



Bonneville  
POWER ADMINISTRATION



# INTEGRATED PROGRAM REVIEW

Information Technology

June 16, 2020

# Agenda

- Overview of IT Services
- Historical composition of IT Budget
- BP-22 IPR Proposal
- IT Strategy
- Questions

# Overview of IT Services



# BPA IT Operations and Services

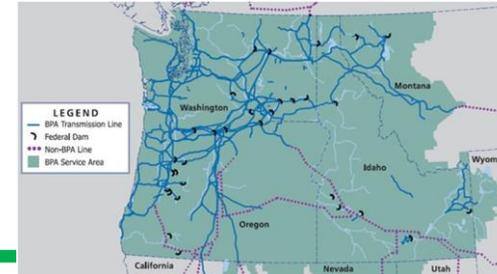
(IT Administrative Systems, Applications Portfolio)

## Business Solutions (Services)

- Physical Access Control & Monitoring
  - NERC/CIP Sites 76
  - Non NERC 35
- Data Integration Layer (Hub)
  - Subject Areas 9
  - Service Interfaces 23

## Business Solutions (Applications)

- Critical Business Apps 23
  - Integration Interfaces 92
- Enterprise Business Apps 42
  - Integration Interfaces 63
- Total J Business Apps 225



## Networking & Communications

- Firewalls 300
- Total Network Nodes 12,553
  - Desktop Connections 10,719
  - Server Connections 1,683
  - Wide Area Network Links 146
  - Internet Links 5
- Switches/Routers 645/211
- Cellular Devices 3,093
  - Smart Phones 1,644
  - Standard Cell Phone 395
  - Data Only Devices 1,054
- Data/Voice Circuits 382
- VoIP Desk Telephones 5,031

## Infrastructure & Data Center(s)

- Windows Servers 1,682
- Unix/Linux Servers 91
- Storage Area Network 900TB
  - SAN Growth/year >150TB
  - Virtual SAN 1.8PB
- Databases (Oracle, SQL) 2,620\*
- Standard Account Users 4,171
- Elevated Account Users 561
- Emails /mo. Received 3,255,852
- Emails/mo. Legitimate 2,250,324

## Email Security

- Email Flagged as Spam 8.9%
- Email Blocked (bad sources) 3.0%
- Email Virus blocked /mo. 660

