Department of Administrative Services

Day 4: All IT, All the Time
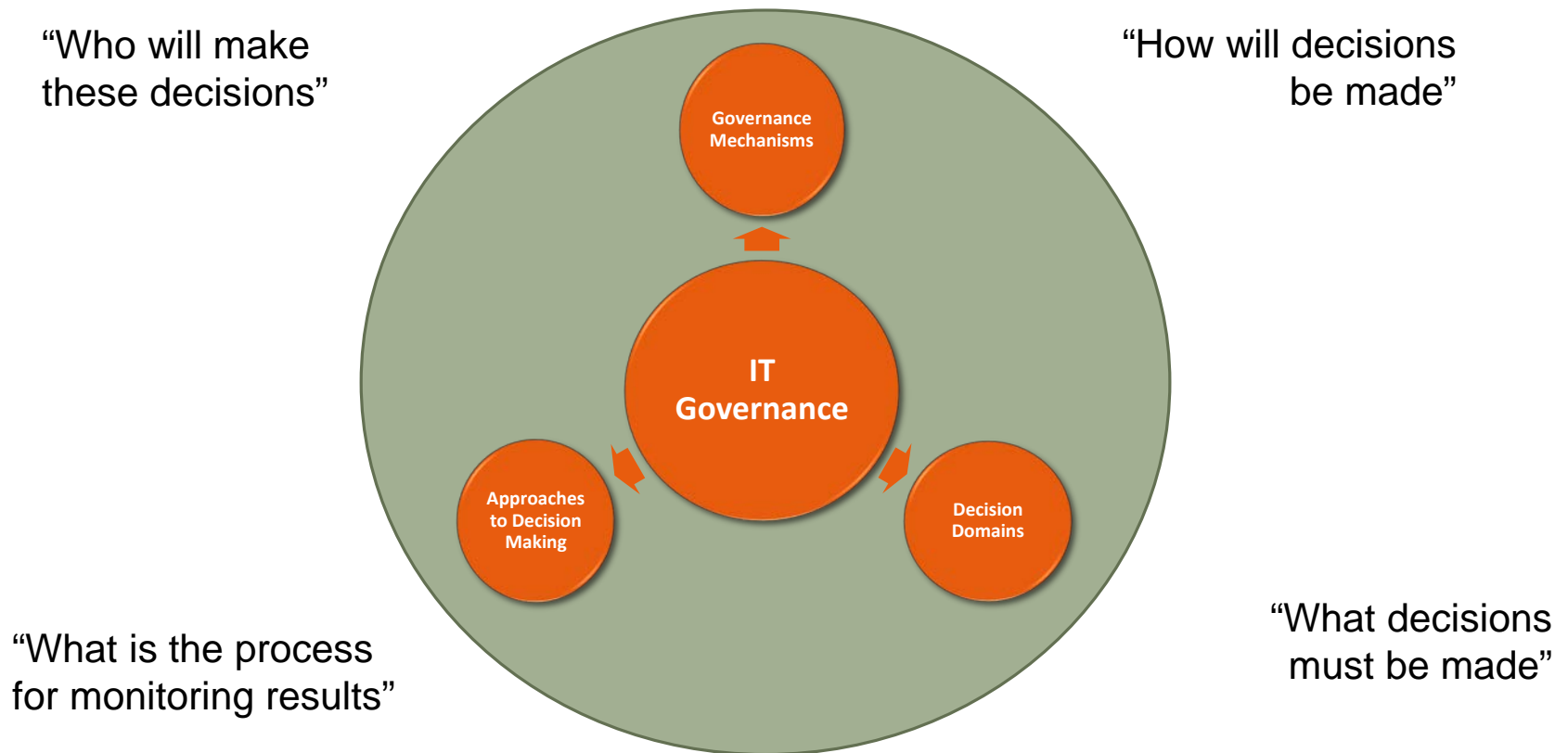
DAS
DEPARTMENT OF
ADMINISTRATIVE
SERVICES

All Roads Lead through IT Governance

Aspects of IT Governance
IT Governance can be viewed as a combination of three high-level aspects[1]

"Who will make these decisions"

"How will decisions be made"

Governance Mechanisms

IT Governance

Approaches to Decision Making

Decision Domains

"What is the process for monitoring results"

"What decisions must be made"

Future Governance Model

Current State

- No centralized IT Governance
- Multiple agency IT Governance models
- Limited cost and resource sharing across the state
- Agency-focused view to optimizing agency activities and coordination

Roadmap to Future

- Transition the state's fragmented IT Governance model utilizing the ELT Model for Governance
- Focus on the immediate opportunities
- Integrate the existing initiative for a state-wide Portfolio and Project Management tool into the governance structure

