



Testimony

House State Government Committee

Hearing on HB 1704

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Office of Administration

Sharon P. Minnich, Secretary

Chairman Metcalfe, Chairman Bradford, and Members of the Committee, I am Sharon Minnich, Secretary of the Governor's Office of Administration (OA). On behalf of Governor Tom Wolf, thank you for the opportunity to appear before this Committee to discuss HB 1704 and information technology IT. With me today is John MacMillan. He was appointed Deputy Secretary for Information Technology and Chief Information Officer (CIO) in March 2015. He comes to the commonwealth with an enormous amount of experience including over 31 years of IT industry experience. He spent almost 19 years with one of the world's leading IT companies and managed a diverse portfolio of public sector work.

First, I would like to tell you a little bit about my background. I have over 20 years of experience leading major transformations and technology implementations with approximately 50% of my career in the private sector. I first worked for the commonwealth under Governor Tom Ridge. I have also have worked for Governors Schweiker, Rendell, Corbett, and now Governor Wolf. I have served as: Deputy CIO for the commonwealth; CIO of the Department of Revenue; Deputy Secretary for Financial Administration in the Office of the Budget; and Deputy Secretary for Procurement at the Department of General Services (DGS). In these roles, I improved operations and managed significant process and system changes, including the implementation of a new financial shared services model for Pennsylvania, the state's tax amnesty project, and the state's enterprise resource planning system. In addition to my work in state government, I have worked in healthcare, finance, and as a consultant in the private sector.

As many of you are aware, the Office for Information Technology (OIT) within OA oversees enterprise technology for the commonwealth. When it was originally established in 1958, the Office of Administration implemented the first centralized computer application (payroll) and provided IT guidance to agencies through its Bureau of Central Data Processing and the Bureau of Management Methods. Much has changed since then but that foundation has allowed Pennsylvania to be recognized as a leader in information technology among other states.

As technology has changed, so have the services and organizational structure within OIT. Through the mid to late nineties most agencies managed their own IT systems (applications, hardware, software, etc.). Each agency had their own organization duplicating many functions. Beginning in the mid-nineties OA began to consolidate the commonwealth's technology infrastructure functions or services through the creation of the managed services relationship with an external supplier which maintained the mission-critical mainframe and server environments for multiple agencies. As client server technology began increasing, the Enterprise Data Center was created to

leverage a single facility with security controls, heating, cooling and required floor space for agency servers. Additionally, the commonwealth standardized on a single email platform, an enterprise resource planning system (ERP), and telecom networks. While these early initiatives helped reduce costs, agency IT organizations still operated relatively independently while following OA policy and standards.

To improve oversight and coordination, in 2003, the first Executive Order was issued which created the first direct reporting relationships between the agency CIOs and the commonwealth's CIO. This was limited to the CIO and not agency IT personnel and was intended to provide improved oversight as IT standards became increasingly important for system interoperability.

Since its inception, OA has provided services to agencies under the Governor's jurisdiction and to independent boards and commissions. Core services include but are not limited to setting policy and architecture standards, setting strategic direction and reviewing strategic plans, establishing IT governance, reviewing strategic projects over certain thresholds, inventorying applications for system upgrade planning, managing data standards and open data, as well as direct service provision for network, telecom, data center, email, disaster recovery and continuity planning, cybersecurity, ERP and other enterprise services.

IT, as you are aware, is a rapidly changing environment. The organization that supports it must be flexible as IT changes while driving down costs. The ability to respond quickly and leverage industry best practices required the OA to look at its people, processes and technology to determine how we serve our customers, the agencies, and citizens of Pennsylvania.

In response to the changing IT landscape, in early 2017 Governor Wolf announced the HR/IT shared services project as part of the 2017-2018 budget address. The objective of the initiative was to decrease costs and improve efficiencies while also focusing on service delivery to our customers, the agencies and citizens of Pennsylvania. I would like to provide an update on the work accomplished over the past ten months as well as the activities in process over the next 12 to 18 months.

