Oregon

Kate Brown, Governor

Department of Administrative Services

DAS Business Services
155 Cottage Street NE
Salem, OR 97301-3972
PHONE: 503-378-2349
FAX: 503-373-1273

December 7, 2015

The Honorable Senator Richard Devlin, Co-Chair
The Honorable Representative Peter Buckley, Co-Chair
Interim Joint Committee on Ways and Means
900 Court Street NE
H-178 State Capitol
Salem, OR 97301-4048

RE: The Department of Administrative Services' Rebalance Request and Report on SB 5502 (2015)

Dear Co-Chairpersons:

EXECUTIVE SUMMARY AND NATURE OF THE REQUEST

The Department of Administrative Services respectfully requests approval of DAS's rebalance of expenditure limitation associated with the implementation of HB 3099 (2015) and to update the Committee on proposed changes to its revenue model for Enterprise Technology Services as required under the Budget Note in SB 5502 (2015).

AGENCY ACTION

HB 3099 (2015)—*relating to state information technology; and declaring an emergency*—fundamentally altered the delegation of authority over statewide IT operations and policy, transferring substantial authority from the DAS Director and Chief Operating Officer (COO) to the State Chief Information Officer (CIO). This reassignment and delegation of joint authority, coupled with the discovery of statewide security vulnerabilities and a lack of a capacity to manage increasingly sophisticated IT vendor relationships necessitates new leadership and new ways of organizing IT service and policy. The proposed realignment of statewide IT policy and service delivery within the Office of the State Chief Information Office (OSCIO) is intended to implement the promise of HB 3099, sustain security investments and build new capabilities. Furthermore, HB 3099 creates a need for increased coordination with DAS Procurement Services and additional capacity within that office.

Similarly, the Budget Note pertaining to Enterprise Technology Services (ETS) and partial funding of the division due to the lack of a credible and transparent financial plan, coupled with uncertainty regarding its future services catalog, weighed in favor of realigning the organization of IT service delivery. However, neither these organizational nor emergent business needs were anticipated within the agency's current division budgets. While it is DAS's position that the majority of these needs can be met with internal rebalancing and the transfer of limitation from one division to another, additional funding will be required to sustain investment in the creation of an Enterprise Security Office and to build capacity for the management and oversight of IT vendor relationships.

### Oregon State Chief Information Office (OSCIO)

Prior to the passage of HB 3099 (2015), the DAS Director retained substantial authority over state IT operations and policy—as a DAS employee and direct report, the State CIO lacked independence and possessed only nominal authority over statewide IT policy. Under this model, the State CIO's division consisted of 34 positions (34.00 FTE)—a group whose responsibilities were limited to IT project oversight, security standards, data collection for geographic information systems and pilot implementation of an IT Governance framework. Furthermore, the State CIO had no authority over IT service delivery within ETS—a division with 225 positions (219.00 FTE) that reported to the Deputy

DAS Director. Consequently, there was a fundamental disconnect between statewide IT policy and service delivery.

Following the discovery of statewide network vulnerabilities in March of 2015, the Governor restructured leadership over statewide IT policy and operations, temporarily assigning operational responsibility for ETS to the State CIO. Additionally, the Governor called for a third-party organizational assessment of ETS procedures, management oversight and industry best practices. The Public Financial Management (PFM) Group was selected and remains a valued partner in benchmarking the state and ensuring fiscal integrity. The reassignment and delegation of joint authority over statewide IT policy and operations was made permanent under HB 3099, which designated the State CIO as an independent official, directly responsible to the Governor as the primary advisor on statewide IT policy and operations. Among other provisions, the bill codified an incremental funding and development process for IT projects over $1 million (*i.e.*, Stage Gate review) and provided a delegation of authority over enterprise IT and telecommunications projects.