Future State

- Architected approach
- Multi-layer governance model that approves, monitors, and coordinates IT service delivery
- Provide a better return on the state's IT investments
- Monitor architecture, projects, and processes to increase business value, reduce risk, and make IT differences that truly make a difference (Carr)
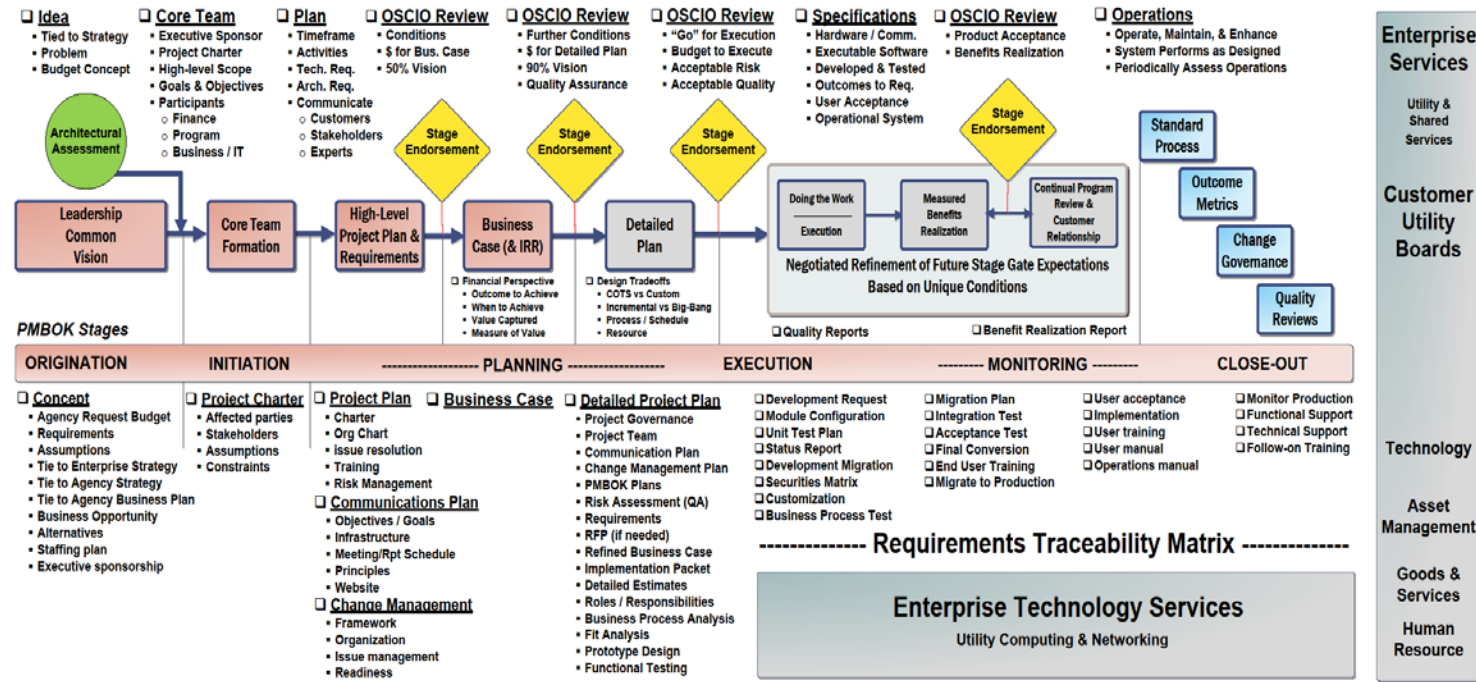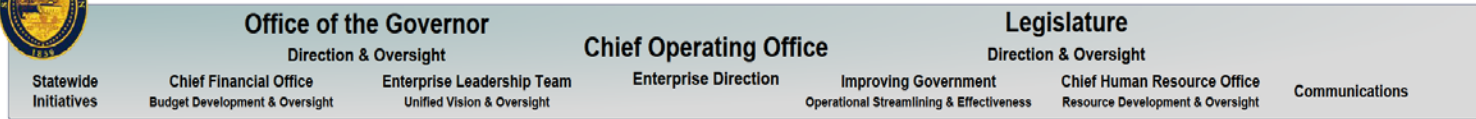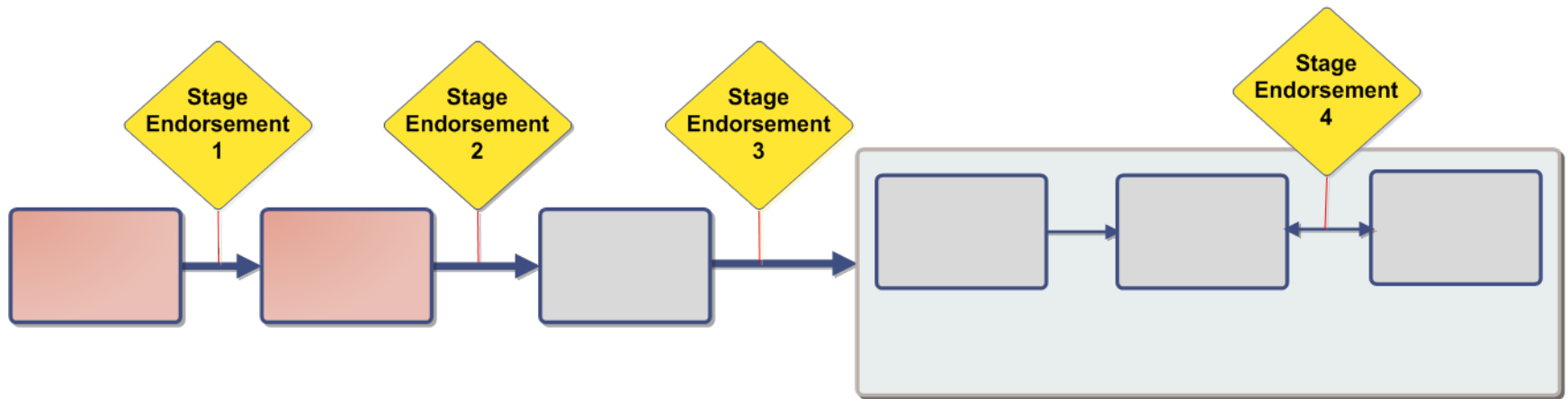
Enterprise IT Governance Meta Models

What (Inventories/Data)	How (Process)	Where (Distribution Channels)	Who (Responsibility)	When (Timing)	Why (Motivation)
• Inventory of current systems/applications • Data inventory • Enterprise Project Portfolio Management	• Supports work flow processes for standard methodologies	• Stipulate the environment where specific services can or should exist	• Develop Lifecycles with internal partners • QA/QC/IV&V and other vendors • LFO and OSCIO oversight	• Stage gating • Standard System Development Life Cycle • Standard Project Management Life Cycle	• Set executive direction • Articulate professional objectives in the office of the State CIO • Policy and Rule review and update

Stage Gate Oversight – Functional Reference Model

Office of the Governor
Direction & Oversight

Chief Operating Office
Enterprise Direction

Legislature
Direction & Oversight

| Statewide Initiatives | Chief Financial Office
Budget Development & Oversight | Enterprise Leadership Team
Unified Vision & Oversight | | Improving Government
Operational Streamlining & Effectiveness | Chief Human Resource Office
Resource Development & Oversight | Communications |

Office of the State CIO

| Security Program
Objectives & Oversight | Geospatial Program
Objectives & Oversight | Enterprise Portfolio Management | Enterprise Strategy
Enterprise Business Intelligence | Enterprise Asset Management | Broadband Wireless
Development & Oversight | Public Safety Interoperability
Development & Oversight |

❑ Idea
- Tied to Strategy
- Problem
- Budget Concept

❑ Core Team
- Executive Sponsor
- Project Charter
- High-level Scope
- Goals & Objectives
- Participants
  - Finance
  - Program
  - Business / IT

❑ Plan
- Timeframe
- Activities
- Tech. Req.
- Arch. Req.
- Communicate
  - Customers
  - Stakeholders
  - Experts

❑ OSCIO Review
- Conditions
- $ for Bus. Case
- 50% Vision

❑ OSCIO Review
- Further Conditions
- $ for Detailed Plan
- 90% Vision
- Quality Assurance

❑ OSCIO Review
- "Go" for Execution
- Budget to Execute
- Acceptable Risk
- Acceptable Quality

❑ Specifications
- Hardware / Comm.
- Executable Software
- Developed & Tested
- Outcomes to Req.
- User Acceptance
- Operational System

❑ OSCIO Review
- Product Acceptance
- Benefits Realization

❑ Operations
- Operate, Maintain, & Enhance
- System Performs as Designed
- Periodically Assess Operations

Architectural Assessment

Stage Endorsement (×4)

Stage Endorsement

Leadership Common Vision → **Core Team Formation** → **High-Level Project Plan & Requirements** → **Business Case (& IRR)** → **Detailed Plan** →

Doing the Work — Execution → **Measured Benefits Realization** → **Continual Program Review & Customer Relationship**

Negotiated Refinement of Future Stage Gate Expectations Based on Unique Conditions

❑ Financial Perspective
- Outcome to Achieve
- When to Achieve
- Value Captured
- Measure of Value

❑ Design Tradeoffs
- COTS vs Custom
- Incremental vs Big-Bang
- Process / Schedule
- Resource