\*Includes Dev, Test and Prod

## IT Client Services

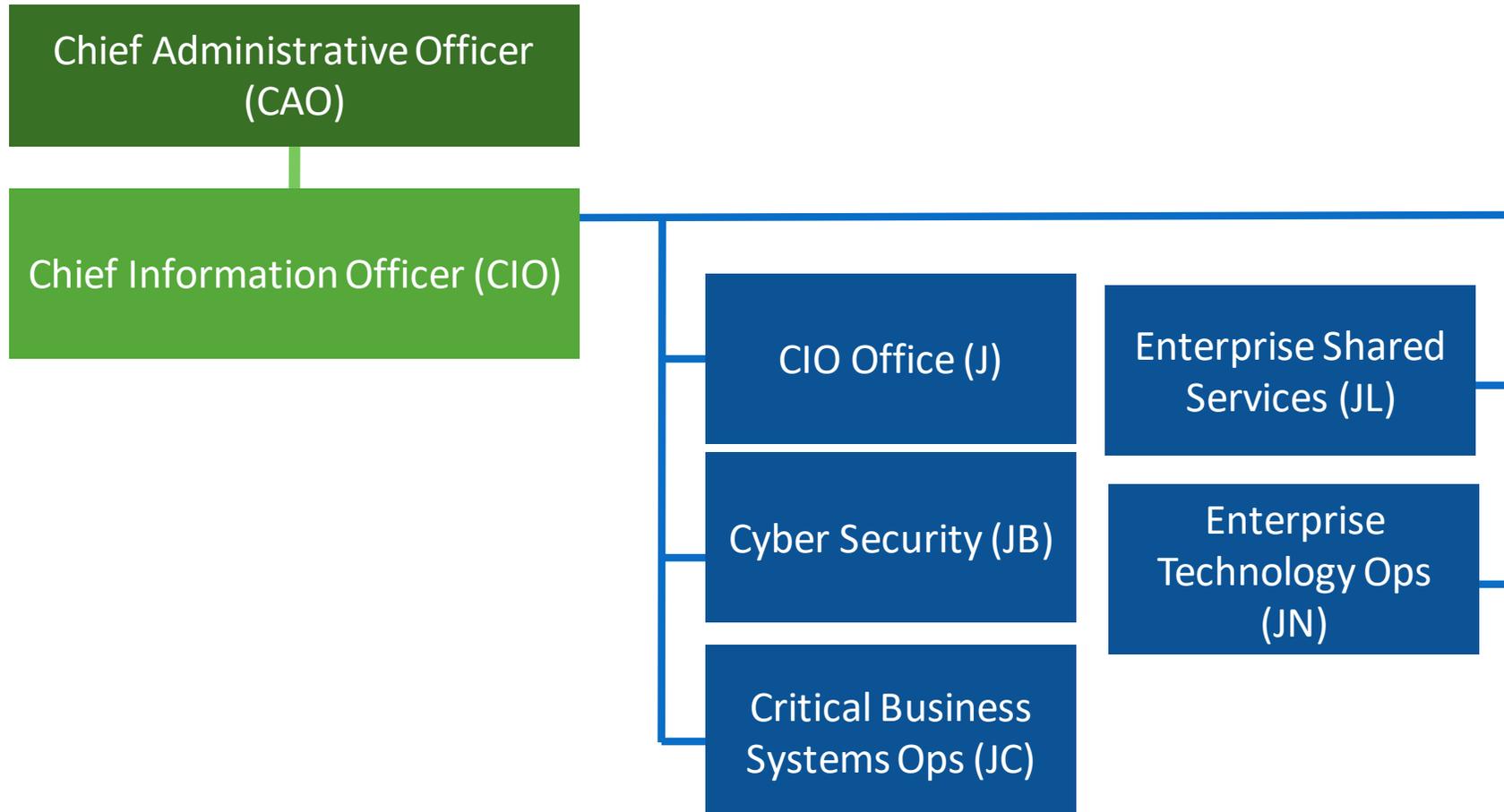
- Desktops/Laptops 3636
- Tablet/2-in-1 96
- Thin Clients (myPC) 1076
- Mobile Thin (myPC) 351
- Printers 537
- Service desk calls/mo. 3,770
  - Resolved in 4 hrs. 81%
- Trouble tickets/mo. 6218\*
- Queue time 160 sec
- Abandon rate 10%
- 1<sup>st</sup> Tier resolution rate 61%

