July 31, 2013 | The State of Oklahoma

Quarterly Report
Fiscal Yearend 2013
Report No. 7

Progress on Consolidation

Developed by:

Alex Z. Pettit

Chief Information Officer

Forward

"The only thing of real importance that leaders do is to create and manage culture. If you do not manage culture, it manages you, and you may not even be aware of the extent to which this is happening" - Louis V. Gerstener, Jr. former Chief Executive Officer for IBM.

Information technology can focus resources on one of three different areas: operations; enhancements; or projects. Operations is defined as the activities required to keep the lights on and fix the things that are broken. Enhancements are continuous improvement efforts applied to processes, software, or hardware solutions currently in production. Projects are larger initiatives that are focused on strategic improvement to the business. Our consolidation effort would fit the definition of a project.

After two years of focusing on consolidation we are in the process of making several organizational and tactical changes at ISD to pivot toward operations. The implementation of these changes is being accelerated as we pass the half-way point of consolidation. Currently, 87% of all agencies use some shared IT service, and over half of the agencies receive all of their IT services from ISD.

We believe these changes will increase customer satisfaction without slowing down the completion of consolidation. The allocation of resource is a never ending balancing act, and cultural change is difficult and takes time. I want to thank all the employees, vendors, and our partner agencies who have helped us achieve what we have achieved in just three and a half years.

Alex Z. Pettit
Chief Information Officer

Table of Contents

1 Summary of Consolidation Progress

This quarterly report will present what was accomplished in FY 2013, what our plans are for FY 2014, and an update to our standard reporting models and tables.

The updated annual spending on IT is presented in Figure 1 starting with 2009 and updated with the most current numbers from the general ledger. IT spending has reduced by $115 million over this period of time. Figures 1a and 1b represent graphically this information. Figure 1c is the supporting data for Figure 1b.

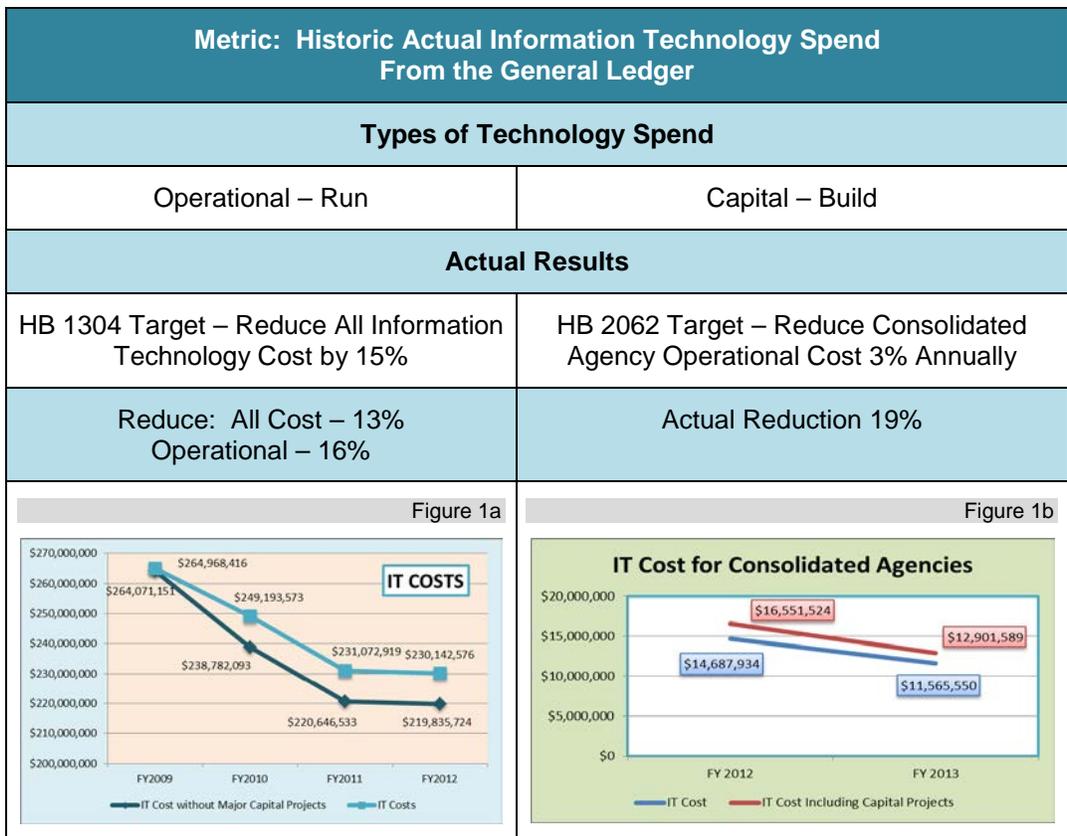**Reduce the Size of Government - METRIC**   Figure 1

Metric: Historic Actual Information Technology Spend From the General Ledger	
Types of Technology Spend	
Operational – Run	Capital – Build
Actual Results	
HB 1304 Target – Reduce All Information Technology Cost by 15%	HB 2062 Target – Reduce Consolidated Agency Operational Cost 3% Annually
Reduce: All Cost – 13% Operational – 16%	Actual Reduction 19%

Figure 1a

Figure 1b

Figure 1c

Agency Name	FY12 Total	FY13 Total	Increase/ Decrease	% of Change
Oklahoma Aeronautics	$34,264.43	$59,932.42	$12,480.63	53.21%
Construction Industries Board	$179,650.40	$130,344.01	$6,631.34	6.97%
Uniform Building Code Commission	$5,297.60	$12,937.21	$8,332.61	297.85%