With enhanced authority over increasingly complex IT and telecommunications projects and vendor relationships, added responsibility for IT service delivery at ETS, and a growing backlog of remediation measures to mitigate statewide security vulnerabilities, the Office of the State CIO requires a new direction. By clarifying the role of the State CIO and ensuring alignment between statewide IT policy and operations, HB 3099 has provided a unique opportunity to reaffirm its commitment to enable state agencies and partner jurisdictions to better serve Oregonians—mitigating security vulnerabilities and threats, optimizing IT investments across the enterprise of state government, ensuring financial transparency and aligning service delivery with industry best practices.

As part of this commitment and to fulfill the promise of HB 3099, the OSCIO has proposed a fundamental shift in its organizational structure—enabling a renewed focus on data center operations, development of enterprise security capabilities, effective management of IT vendor relationships and implementation of the IT governance framework. Under the proposed OSCIO redesign, there will be five sections: Enterprise Technology Services (the State Data Center); Enterprise Security Office; the Office of Strategic IT Governance; Enterprise Shared Services; and the DAS Chief Information Office (DAS CIO). While the DAS CIO will remain under the authority of the State CIO, it will report to the DAS Deputy Chief Operating Officer—consistent with the new IT governance framework and best practices.
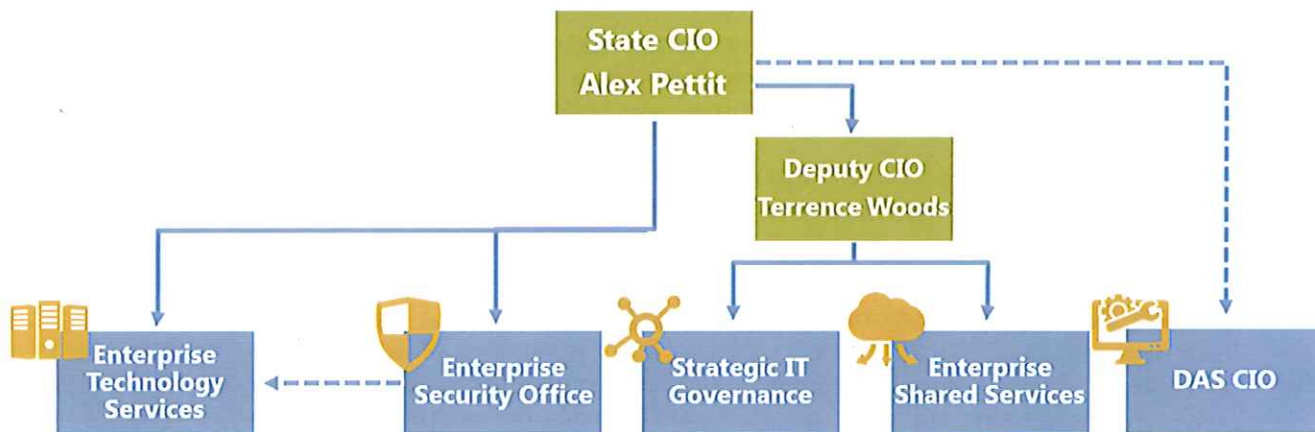
Enterprise Technology Services (ETS)

The legacy of Enterprise Technology Services (ETS) traces its origins to the Computing and Network Infrastructure Consolidation (CNIC) project. The Oregon Legislature funded the CNIC project with an initial investment of $63.6 million in 2005 with the intention of generating savings and operational efficiencies through IT consolidation. The CNIC project ultimately migrated 11 agencies' data center operations, including equipment and staff, into a state-owned and operated data center. However, a 2008 Secretary of State Audit, entitled *"Department of Administrative Services: State Data Center Review,"* noted that full infrastructure consolidation had not been achieved, savings were unlikely to be realized, operational controls did not address service level agreements, the SDC was not prepared to "resume data center operations" in a timely manner following a major disruption or provide a secure computing environment. While the data center has worked to develop a virtualized computing and network environment (with enhanced disaster recovery capabilities through an innovative partnership with the state of Montana), it has struggled with organizational change fatigue, disaffection with management, a lack of customer alignment, long periods of disinvestment and the lack of a transparent and credible financial model.

