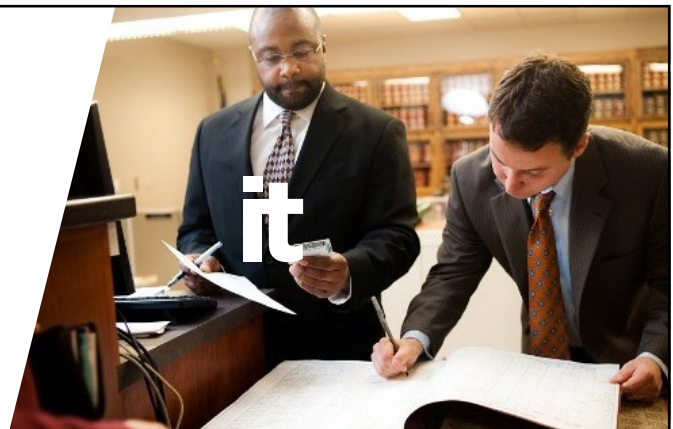
- Drew Reisinger
- Shellie Thompson
- Cattleya Gaines
- Deeds Team

T Tax Department

- Kristen Foxworth
- Jennifer Pike
- Tax Collection Team

it Information Technology

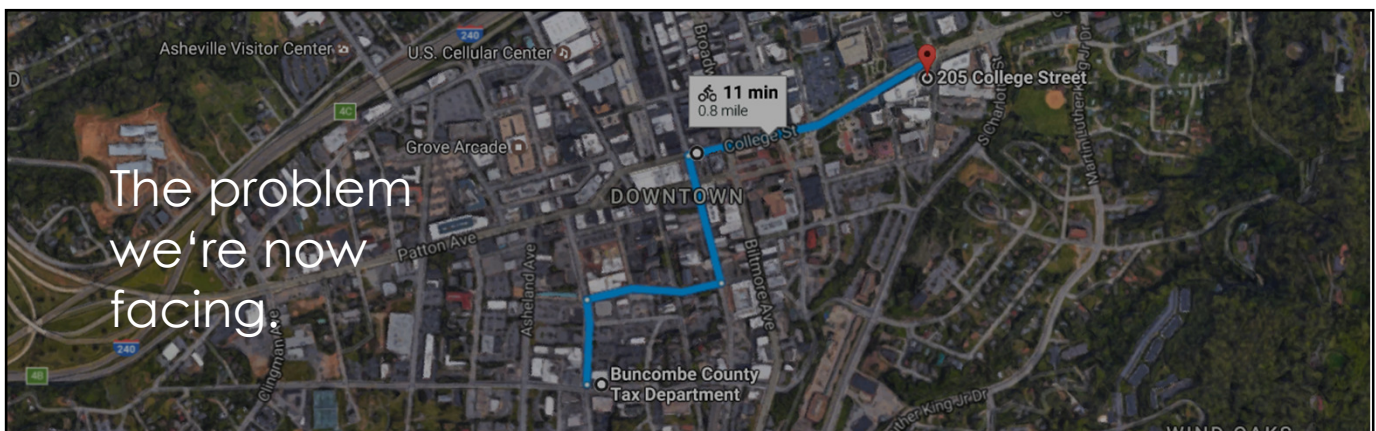
- Custom Development Team
- DBA Team
- CMS Team (MFD)



21 | Good Ole' Days



The Good Ole' Days
How it used to work



One Round Trip...

32+
MINUTES

Walking

22+
MINUTES

Bus

10+
MINUTES

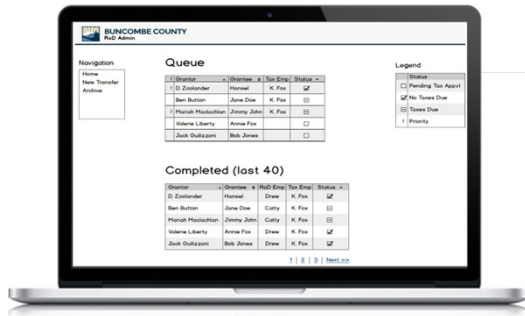
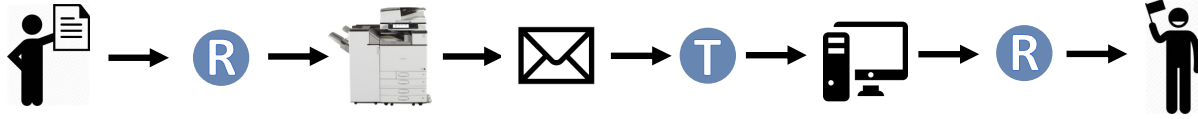
Driving