❑ Quality Reports

❑ Benefit Realization Report

Standard Process
Outcome Metrics
Change Governance
Quality Reviews

Enterprise Services
Utility & Shared Services

Customer Utility Boards

Technology

Asset Management

Goods & Services

Human Resource

PMBOK Stages

| ORIGINATION | INITIATION | ------------------ PLANNING ------------------ | EXECUTION | --------- MONITORING --------- | CLOSE-OUT |

❑ Concept
- Agency Request Budget
- Requirements
- Assumptions
- Tie to Enterprise Strategy
- Tie to Agency Strategy
- Tie to Agency Business Plan
- Business Opportunity
- Alternatives
- Staffing plan
- Executive sponsorship

❑ Project Charter
- Affected parties
- Stakeholders
- Assumptions
- Constraints

❑ Project Plan
- Charter
- Org Chart
- issue resolution
- Training
- Risk Management

❑ Communications Plan
- Objectives / Goals
- Infrastructure
- Meeting/Rpt Schedule
- Principles
- Website

❑ Change Management
- Framework
- Organization
- Issue management
- Readiness

❑ Business Case

❑ Detailed Project Plan
- Project Governance
- Project Team
- Communication Plan
- Change Management Plan
- PMBOK Plans
- Risk Assessment (QA)
- Requirements
- RFP (if needed)
- Refined Business Case
- Implementation Packet
- Detailed Estimates
- Roles / Responsibilities
- Business Process Analysis
- Fit Analysis
- Prototype Design
- Functional Testing

❑ Development Request
❑ Module Configuration
❑ Unit Test Plan
❑ Status Report
❑ Development Migration
❑ Securities Matrix
❑ Customization
❑ Business Process Test

❑ Migration Plan
❑ Integration Test
❑ Acceptance Test
❑ Final Conversion
❑ End User Training
❑ Migrate to Production

❑ User acceptance
❑ Implementation
❑ User training
❑ User manual
❑ Operations manual

❑ Monitor Production
❑ Functional Support
❑ Technical Support
❑ Follow-on Training

-------------- Requirements Traceability Matrix --------------

Enterprise Technology Services
Utility Computing & Networking

Strategic Technology Office

| Public Safety
Outcome Area | Human Services
Outcome Area | Natural Resources
Outcome Area | Education
Outcome Area | Architecture & Design
Project Management Business Analysis System Architecture | Transportation & Economic Development
Outcome Area | Administration & Business Services
Outcome Area |

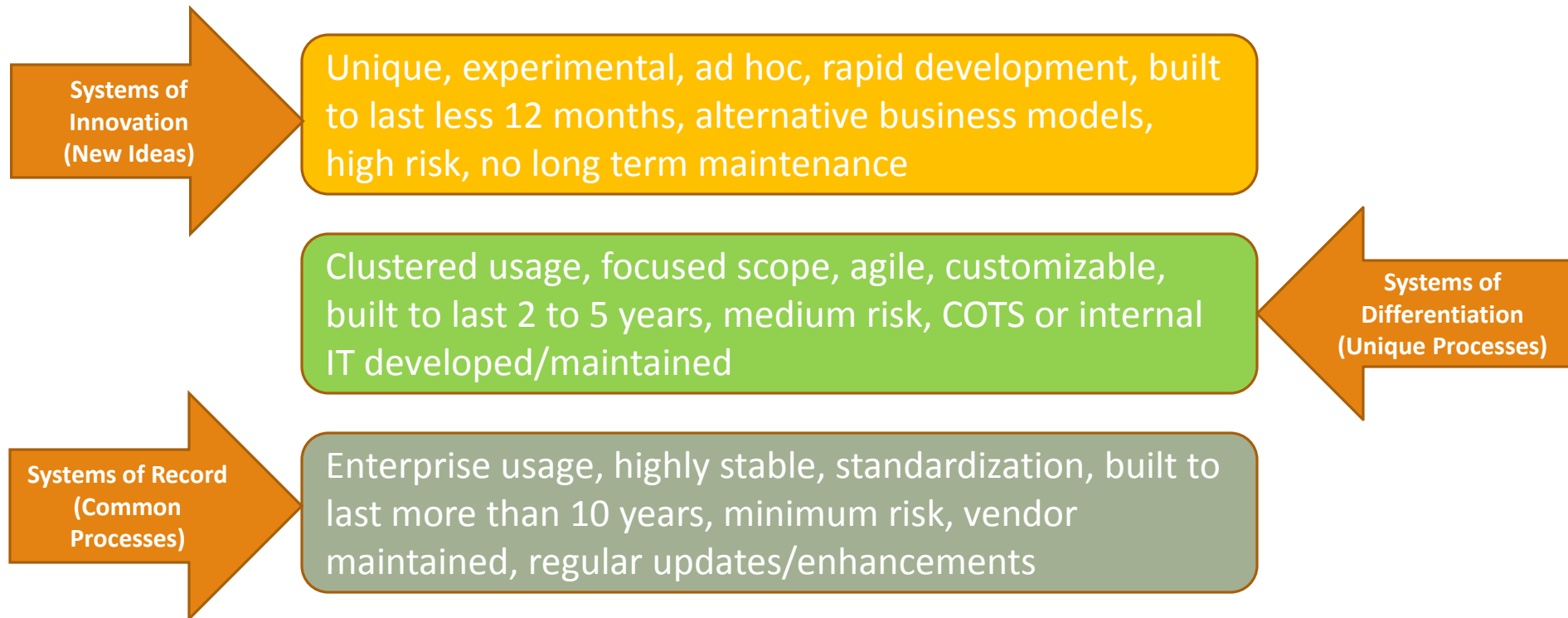# Simple Model (Stage Gate Focus)