OA began a true shared services initiative in January of 2017 to deliver IT services aligned to industry best practices. It is worth noting that Pennsylvania, while ahead of other states in many areas of IT such as infrastructure consolidation, was somewhat behind in terms of enterprise service delivery and is not alone in implementing and realizing the value of a centralized IT shared service model. Nationwide, the country is heading in the direction of shared services for IT. An August 2017 poll conducted by

Government Technology Magazine reported that more states are moving toward a centralized model for IT services with 25 states having centralized IT functions.

The shared services project is structured into several phases. Given the scope and complexity of the initiative, a phased approach allows for a careful implementation to reduce service delivery risk.

The first phase of the initiative was six months and focused on planning and design. The project team included members from OA and agencies under the Governor's jurisdiction.

The first step in the process was analyzing the current state. At a high-level, the service delivery model led to both inconsistent delivery limited by personnel and funding, as well as duplication of activities as each agency had similar IT organizational structures to support the agency business. The prior operating model for IT in the commonwealth incentivized an agency-specific view to solving business problems versus looking at a citizen-centric or service-centric view to service delivery that allows for the most cost-effective investment decisions. For example, there were agencies with dedicated cyber security personnel and agencies with part-time cyber security personnel based on resource limitations.

After the current state was reviewed, the team developed the future state processes and services. We aligned processes to services and to the ITIL framework which is a leading framework for IT service delivery. This was supplemented by conversations with other states that implemented consolidated services. The result was the development of our service catalog.

Following the development of the future state processes, the supporting organizational structure was designed to support this service delivery model. The structure needed to support our processes and help us achieve our goals of:

- Eliminating redundancies to realize greater savings and efficiencies.
- Transforming how services are delivered to allow the agencies to focus resources and funds on citizen facing activities.
- Improving the return on investment of taxpayer funds through a coordinated, standardized approach to service delivery for IT services.
- Reducing gaps in productivity and expertise found between small, medium, and large agencies.

- Improving relationships and communication with stakeholders.

The basic assumption for the organizational model was to organize by service delivery area or function rather than by agency to better leverage IT assets across the enterprise. Functions that are “standard” across the enterprise were designed as part of the enterprise organizations and would serve all agencies (example: cybersecurity). Functions that are more agency or business line specific would be provided by six cross-agency delivery centers. These delivery centers would be organized by IT service area and provide those services to all agencies within the delivery center.

The six cross-agency delivery centers are:

General Government (OA, Office of the Budget, Office of General Counsel, Governor’s Office, Lieutenant Governor’s Office, Education, General Services, Office of Inspector General, and Independent Boards and Commissions that were serviced by OA).

Public Safety (Corrections, JNET, Probation & Parole, State Police).

Employment, Banking & Revenue (Labor & Industry, Revenue, State Banking & Securities, Insurance).

Health & Human Services (Human Services, Health, Drug & Alcohol Programs, Aging, Military & Veterans Affairs).

Conservation & Environment (Conservation & Natural Resources, Environmental Protection, Agriculture, Milk Marketing Board, Environmental Hearing Board).

Infrastructure & Economic Development (Community & Economic Development, Transportation, Emergency Management).

The enterprise functions include:

Strategy and Management which will establish common approaches for IT service management, IT project management, IT training, IT policy & compliance.

Enterprise Solutions will build, configure and maintain enterprise solutions, through a shared services model – enabling IT staff within the delivery centers to leverage solutions to further agency business missions.

Service Desk will establish a more coordinated approach to managing incidents in the commonwealth.

Technology and Operations will provide enterprise network, telecommunication and data center services.

Cybersecurity will protect the commonwealth's network, data and applications from threats and attacks.

Centralizing the cybersecurity function is critically important to the commonwealth. Centralization under one area enables more efficient identification and resolution of cyber incidents. It quickly marshals needed resources to diagnose and mitigate a potential cyber event. Responses to a cyber event require coordination amongst multiple IT disciplines, systems and vendors – having a single chain-of-command structure removes barriers to access needed information. Having this critical function in a siloed structure presented risk and created barriers to an efficient, coordinated response.

As noted earlier and under the General Government delivery center, we will continue to provide services to the many independent boards and commissions utilizing our data centers, network, software, technical services or applications.