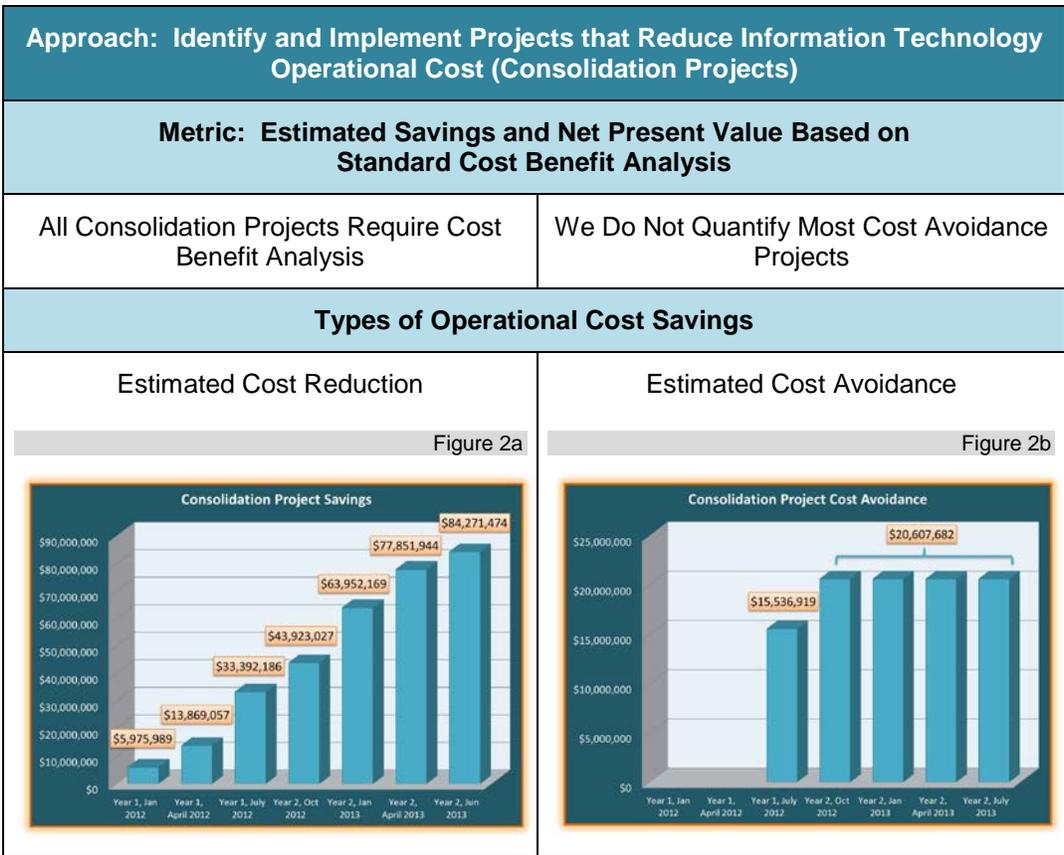| Agency Name	FY12 Total	FY13 Total	Increase/ Decrease	% of Change
State Arts Council	$32,871.21	$25,869.73	-$7,001.48	-21.30%
Department of Education	$8,659,474.50	$6,029,832.30	-$2,630,896.83	-30.50%
OK Comm for Teacher Prep	$41,179.13	$78,793.17	-$753.27	-1.83%
Physician Manpower Trng Comm	$8,203.59	$11,252.64	$3,049.05	37.17%
Center for Advancement of Science/Tech	$172,631.17	$85,706.70	-$15,590.88	-22.64%
Teachers Retirement System	$884,996.45	$808,251.22	-$76,745.23	-8.67%
Ethics Commission	$16,297.28	$17,691.62	$1,394.34	8.56%
Office of Personnel Management	$180,418.07	$137,126.15	-$40,514.02	-22.81%
Dept of Central Services	$1,291,321.88	$728,613.41	-$607,268.01	-47.03%
State Treasurer	$1,506,827.12	$1,071,313.32	-$309,887.93	-36.87%
Employees Benefits Council	$1,238,542.82	$1,006,345.00	$170,586.06	25.07%
Tobacco Settlement Endowment Trust	$146,935.41	$131,539.16	-$15,396.25	-10.48%
Office of Disability Concerns	$16,132.19	$15,099.19	-$1,033.00	-6.40%
Okla. Human Rights Comm.	$37,044.30		-$37,044.30	-100.00%
Commercial Pet Breeders Board	$10,434.52	$911.73	-$9,522.79	-91.26%
Interstate Oil Compact Comm	$8,315.32	$11,750.87	$3,435.55	41.32%
Dept of Tourism & Recreation	$1,030,088.45	$1,699,541.78	$381,212.17	38.21%
Oklahoma Accountancy Board	$166,198.50	$59,196.09	-$5,133.39	-9.97%
State Banking Department	$169,723.78	$65,152.72	$21,845.94	26.14%
Liquefied Petroleum Gas Bd	$16,002.85	$18,709.63	$2,706.78	16.91%
Marginally Prod Oil & Gas Wells	$28,043.67	$46,789.64	-$11,749.32	-41.90%
Okla Motor Vehicle Comm	$16,517.12	$8,566.75	-$4,750.37	-35.67%
Bd of Exam for Long Term Care Admin	$16,044.02	$13,635.17	-$2,408.85	-15.01%
Oklahoma Board of Nursing	$190,784.85	$219,832.89	$29,048.04	15.23%
Board of Exam in Optometry	$7,963.69	$6,582.79	-$1,380.90	-17.34%
Prof Engineering & Land Surveyors	$27,384.24	$65,549.93	$13,165.69	48.08%
OK State Board of Lic Social Workers	$48,733.46	$8,908.67	-$2,824.79	-24.07%
Comm on Consumer Credit	$204,974.01	$162,464.98	$1,618.84	2.06%
Oklahoma Abstractors Board	$12,055.83	$8,991.08	-$4,901.65	-40.66%
Capitol Improvement Auth	$10,132.78	$1,906.11	-$8,226.67	-81.19%

Agency Name	FY12 Total	FY13 Total	Increase/Decrease	% of Change
Governor	$41,827.79	$48,943.98	$5,844.95	14.28%
State Fire Marshal	$94,211.73	$103,506.47	$9,294.74	9.87%

Figures 2a and 2b present the updated consolidated project savings to date. These projects represent specific activities undertaken to replace inefficient or more expensive IT systems with more efficient or less expensive systems. Each chart represents a different category of project savings.

Figure 2a presents the direct estimated dollar reduction in spending resulting from a specific project. To illustrate, when the individual disaster recovery plans and supporting services for DHS and OMES were combined, the amount spent by both agencies was reduced by over $200,000 per year.

Figure 2b is the estimated cost avoided had the project not been completed. The best examples of this are the enterprise-wide IT software licensing agreements, where agencies would run older copies of software and would eventually be faced with a higher expense to upgrade their applications when they went to update their desktops or laptops.

Reduce the Size of Government - APPROACH
Figure 2

Approach: Identify and Implement Projects that Reduce Information Technology Operational Cost (Consolidation Projects)	
Metric: Estimated Savings and Net Present Value Based on Standard Cost Benefit Analysis	
All Consolidation Projects Require Cost Benefit Analysis	We Do Not Quantify Most Cost Avoidance Projects
Types of Operational Cost Savings	
Estimated Cost Reduction	Estimated Cost Avoidance
Figure 2a	Figure 2b

Figures 3 and 4 identify each specific cost reduction or cost avoidance project and how much they have and will reduce the IT costs by each year. This is the detail which supports the graphically presented information in Figures 2a and 2b.