Stage 1: High Level Planning

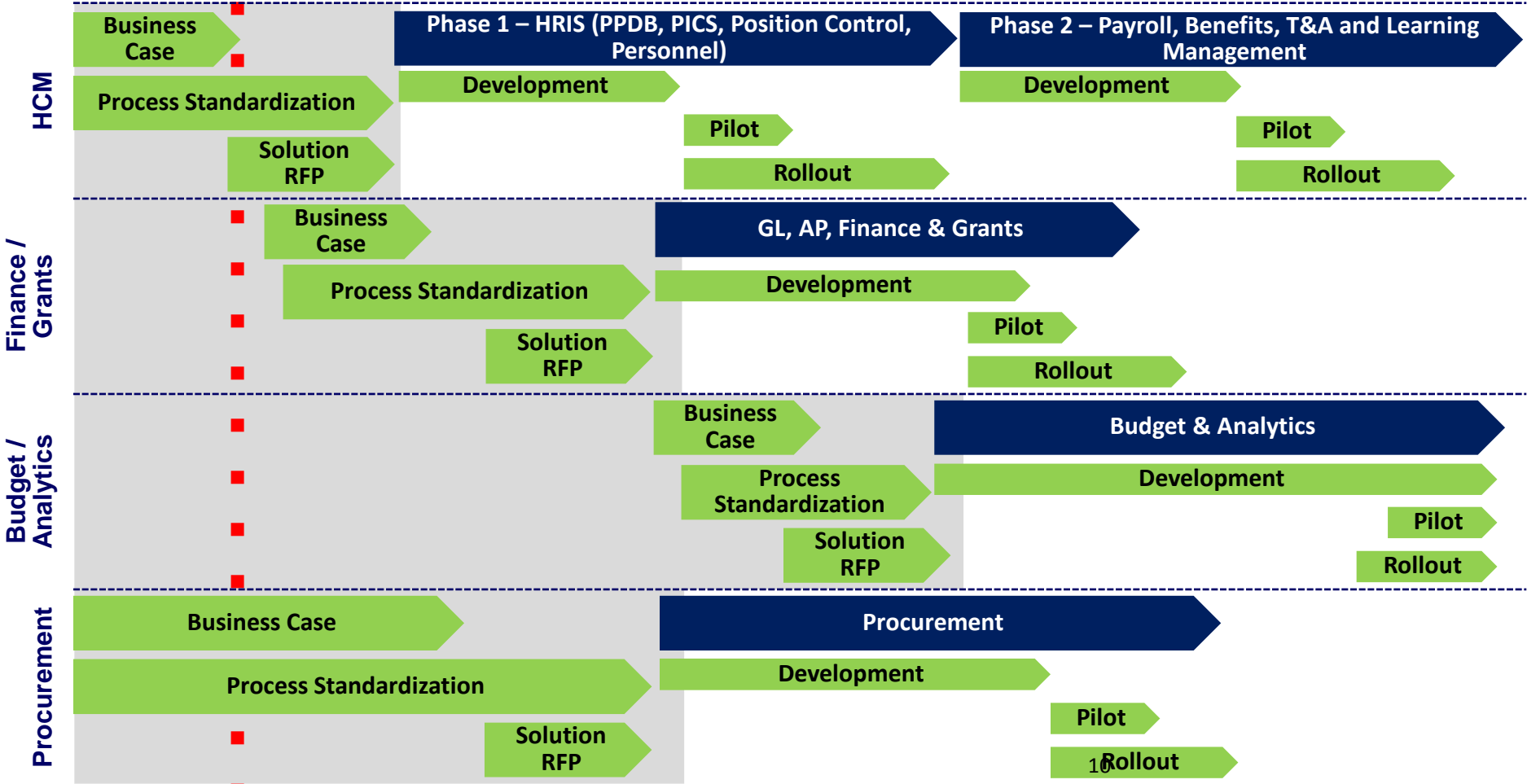Stage 2: Detailed Business Case & Foundational Planning

Stage 3: Detailed Planning

Stage 4: Execution

Pace Layer Attributes

Systems of Innovation (New Ideas) →

Unique, experimental, ad hoc, rapid development, built to last less 12 months, alternative business models, high risk, no long term maintenance

Clustered usage, focused scope, agile, customizable, built to last 2 to 5 years, medium risk, COTS or internal IT developed/maintained

← **Systems of Differentiation (Unique Processes)**

Systems of Record (Common Processes) →

Enterprise usage, highly stable, standardization, built to last more than 10 years, minimum risk, vendor maintained, regular updates/enhancements

HRIS Business Case – Benefits of a Modern HRIS

- Support the evolving business needs of agencies

- Reduce the need for shadow systems

- Compliance with FMLA/OFLA requirements

- Reduce paper and manual processes

- All human resource data in one place

- Ease of data retrieval and reporting

- Overall replacement strategy show HRIS is the most urgent need with the most readiness expressed

HRIS Business Case – Project Accomplishments

Project Planning

- Hired Certified Project Manager

- Project charter approved by Enterprise Leadership Team

- Steering committee formed & meeting monthly

- Project team of state agency & LFO participants formed

- Consultants hired for business case development and other deliverables

HRIS Business Case – Project Accomplishments

Executing

- Twelve vendor system demonstrations completed

- Survey of Enterprise human resource shadow systems

- 46 human resource and position control business processes mapped

- 810 requirements defined & categorized

- Review of Lessons Learned from past projects

- Consulted with Gartner and Deloitte on Best Practices and other State's experience

- Surveyed agencies on greatest area of need and readiness

HRIS Business Case – Project Accomplishments

Oversight

- Quality Assurance contractor hired

- Monthly briefings with LFO Agency & IT Analysts

- Business Case widely reviewed including project team, QA, LFO and CIO's office

- Business Case submitted to CIO's office for Stage Gate review and endorsement

HRIS Business Case – Critical Success Factors and Strategies

- Establish & follow a strong governance model
  - Create steering committee, technical advisory board, and change control board

- Provide adequate project resources
  - Recruit agency experts, backfill for participants, create a realistic schedule, staff adequately

- Make change management a critical part of the implementation solution
  - Employ organizational change management services

HRIS Business Case – Alternatives Summary

Alternative	Estimated Project Cost	Estimated 10 Year Operational Costs	Estimated Total 14 Year Lifecycle Costs	Project Length	Estimated Go-Live Month
A: Do nothing and continue to use the existing core HR systems	$0	$79,151,047	$79,151,047	0	N/A
B: Build a custom HR application to replace PPDB and PICS	$48,951,454	$78,413,913	$127,365,367	42 months	Jan 2018
C1: Acquire a COTS HRIS solution, housed on premise (DAS SDC)	$22,991,817	$58,236,548	$81,228,365	36 months	Sep 2017
C2: Acquire a COTS HRIS solution, housed off premise (vendor site)	$21,997,240	$66,784,997	$88,782,237	36 months	Sep 2017
C3: Acquire a COTS HRIS SaaS solution, housed in the cloud	$13,134,879	$55,461,181	$68,596,060	24 months	Sep 2016

HRIS Business Case – Selected Alternative

COTS: Either hosted and operated by a vendor or Software-as-a-Service

RFP will ask vendor to propose what implementation model would be **best for Oregon**