In addition to the definition of services and supporting organization structure, a new governance process was designed for agency, delivery center, and enterprise decision making. Finally, metrics were reviewed, prioritized and aligned to the new service delivery and governance models. The design principle is intended to make decisions that serve multiple agencies within a delivery center.

There are two other foundational components of the model. First, to allow for flexibility and resource sharing and to serve all agencies, employees would transfer to OA's complement. Second, a new financial model would be needed to better allocate resources.

The model was rolled out to all employees at town halls and agency meetings during the months of May and June in preparation for July 1st implementation.

The current phase, Transition, is six months and comprises governance, transition planning, and the launch of a pilot delivery center work stream. We took a phased organizational transition to mitigate risk and allow for additional analysis. This phase also eliminates each agency CIO and establishes the new delivery center CIO responsible for the strategic direction for all agencies

within the delivery center. It is important to note that while complement transitioned, to mitigate risk associated with the financial model, FY 17-18 funding remains within the agencies.

This phase includes the implementation of a pilot within the Conservation & Environment Delivery Center. The first activity of the pilot delivery center was to establish a cross-agency delivery center governance process. This was established in July. The delivery center is now in process of transitioning its staff from their current agency structures to the new service delivery structure. Lessons learned from this transition will be provided to the other delivery centers.

Another component of the transition phase is to establish Delivery Center Chief Technology Officers (CTO) and Information Security Officers (ISO). These individuals are direct reports to enterprise Cybersecurity and Technology and Operations but are physically located within their respective delivery center (matrixed). This allows additional standardization across agencies within the delivery center as well as providing all agencies with improved resources for critical functions. It allows the delivery center the ability to focus on applications or the business side of delivery while the enterprise resources assigned to the delivery center can support the technology needs to support those applications. It provides the flexibility to move resources when work ebbs and flows based on federal, state or other changes while incentivizing IT investments that meet multiple purposes within the established governance structure.

While only three months into the initiative, there are several benefits already realized. Through consolidation into delivery centers, one agency with a gap around GIS could leverage the skills and resources within the combined structure. Resource constraints for a wireless initiative in another agency were mitigated through the consolidation of personnel and sharing of resources. Through sharing of technology an agency was able to implement an automated process to review and prioritize IT work that was previously done manually.

Within the pilot delivery center, we have also realized benefits from consolidating service desks within the delivery centers so customers have one number to call for IT issues 24 hours a day, seven days a week – this approach is resulting in service improvements to customers that did not previously have a fully staffed service desk. This will serve as the model for other delivery centers and the enterprise.

While the pilot is underway, the remaining delivery center teams have six months to develop transition plans. These plans will depict how each delivery

center CIO will take their organizations from its agency view to a service or functional structure, and identify resource, training, and technology gaps. The current process for agency IT strategic plans and project reviews with the Office of Budget will continue unchanged for the FY 18-19 budget and be redesigned based on the new model for the 19-20 budget cycle.

This phase also includes establishment of delivery center governance processes for the remaining delivery centers as well as the development of service delivery metrics for each agency which will then roll up to the enterprise. Following governance signoff of the transition plans, delivery centers will begin movement to the new model. Based on complexity, implementation timelines may vary.

In addition, this phase includes a redesign of our financial model. Currently agency IT activities are funded through a variety of mechanisms. There are enterprise agency billings for services such as the enterprise resource planning system, agency direct payments for consumption based services such as the data center and telecom services, direct appropriations for enterprise security, agencies leverage federal and state funds directly for project implementation. Staff complement are funded via general fund, special fund and federal funds in any variety of forms which at times limits how IT solutions are architected. To prepare for the change to the new financial model we also implemented time tracking solutions for all HR and IT employees this past July. OA is working collaboratively with the Office of the Budget to develop a new financial design that aligns with the shared services initiative's goals to maximize commonwealth dollars and make the most strategic IT investment decisions. A revised financial framework allows us to leverage federal funds while also providing us the ability to allocate resources based on demand. This resource flexibility will benefit agencies and citizens by enabling greater citizen-focused solutions.

