Bonneville
POWER ADMINISTRATION

INTEGRATED PROGRAM REVIEW

Information Technology

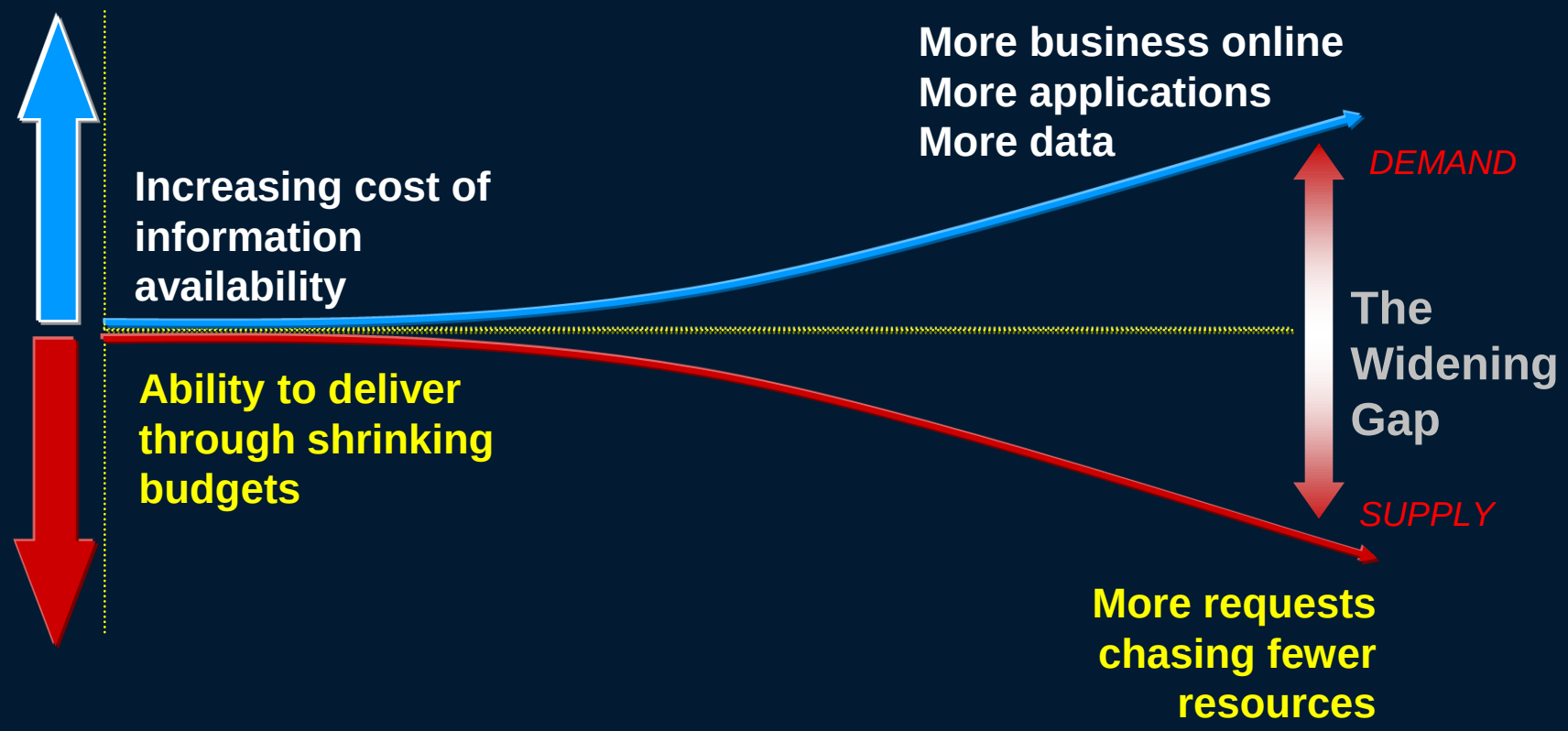
June 19, 2018

Agenda

	Topic	Speaker
1	Information Technology Overview	Ben Berry *Executive Vice President (EVP),* *Chief Information Officer (CIO)*
2	Status Quo Trajectory - Need for Change	Ben Berry *EVP and CIO*
3	Enterprise Technology Assessment (ETA)	Ben Berry *EVP and CIO*
4	ETA Breakthrough Strategies	Ben Berry *EVP and CIO* Paula Hamlin *ETA Program Manager*
5	ETA Strategy: IT Organizational Optimization	Ben Berry *EVP and CIO*
6	ETA Strategy: Cloud Strategy	Ben Berry *EVP and CIO*
7	ETA Strategy: Finance IT Model	Ben Berry *EVP and CIO*
8	Question and Answer Session	Ben Berry *EVP and CIO*