As part of a DAS reorganization in 2011, the State Data Center, Technology Support Center (TSC), Application Development and E-Government program were combined to form ETS using an entrepreneurial management framework and matrix organizational structure. However, the reorganization was initiated with limited employee engagement and never fully implemented. Consequently, there was widespread confusion among employees regarding roles, responsibilities, and a fundamental lack of accountability and disaffection with management. These themes were still evident in an ETS Environmental Scan conducted by DHM Research in April of 2014. In the scan, ETS staff indicated that ETS managers were "easily swayed by politics," had limited trust in or respect for staff, lacked industry expertise and a coherent vision for the organization, and were spread thin in order to meet customer requests.

At the time the State Data Center was reconstituted as ETS, it also acquired the FullCost Maturity Model—a proprietary cost-allocation and rate-development tool and methodology. By definition, the FullCost model was intended to ensure that every agency paid the "full cost" of the services it received from the data center, including: overhead and cost of the building, supporting infrastructure and the hours worked by ETS employees (*i.e.,* direct, indirect and overhead). While some of the "billable" hours were directly charged to agencies as job costs, they were primarily embedded within the cost of discrete service lines based on estimates from management discretion, along with a host of other discrete cost information. In the absence of an employee time-tracking system, the particularity of the FullCost model and specificity of ETS service lines coupled with a matrix organizational structure did little to increase financial transparency, offering false precision and contributing to rate volatility. Anecdotally, PFM observed that more than half of ETS employees interviewed considered rate-making their primary responsibility.

Under entrepreneurial management, rate development and revenue growth seemingly took precedence over service delivery, contributing to an "in-house" bias and an increasingly un-focused services catalog. In attempting to be all things to all people, ETS neglected core data center operations and security. Furthermore, the allocation of fixed costs through rates for existing state assets (*e.g.,* empty floor space in the data center) undermined the cost-competitiveness of ETS computing services. Consequently, the economies of scale and savings that could have been generated with increased utilization of state assets has remained unrealized, as non-customer agencies have been incented to purchase duplicative IT infrastructure.

Concern with ETS financial transparency increased with the rate impacts of the Sustainability Initiative. A five-year capital improvement project exceeding $40 million and beginning in 2014 that addressed network and service outages and reversed long-term disinvestment in the lifecycle replacement of key infrastructure. While the Sustainability Initiative received broad agency support through the ETS Customer Utility Board, its approval resulted in a substantial rate increase and raised further concern with the underlying rate methodology. As a result, the 2015-17 DAS appropriation bill, SB 5502 (2015), provided partial funding for ETS and included the following Budget Note:

> "Given the uncertainty involving which services Enterprise Technology Services will offer in the future due to the ongoing IT Common Service Delivery review currently underway and concerns over management of ETS which has led to numerous outside reviews and audits, the Subcommittee agreed to only partially fund the Enterprise Technology Services budget requests for 2015-17. The State Chief Information Officer (SCIO), through the Department of Administrative Services (DAS), shall return during the 2016 legislative session to the appropriate subcommittee of the Joint Ways and Means Committee with recommendations on changes to ETS information technology services provided, which services it will no longer offer and state agencies will then be responsible, the budgetary impact of these decisions on state agencies, as well as DAS, changes in ETS operations implemented or considered as a result of outside reviews and audits completed by the time of the report, and timelines for additional changes to ETS services or operations being contemplated and how those could affect budgets, In addition, SCIO shall recommend a new funding formula for ETS that refocuses charges to state agencies on fees for service and deemphasizes the use of assessments which fund all positions regardless of reductions in services delivered, show how reductions in services purchased by state agencies would be reflected in reductions in operating expenses, and include price list adjustments needed for implementation of a new revenue formula at the start of second year of the biennium."