After December 2017, each delivery center is expected to have completed its transition plan.

Beginning in 2018, we will begin to move into the Consolidate Phase. Delivery centers will start to implement transition plans and consolidate organizations to align with the service catalog and service delivery model. We also plan to transition to a new billing model in FY18. The goal is to move to a delivery center strategic plan for submission (October 2018) from the current individual agency plan submission. This will improve cross-agency application development and support.

As the organization begins to stabilize, we will look for opportunities to prioritize areas for standardization around processes and technology. It will

allow reduced business risk, improved management and oversight through both decision making and resource allocation. It also provides for opportunities to reduce software and hardware costs allowing resources to be directed toward citizen focused services. For example, we are in the process of implementing a standard virtual desktop solution which will enable a remote support model for desktop support and central administration. We recently standardized on an automated server build solution that significantly reduced the time it takes to build a server from four days to one hour in one of our enterprise data centers. A few months ago, we standardized on a desktop platform for all commonwealth employees – that standardizes on a set of desktop productivity tools. These initiatives enable greater efficiencies and savings using more common technology, streamlining of training on a consistent set of products/services and simplification of technical integrations with other back-end products.

As we look to the future, following standardization we want to optimize service delivery. This will be an ongoing activity. With a portfolio of over 2000 applications, varying processes, multiple tools and contracts, the movement to the new model and full benefits to be realized will take several years. The current state emerged over the last thirty years. Aligning our services to industry standards and the work completed to date has put us on the right path to implement those changes.

That said, we must transition to the future in a way that does not impede service delivery. We are conducting ongoing portfolio reviews to manage resources, monitor service delivery and adjust accordingly during transition.

With any major initiative, there will be bumps in the road and adjustments will be made before there is a final end-state. I fully expect the end-state to be different from today's anticipated end-state. That is the specific reason we first did a Pilot Deliver Center to assess and learn before moving forward with all remaining delivery centers.

The key is flexibility. We need the ability to modify our services and our service delivery model as the IT industry changes. Through June 30th, we have saved over \$11.2M, slightly ahead of our current FY objective, as part of shared services through consolidation and restructuring. As we move through the next 12 to 24 months, we will be able to continue to standardize and review our hardware, software, and licensing agreements for additional opportunities.

This is the beginning of the journey. The current IT executive order mentioned earlier is broad in non-prescriptive terms. This allows OA to manage the IT commonwealth enterprise and be flexible enough to address those rapid, unpredictable changes that happen in the IT world. Our concern is that

HB 1704 is very prescriptive and would undermine our ability to be nimble enough to successfully manage the commonwealth IT enterprise in the rapidly changing world of IT.

While we are confident in the future direction of the delivery of IT services, we also believe it is premature to legislate IT service models based on where we are with our transition and the rapidly changing IT marketplace. It's important that OA continues to focus on the work to stabilize the model, confirm we have the correct elements in place and ensure a fully optimized IT organization.

Given we are just three months into the transition, its critical not to unravel or walk back any of the progress made to date. Unfortunately, HB 1704 would have the unintended consequences of doing just that.

Thank you to all of you who have supported our work. We appreciate the opportunity to appear here today. Thank you for your time.

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IT Shared Services Transformation