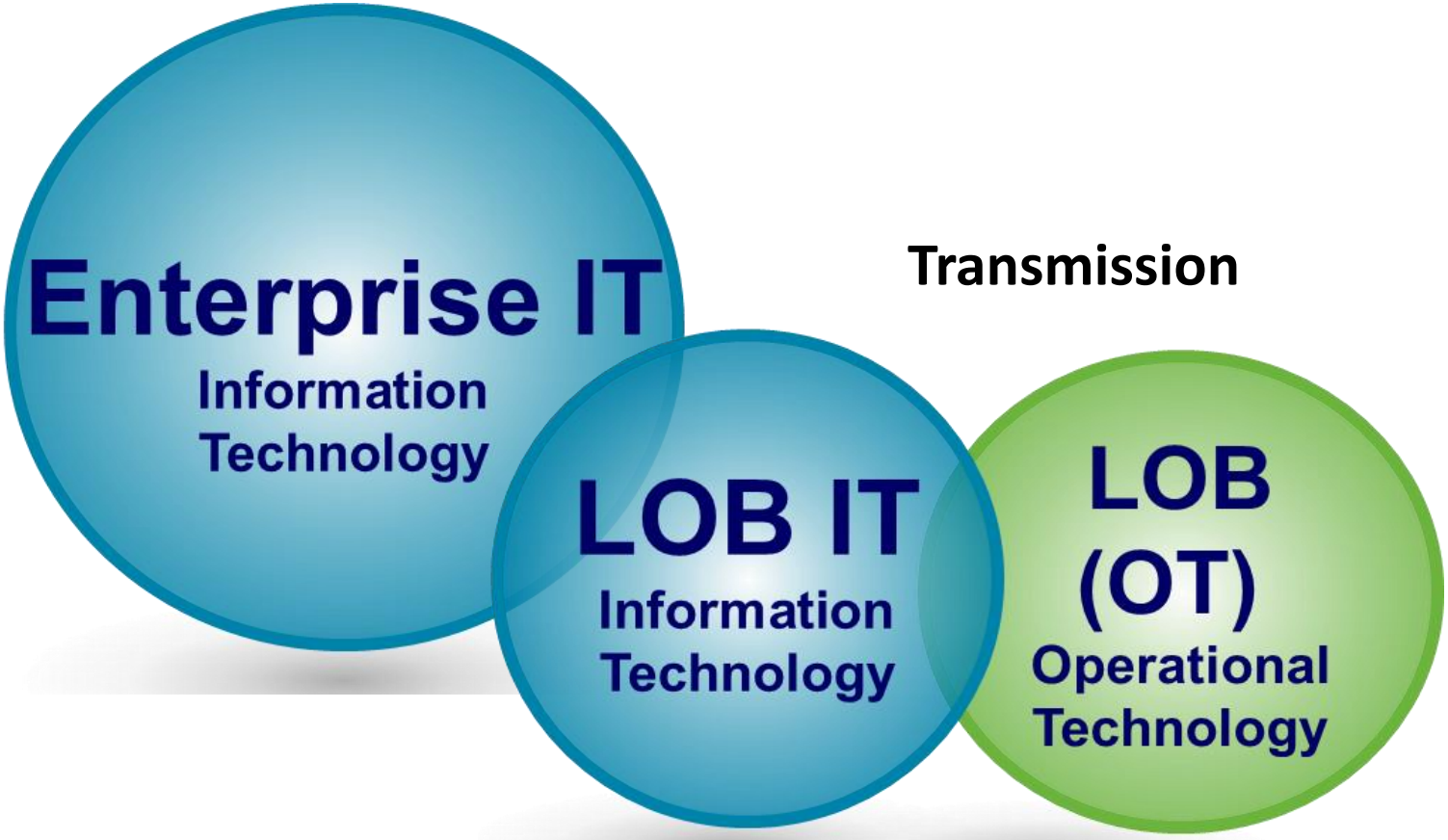
The BPA Challenge

Are we working on the right things?