The realignment of statewide IT policy and operations under HB 3099 (2015) and the ETS Budget Note require a new direction and organizational model to better support IT service delivery and provide for a credible and transparent rate and assessment methodology. Going forward, ETS will refocus on core operations and the business of being a state data center—striving to become a premier utility provider of computing and network services. Consequently, ETS will be divested of the Technology Support Center (TSC), Application Development and E-Government programs as part of a broader realignment within the OSCIO. Under this realignment, with Legislative approval, ETS will have an Other Funds expenditure limitation of $160,746,437 and be composed of 165 positions (165.00 FTE).

While ETS is not requesting any new positions at this time, it has an urgent need for an employee-time tracking (*i.e.,* time and attendance) system and an integrated IT System Management (ITSM) tool. The need for these tools was a recurrent theme during the PFM assessment and review of the rate methodology. ETS remains reliant on several highly-customized and unsupported open-source products, which require significant manual processes that are prone to error and inconsistency. With an ITSM tool and time and attendance, ETS could better leverage FTEs across the organization, align its rate methodology with industry best practices, automate billing functions, improve the reliability of utilization data and forecasting, and empower its management team with real-time data and business analytics. There is an active project to acquire an ITSM tool—it currently has Stage 2 Endorsement, with an approved business case and detailed planning documentation. Once the project moves into the procurement phase, ETS will request additional limitation in a subsequent meeting of the Emergency Board. Similarly, a need for additional limitation may arise if there are substantial changes to the ETS services catalog or emergent opportunities.

Along with this broader realignment, ETS is shifting away from a matrix structure and transitioning to a discipline-oriented structure to better leverage technical competencies and align with the budget and rate-setting processes, thereby increasing financial transparency and simplifying rate development.

While ETS may have experienced organizational change fatigue, this does not preclude the implementation of change done right. Unlike previous reorganizations, new leadership at ETS has contracted with the Coraggio Group, an Oregon-based company with deep experience in change management consulting. Through their engagement and facilitation, ETS has articulated organizational success principles, held a series of employee focus groups with high-levels of staff attendance, provided opportunities for employee feedback on initial drafts of the proposed organizational structure and created both online and onsite communication channels with FAQs, timelines and status updates. Currently, ETS is developing the details of its implementation plan, working to ensure key processes are transferred without interruption and that ETS successfully transitions to its new operating model—one informed by employee engagement and industry best practices (*i.e.*, the Information Technology Infrastructure Library (ITIL)).

Action Requested.
- Transfer existing Other Funds expenditure limitation from ETS to OSCIO and Chief Operating Office.
- Transfer 60 positions (54.00 FTE) from ETS to OSCIO and Chief Operating Office.
- Reclassify three permanent full-time positions, one Information Systems Specialist 5 to Information Systems Specialist 6, and two Information Systems Specialist 8 to Principal Executive/Manager E.

Enterprise Security Office (ESO)

Until recently, the State Chief Information Security Officer (CISO) had neither responsibility for nor authority over the security of ETS operations—possessing only nominal authority over statewide security policy, given limited staffing and a lack of enforcement authority. In its 2015 audit report entitled "*State Data Center: First steps to address longstanding security risks, much more to do*" the Secretary of State's (SOS) Audit Division observed that "[o]ver the last nine years, security weaknesses at the state data center have put confidential information at risk. [Noting that] [t]he weaknesses continued because the state abandoned initial security plans, did not assign security roles and responsibilities, or provide sufficient security staff." Under this model, responsibility for security at ETS was diffused amongst all staff, yet there was no corresponding accountability—much like the "bystander effect," when everyone is responsible no one is responsible.