Shared Service Transformation Background

1990s

IT – Data Center, Email, Telecomm/Network



2000-2010

IT – Data Center, Agency IT Consolidation,
Shared Services



2010-Present

IT – Data Center, Agency IT Consolidations,
Centers of Excellence

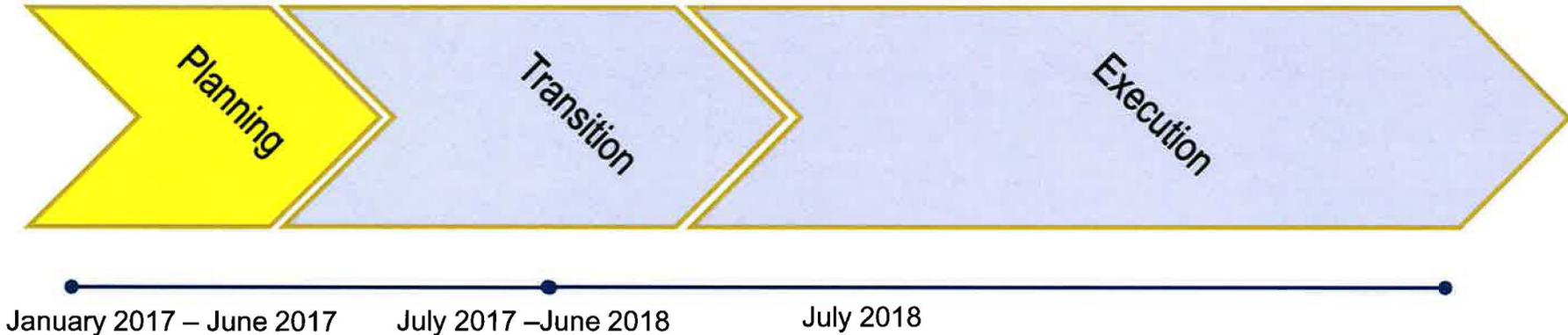
Over the same period, services grew and changed based on federal and technical landscapes (mobile, internet, online services, cybersecurity and GIS).

Organizational changes occurred to support new service delivery as well as some shared services.

Application portfolio grew to over 2000 supporting the enterprise.