Consolidation Project Savings
Figure 3

Agency Name	Status	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
AIICM	Completed	$34,311	$48,511	$41,411	$41,411	$41,411	$41,411
Banking Dept	Completed	$7,251	$7,251	$7,251	$7,251	$7,251	$7,251
Board of Nursing	Completed	($15,543)	($9,745)	($15,245)	($15,245)	($15,245)	($15,245)
Capitol Improvement Auth	Completed	($1,601)	($1,052)	($1,052)	($1,052)	($1,052)	($1,052)
Dept of Central Services	Completed	$37,194	$9,054	$14,554	$9,054	$9,054	$3,554
Dept of Corrections HCM	Completed	($132,472)	$93,753	$234,892	$234,892	$234,892	$234,892
Dept of Tourism	Completed	$93,607	$94,407	$93,727	$93,727	$93,727	$93,727
Disaster Recovery Services	Completed	$247,344	$419,245	$203,524	$203,524	$203,524	$203,524
Employee Benefits Council	Completed	$150,115	$214,084	$208,584	$214,084	$208,584	$214,084
Fiber – First National Building	Completed	$11,895	$49,115	$49,115	$49,115	$49,115	$49,115
Office of Personnel Mgmt	Completed	$70,596	$77,933	$77,046	$70,746	$70,746	$70,746
People Move 2012	Completed	$2,336,741	$2,336,741	$2,336,741	$2,336,741	$2,336,741	$2,336,741
Dept of Education	Completed	$1,098,231	$1,054,231	$933,231	$960,731	$1,054,231	$1,435,231
Dept of Education Managed Print Services	Completed	$200,251	$279,251	$279,251	$279,251	$279,251	$279,251
State Treasurer	Completed	$277,473	$277,474	$277,475	$277,476	$277,477	$277,477
VoIP OKC County Health Dept	Completed	($11,794)	$41,814	$41,814	$41,814	$41,814	$41,814
CareerTech Position Consolidation	Completed		$98,150	$98,150	$98,150	$98,150	$98,150
AG HelpDesk Transition	Completed		$3,086	$3,241	$3,403	$3,573	$3,751
CareerTech Independent Contractor Consolidation	Completed		$39,960	$39,960	$39,960	$39,960	$39,960
COMIT Telemanagement Billing Module	Completed		$60,675	$123,925	$123,925	$123,925	$123,925
Decommission MidCon	Completed		$113,160	$113,160	$113,160	$113,160	$113,160
Fiber – Classen Buildings	Completed		($33,336)	$14,592	$14,592	$14,592	$14,592
Fiber – LandMark Tower	Completed		($49,514)	$14,821	$14,821	$14,821	$14,821
Fiber – Prof Engineers & Land Surveyors	Completed		($29,922)	$4,164	$4,164	$4,164	$4,164
Labor Dept	Completed		$86,293	$83,814	$86,925	$95,629	$93,429

Agency Name	Status	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
ODVA HelpDesk Transition	Completed		$145,700	$145,700	$145,700	$145,700	$145,700
Private Vocational Schools	Completed		($1,155)	($605)	($605)	($605)	($605)
SDE HUPP Contract Consolidation	Completed		$85,942	$92,056	$89,249	$86,357	$83,379
SDE Printer Consolidation Phase 2 *	Completed		$84,247	$5,247	$5,247	$5,247	$5,247
Wheat Comm	Completed		$3,598	($1,902)	($1,902)	($1,902)	($1,902)
Agriculture Dept Consolidation	Completed		$120,056	$125,644	$125,644	$125,644	$125,644
Children & Youth Commission	Completed		$107,391	$90,891	$90,891	$107,391	$90,891
Mines Dept	Completed		($10,913)	($16,413)	($16,413)	($10,913)	($16,413)
Scenic Rivers Commission	Completed		($6,195)	($6,195)	($6,195)	($6,195)	($6,195)
SDE Child Contract Consolidation	Completed		$18,500	$23,700	$23,700	$23,700	$23,700
SDE Child Nutrition Contract Consolidation	Completed		$60,399	$60,399	$60,399	$60,399	$60,399
DEQ Position Cost Savings	Completed		$113,475	$113,475	$113,475	$113,475	$113,475
Pharmacy Board Consolidation	Completed		$94,000	$88,500	$88,500	$88,500	$88,500
Dentistry Board Consolidation	Completed		($2,529)	($3,857)	($3,857)	($3,857)	($3,857)
SDE GED Lifelong Scoring	Completed		$5,838	$5,838	$5,838	$5,838	$5,838
Vet Board Consolidation	Completed		($3,904)	($3,904)	($3,904)	($3,904)	($3,904)
Chiropractic Examiners Consolidation	Completed		($2,524)	($2,524)	($2,524)	($2,524)	($2,524)
Psychologists Examiners Consolidation	Completed		($1,408)	($1,408)	($1,408)	($1,408)	($1,408)
Pre-Surplus Clearing House	Completed		$173,446	$0	$0	$0	$0
Eliminate Unused Software – Shared Services *	Completed		$125,204	$128,960	$132,829	$136,814	$140,918
DOC Re-organization	Completed		$140,570	$140,570	$140,570	$140,570	$140,570
Conservation Commission Consolidation	Completed		$14,575	$14,575	$14,575	$14,575	$14,575
Medical Examiners Consolidation	Completed		$13,932	$8,432	$13,932	$8,432	$13,932
SDE – CAS Contract Consolidation	Completed			$20,000	$21,000	$21,000	$21,000
SDE Scrantron Contract Consolidation	Completed			$140,548	$147,575	$147,575	$147,575
ODOT Video Editing System	Completed			$29,670	$0	$0	$0