\* Includes calls and email request

BPA Office of the CIO – February 2020  
Enterprise Technology Assessment



# Overview IT Services



# Historical Composition of IT Costs

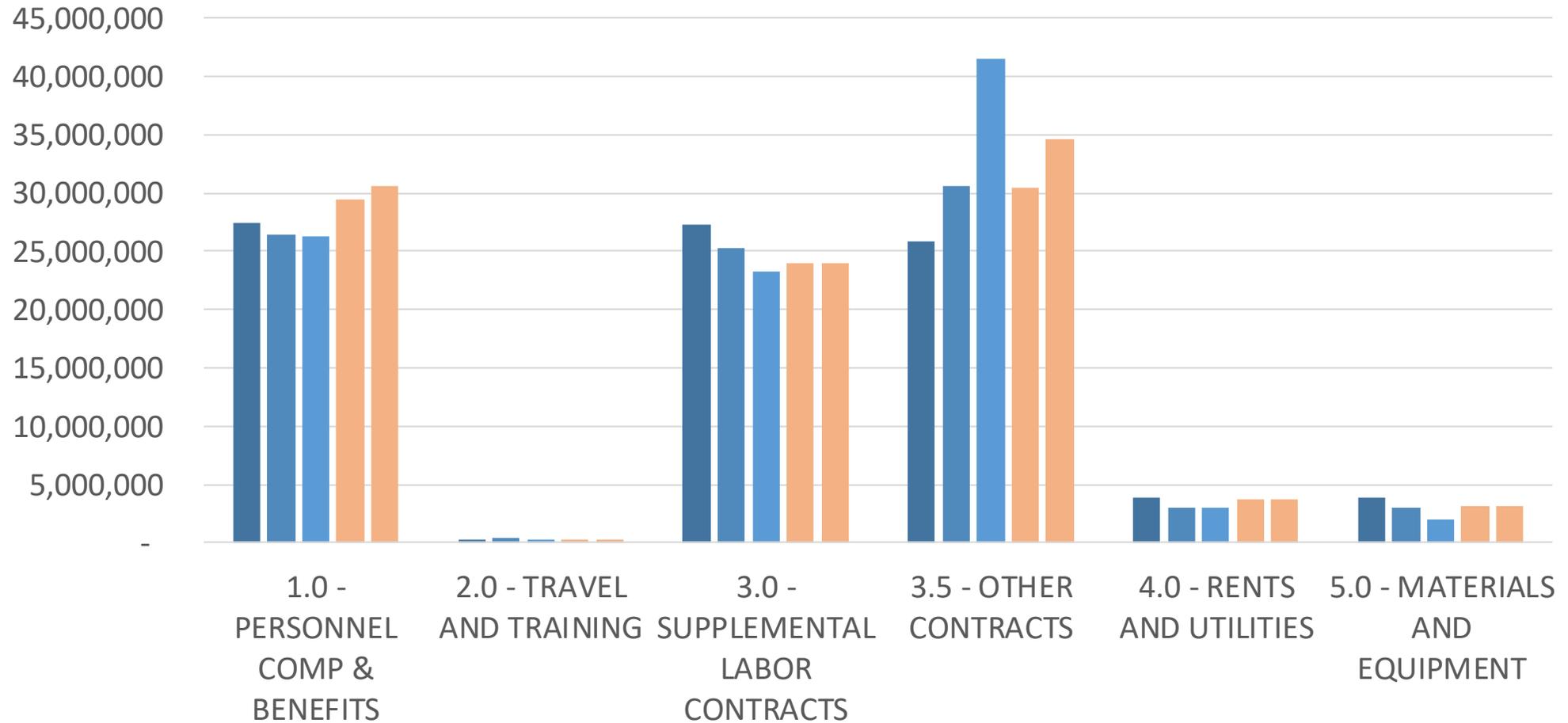


# IT Historical Costs by Budget Category

IT Historical Spend by Budget Category

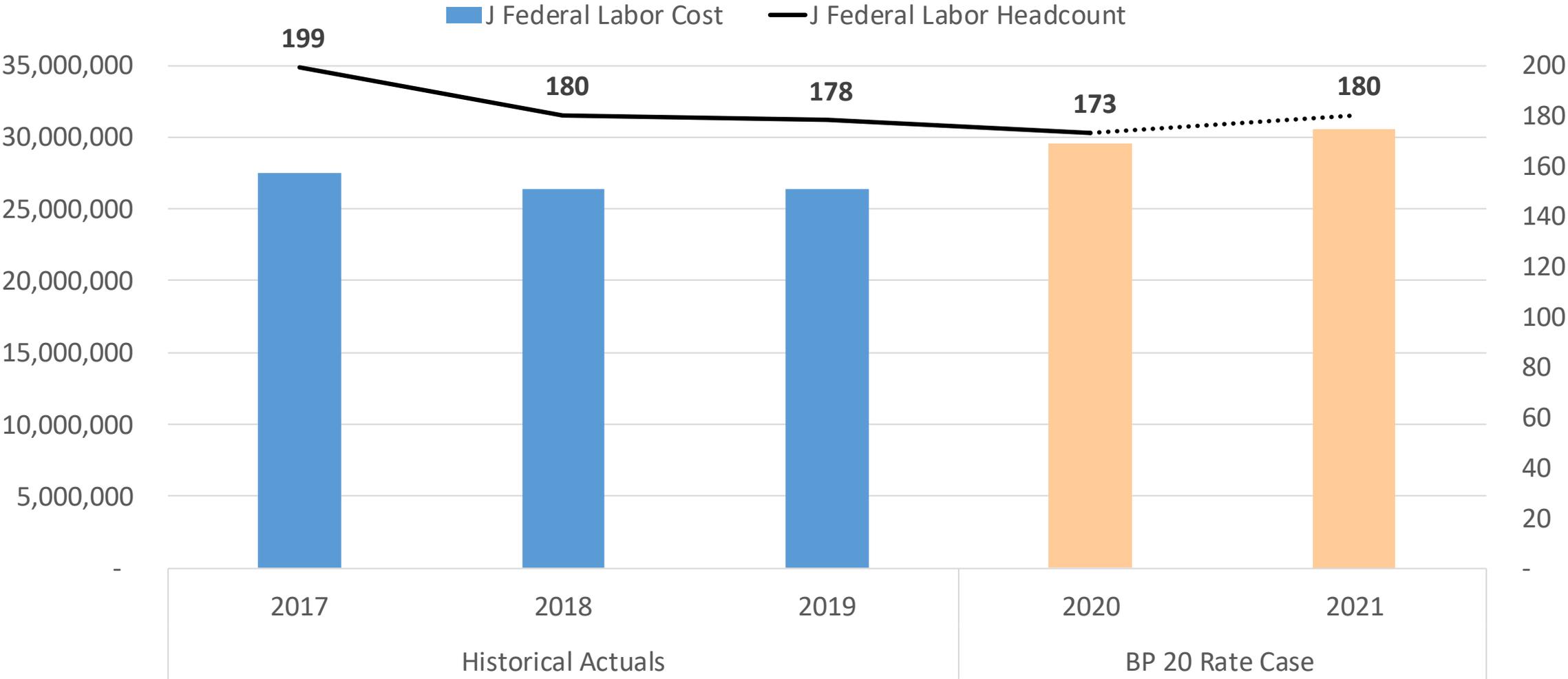
■ = Forecasted Spend

■ 2017 ■ 2018 ■ 2019 ■ 2020 ■ 2021

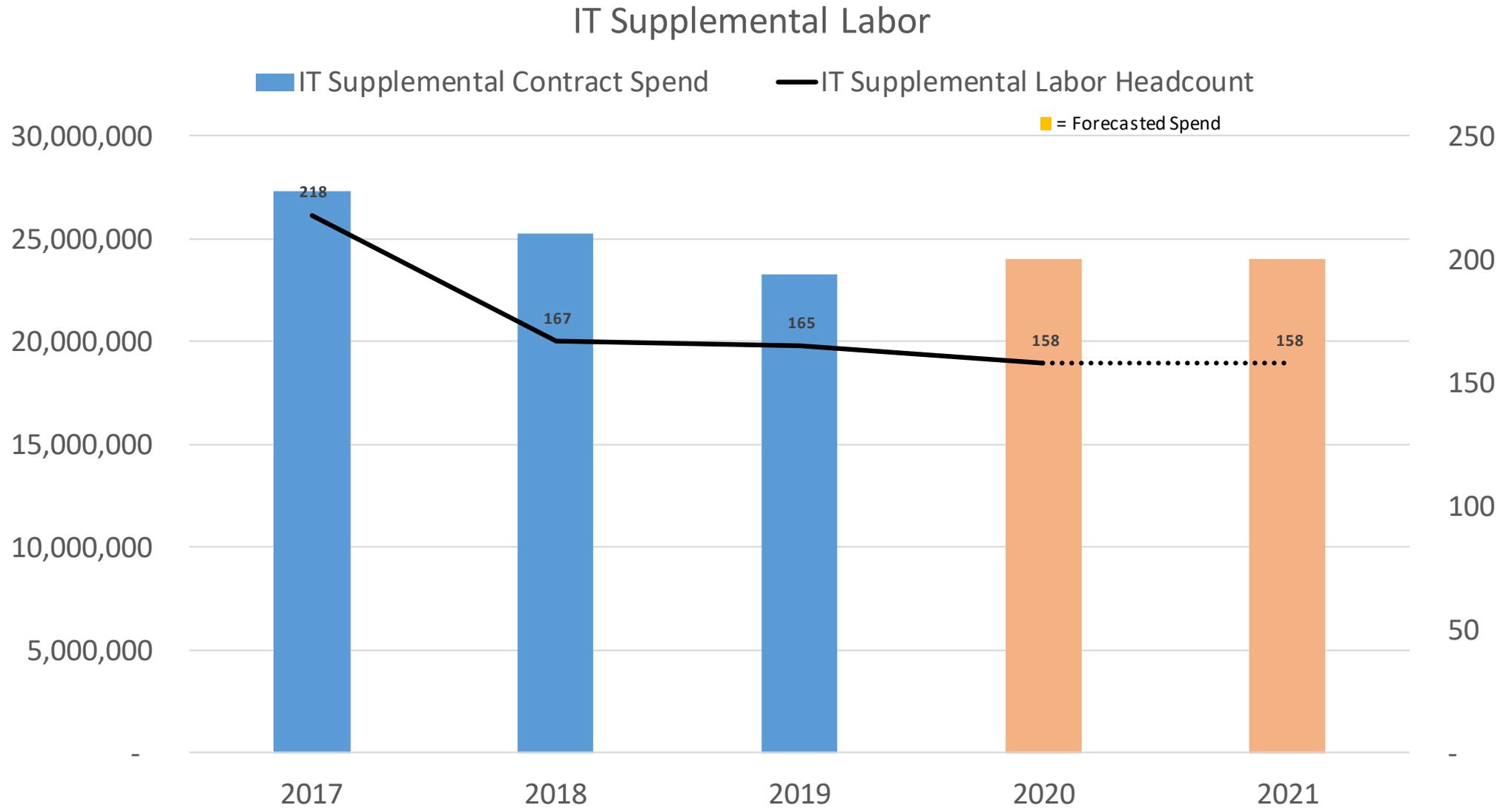


# IT Federal Labor Costs

## J Only Federal Labor Costs & Headcount



# IT Supplemental Labor Costs



# IT Contract Costs

- IT contracts costs are the largest component (39%) of IT's budget