Resulting in opportunities to realign the IT service delivery model

Shared Service Timeline



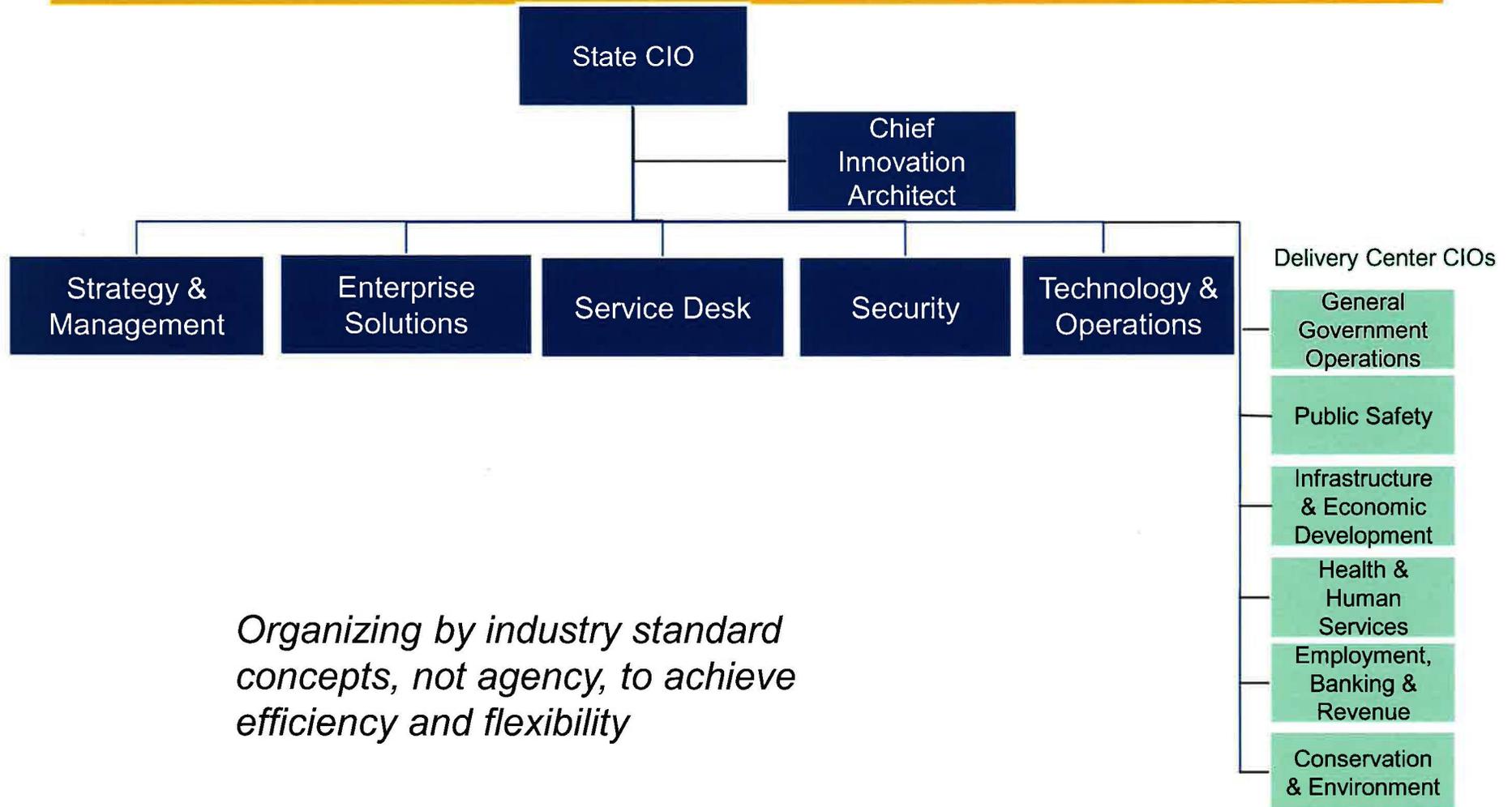
- **Planning**

- As-Is Process Design Sessions
- To-Be Process Design Sessions
- Future Organizational Structure
- Governance and Metric Models
- Employee Town Halls

Assumptions:

1. Align services to ITIL standards
2. Group services to enterprise or business
3. Align business groupings by mission
4. Consolidate complement for resource flexibility
5. Implement multiple tiered governance
6. Align metrics to service catalog³

Newly Implemented IT Org Design



Organizing by industry standard concepts, not agency, to achieve efficiency and flexibility

Shared Services Delivery Centers

General Government

OA*, Office of the Budget, Office of General Counsel, Governor's Office, Lieutenant Governor's Office, Education, General Services, Office of Inspector General, PA Emergency Management (PEMA) HR and PA Commission on Crime and Delinquency (PCCD) HR

**Independent boards and commissions currently served by OA OIT will continue.*

Public Safety

Corrections, JNET, Probation & Parole, State Police, PCCD IT

Employment, Banking & Revenue

Labor & Industry, Revenue, State, Banking & Securities, Insurance

Health & Human Services

Human Services, Health, Drug & Alcohol Programs, Aging, Military & Veterans Affairs