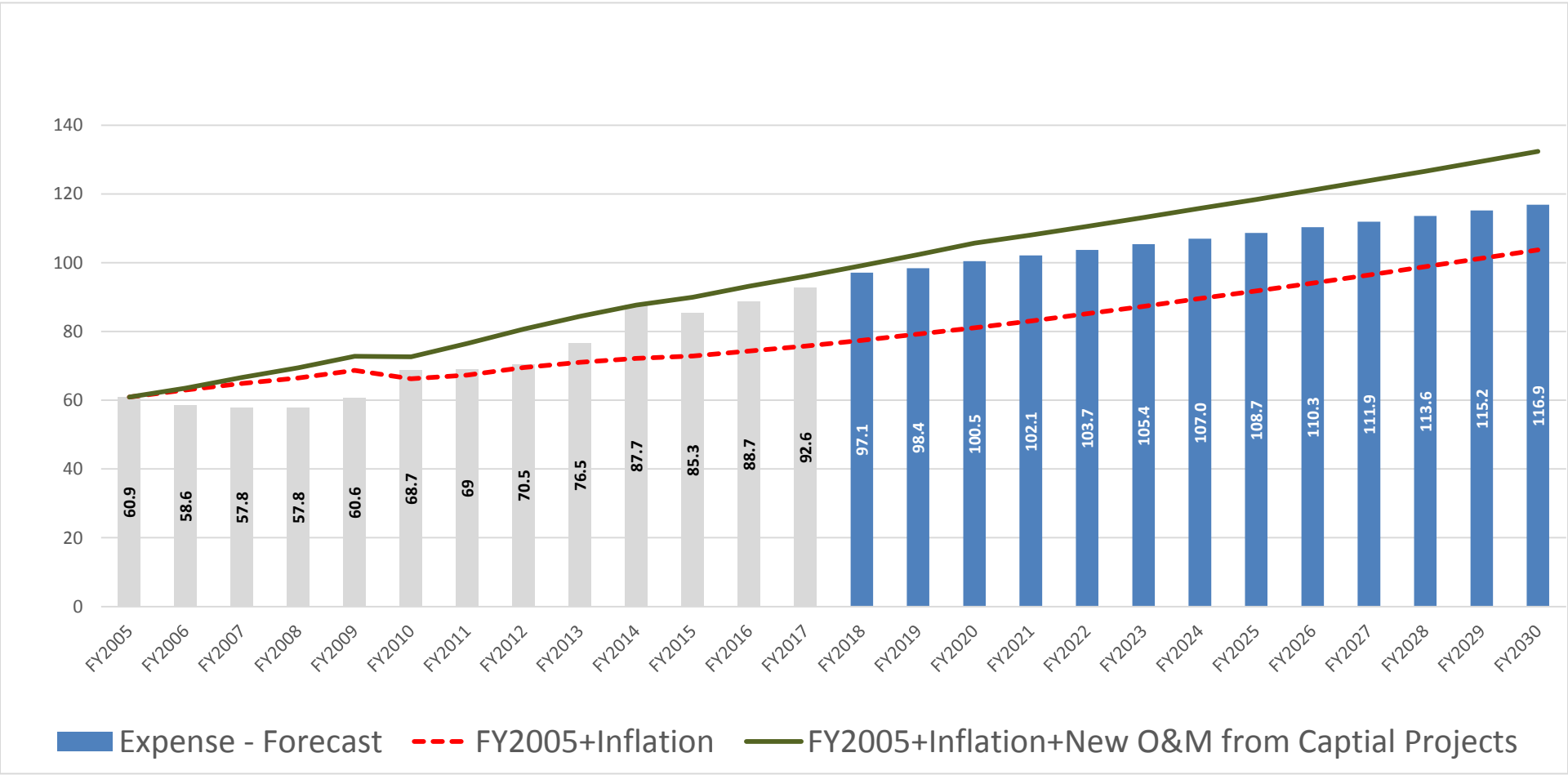
Enterprise Information Technology

Chief Information Officer



Transmission

Status Quo Enterprise IT Trajectory



Changing to Strengthen Financial Health

- **Enterprise Technology Assessment (ETA)**
  - Ending “business as usual” approach
  - Ten ETA Breakthrough Strategies will help us to:
    - Achieve cost reduction goals
    - Implement an IT Service Model to improve service delivery
    - Enable IT to be a more effective strategic business partner

Setting the ETA Target

- **Information Technology (Enterprise)**
  - IPR2016 SOY2018 Expense: $97.1 M
  - SOY2018 Capital: $25.0 M
- **Combined spend $122.1M; 5% efficiency equates to savings of $6.1M**

ETA Schedule	IPR2016 Baseline ($M)	Cumulative Cost Reductions	Efficiency ($M)	Target Fiscal Year Spend ($M)
Short Term - EOY2018	122.1	5%	6.1	116.0
Intermediate - Q2 FY2019	122.1	10%	12.2	109.9
Long Term - Q2 FY2020	122.1	15%	18.3	103.8

ETA Breakthrough Strategies

~ Enterprise Assessment Action Plan ~
Bonneville Power Administration
Commissioned by COO, CAO and CIO for FY2018

ETA Breakthrough Strategy Recommendations	BPA Business Deliberation							Business Case Solution Values		
	Proposed Duration	Proposed Start Date	Cost Savings * (over 5 yrs)	Budgeted Investment (over 5 yrs)	$ Savings ROI (over 5 yrs)	Cost Avoidance	Feasibility	Significant Cost Savings	Ease of Implementa-tion	Non Financial Benefits
Best Practices										
(1) IT Organization Optimization	14 months	Apr-18	$10.5M	$0.0 M	$10.5M		High	●	◐	●
(2) Role-Based Provisioning	24 months	Apr-18	$5.7M	$0.8M	$4.9M		High	◐	◑	●
(3) Improved IT Governance	36 months	Jul-14	$5.3M	$0.9M	$4.4M		High	◑	◐	●
Shared Environment										
(4) Grid Modernization IT Infrastructure	24 months	Jun-18	Lower out year refresh costs	$8.5M	-$8.5M	$10M (lower operations and refresh cost for year 6 and beyond)	High	◑	◐	●
(5) Enterprise Service Management	24 months	Jun-18	$7.9M	$0.9M	$7.0M		Moderate	◑	◐	●
(6) Enterprise Business Systems with Disaster Recovery	24 months	Apr-19	Cost Avoidance from Major Disaster Event	$16.7M	-$16.7M	$36M (Assume systems disabled for 2 months)	Moderate	●	●	●
Sustainable Cost Management										
(7) IT Contracts Management	24 months	Jun-18	$10.9M	$0.8M	$10.1M		Moderate	●	◐	●
(8) Cloud Based Service Adoption	36 months	18-Apr	$12.5M	$3.7M	$8.7M		High	●	◐	●
(9) Enterprise Architecture Integration	TBD	TBD	TBD	TBD	TBD	$22M over 5 years	Moderate	●	●	●
(10) Financial IT Model (FITM) (IT Charge Back Model)	12 months	May-18	$3.2M	$1.2M	$2.0M		High	●	●	●

BPA Strategic Plan Alignment

Goal # 1

Strengthen financial health = **ETA sustainable cost management**

- Reduction of up to $10.5 million of contracting services over 5 years
- NERC CIP (Critical Infrastructure Protection) compliance fulfilled through managed services (recommended)
- IT contracts management (expansion)
- Financial IT model - IT Show Back / Charge Back Model

BPA Strategic Plan Alignment

Goal # 2

Modernize assets & system operations = ETA shared environment

- Role-based provisioning
- Optimizing Agency Prioritization Steering Committee (APSC)
- Grid modernization IT infrastructure
- Enterprise service management adoption
- Enterprise business systems with disaster recovery
- Enterprise architecture integration
- Analytics capability expansion