Agency Name	Status	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
Employee Benefits Div – VM Ware	Completed			$5,357	$5,357	$5,357	$5,357
Health Department Network Consolidation	Completed		$1,822,537	$1,437,627	$1,437,627	$1,437,627	$1,437,627
EGID – Manage Engine Renewal	Completed			$4,148	$4,148	$4,148	$4,148
ODVA Network Consolidation	Planning		$33,817	$33,817	$33,817	$33,817	$1,017,517
OKDHS Printer Optimization *	Planning		$135,000	$160,000	$160,000	$160,000	$160,000
Health Dept Printer Optimization *	Planning		$257,631	$307,631	$307,631	$307,631	$307,631
Agriculture Printer Optimization *	Planning		$62,579	$87,579	$87,579	$87,579	$87,579
DEQ Printer Optimization *	Planning		$90,470	$115,470	$115,470	$115,470	$115,470
Dept of Libraries Consolidation	Execution		$130,167	$130,167	$124,667	$124,667	$130,167
OSEEGIB Consolidation	Execution		$515,053	$610,159	$610,159	$610,159	$610,159
Shepherd Mall Network Consolidation	Execution		$9,825	$38,257	$38,257	$38,257	$38,257
Health Dept Consolidation	Execution		$436,970	$276,770	$441,770	$276,770	$276,770
SDE – Decommission HP NonStop (Mainframe) *	Execution		$191,242	$385,939	$393,566	$401,422	$409,513
Security as a Service – Phase I	Execution		$57,542	$723,798	$723,798	$723,798	$723,798
Statewide Mainframe Consolidation	Execution		$1,769,151	$2,162,249	$2,838,061	$2,838,061	$3,623,315
Telecom Expense Management *	Execution		$2,680,000	$3,426,000	$3,426,000	$3,426,000	$3,426,000
Pardon & Parole Board Consolidation	Execution		$51,082	$52,515	$62,474	$59,304	$61,704
Real Estate Commission Consolidation	Execution			$118,756	$118,756	$118,756	$113,056
Boll Weevil Consolidation	Execution			$60,090	$60,090	$60,090	$60,090
Dept of Human Services Eliminate Unused Software *	Planning		$286,273	$202,987	$202,987	$202,987	$202,987
Dept of Commerce Consolidation	Planning			$289,035	$39,035	$33,535	$33,535
Dept of Human Services Email to the Cloud	Planning			$351,018	$218,481	$225,874	$233,489
Mental Health Network Consolidation	Planning			$90,806	$50,809	$50,809	$50,809

Agency Name	Status	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
Decommission Unused Software – Infrastructure	Initiation			$88,984	$88,984	$88,984	$88,984
pSeries Consolidation	Initiation			$283,000	$283,000	$283,000	$283,000
TOTAL ANNUAL SAVINGS		$4,403,598	$15,088,204	$17,917,700	$18,357,458	$18,313,506	$20,463,971

Savings Over 6 Years [1] $84,271,474

NOTES: [1] **FY12 plus NPV of savings achieved in FY13 – FY17**
  * Vendor and/or Employee Cost Savings Idea

Consolidation Project Cost Avoidance   Figure 4

Project Name	Status	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
ISD Procurement	Completed	$81,654	$81,654	$81,654	$81,654	$81,654	$81,654
Statewide IT Contracts	Completed	$920,266	$1,679,846	$1,679,846	$1,679,846	$1,679,846	$1,679,846
SSL Certificate Savings	Completed	$7,888	$7,888	$7,888	$7,888	$7,888	$7,888
Microsoft Enterprise Agreement	Completed	$1,778,419	$1,778,419	$1,778,419	($2,047,273)	($2,047,273)	($2,047,273)
Microsoft EES Statewide Contract	Completed		$1,139,031	$1,139,031	$1,139,031	$1,139,031	$1,139,031
Health Network Consolidation	Completed		$1,822,538	$1,437,628	$1,437,628	$1,437,628	$1,437,628
TOTAL ANNUAL SAVINGS		$2,788,227	$6,509,376	$6,124,466	$2,298,774	$2,298,774	$2,298,774

Savings Over 6 Years [1] $20,607,682

NOTES: [1] **FY12 plus NPV of savings achieved in FY13 – FY17**

As of July 2013, 87% of the executive branch agencies receive some information technology services from the shared services center and over half of the executive branch agencies receive all IT services from the shared services center. Additionally, over 80% of all the IT endpoints are secured through the centrally managed security operations center. Figures 5, 6 and 7 represent our updated agency-by-agency, service-by-service or service-by-agency progress as we continue to transform the agencies IT services from stand-alone to the shared services model.
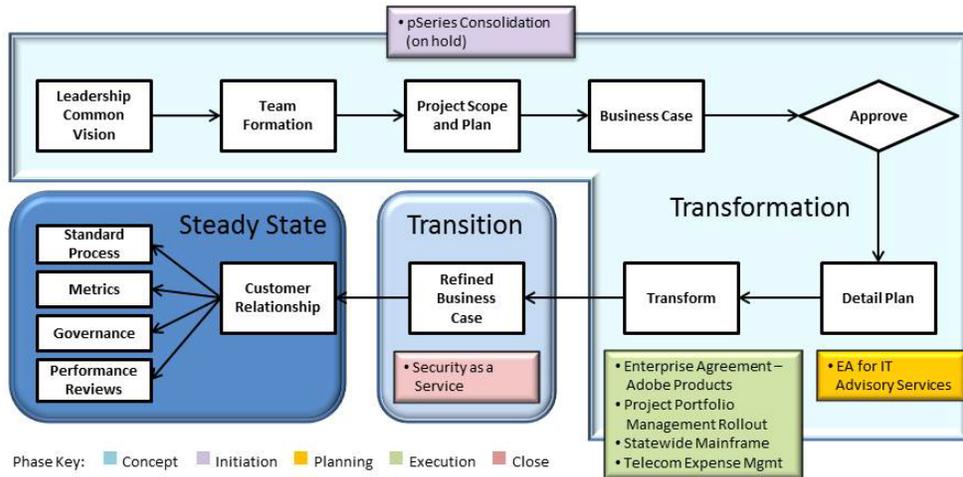
Agency-by-Agency Consolidation Approach
Figure 5
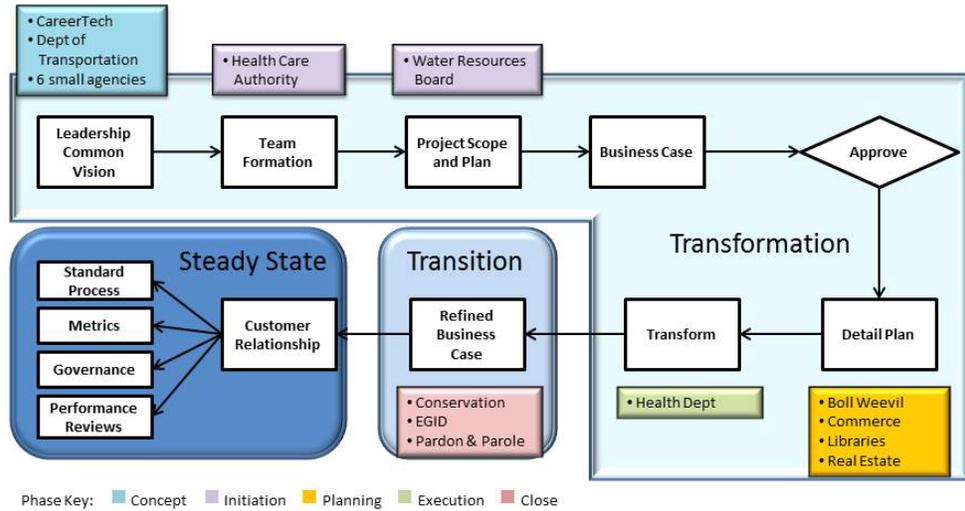
Agency-by-Agency Completion