Business Process Change Required

No Customization, Only Configuration

Private or Hybrid **Cloud Environment**

HRIS Business Case – Next Steps

Release RFI in January 2015 to inform RFP

Finalize RFP and Release in March 2015

Return to Legislature with Budget and Schedule

Request Funding and Approval to Sign Contract

Ramp Up of Project Team

Hire **Cultural Change Management** Contractor

Hire **Independent QA**

Regular Review by State CIO's Office via Stage Gate Approval Requests

Regular Updates to LFO and Legislature

Common IT Service Delivery Project

Recommendations

Change Mgmt. Vendor

Director of Enterprise IT Transition

IT Utility Advisory Team

Vetting

Agency Business Team

Agency Finance Team

Approval

IT Governance Steering Team → Enterprise Leadership Team

Enterprise Technology Services

DAS DEPARTMENT OF ADMINISTRATIVE SERVICES

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                         ETS
                     Administrator
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| Service Solutions | Engineering | Service Delivery | Plans & Controls | Technology Availability Management | Application Delivery |
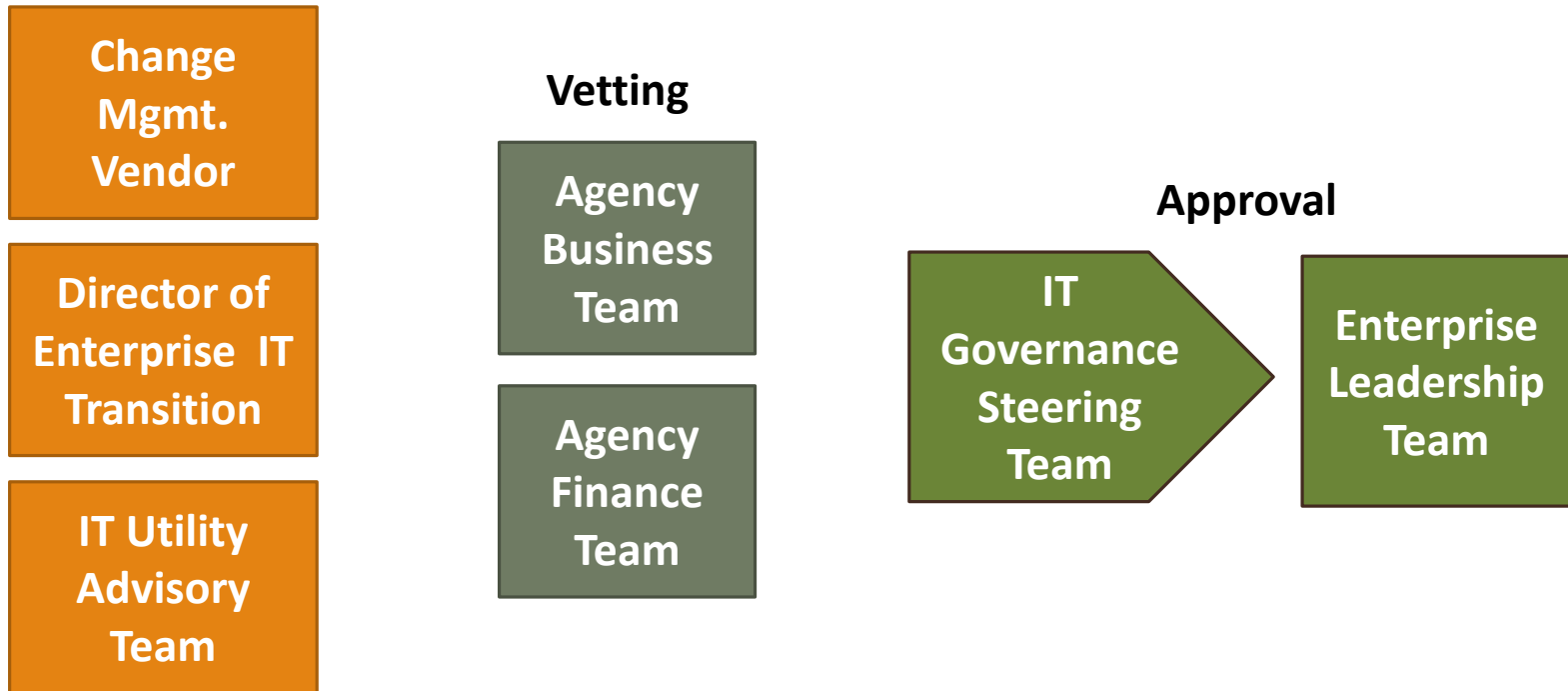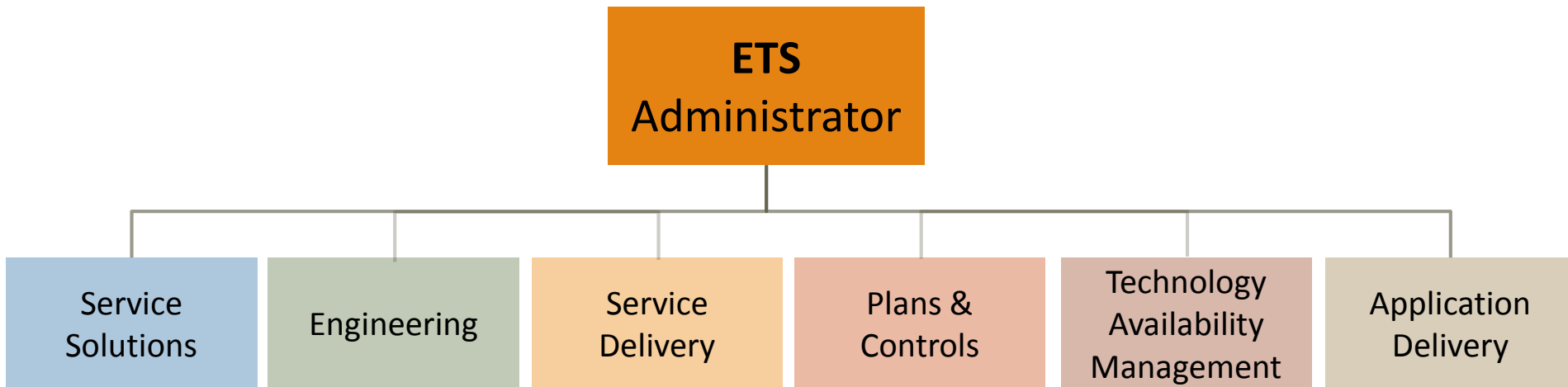
Mission: *Provide reliable, agile and flexible IT service choices while optimizing the state's IT investments.*

ETS Customers

- Agencies
- Board & Commissions
- Cities & Counties
- Educational Service Districts
- Other

ETS Services

Security Services

Network Services

24 X 7

Computing Services

Storage Services

State Employees, Citizens & Private Business

ETS Supports State Business

HealthCare

- Oregon Health Alert Network
- Oregon State Hospital
- Food Benefits System
- Medicaid Eligibility

Public Safety

- Drivers License system
- Criminal Records Checks
- Corrections Criminal Information System
- Juvenile Justice System
- Law Enforcement Data System
- Traffic Check

Revenue Generating

- State Income Tax System
- Corporate Tax System
- Child Support Enforcement System
- Online & mobile payments

Top section:
- Child Support – DOJ
- Criminal Records Checks for Identification, Background, Licenses, Stolen Vehicles, Gun Sales & Permits – OSP
- Determining Assistance Eligibility – DHS
- Human Resources Administration Tracking & Records – DAS and Other Agencies

- Legislative Bill Writing and Tracking – All Agencies
- Medicaid, Senior Care, Childcare, Housing Assistance – DHS & OHA
- Processing Driver Records – ODOT
- Public & Commercial Drivers and Vehicle Licensing – ODOT

- SNAP – DHS
- State Financial System – DAS and Other Agencies
- Trucking Point of Entry & Oversize Vehicle Permits – ODOT
- State Payroll Processing – DAS & OSP
- Unemployment Insurance Claims – OED

Left section:
- Appellate Courts e-Filing Applications – OJD
- Aquatic Invasive Species Permit Payments – OSMB
- Board of Nursing Online Renewal Payments – OSBN
- Boat Registration Renewal – OSMB
- County Courts Websites – OJD
- Courts Websites – OJD
- DMV Call Center Office Location Interface – ODOT
- DOJ Website – DOJ
- Electronic Tax Payment System – DOR
- Health Related Licensing Boards Online Payments
- Law Library Digital Collection – DOJ
- Legislative Counsel e-Store
- Oregon.gov – ALL
- Public Meeting Manager – ALL
- SOS website – SOS
- SOS Business xPress – SOS
- SOS Online Payments – SOS
- State Surplus Online Payments
- Water Resources Online Payments

