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Agenda

- Budget
- Goals
- Recent Improvements
- Budget Trends
- Short-Term Investments
- Long-Term Investments
- Next 12 Months

Budget

<u>Enacted Budget</u> (authorization)		<u>Actual Spend</u> (all funds)	<u>Outstanding CHASE balance*</u>	
FY15	\$141.8 M	\$118.4 M	FY15	\$ 71.8 M
FY16	\$141.5 M	\$120.5 M	FY16	\$ 59.4 M
FY17	\$138.3 M	\$111.8 M	FY17	\$ 42.5 M
FY18	\$132.7 M	\$110.0 M	FY18	\$ 25.4 M
FY19	\$130.7 M	\$112.0 M (April 30, 2019)	FY19	\$ 8.3 M
FY20	\$131.3 M			\$ 2.8 M (as of April 30, 2019)

*Note: beginning of each fiscal year
2014: 80.2 M start

Highlights

FY17 transfer to General Fund (GF)	\$ 8.0 M
FY18 transfer to GF	\$10.8 M
FY19 scheduled transfer to GF	\$ 2.8 M
FY20 scheduled transfer to GF	\$ 2.8 M

Strategic Plan: Four Primary Lines of Effort

- Security
- Enterprise Services
- Contract Administration
- Training/Education

Operational Approach

Security

- 1 2 3 4 5 6

A

Enterprise Services

- 1 2 3 4 5 6

B

Contract Administration

- 1 2 3 4 5 6

C

Training/Education

- 1 2 3 4 6

D

Current Environment

21st Century Information Technology Environment

SUPPORTED OBJECTIVES

- 1 – Securing the network
- 2 – Shared data environment
- 3 – Data Center restructuring
- 4 – Single Sign On/Identity Management
- 5 – Enterprise standards and services
- 6 – Oversight of IT acquisitions and projects

DESIRED CONDITIONS

- A** – A monitored and secured computing environment capable of risk detection, response, and mitigation
- B** – State-of-the Market services provided to agencies
- C** – A task deliverable contracting environment with approach monitoring and follow-up
- D** – Planned workforce training and education for completion of daily tasks and investment in our future IT staff

Recent Improvements (1)

Staffing Changes

- Contracting Officer (CO) - works hand in hand with Finance
- Chief Compliance Officer (CCO)- offloads tasks from our Chief Information Security Officer (CISO) – focus on compliance and policy
- Enterprise Project Management Office (EPMO)- consolidated all project managers
- Chief Data Officer (CDO) – all data initiatives
- Digital Transformation Office – stood up and actively working projects
- Kentucky Business One Stop – Actively transitioning Single Sign-on

Recent Improvements (2)

Infrastructure

- Implementing converged infrastructure for servers and storage (VBlock)
- Implemented enterprise monitoring & management tools (Dynatrace)
- Managed Router Service (MRS) with AT&T reduces cost and better service (KIH3 contract)
- Reduced annual cost by \$600K by eliminating ServiceLink (datacom)
- Refreshed and Upgraded the central network core switching ("a heart transplant")
- Centralizing and standardizing Video Conferencing (Bluejeans and Skype)
- Standardizing Document Management approaches and software (OnBase)
- Upgrading the Geographic Information System (GIS) capabilities with leaf-off photogs
- Implementing the Citrix (Thin Client) environment to facilitate application modernization
- Eliminated bloated or underused consulting agreements (i.e. Gartner)
- Mainframe to the Cloud (Boulder, CO) (MaaS)

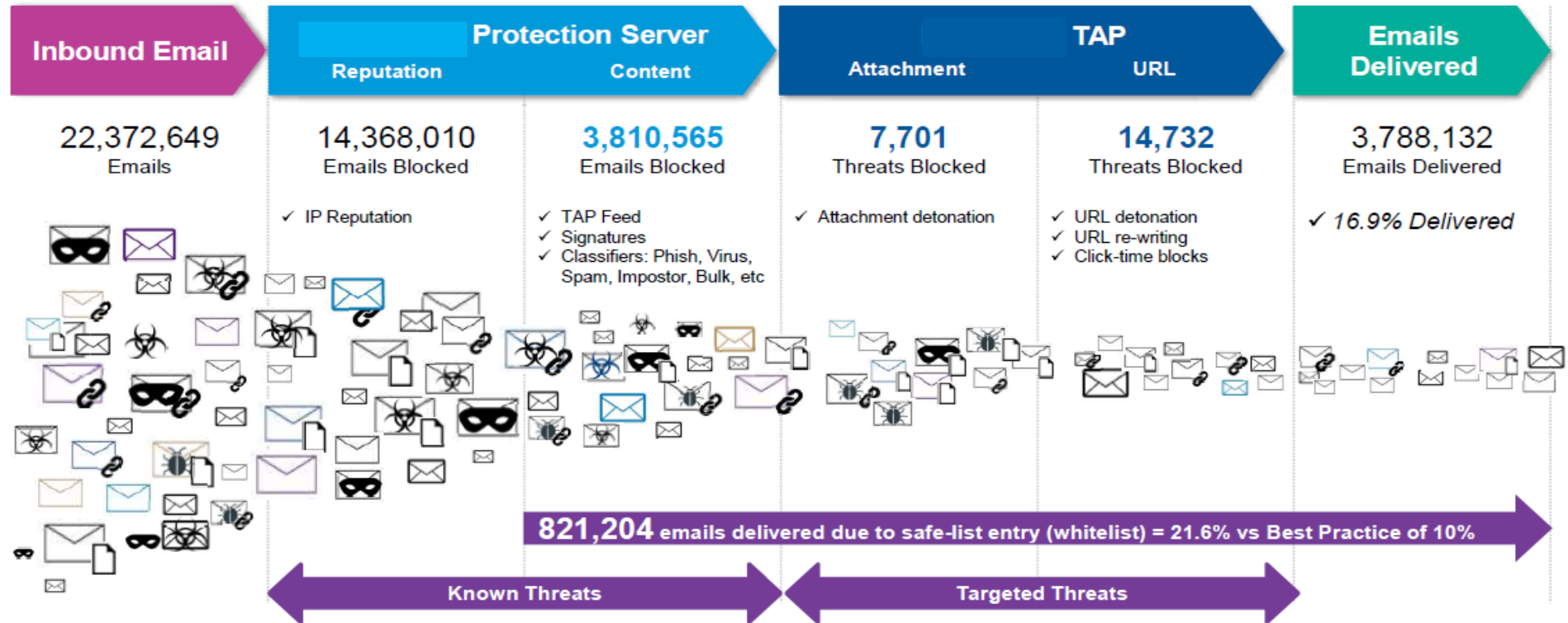
Recent Improvements (3)