Abstractors Board	Disability Concerns	Long Term Care Admin Bd	Prof Engineers & Land
Accountancy Board	Education Dept	Marginal Well Commission	Surveyors Licensure Bd
Aeronautics Comm	Employees Benefits Council	Medical Examiners	Psychologists
Agriculture	Ethics Commission	Merit Protection Comm	Scenic Rivers Commission
Anatomical Board *	Finance Authority	Mines Dept	Science and Math
Arts Council	Fire Marshal	Motor Vehicle Comm	Sorghum Comm
Banking Dept	Governor	Multiple Injury Trust Fund *	State Treasurer
Bond Advisor	Human Rights Comm	Native American	Teachers Prep Comm
Building Bonds Comm	Interstate Oil Compact	Cultural & Educ Auth	Teachers' Retirement Sys
Capital Investment Board	Comm	Nursing Board	Tobacco Settlement
Capitol Improvement Auth	Industrial Finance Auth	Optometry Board	Endowment Trust
Ctr f/Advancement of	Judicial Complaints	Personnel Mgmt Office	Tourism & Recreation
Science & Tech (OCAST)	Council *	Pet Breeders *	Uniform Building
Central Services – DCS	Labor Dept	Pharmacy	Code Comm
Children & Youth Comm	Lic Social Workers Bd	Physician Manpower	University Hospitals Auth *
Chiropractic	Liquefied Petroleum	Training Comm	Veterinary Medical Exam
Construction Industries Bd	Gas Board	Private Voc Schools Bd	Wheat Commission
Consumer Credit			
Dentistry Board			* = No IT Services

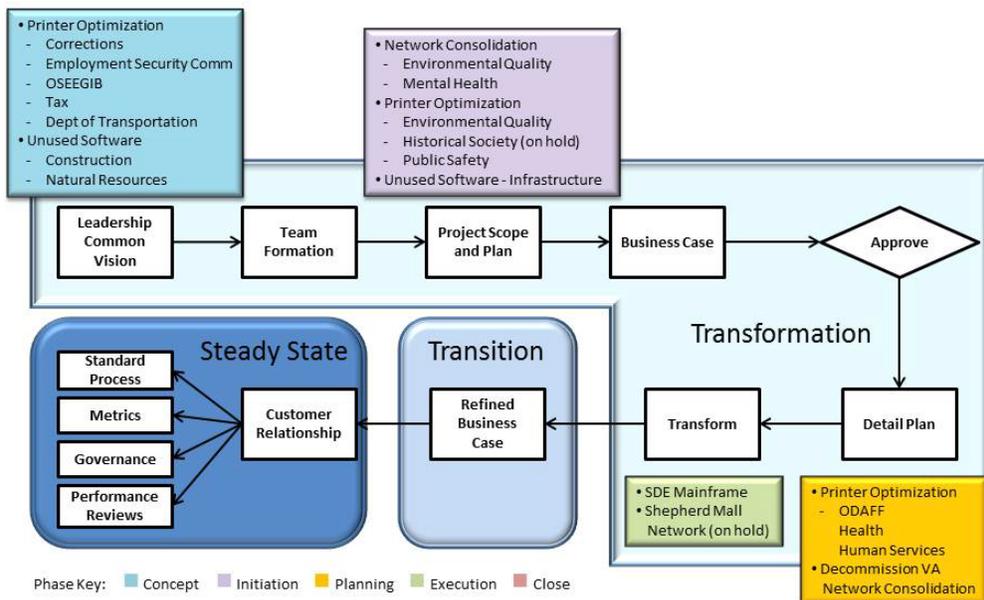## Service-by-Service Consolidation Approach

Figure 6

Service-by-Service Completion:

- Antivirus / Spam / Encryption Pilot
- COMIT Tele-management Billing Module
- Microsoft Enterprise Agreement
- People Move 2012
- PPM Tool Pilot
- Pre-Surplus Clearing House – 2012 Cost
- Savings Idea

Service-by-Agency Consolidation Approach

Figure 7

The risk a project presents is a significant factor when determining if the reward for doing it is worth the chance that something may go wrong. Our updated risk matrix appears in Figure 8, completed projects have been removed and projects in execution have been updated to reflect changes to the risk/reward analysis. Even after expanding the scope, the proposed IBM pSeries consolidation still has a negative NPV and will be removed by the next quarterly report.
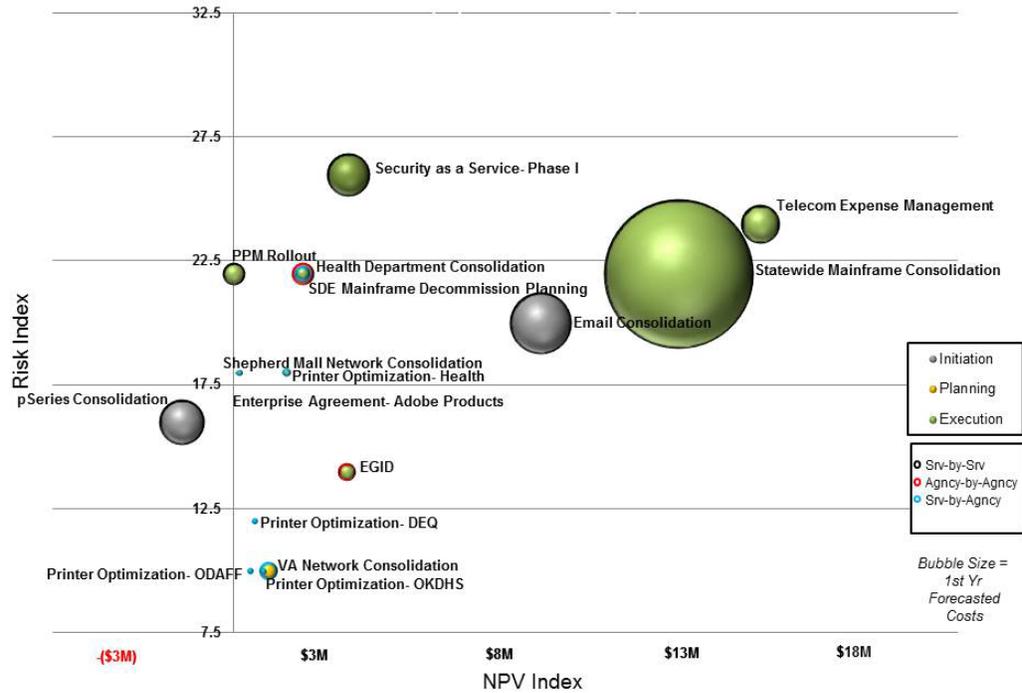
Consolidation Portfolio
Figure 8