BPA Strategic Plan Alignment

Goal # 3

Provide competitive power products and services = **ETA best practices**

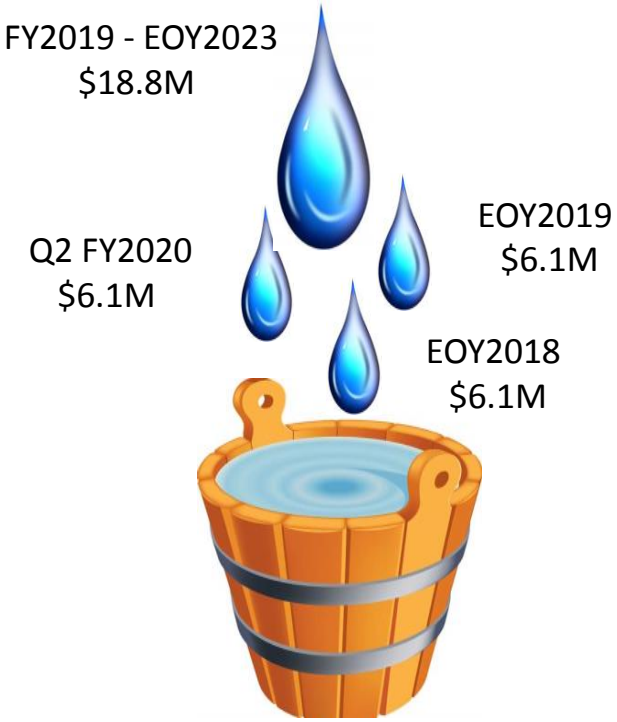
- Grid modernization roadmap projects enable higher transaction processing

Goal # 4

Meet customer needs efficiently and responsively = **ETA best practices**

- Grid modernization roadmap projects by enabling IT components

Building Financial Strength



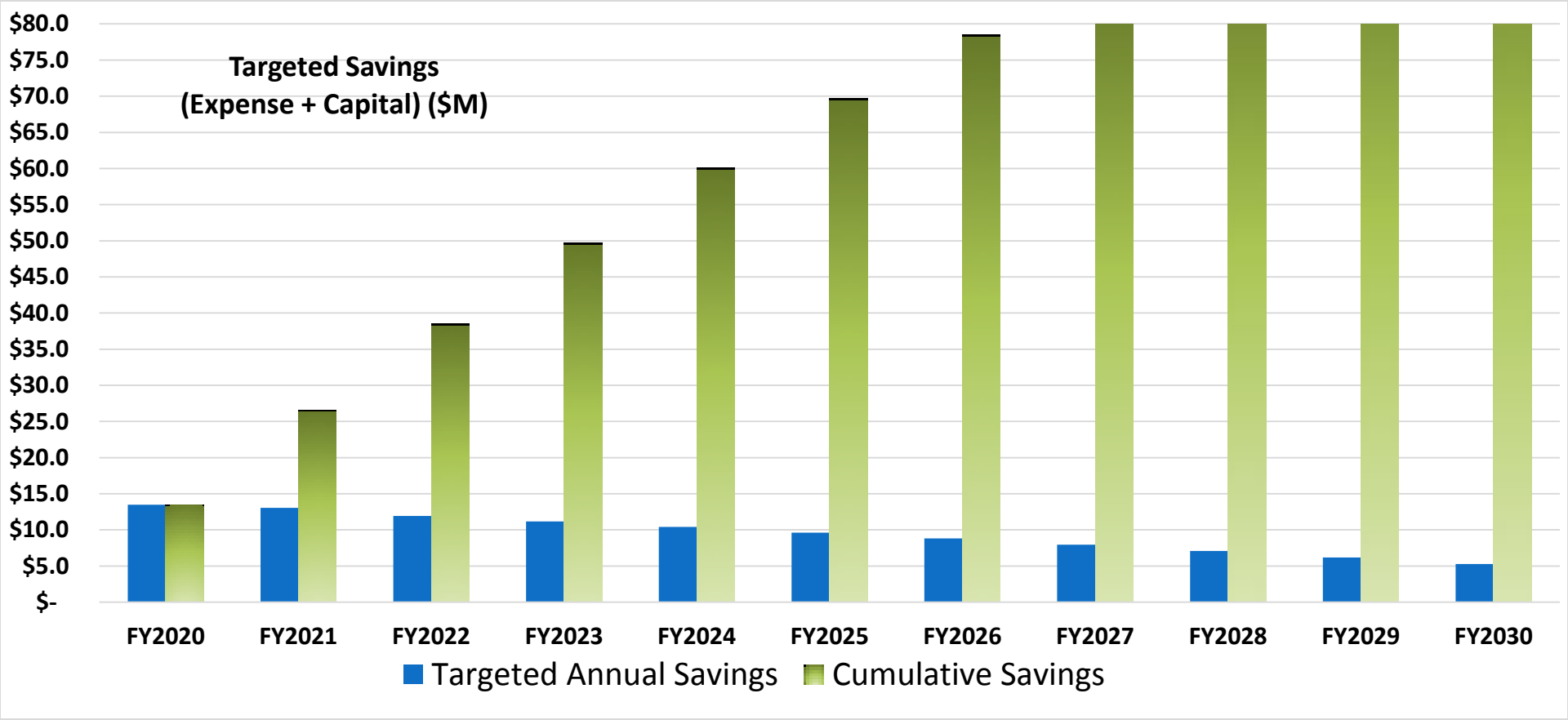
Meeting strategic and emerging business needs by providing business solutions which deliver demonstrable positive net value and benefits to the Agency and the Northwest.