Security

- Implemented Multi-Factor Authentication and advanced email filtering
- Incident Response Evaluation (223,000 edge events/day, 5,700 proactive defensive actions, 30-60 events require eyes on manual analysis daily)
- Adoption of Enterprise-wide desktop Advanced threat protection and intrusion prevention
- Upgraded all enterprise firewalls and implemented Managed Router Service (MRS)
- Filled vacant critical security staffing expertise
- Enhanced Security Programming controls which has decentralized agency application code deployments
- Acquisition and Implementation of enterprise Security Incident and Event Management System (Exabeam)
- Proactive protections for workstations and servers through enhanced security detection and response (endgame)

Threat protection statistics

04/24/19 to 05/31/19



Recent Improvements (4)

Applications

- ~\$589 million annual IT spend in the executive branch, ~\$120 million is IT infrastructure
- This past 12 months has just started to elevate applications to the enterprise:
 - Single Sign-on to the enterprise
 - Service Desk
 - Single security platform
 - Application deployment platform
 - Our cloud vs “the” cloud
- Direct Support to SB77 (2019 session) and HB74 & HB400 (2018 session)
- Enterprise Content Management – 3 proposed IT Capital Projects (18 Million) – Moved to Onbase at no cost using existing resources – New IT Capital Project for further advancement of ECM

Recent Improvements (5)

Cooperation and Collaboration

- **Justice Cabinet – Management Control Agreement (MCA) with Kentucky State Police**
 - First Ever MCA in the Commonwealth
 - Moves Criminal Justice Information into Commonwealth Data Center
- **Data Sharing Agreement – Agreement amongst agencies to willingly share data which is not federally controlled. Federally controlled data sharing agreement with proper acknowledgements still required**
- **Local Entities and Universities reaching out to share Datacenter space and data (UK, UofL, JCPS)**
- **Non-Executive Branch Agencies asking to participate in shared services (Housing Authority)**
- **Career and Technical Education Collaboration attracting and retaining quality entry level IT staff (apprentices)**

Budget Trends

- Security – Nation-wide increase in Security spending (KY = 9%)
- Legacy application retirement funding
- Pass-throughs (ATT, Various Software)
- Amazon Centralized purchasing
- Enterprise Contracts
- Debt Service
- Geographical Information Services (GIS)

Short Term Investments

- **Contracting project-based IT expertise (networking and desktop upgrades)**
- **Extension of Alternate Data Center Contract**
- **Mainframe applications with short-term renewals evaluating longer-term solutions**

Long Term Investments

- **VXBLOCK – Infrastructure**
- **Application Monitoring (Dynatrace)**
- **Digital Transformation (Salesforce)**
- **Desktop Applications and email (Google vs Microsoft)**
- **Document Management (OnBase)**
- **Data Center Improvements (Flooring and Generator)**
- **Consolidation of Physical footprint (new Mero street building)**

Next 12 Months

- **Windows 10 upgrade - current Operating System not supported after January 2020, 29,000 devices (60% complete) - Apprenticeships (2) helping rebuild Computers;**
- **LinuxOne Transition for Oracle Databases**
- **Integrated Enterprise service desk (trouble ticketing) - currently 9 different trouble ticket systems in the Commonwealth**
- **Digital Transformation Initiatives (Employee Engagement Portal = Time Keeping, Expense Reporting; Grants Management, Professional Licensing,)**
- **Decision on Enterprise email and desktop applications (Microsoft/Google Discussion)**
- **Enterprise Resource Planning (ERP) system analysis (two completely different CGI and SAP)**

Questions