Figure 9 outlines the currently active projects (projects which are underway but have not completed) and are expected to reduce the IT spend. The project name, the phase the project is in, the forced risk rating, the expected savings it will produce (indicated by the Cost Benefits Analysis Net Present Value, or CBA NPV column), and the total estimated cost of the project are presented. These projects are in our portfolio management tracking system, and updates can be found online at www.cio.ok.gov.

Consolidation Portfolio Active Projects

Figure 9

Agency-by-Agency Projects

Project No.	Project Name	Project Phase	Risk Rating	CBA NPV	Total Forecast Cost
30236	EGID Consolidation	Execution	14	$3,107,091	$222,966
30235	Health Dept Consolidation	Execution	22	$1,877,595	$145,000

Service-By-Service Projects

Project No.	Project Name	Project Phase	Risk Rating	CBA NPV	Total Forecast Cost
32531	Printer Optimization – Dept of Human Services	Planning	10	$814,703	$25,900
31212	Printer Optimization – Agriculture Dept	Planning	10	$435,064	$26,100
31929	Printer Optimization – Environmental Quality	Planning	12	$581,270	$25,000
30979	Printer Optimization – Health Dept	Planning	18	$1,438,759	$50,000
30846	SDE Mainframe Decommission Planning	Planning	22	$1,900,546	$377,029
30846	Dept of Veterans Affairs Network Consolidation	Planning	10	$954,706	$241,385
30982	Network Consolidation for Agencies at Shepherd Mall	Execution	18	$142,976	$28,433

Service-by-Service Projects

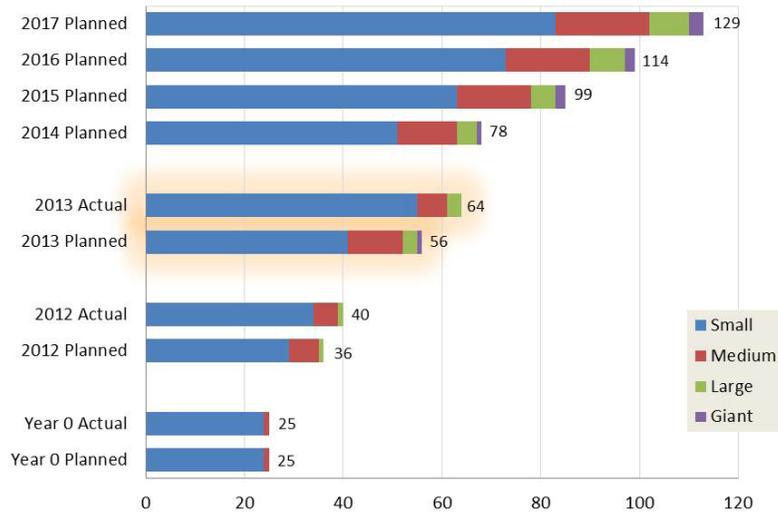| Project No.	Project Name	Project Phase	Risk Rating	CBA NPV	Total Forecast Cost
32779	pSeries Consolidation	Initiation	16	($1,442,308)	$1,500,000
30224	Email Consolidation	Initiation	20	$8,464,762	$2,807,000
30566	Telecom Expense Management (TEM)	Execution	24	$14,534,636	$1,120,000
30237	Statewide Mainframe Consolidation	Execution	22	$12,287,476	$16,621,611
30238	Security as a Service – Phase 1	Execution	16	$3,153,616	$807,041
30881	Enterprise Agreement – Adobe Products – 2012 Cost Savings Idea	Execution	18	$52,596	$2,000
30824	Statewide Portfolio and Project Management	Execution	22	-----	$375,400

Our updated consolidation plan detailing which agencies we will work with in FY 2014 are presented in Figure 10. Agency names appearing in blue indicate that they are already in progress, and the Health department has been carried forward from FY 2013 for completion. Fourteen agencies are expected to be completed in FY 2014, which will keep us on track for transformation to be completed by FY 2017. Figure 11 illustrates our progress towards this goal.

Accelerated IT Consolidation Plan
Figure 10

Year 0	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
• Aeronautics • Construction Industries • Arts Council • Physician Manpower • Ctr for Advancement of Science & Technology • Teacher's Retirement • Disability Concerns • Human Rights • Ethics Comm • Tobacco Settlement • Interstate Oil • Fire Marshal • LP Gas • Marginal Wells • Motor Vehicle • Long Term Care • Prof Engineers & Land Surveyors • Lic. Social Workers • Consumer Credit • Abstractors Board • Governor's Office • Uniform Building Code • Teachers Prep • Optometry Board • Accountancy Board	• Treasurer • Education • Tourism • Employees Benefits Council • Dept of Central Services • Personnel Management • American Indian Cultural Ctr & Museum • Nursing • Banking • Capitol Improvement • Commercial Pet Breeders * • Building Bonds* • Multiple Injury Trust Fund * • Capital Investment Board * • Anatomical Board *	• Agriculture • EGID • OBPVS • Labor • Pardon and Parole • Medical Examiners • University Hospital Authority* • Mines • Judicial Complaints * • Wheat • Conservation Comm • School of Science and Math • Scenic Rivers • Development Finance Authority • Children and Youth Commission • MPC • Sorghum Commission • Bond Advisor • Industrial Finance Authority • Chiropractic Board • Dentistry Board • Pharmacy Board • Psych Board • Vet Board	• Health^ • Health Care Auth • Commerce • Libraries • Real Estate • Boll Weevil • CareerTech • ODOT • 6 Small	• 1 Giant • 6 Large • 14 Small and Medium Agencies	• 1 Giant • 2 Large • 12 Small and Medium Agencies * = No IT Services ^ = 2013 Carryover BLUE = IN PROGRESS	• 15 Small and Medium Agencies
25	15	24	14	21	15	15

Consolidation Acceleration Plan vs Actual
Figure 11

2 Statewide Mainframe Consolidation

The Office of Management and Enterprise Services (OMES) has been identifying and prioritizing IT consolidation projects for the State of Oklahoma. Previously, the state used multiple mainframe computers for its administrative and business functions. This resulted in higher operating and maintenance costs for agencies.