Following the passage of HB 3099 (2015) and approval of *Policy Option Package 112: Security and IT Operations Audit Support* (SB 5502, 2105), which provided 12 limited duration (LD) positions (12 months in duration), the State CIO immediately moved to create the Enterprise Security Office (ESO). Given the immediacy of statewide security vulnerabilities and SOS Audit findings, the ESO was formed with the 12 LD security positions (immediately filled with job rotations using existing ETS personnel), permanent ETS staffing and the original security policy group from the Chief Information Office. Consisting of 24 positions, the formation of the ESO increases total security staffing from 3 to 14 percent of ETS staffing.

Under the leadership of the State CISO, the ESO brings together all enterprise security functions into a single organization—directly accountable for the security of ETS operations, real-time security monitoring and incident response, enterprise security policy, enterprise security architecture, and dissemination of best practices. Since formation of the ESO and completion of a risk-based security assessment by Microsoft, the office is also engaged in several key security initiatives, including:

- *Risk Management: Working to document, review and prioritize all security risk findings, and standardizing risk prioritization, remediation and statewide security tolerances.*

- *Addressing Critical Findings: Improving credential hygiene through credentials access and control, improving vulnerability management and addressing patch control.*
- *Boundary Definition: Working to compartmentalize risk across agencies and define boundaries for clear accountability and risk reduction.*

Given its responsibility for ETS operations and the need to collaborate with ETS technical teams, the ESO will be embedded within the state data center, however, the State CISO will report directly to the State CIO.

With the formation of the ESO, the State CIO has taken significant steps towards fixing the problems identified by the SOS's recent audit. However, as the audit notes, "the solutions will take time, resources, and cooperation from state agencies." While the OSCIO has managed to stand up the ESO by repurposing existing personnel, using the 12 LD positions for staff rotations and carving out Other Funds expenditure limitation of $13,556,596 from ETS and the Chief Information Office, the State CIO is requesting additional position authority and expenditure limitation for the ESO. Absent reclassification of the 12 LD positions to full-time permanent, the ESO will lose a full half of its staff at the end of the fiscal year. Additionally, with the formation of the ESO and increased responsibility of the State CISO, the addition of an executive support staff person would enable the office to more effectively carry out its duties.

Action Requested.
- Transfer existing Other Funds expenditure limitation between ETS and OSCIO.
- Transfer 19 positions (13.00 FTE) from ETS to OSCIO.
- Reclassify one permanent full-time position from a Principal Executive/Manager G to Principal Executive Manager H.
- Establish permanent full-time position, an Executive Support Specialist 2 (1.00 FTE).
- Change position type from limited duration to permanent on 12 positions, increase months from 12 to 24 (6.00 FTE), and reclassify one position from an Information Systems Specialist 8 to a Principal Executive/Manager E.

Enterprise Shared Services (ESS) + DAS Procurement Services
Beyond the realignment of statewide IT policy and operations under the State CIO, HB 3099 (2015) also delegated the OSCIO substantial authority over enterprise IT and telecommunications projects and aspects of the procurement process. Going forward, the OSCIO delegation of authority includes: (a) the ability to suspend or modify project implementation; (b) cancel or modify a procurement, contract or price agreement; (c) modify the scope of an initiative prior to the award of a contract or price agreement; (d) enforce the terms and conditions of a contract or price agreement (*e.g.*, "call for cure"); or (e) elect to be named as a party or third-party beneficiary to any contract or price agreement. By implication, this delegation of authority implies new responsibilities for the OSCIO—responsibilities that impact how the state procures hardware, software, telecommunication services and IT professional services. Currently, the OSCIO is working in coordination with the Department of Justice and DAS Procurement Services to define the roles and responsibilities of the respective parties relative to IT procurement.

Coupled with the OSCIO's increased responsibility over IT purchasing and procurement is a growing recognition that traditional IT *ad hoc* acquisition and vendor management strategies are increasingly inadequate—given emergent technology, changes in the IT market place and the sophistication of IT procurements and the resulting vendor relationships. In effect, the state can no longer afford to own or maintain the entirety of its IT portfolio. As the state transitions to new service models, including infrastructure-as-a-service (IaaS), platform-as-a-service (PaaS) and software-as-a-service (SaaS)—*i.e.*,

"cloud computing"—it is evident that there is lack of statewide capacity to manage increasingly sophisticated IT vendor relationships.