<u>Over Five Years:</u>

$42.5M in Cumulative ETA Savings

$60.0M in Cost Avoidance

Targeted IT Annual and Cumulative Savings



Status on Phase 1 ETA Target

Achieving Phase 1 Targets (1 Oct 2018)

Projected Reductions in FTE Costs from FY2017:	$4.3M
Savings from Not Engaging in ETA External Contracts:	$0.4M
Deferring Desktop Refreshes:	$0.4M
Cumulative Miscellaneous Savings:	$1.4M
Reducing Capital Projects:	$6.0M
Total Projected Cost Reductions from SOY2018:	$12.5M
ETA Short Term Costs Reductions Target:	$6.1M

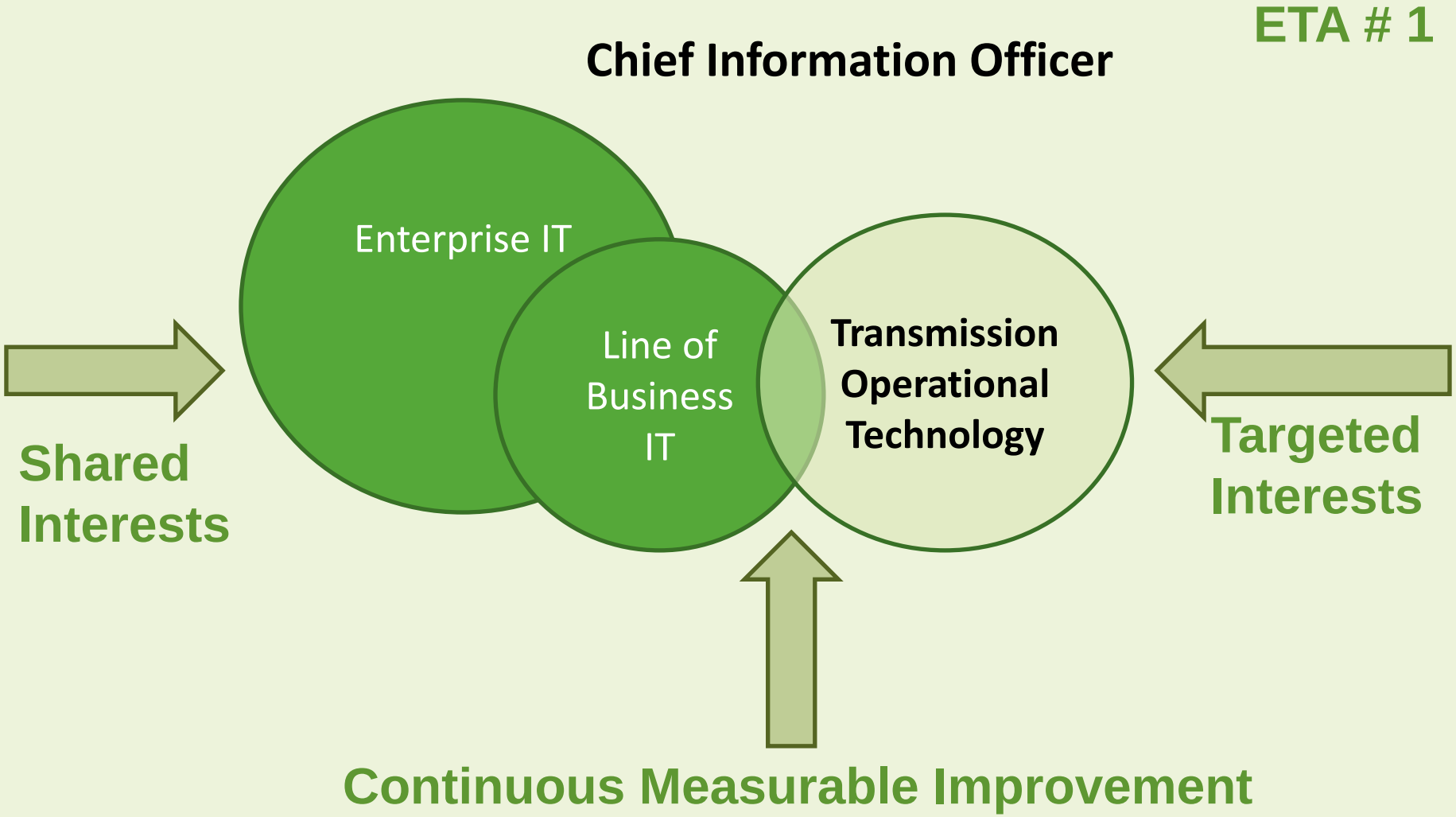
Projected to Exceed ETA Short Term (EOY2018) Target by: $6.4M

ETA Breakthrough Strategies

- **IT Organizational Optimization – ETA # 1**
- **Cloud Migration and Contract Management – ETA # 8**
- **Finance IT Model – ETA # 10**