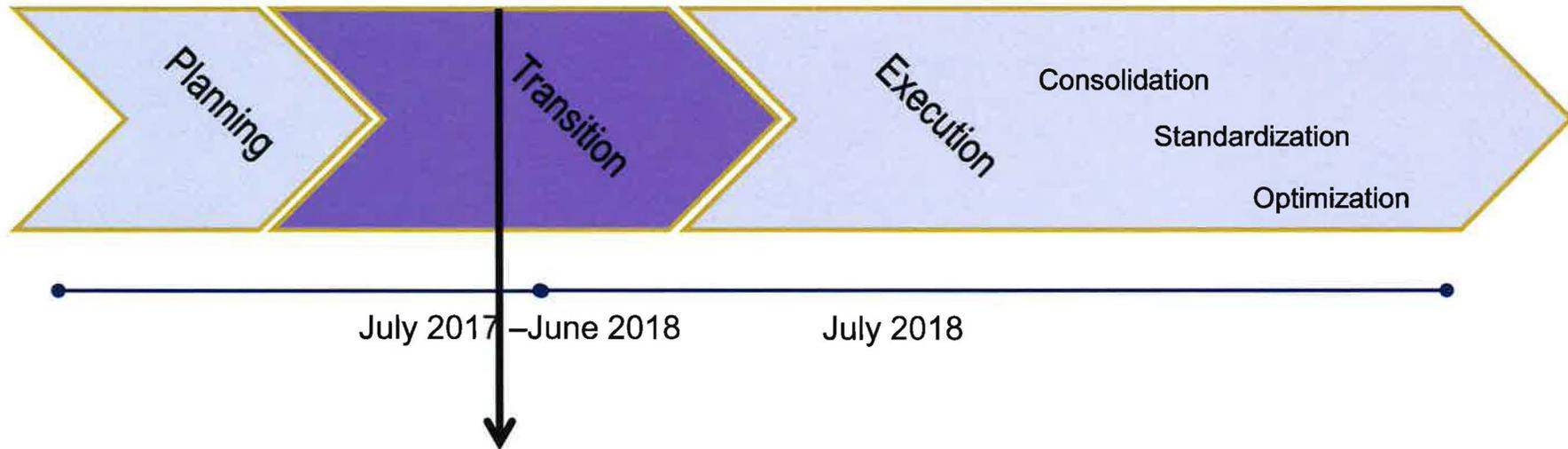
Conservation & Environment

Conservation & Natural Resources, Environmental Protection, Agriculture, Milk Marketing Board, Environmental Hearing Board

Infrastructure & Economic Development

Community & Economic Development, Transportation, PEMA IT

Current Status



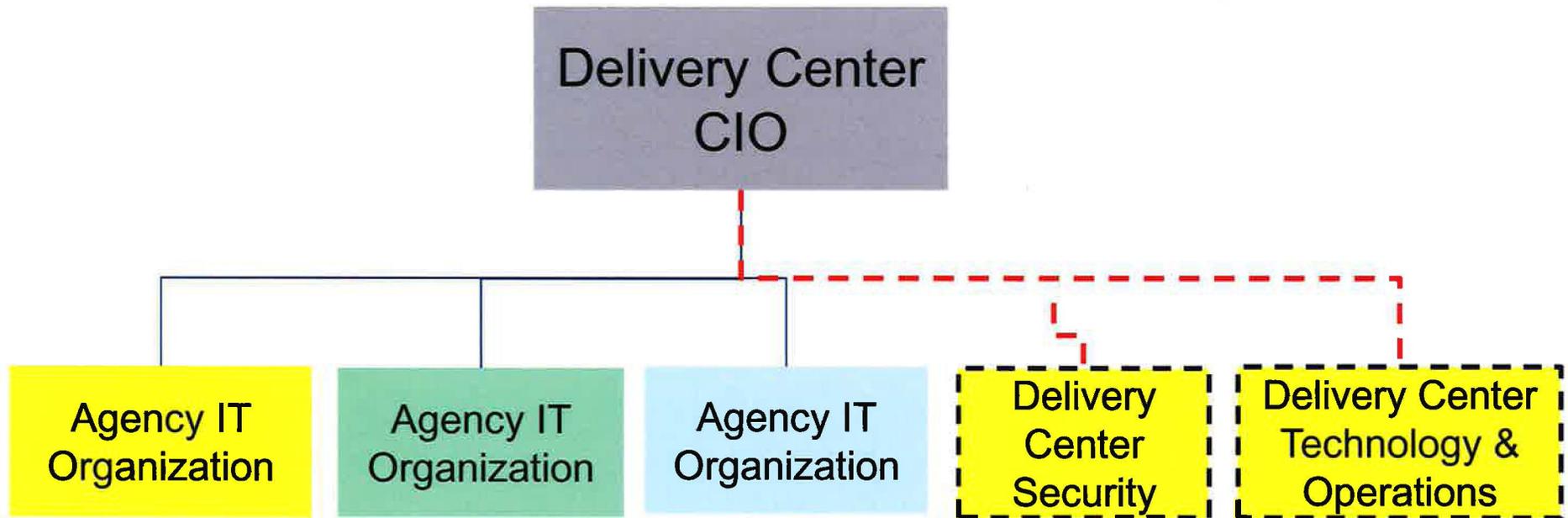
- Transition Key Activities

- July 1 - IT employees transitioned to OA complement
- Pilot Delivery Center Implementing Future State
- Delivery Center Governance Scheduled
- Organizations Transition Planning
- Implementation of Matrix

- Transition – What's Next?