As part of the broader realignment, the OSCIO proposes the creation of the Office of Enterprise Shared Services (ESS). With Legislative approval, the office would manage several existing programs, including: E-Government, Quality Assurance (QA), the Geospatial Enterprise Office (GEO) and State Interoperability Program. The central theme of these programs being the development of shared service models and management of long-term strategic vendor relationships—e.g., the state of Oregon's e-Government partnership NICUSA. In the case of QA program, it would be looking to build capacity and develop new strategic partnerships in order to meet increasing demand for third-party QA oversight on major IT projects. As for the GEO program, while it also manages a long-term partnership with ESRI for geographic information systems (GIS) licenses, it is simultaneously working to develop a multi-agency co-located shared services model and GIS center of excellence in partnership with the Department of Land Conservation and Development among other partners. Additionally, the realignment includes an investment in the Oregon Transparency program in the form of dedicated staffing.

Beyond existing enterprise programs, the Office of Enterprise Shared Services would partner with DAS Procurement in the initial build-out of a vendor management program. The establishment of a joint IT strategic sourcing group would enable the standardization of processes for soliciting and contracting for vendor-provided services, evaluation of vendor performance, effective vendor management, enterprise risk management and increased vendor diversity—enabling the development of strategic vendor relationships. By ensuring standardization, best practices, and an enterprise-wide focus on IT procurement, contract negotiation and oversight, the vendor management program will ensure alignment with project management principles and strategies. Additionally, it will build the capabilities to successfully negotiate IT- and telecom-related contracts as the state transitions to new service models—mitigating risks and realize benefits across the enterprise.

Just as HB 3099 and new IT service models create the need for new capabilities within the OSCIO, there is a corresponding staffing need within DAS Procurement. In clarifying roles and responsibilities relative to IT procurement, vendor management and oversight, there is a need to align staffing capabilities under a common framework based on industry best-practices—utilizing a category-based sourcing strategy, focused on hardware, software, IT professional services and unified communications (e.g., telecommunications). Furthermore, there are unmet staffing needs within DAS Procurement associated with the re-pooling of delegated procurement authority. More and more, individual agencies are no longer seeking these delegations nor looking to go it alone.

Action Requested.
- Transfer existing Other Funds expenditure limitation from ETS to OSCIO.
- Transfer 2 positions (2.00 FTE) from ETS to OSCIO.
- Change position type from limited duration to permanent on Principal Executive/Manager F position.
- Establish one permanent full-time Executive Support Specialist 1 position (1.00 FTE), one permanent full-time Operations Policy Analyst 3 position (1.00 FTE), three permanent full-time Operations Analyst 4 positions (3.00 FTE), and one permanent full-time Principal Executive/Manager F (1.00 FTE)
- Establish three permanent full-time Operations and Policy Analyst 4 positions (3.00 FTE) and one permanent full-time Procurement and Contract Specialist 3 position (1.00 FTE) within Enterprise Goods and Services Procurement Services.

The Office of Strategic IT Governance

This Office of Strategic IT Governance is key in implementing and using the new IT Governance Framework, which includes oversight and portfolio management of all major IT investments. The new IT Governance approach contributes to greater accountability across the enterprise of state government, supports successful IT projects and aims to reduce duplication, fragmentation, inefficient deployment of IT resources and project failures. The office facilitates the strategic, coordinated investment, acquisition and deployment of IT resources to meet the business needs of state agencies providing critical services to Oregonians, while also ensuring increased oversight and compliance with the Stage Gate incremental funding model. The office is institutionalizing a modern governance structure for IT that meets the needs of state agencies, including the specific needs of small agencies, boards and commissions.