ETA Organizational Optimization

ETA # 1



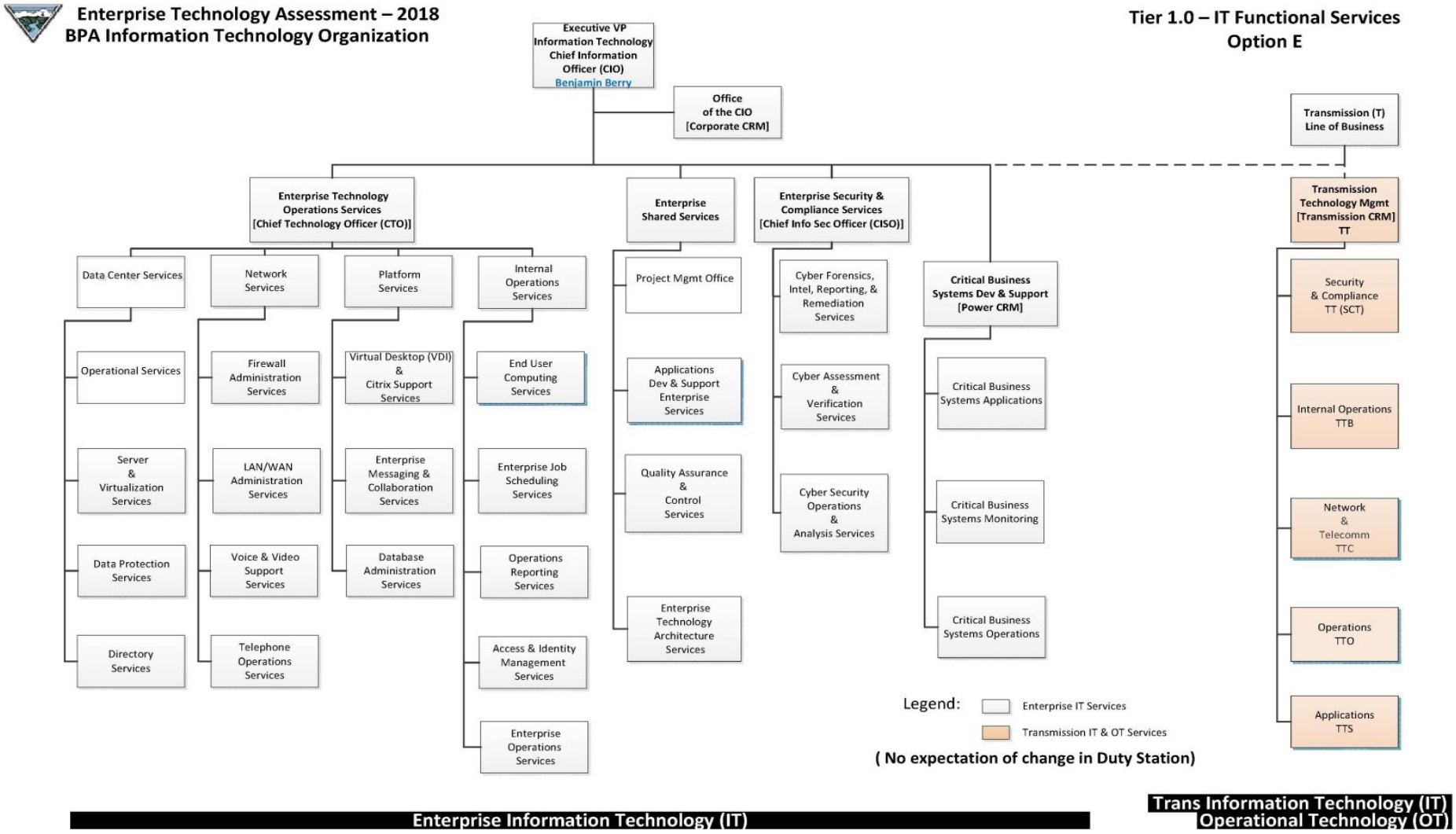
The Need for Organizational Change

ETA # 1
(cont'd)

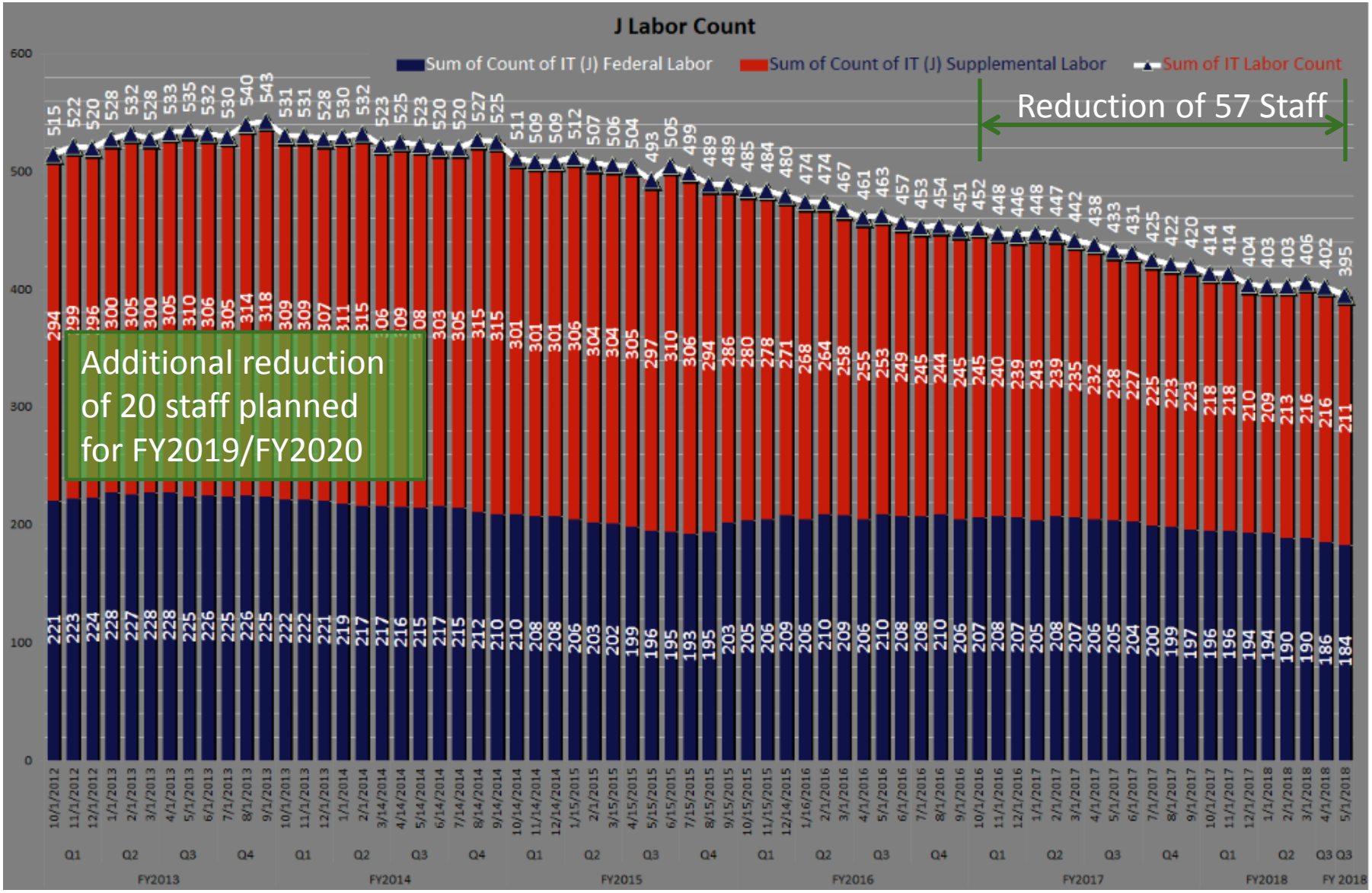
- **Cost drivers and change plan**
  - Adopt Commercial Software Solutions and Limit Customizations
    - New customization policy in place to reduce O&M costs