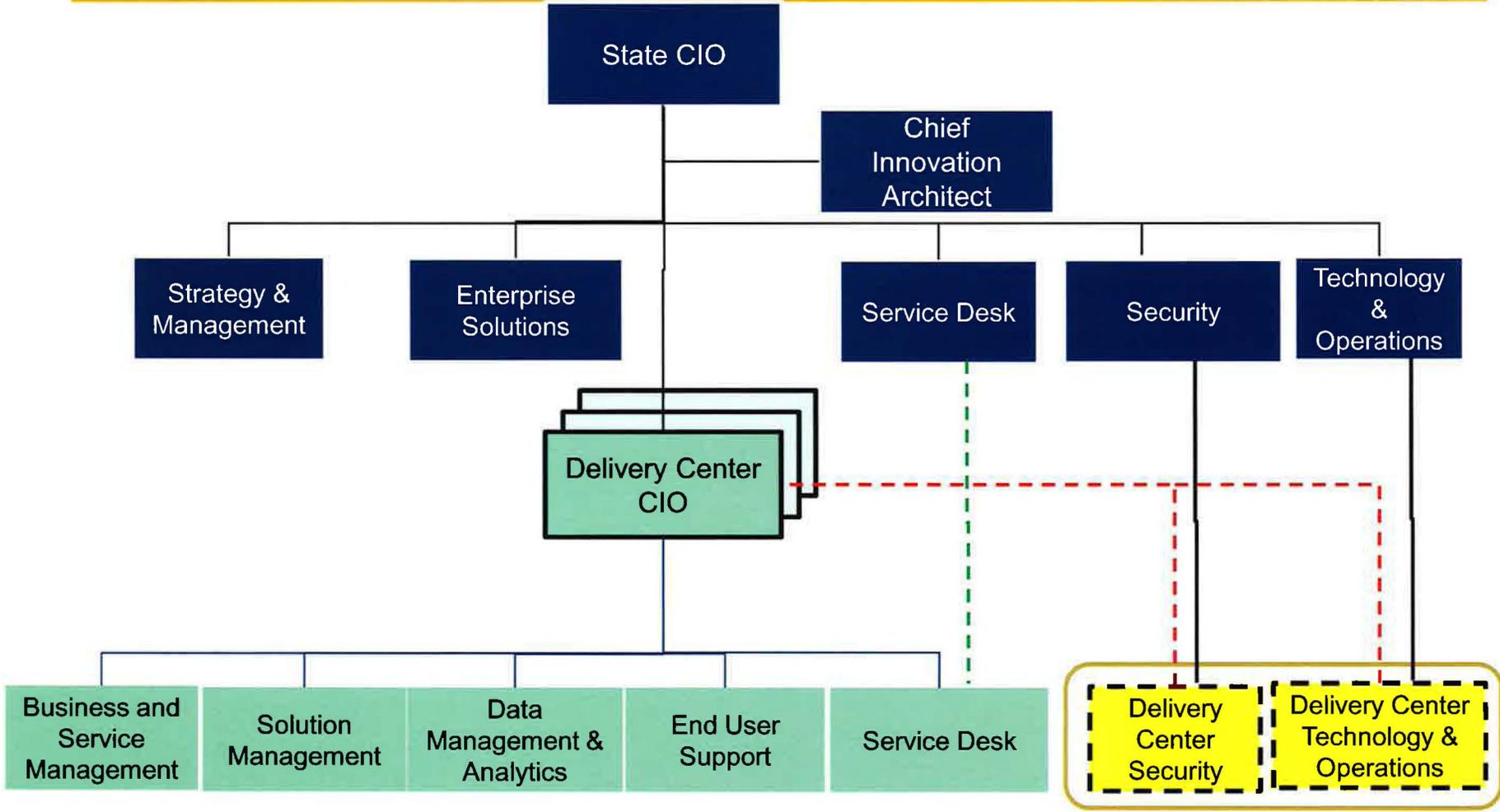
- Organizations Begin Consolidation
- Financial model development
- Governance rollout
- Metric Rollout

Current Delivery Center View: IT Org Design



Each Delivery Center CIO will submit a plan in December 2017 outlining steps to reach the Optimized Design.

Future State: IT Org Design



Aligned by service delivery