The office is split between three working groups including: Strategic Planning and Investment, Policy and Oversight, and Enterprise Architecture and Design. The Strategic Planning and Investment team works closely with the assigned state agencies, policy advisors and other stakeholders to understand business objectives and strategic technology direction and assist them in identifying and successfully implementing effective technology solutions—managing the project portfolios for the assigned agencies and educating them in oversight policies and processes. The Policy and Oversight Team provides oversight and policy enforcement for all major IT projects. The Enterprise Architecture and Design Team, works with the Strategic planning and investment team—linking the business mission, strategy, and processes of an organization to the Enterprise IT strategy, and documents using architectural models or views that show how the current and future needs will be met in an efficient, sustainable, agile, and adaptable manner. Under this realignment, the IT Governance group will have an Other Funds expenditure limitation of $5,330,180 and be composed of 20 positions (20.00 FTE).

> Action Requested.
> - Transfer one position (1.00) FTE from ETS to OSCIO.
> - Reclassify two permanent full-time positions, one Principal Executive/Manager F to Principal Executive/Manager G and one Operations Policy Analyst 4 to Principal Executive/Manager F.

DAS Chief Information Office (DAS CIO)

This office will provide an internal champion for DAS that is focused on internal agency business needs, technology support, legacy systems replacement and meeting the IT needs of client agencies. The establishment of a DAS agency CIO will ensure that DAS models the recently adopted IT Governance focused on managing the state's IT resources at an enterprise level. This office will steward the Department's electronic information assets, provide appropriate technology service support and set the strategic long-term direction for IT service delivery within DAS—enabling DAS to better serve Oregonians by supporting the state agencies, boards, and commissions they rely on each day. Specifically, the section would house the agency's Application Service Delivery Unit and the Technology Support Center (TSC). In this capacity, the DAS CIO will act as the central point of accountability, providing coordination for Department information technology and resource management across all divisions, programs and business units. Given statewide reliance on legacy systems, DAS stands at a critical juncture and requires strong IT leadership.

> Action Requested.
> - Transfer existing Other Funds expenditure limitation from ETS to Chief Operating Office (COO).
> - Transfer 37 positions (37.00 FTE) from ETS to COO.
> - Establish one permanent full-time Executive Support Specialist 1 position (1.00 FTE).

LEGAL REFERENCE

Increase or transfer the Other Funds expenditure limitations established by Chapter 654, Section 2, Oregon Laws 2015, for the 2015-17 biennium as follows:

OR Law Chapter/Section		Fund	Rebalance Adjustments	Increase Limitation	Total Adjustment
654/Sec. 2(1)	Chief Operating Office	Other	$12,091,800	$79,744	$12,171,544
654/Sec. 2(3)	Chief Information Office	Other	$25,651,384	$2,714,006	$28,365,390
654/Sec. 2(5)	Enterprise Technology Services	Other	($37,743,184)	$0	($37,743,184)
654/Sec. 2(7)	Enterprise Goods and Services	Other	$0	$474,682	$474,682
		Total	$0	$3,268,432	$3,268,432
	Chief Operating Office	Pos	37	1	38
		FTE	37.00	1.00	38.00
	Chief Information Office	Pos	23	7	30
		FTE	17.00	13.00	30.00
	Enterprise Technology Services	Pos	(60)	-	(60)
		FTE	(54.00)	-	(54.00)
	Enterprise Goods and Services	Pos	0	4	4
		FTE	0.00	4.00	4.00
		Total Pos	0	12	12
		Total FTE	0.00	18.00	18.00

Sincerely,

George M. Naughton
Interim DAS Director and Chief Financial Officer

Alex Z. Pettit, Ph.D.
Chief Information Officer

Cc: Paul Siebert, Legislative Fiscal Office
        Ken Rocco, Legislative Fiscal Office
        Patrick Heath, Chief Financial Office