- **Optimize the IT Organizational Structure due to over-lapping and redundant services**
  - Optimize services by organizing IT to deliver solutions based on the IT Service Management industry standard

Functional Services Based Organization



Reducing Labor Costs



ETA Cloud Strategy

ETA # 8

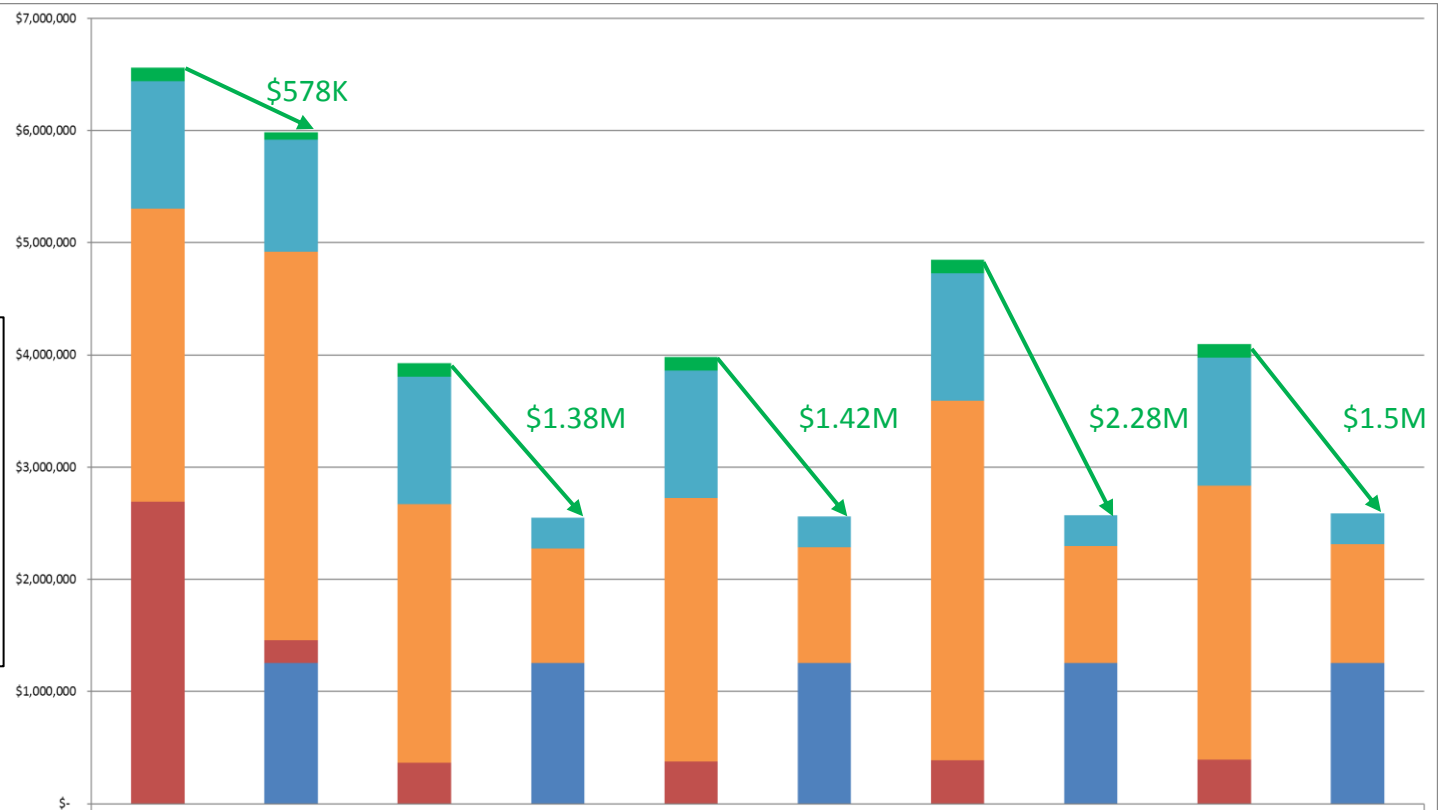
- **Office of Management and Budget guidance/directive**
  - Software-as-a-Service
  - Platform-as-a-Service
  - Infrastructure-as-a-Service

- **Our BPA IT Principles Strategy**
  - New projects
  - Disaster recovery capabilities
  - Data analytics and big data
  - Cloud-based deliveries