- When comparing 2017 to 2019, contract costs have increased \$19.6 million, far greater than inflation.
  - Many existing contracts increase 10% per year (\$4 million per year)

## **Major contract increases, include:**

- Microsoft Enterprise Agreement (OS, Office, Visio, SQL, Project ...)
- Cisco and Palo Alto networks
- Oracle database
- Dell desktop/laptop equipment leases
- Pacific Office Automation printers
- Telecom circuit providers
- Discovery Core eDiscovery architecture
- Server and storage hardware infrastructure
- Smart Phone capability increases

# IT Contract Costs

## Main drivers for increased contract costs:

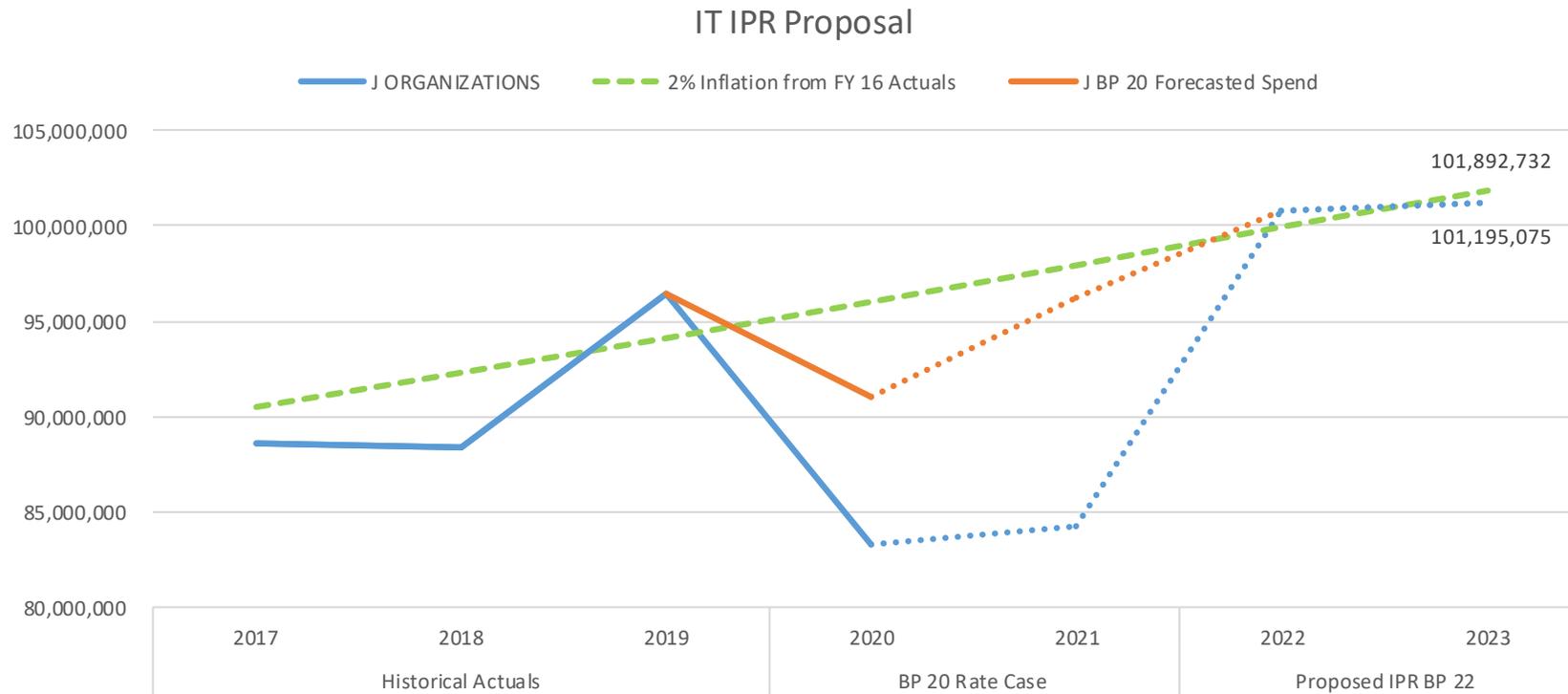
1. Increases in software licensing
  - 30% increase for Microsoft SQL server
  - 30% increase for additional storage software and applications (eDiscovery)
2. Increased usage of Software-as-a-service
  - Increased costs of subscriptions and annual contracts
  - Projects planned as capital were expensed due to cloud-based solutions
3. New compliance requirements:
  - Mandatory cyber security monitoring
  - Telecom circuits for NERC CIP sites
4. Increase costs for implementation of new systems beyond the rate of inflation
5. Increased demand for new, on-going projects