The mainframe still plays a crucial role delivering applications to citizens of Oklahoma and handling other government's business. The 2011 annual expense to provide these services was $14.9 million which included hardware, software, personnel and consulting costs, or about $89.4 million over 6 years.

IBM partnered with the state on developing the mainframe target architecture, establishing a high-level roadmap, performing a detailed analysis of the IT infrastructure and opportunities to consolidate mainframe computing capacity, storage, network and backup capabilities. This ensured the delivery of technology services would be more effective and consistent in the new environment.

The return on investment (ROI) estimate was based on the state's historical spend on the zSeries platform going back 5 years. This spend was isolated to hardware investments (e.g. upgrades, new boxes, storage, memory) and software investments (typically upgrade charges for new versions and/or operating licenses for larger platforms). The historical average was $2.5MM per year. Cost avoidance (costs which would have been incurred had the consolidation of mainframes not happened) on mainframe investments are estimated at $2.5MM annually or $12.5MM total over the next 6 years.

Ultimately, consolidation of five mainframe platforms to one yielded significant savings in support costs and a reduction in software licensing costs from over-provisioned and redundant software. The Net Present Value (NPV) of the statewide mainframe consolidation project is $14,964,684.

The statewide mainframe consolidation project has one objective:

"To reduce the state cost of ownership for mainframe technology and support"

Figure 12
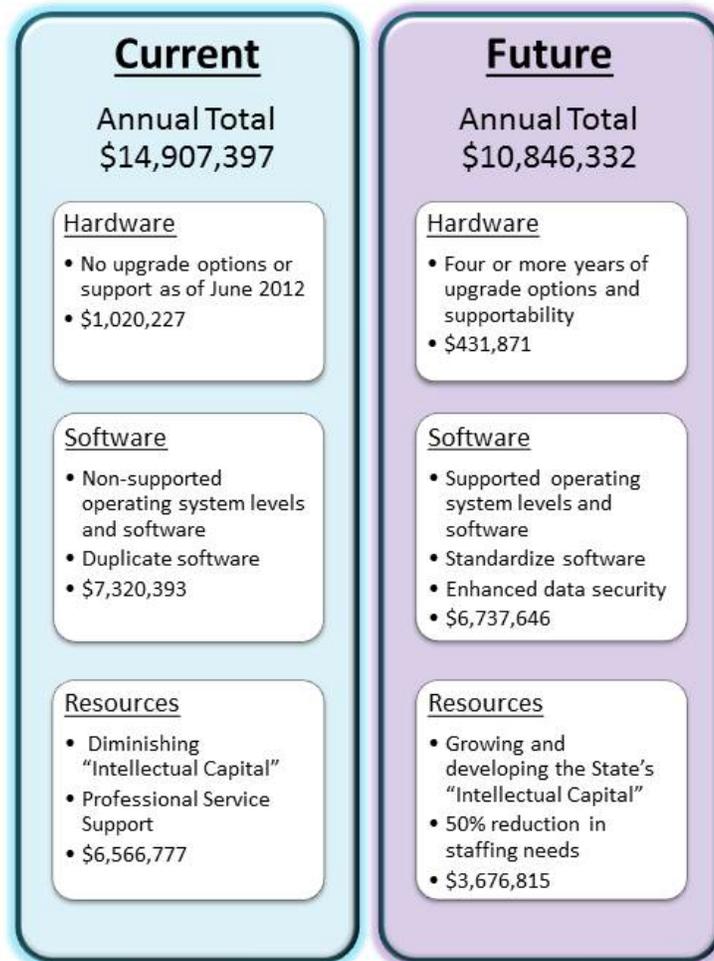
Goals of the mainframe project are to:

➢ Retain state intellectual capital;

➢ Sustain the technology environment to support business needs;

➢ Identify mainframe key performance indicators for increased accountability;

➢ Reduce the cost of ownership for mainframe technology and support;

➢ Assist in providing agencies with timely transparency reporting;

➢ Provide opportunities for post consolidation optimization and future cost reductions; and

➢ House the equipment at the state's only tier 3 data center.

Project Overview

In August of 2012, the Information Services Division (ISD) of OMES embarked on a journey with Oklahoma Department of Human Services (OKDHS), Oklahoma Department of Transportation (ODOT), Department of Public Safety (DPS) and Oklahoma Tax Commission (OTC) to consolidate the state's five mainframes onto one mainframe by combining multiple mainframes, service centers, resources support and the associated hardware and software.

With the completion of this project state agencies will share cost for a shared mainframe service. Over the next six years, the state will save $15 million. The state's savings are in mainframe hardware maintenance, centralized support reduction and software licensing costs supporting specific business functions in state agencies.

Project Planning

Three options were identified to execute the project (Figure 13). Depending on the option selected the investment and savings would vary.

Figure 13

	Option	Risk	ROI (months)
1	New Mainframe with current processing power and leverage existing storage and backup equipment.	Moderate (aging equipment)	19
2	New mainframe and storage with more processing power and leverage existing backup equipment	Minimal (aging tape equipment)	22
3	New mainframe, storage and backup equipment.	Lowest (minimizes upgrade cost)	25

With a new EC12 mainframe and storage, the state mainframe has scalability, reliability, availability and serviceability and "data at rest" encryption capabilities.

OMES moved forward with the execution of option 2 and developed the transformation schedule (Figure 14).

Transformation Schedule

Planning for transformation for each of the participating agencies consisted of developing a detailed agency implementation plan, providing a timeframe for verification and validation testing of agency specific mainframe applications and interfaces, and a conversion plan for transformation to steady state.