ETA Cloud – Financials & Human Capital

ETA # 8

5-Year Comparison of Business-As-Usual Versus Cloud: $5-7M Cost Savings

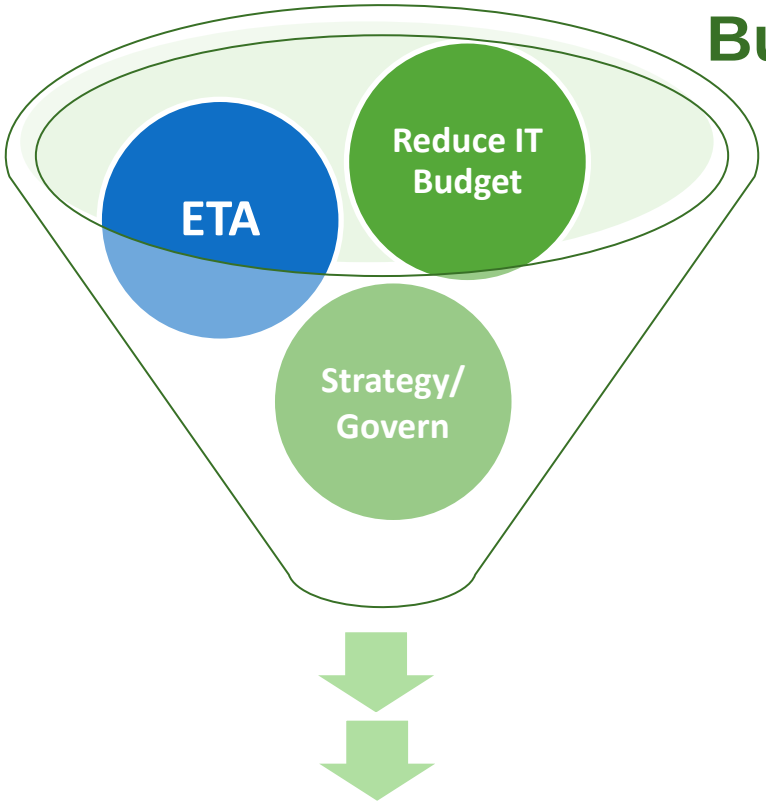


	Year 1		Year 2		Year 3		Year 4		Year 5	
	Business as Usual	Proposed	Business as Usual	Proposed	Business as Usual	Proposed	Business as Usual	Proposed	Business as Usual	Proposed
Facilitie Support	$120,000	$63,900	$120,000	$-	$120,000	$-	$120,000	$-	$120,000	$-
Current Ora... ...ng)	$1,138,064	$1,000,585	$1,138,064	$274,202	$1,138,064	$274,202	$1,138,064	$274,202	$1,138,064	$274,202
Labor	$2,610,600	$3,462,659	$2,301,936	$1,018,301	$2,347,975	$1,031,098	$3,206,734	$1,043,907	$2,442,833	$1,056,973
Hardware and Software	$2,692,805	$200,973	$366,330	$-	$375,407	$-	$384,718	$-	$394,269	$-
Cloud	$-	$1,255,576	$-	$1,255,576	$-	$1,255,576	$-	$1,255,576	$-	$1,255,576

Finance IT Model

ETA # 10

Enterprise Technology Assessment



Budget Reduction Impact

Strategy and Governance

Adopt IT Show Back or Charge Back Model

Finance IT Model vs. Status Quo

Comparison Criteria	Finance IT Model (FITM)	Status Quo
Enables Cost Transparency	Provides business units with data for direct costs of services	Limits cost transparency
Enables Cost Containment/Reduction	Enables business units to make informed cost-to-value decisions	Cost efficiency initiatives only affect Enterprise IT budget
Meets Agency Strategic Objectives	Funds IT-core and LOB-specific services and products through distributed lines of business	Funds the IT budget to serve the Enterprise without LOB rationing of services and priority
Ensures Operational & Maintenance Costs are Covered	Creates an IT service catalog for IT services projects to define O&M costs	Identifies O&M costs at the BPA pool level but not department level
Supports Life Cycle Management	Includes life cycle upgrade costs in service prices	Exposes life cycle upgrades to IT budget cuts
Implementation Risk	Requires Change Management to facilitate adoption by BPA	Maintains current practices of IT cost recovery

ETA Strategy Risk Drivers

	Impact	
Risk Driver	**Expense**	**Capital**
Delay in adopting Finance IT Model.	Increases	Increases
Failure to fully implement IT Service Model.	Increases	Neutral
Failure to achieve targeted breakthrough strategies efficiencies.	Increases	Neutral
Inability to convert programmed capital to expense for cloud-based solutions.	Defers	Defers
Failure to adopt cloud-based upgrades (e.g. Asset Suite, PeopleSoft ERP) will drive up cost of disaster recovery.	Increases	Neutral
Support for DOE/OMB initiatives (e.g. DOE Office 365 initiative) may reduce cost of email service while increasing network circuit costs.	TBD	Neutral

IT Funding Level Forecast

As of June 19, 2018

Spend Profile (June 2018) ($M)	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030
Total Expense	**$ 83.2**	**$ 84.2**	**$ 86.9**	**$ 88.3**	**$ 90.8**	**$ 93.3**	**$ 95.8**	**$ 98.3**	**$ 100.9**	**$ 102.5**	**$ 104.1**
Operational Expense	$ 77.2	$ 78.2	$ 80.0	$ 81.4	$ 83.0	$ 84.6	$ 86.2	$ 87.8	$ 89.5	$ 91.1	$ 92.7
Expense for Capital Program	$ 6.0	$ 6.0	$ 6.9	$ 6.9	$ 7.8	$ 8.7	$ 9.6	$ 10.5	$ 11.4	$ 11.4	$ 11.4
Total Capital	**$ 21.0**	**$ 21.0**	**$ 20.0**	**$ 20.0**	**$ 19.0**	**$ 18.0**	**$ 17.0**	**$ 16.0**	**$ 15.0**	**$ 15.0**	**$ 15.0**
Total (Capital + Expense)	**$ 104.2**	**$ 105.2**	**$ 106.9**	**$ 108.3**	**$ 109.8**	**$ 111.3**	**$ 112.8**	**$ 114.3**	**$ 115.9**	**$ 117.5**	**$ 119.1**

QUESTIONS?

FINANCIAL DISCLOSURE

This information was publicly available on June 18, 2018, and contains information not sourced directly from BPA financial statements.