# BP-22 IT Proposal



# IT BP-22 Proposal

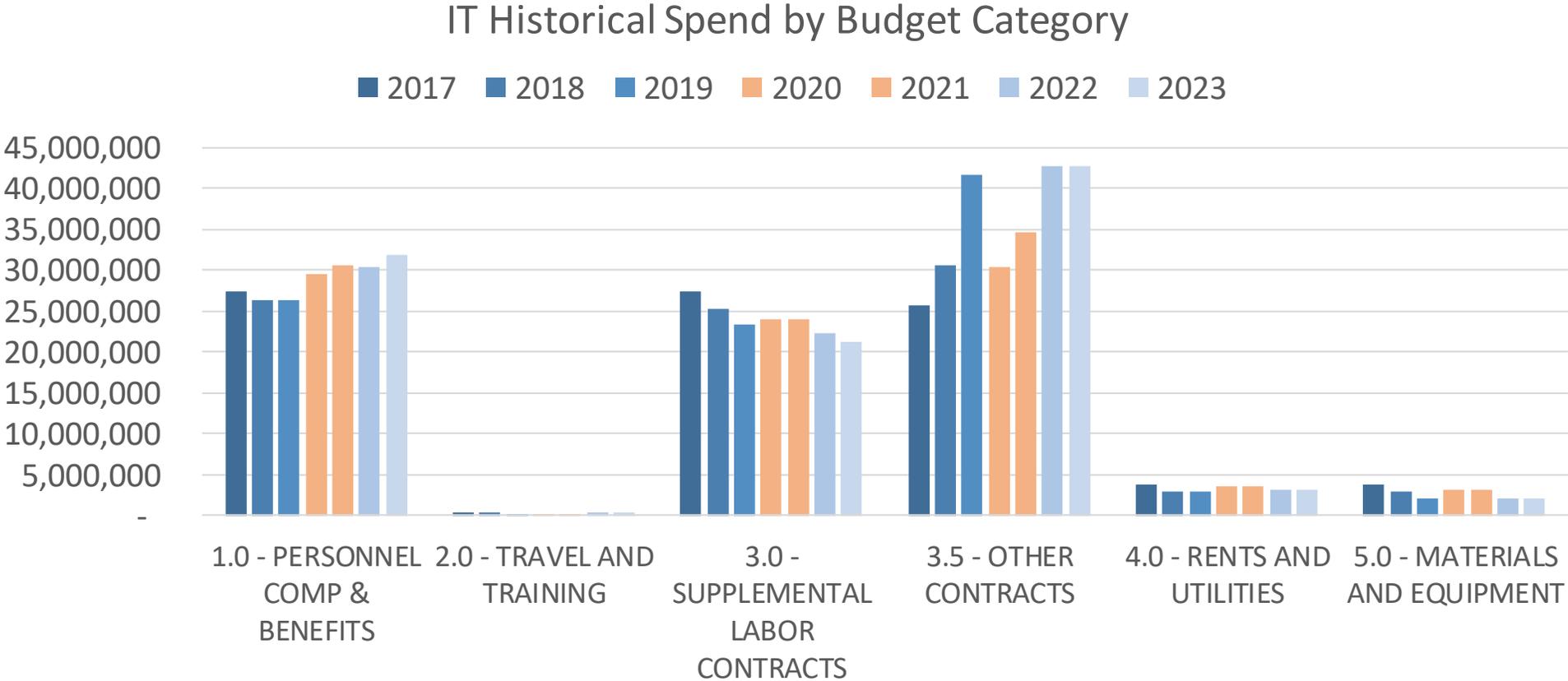
## IT request a \$17 million increase from BP20