1.6
MILES

Distance

Split of physical location

23 | The Application



The Application and Workflow

- 01 Interface
- 02 Notifications
- 03 Key Functionality
- 04 Collaboration Aspects

The problem we're now facing.

One Round Trip...

32+ MINUTES

Walking

22+ MINUTES

Bus

10+ MINUTES

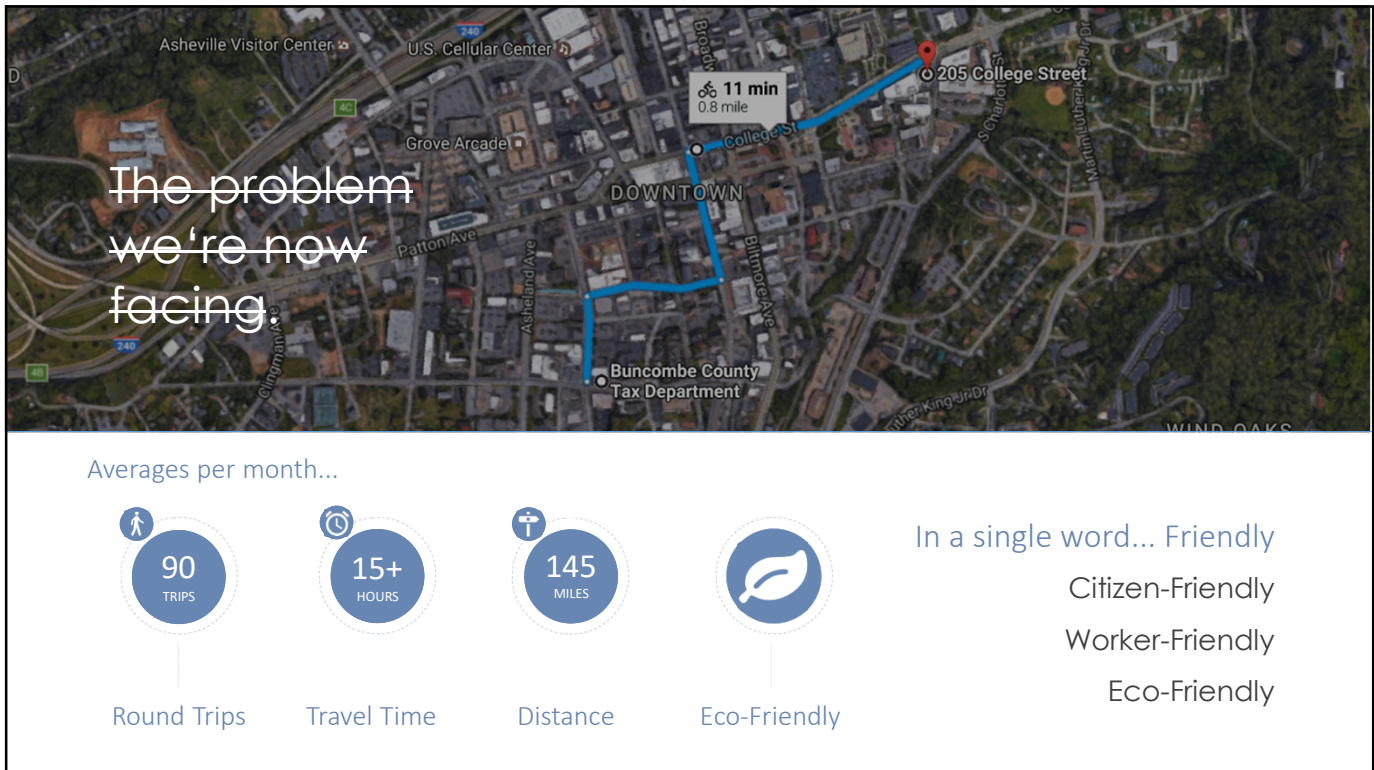
Driving

1.6 MILES

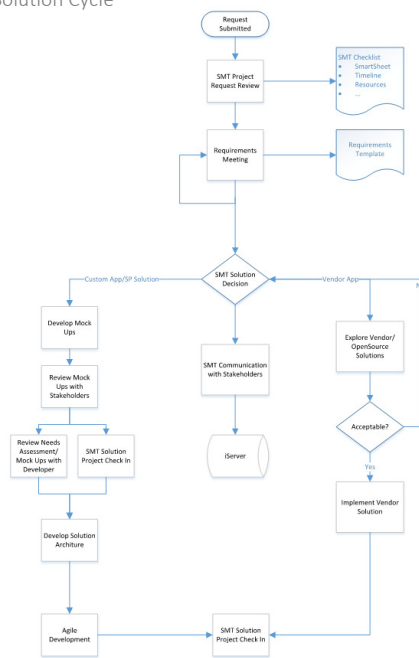
Distance

Split of physical location

Following administrative decisions, both departments have now moved to new locations breaking the natural workflow of the deed transfer process.



26 | Solution Cycle



The Solution Cycle

1. Requirement Gathering
 - i. Core Objectives
 - ii. Timeline
 - iii. Data Needs / Security
2. Solution Management Team
 - i. Can we leverage an existing system?
 - ii. Is there a viable Open Source solution?