Center diagram:
- Mainframe 350+ Apps
- 250+ E-Gov Services
- Storage
- Network
- Voice
- Security
- Required Core
- Mid-Range 225+ Apps
- Servers 1800+ Apps

Right section:
- Agencies Financial Systems – ALL
- Applying for Oregon Health Plan Insurance – OHA
- Bill Information Tracking for Agencies – ALL
- Case Management for Children, Families and Seniors – DHS
- Corporate, Business, Property and Personal Income Tax Filing – DOR
- Corrections Inmate Tracking – DOC
- Energy/Weatherization Credits – DAS
- Financial Analysis and Reporting Data Warehouse – ALL
- Health Benefits for Oregon Educators and Public Employees – OPRS & PERS
- Housing Resources – OED
- Medicaid Billing for Payments to Senior Providers – DHS
- Online Recruitment System – ALL
- Revenue Collection – DOR
- State Hospital System – OHA
- State Income Tax Processing, Refunds, Auditing, Accounting – DOR
- Tracking Youth Offenders – DOC
- Unemployment Insurance Registration – OED
- Veterans Loans & Claims – ODVA

Bottom section:
- DMV Dealers – ODOT
- Email Infrastructure – Most Agencies
- Emergency Dispatch Services for Forest Fires - ODF
- Energy Loan Program
- Green Light for Weigh Stations – ODOT
- Health Alert Network – OHA
- Lightening Tracking – ODF

- Medical Marijuana Program – OHA
- Online Boating Registration – OSMB
- Online Claim Filing – DOR
- Online DMV Services – ODOT
- Registration of Oregon Vital Events – OHA
- Residential Energy Tax Credits
- Seniors, Families and Children's Case Work – DHS
- Situational Awareness – DAS

- Teachers Licensing Certification
- TripCheck for Weather Conditions – ODOT
- Trucking online DMV Services – ODOT
- Unclaimed Property Processing
- Vendor Procurement – DAS
- Where's My Refund - Tax Mapping and Tax Status – DOR
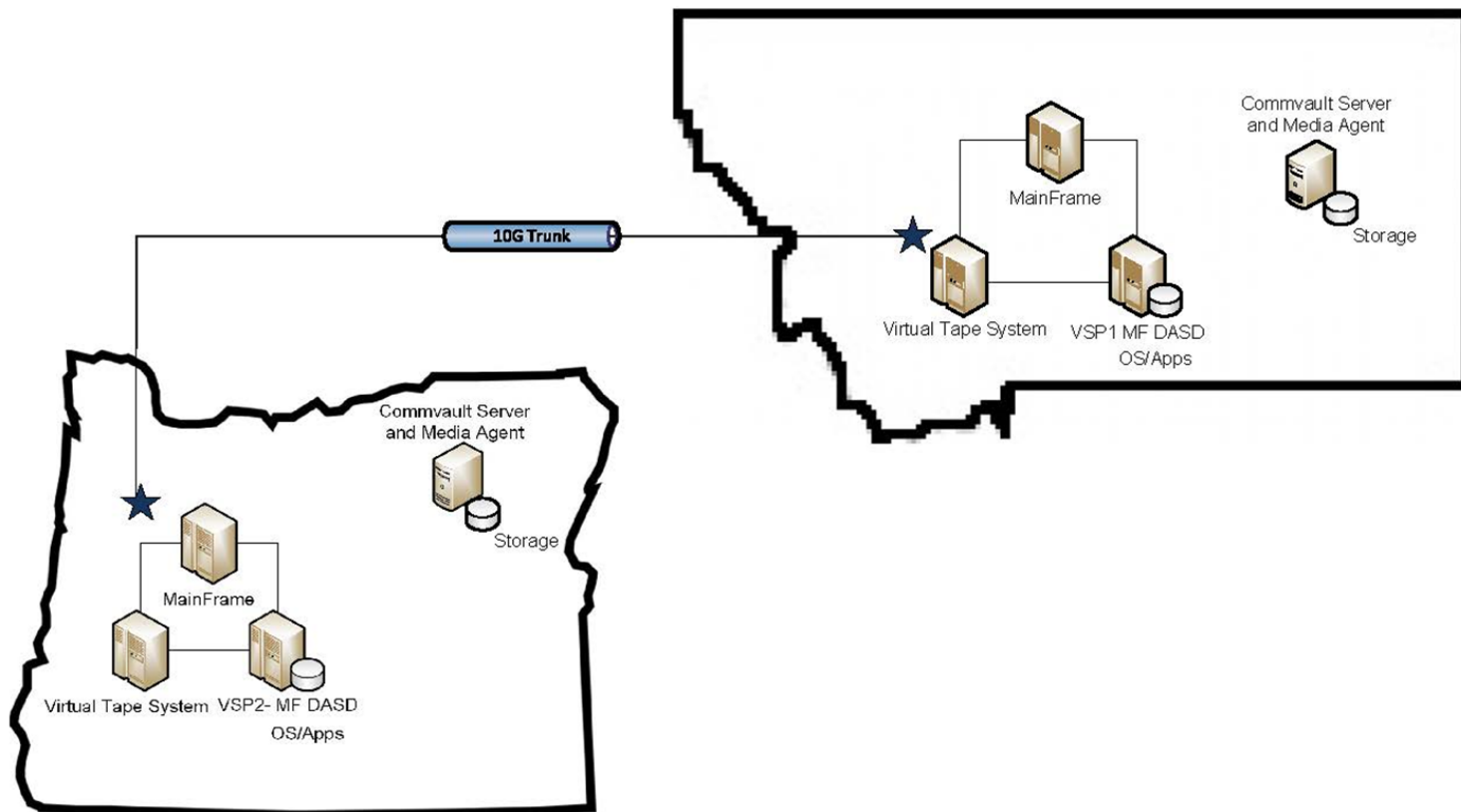- ePaystub – DAS
- eTime - DAS

ETS Benefits to Customers

- Agency IT resources can focus on agency business applications rather than infrastructure

- Increased security

- Behind the scenes 24 x 7 monitoring and 24 x 7 x 365 on-site staffing at the data center