IT IPR Proposal							
	Historical Actuals			BP 20 Rate Case		Proposed IPR BP 22	
	2017	2018	2019	2020	2021	2022	2023
<b>J ORGANIZATIONS</b>	88,541,659	88,376,973	96,414,537	83,219,967	84,251,108	100,746,133	101,195,075
<b>2% Inflation from FY 16 Actuals</b>	90,477,830	92,287,387	94,133,134	96,015,797	97,936,113	99,894,835	101,892,732
<b>J BP 20 Forecasted Spend</b>	88,541,659	88,376,973	96,414,537	<b>91,064,000</b>	<b>96,251,108</b>	100,746,133	101,195,075

# IT BP 22 Proposal

The major drivers for the increase is due to increase contract costs (see slide 11)



# IT BP 22 Proposal

**IT's budget was reduced \$14.1 million from BP-18 to BP-20 based on three assumptions:**

- 1. \$6 million IT underspend in BP-18**
  - BP-18 rate case average: \$98 million
  - BP-18 average actual spend: \$92 million
- 2. Requests to reduce IT costs through deferral of asset management life-cycle replacements**
- 3. Estimated Enterprise Technology Assessment savings by the end of BP-20**

# IT ETA Initiative

## IT's Enterprise Technology Assessment achieved cost savings from FY 18 to FY 20

**The Timeframe:**

**Apr FY 18 – Apr FY 20**

**The Target:**

**\$18.3 million in savings**

**The results (forecast):**

**\$16 million cost avoidance  
\$10 million sustained savings**

# IT ETA Initiative

## ETA achievements include:

- Reorganization of Service Management resulting in reduced staff levels and consolidation of common software
- Role-based Provisioning delivers right-sized resources.
- Improved IT Governance increased scrutiny over IT projects, decreased number of new systems.
- IT Contracts Management analysis resulted in some contract eliminations and down-sizing
- Cloud-based service adoption reduced total cost of ownership
  - Occupational Safety and Health
  - Library archive

# IT BP 22 Proposal

**ETA achievements mitigated BP-22 request to increase, however, savings achieved outpaced by increasing contract costs.**