 - iii. Can we acquire an affordable Vendor solution?
 - iv. Do we need to build it?

SECURITY & STANDARDS DIVISION

- The Data
- The Threats
- The Methods
- The Numbers

What is
CYBERSECURITY?



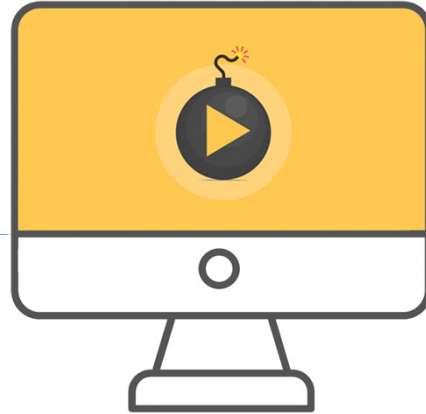


31 | Threats: Digital

Spam



Virus



32 | Threats: Human

Social Engineering



Phishing



Protecting Data

Protecting data is similar to the steps used to protect your house.



- Lock the Door
- Install an Alarm
- Put in Cameras
- Buy a Safe
- Hire Security Guards



23%

of recipients now open phishing messages and 11% click on attachments or links.



Days

is the average it takes to discover a malicious attack.



\$170

is the average cost per lost or stolen record caused by a malicious or criminal data breach.

4.2 Billion

is the total number of records exposed globally in 2016 (reported).