- Disaster Recovery

- Online & Mobile payment processing

# ETS Disaster Recovery

Online Citizen Services

- E-Government Program enables public internet services

- Websites, E-Commerce, Licensing, Mobile, Open Data, Collaboration

- $4.4 Billion revenue in online revenue collected last biennium

- 165 different websites, 52 online payment apps, 25 custom apps

- 16 are online licensing payments

- Provides agencies with low risk funding options

- Legislative oversight by Electronic Portal Advisory Board

ETS Service Growth

ETS Growth and Budget
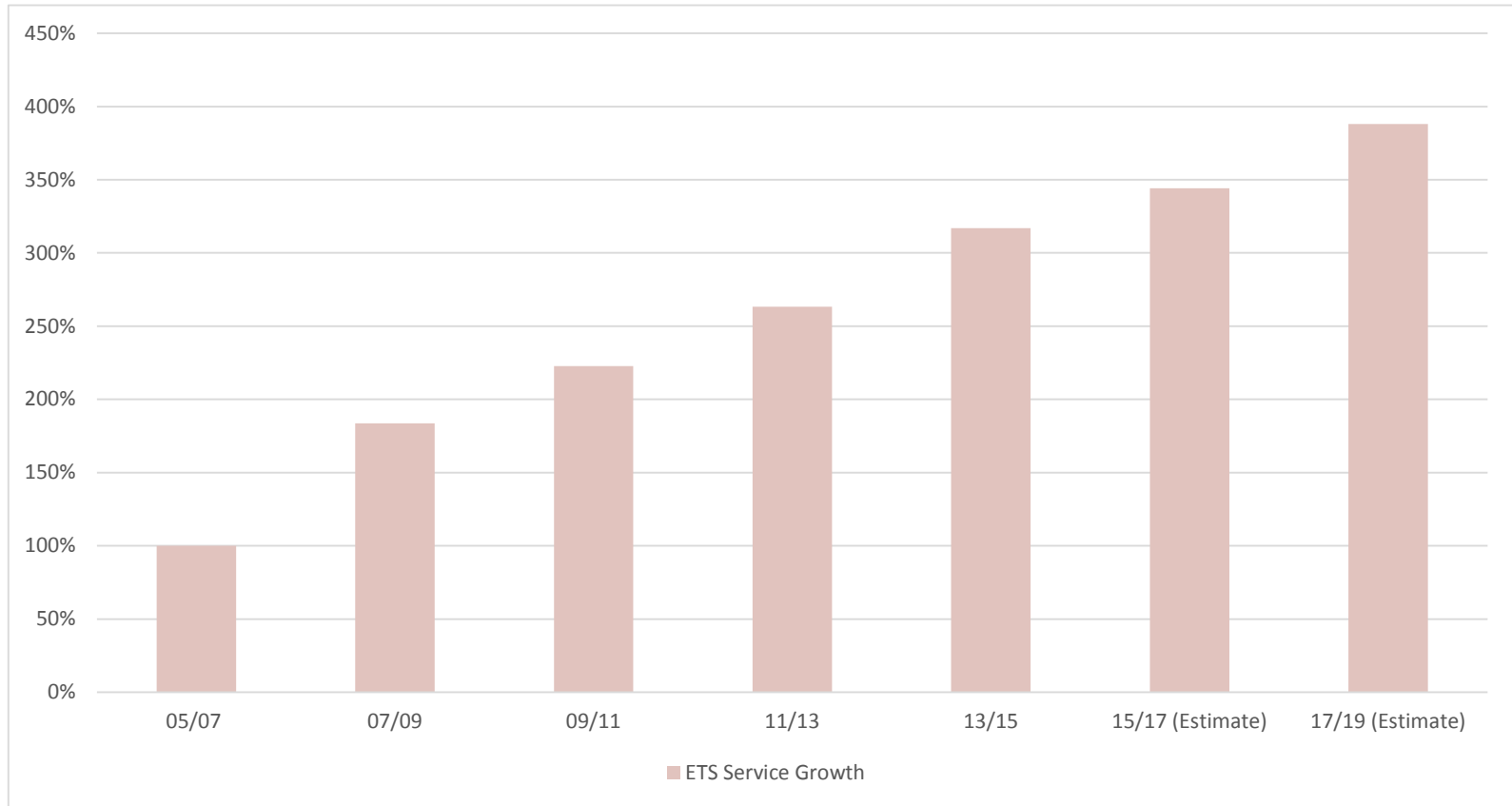
ETS Growth and Budget
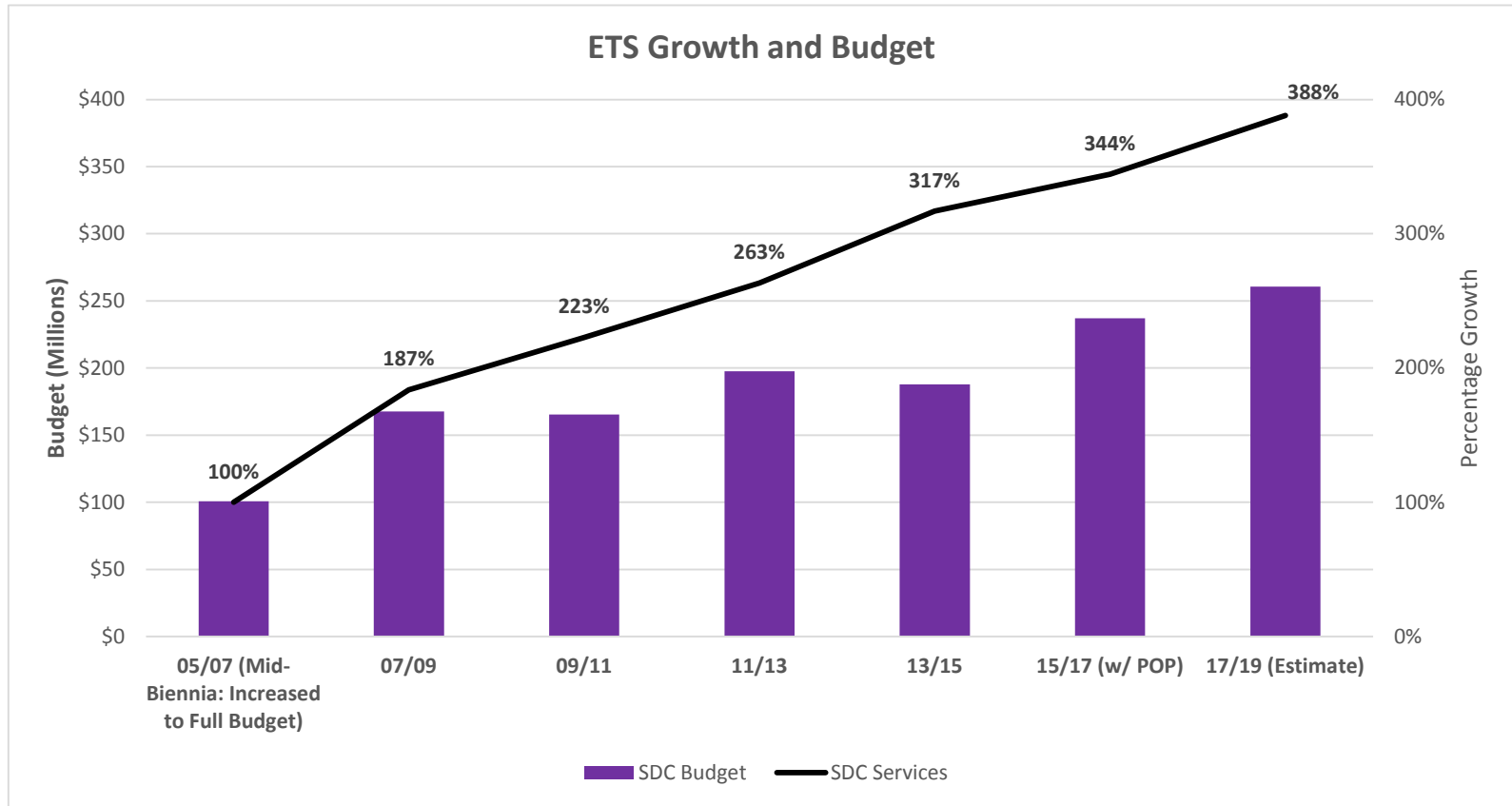
ETS Budget Drivers