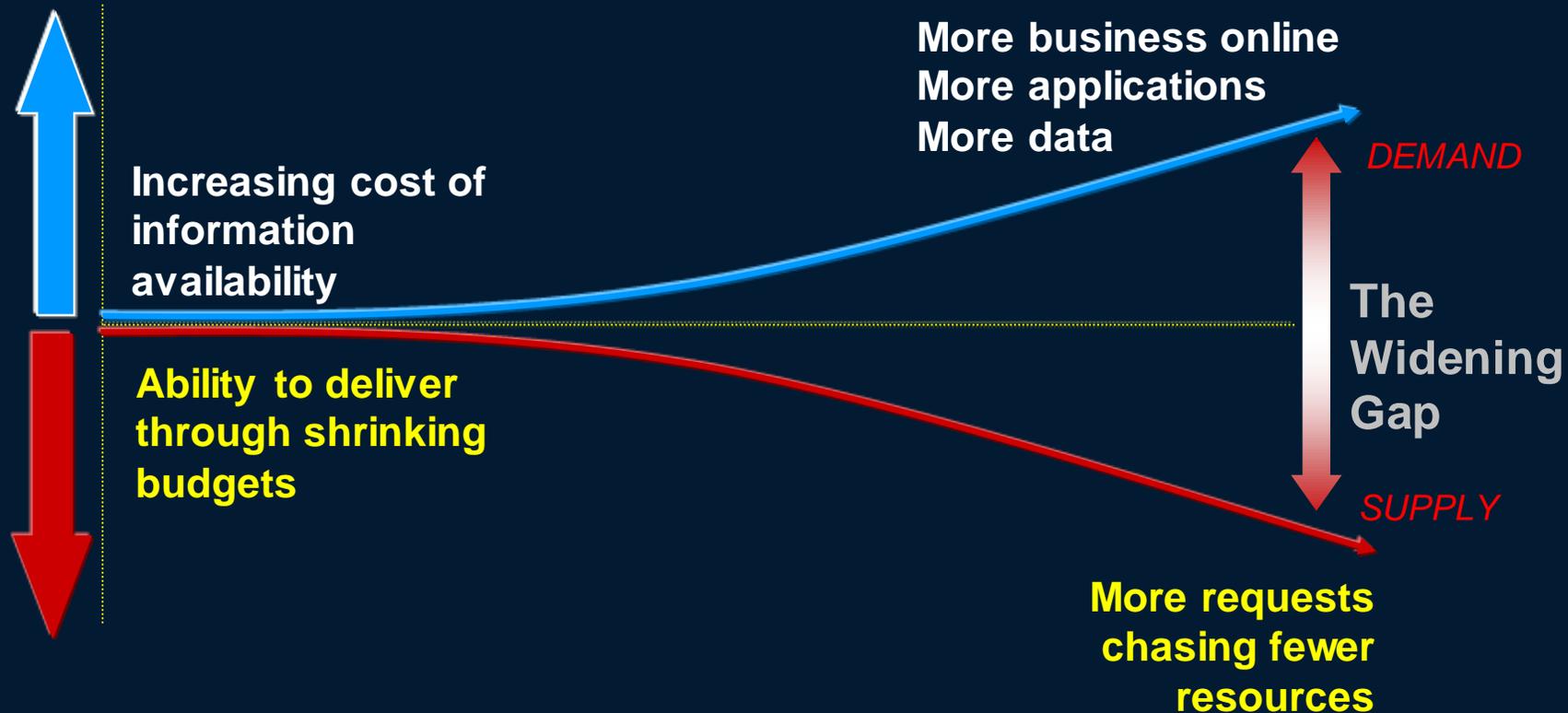
1. Increases in software licensing
2. Increased usage of Software-as-a-service
3. New compliance requirements:
4. Increase costs for implementation of new systems
5. Increased demand for new, on-going projects

# BP-22 IT Strategy



# IT as a Customer Service Organization

Are we working on the right things?



# IT as a Customer Service Organization

**IT will focus on maturing effective customer service. A customer-oriented culture will:**

- Help cut costs
- Increase productivity
- Improve interdepartmental communication and cooperation
- Boost employee morale
- Align goals
- Harmonize processes and procedures
- Deliver continuous measureable improved service to our customers

## **Grid Modernization:**

- Metering and Billing
- Integration architecture
- Energy Imbalance Market
- Data Analytics
- Customer Portal

# IT Ongoing Initiatives

- **Reduce Costs:**
  - Increase IT cost transparency through IT Service Catalogue
  - Reliability and operational metrics
  - Service level agreements
  - Cloud-based solutions
  - IT Service Management model implementation
- **Improve Continuity:** Strengthen continuity for Enterprise Business Systems
- **Effectively Manage Assets:** Life cycle updates for existing systems (eliminate break/fix approach)
- **Cyber Security:** Enhance Cyber Security Continuous Monitoring and Mitigation



# QUESTIONS?

# FINANCIAL DISCLOSURE

This information was publicly available on June 12, 2020, and contains information not sourced directly from BPA financial statements.