BUDGETOVERVIEW

36 | Budget: Overview

Overview
Information Technology

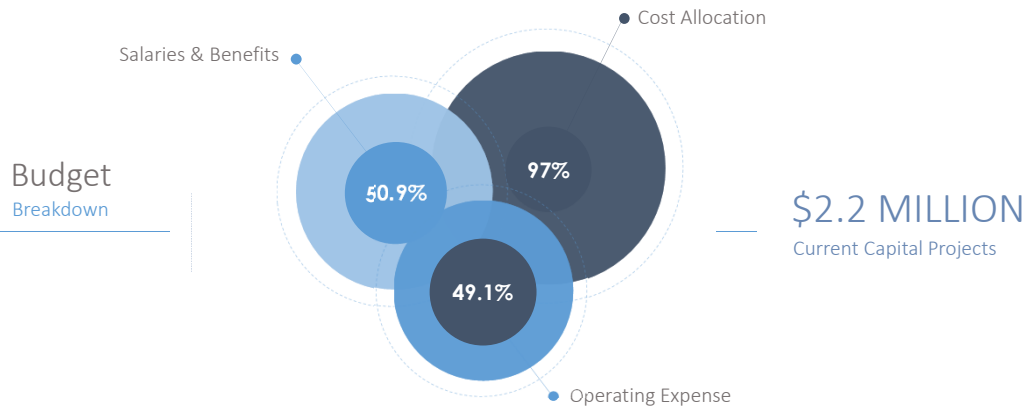


53
IT Employees

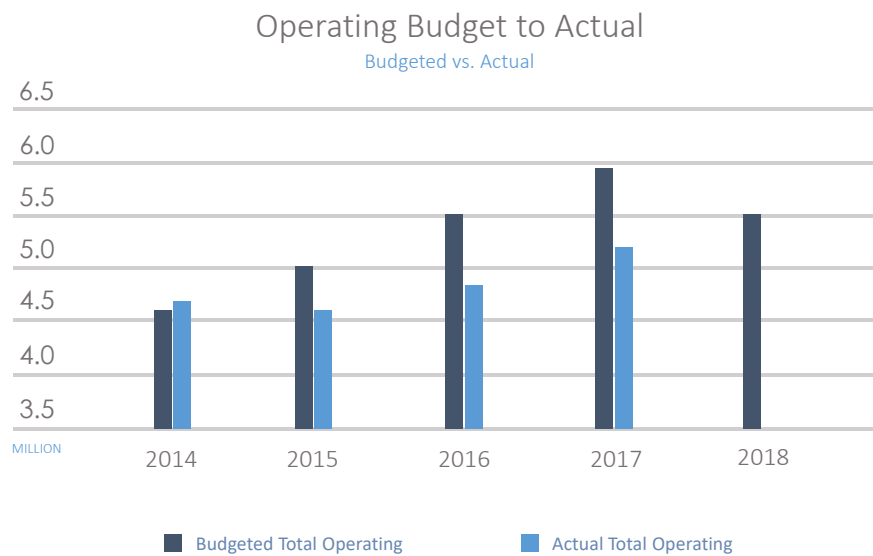


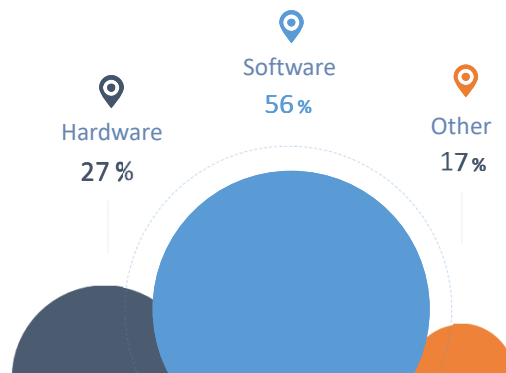
11.17 Million
IT Budget

37 | Budget: The Numbers

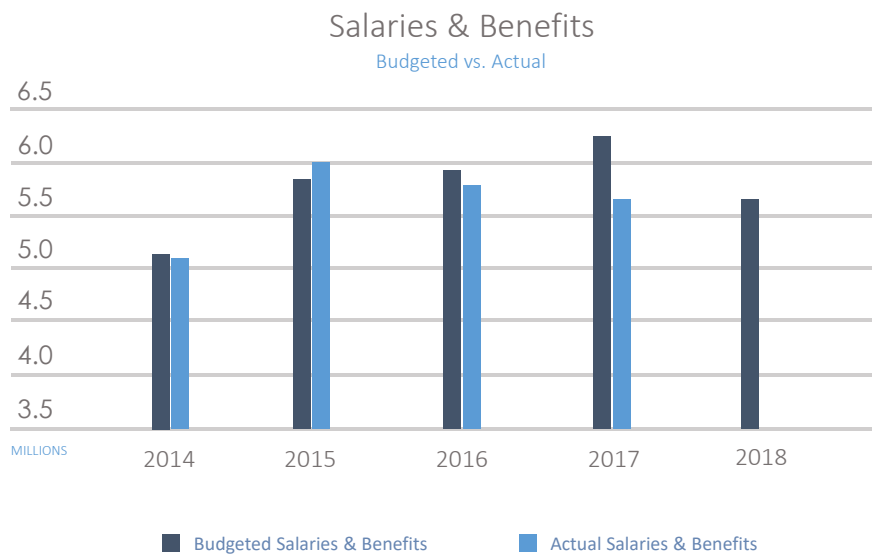


38 | The Numbers: Salaries & Benefits





Operating Expenses



Time for your
Questions.