Setting technology service rates based on what each service costs and customer utilization

Shared responsibility for state technology spend

Economizing to create shared services and negotiation of pricing based on economies of scale

ETS Environmental Factors

- Increasing demands on services require faster, more secure solutions and the expertise to support them

- Technology usage is driven by how much businesses and citizens use agency services

- Keeping pace with citizen expectations of state government's use of technology

- Increasing desire for the mobility of technology

- Fast pace of technology advancements

- Aging technology infrastructure required increased investment for replacement
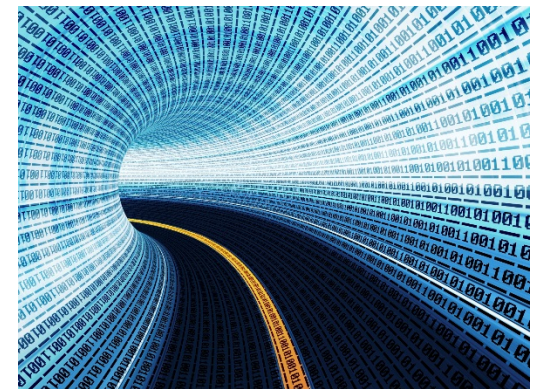
Fast Pace of Technology Advancements:
Data Center Evolution 2006 and Beyond

Multiple Vendor Servers

Hitachi Storage

Cisco Network

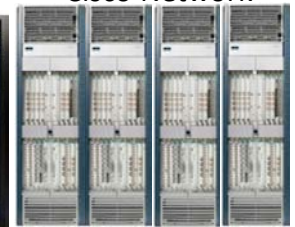2006-2009 Data Center's Raised Floor (computer room)

HP VM Servers

Hitachi Storage

Cisco Network

2009-2014 Data Center's Raised Floor (computer room)

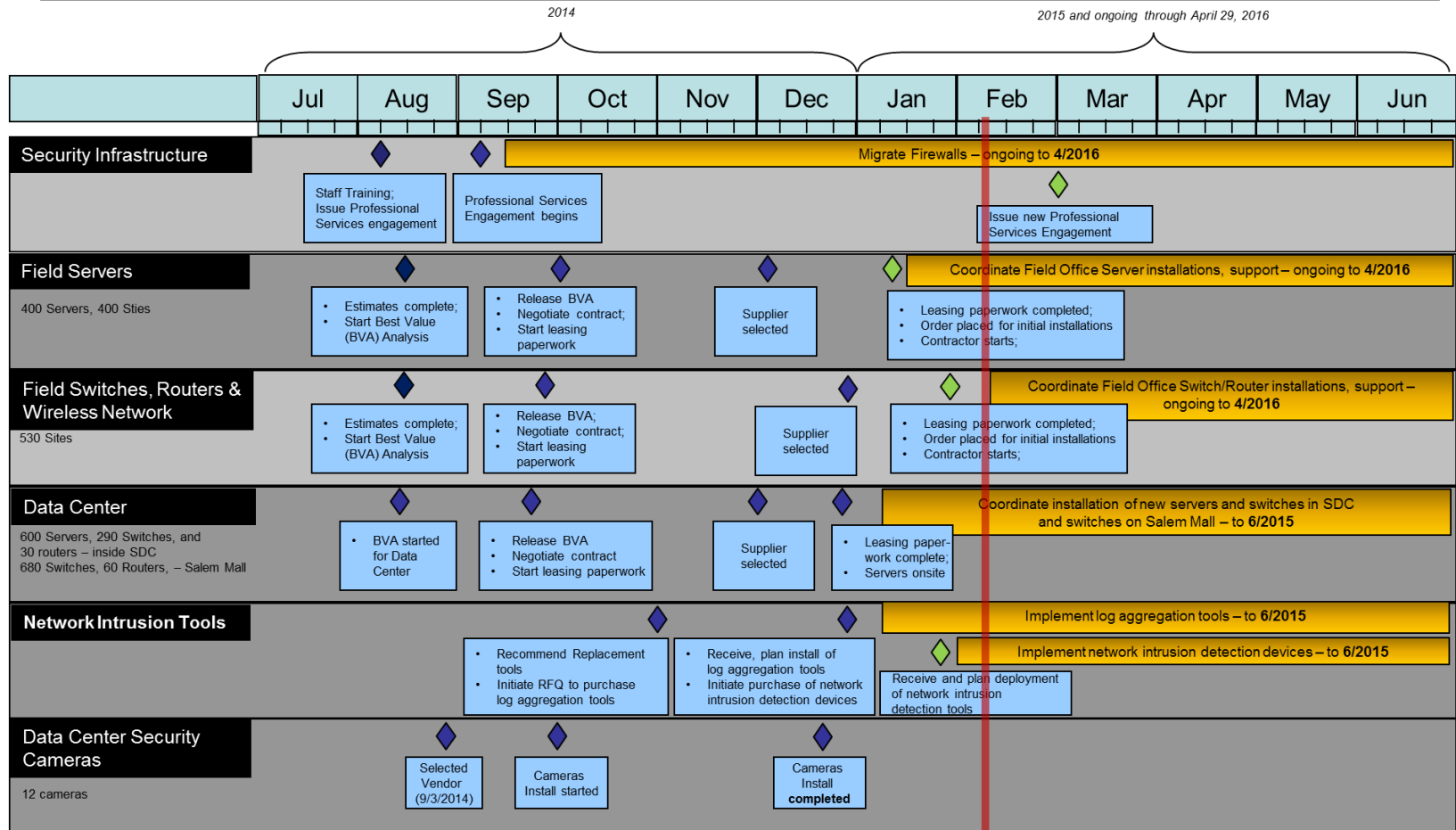Unified Computing Platform (UCP)

2015-2020 Data Center's Raised Floor (computer room)

ETS Lifecycle Replacement

- Approved to proceed in 2014 with an estimated five-year cost of $47.6M

- Project initialization and procurement vehicles are finalized.

Biennium	Projected Costs
2013-2015	$8.6M
2015-2017	$18.7M
2017-2019	$18.3M

ETS Lifecycle Target Dates

ETS Future Opportunities

- Re-evaluating utility services

- Outsourcing telephony to third-party vendor

- Improving IT security
  - Package 112 – Security and IT Operations and Audit Support

- Real-time budgeting of new agency demand
  - Package 113 – Support Growth in Customer Usage of IT
  - Package 114 – Support Usage Growth for DAS

- Packages that did not move forward
  - Package 115 – Support Agency Large IT Projects
  - Package 116 – Support Agency Direct IT Purchases

Current and Future Initiatives

- Enterprise Asset Management

- Partnership with Cherriots

- Office of Administrative Hearings Move