2013 – 2014 Transformation Schedule

Figure 14

					2013								2014	
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		Jan	Feb
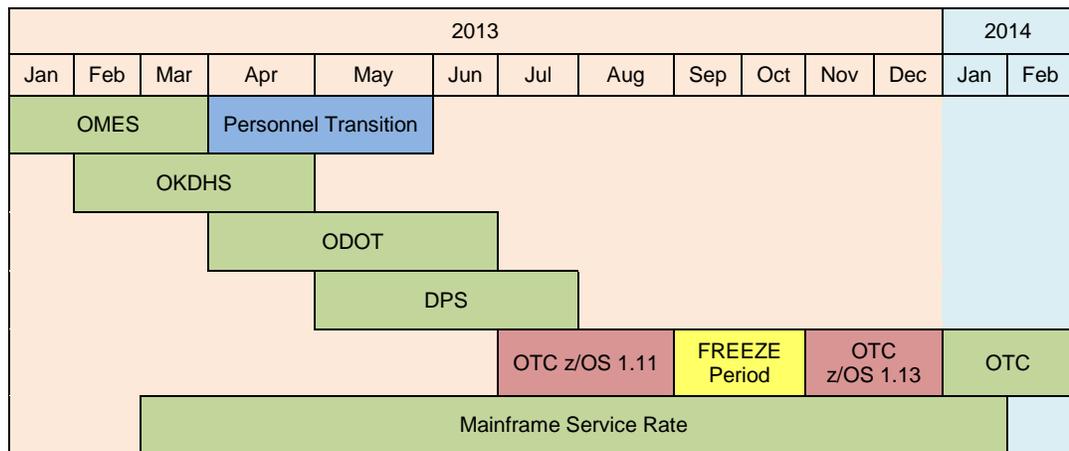
Infrastructure architecture (hardware and software), organizational design (centralized support) and establishing a mainframe service rate are the three milestones for project completion.

Project Execution

In January 2013, the new IBM EC12 mainframe was "powered-on" and the project completion was at 60% by June 30, 2013. OMES, OKDHS and ODOT mainframe environments and secure interfaces are sharing hardware, centralized support and software services. DPS was migrated on July 20, 2013, bringing the project completed status to 80%. OTC transformation to the EC12 is currently scheduled for February 2014.

The project transformation schedule has provided the following project outcomes:

Infrastructure

- ▪ March 23, 2013 – the mainframe transition team began shutting down the OMES old mainframe; and within 8 hours OMES mainframe environment had been transformed onto the unified EC12 mainframe.

- May 4, 2013 – Oklahoma Department of Human Services (the largest mainframe environment of all the participating agencies) was migrated. The transition team worked for 14 hours to successfully complete OKDHS transformation to the unified EC12 mainframe.

- June 22, 2013 – Oklahoma Department of Transportation's mainframe environment migration was completed in less than 17 hours. This has decreased the backup time by 20% and improved user performance.

- July 20, 2013 – Department of Public Safety was migrated to the unified EC12 mainframe. Users noticed a significant performance improvement.

- By August 31, 2013 – Oklahoma Tax Commission's detailed mainframe transformation plan should be completed and schedule implementation confirmed.

Organization Design

- OMES Human Capital Management team developed the organization design transition plan providing the project team a phased approach to continue the continuity of mainframe support for each of the participating agencies while retaining state intellectual capital. At the onset of the project, 93 people were identified as mainframe skilled personnel. The phased organization design transition plan achieved a reduction of 50% in mainframe support staff.

  All people participating in the organization design transition plan received a steady state position or selected the voluntary buyout offering. Sixty-six (66) people participated in the organization design transition plan in June of 2013. Forty-six (46) individuals retained a steady state mainframe position, 11 individuals were hired into other ISD positions and 9 individuals accepted a voluntary buyout offering (VOBO). Additionally, there were 27 people that retired or accepted a new job before the completion of the organization design transition plan.

Mainframe Service Rate

- Mainframe service rate and metrics are defined as the actual usage and direct rate charged. Rates based on consolidated costs of operating the mainframe are broken out by the chargeback solution developed during consolidation. An accounting (chargeback) methodology shall determine the operating costs to be allocated to each agency and support any requirements for reporting and supporting current federally funded programs.

During Transformation:

- Agencies use their own costing methodology on the historical costs, paid as a contract payment to OMES rather than to vendors.
- Invoices may be broken out to accommodate an agency's specific cost allocation method.

Steady State:

- Rates based on consolidated costs of operating the mainframe are broken out by the chargeback solution developed during consolidation.
- Necessary data will be provided to support new costing model and allow agencies to appropriately allocate their costs.

Post Consolidation - Mainframe Optimization

Mainframe optimization will further reduce costs for providing mainframe services to state agencies by providing opportunities for post consolidation optimization and further cost reductions with process improvement and software standardization.

➢ Move the Tivoli storage manager (TSM) software off the EC12 mainframe onto another hardware platform;

➢ Perform process improvement to automate operational support by implementing standard scheduling software for all mainframe LPARS;

➢ Provide participating agencies with timely performance and usage reporting;

➢ Remove duplicate software residing on different LPAR's mainframe environments;

➢ Assess and align the multiple mainframe environments; and

➢ Unify all disaster recovery and business continuity requirements for all participating agencies.

3 Legislative Summary

The consolidation of state information technology and telecommunication resources began with an idea cultivated in 2009 and has continually developed as successive legislative sessions have further refined and augmented the process to achieve the objectives of reducing the size of government through efficient use of state resources, improving transparency related to funds spent on information technology and telecommunications, and increasing accountability regarding the resulting cost savings. Set forth below is a cumulative summary of legislation which shaped the consolidation process.

House Bill 1170 (2009)

Oklahoma's information technology and telecommunication consolidation effort originated in 2009, with the passage of the Oklahoma Information Services Act through House Bill (HB) 1170, which created the new position of Chief Information Officer (CIO). HB 1170 provided the CIO exclusive responsibility for information technology and telecommunication procurement for executive state agencies and set forth duties of the CIO to develop a shared services model and a consolidation plan to implement the model which would achieve a 15% cost savings to the state by the beginning of Fiscal Year 2013. The duties of the Information Services Division (ISD) were expanded as well to develop, implement and manage components of the consolidation plan.

House Bill 1304 (2011)

Subsequent to the appointment of the CIO in 2010, HB 1304, also known as the Information Technology Consolidation and Coordination Act, was passed. The bill mandated accountability through quarterly reporting of consolidation progress and an annual assessment of the implementation of the consolidation plan. HB 1304 also required that information technology assets and positions be transferred to ISD, with certain agency-specific exceptions, and designated ISD as the exclusive provider of shared services to executive state agencies. Additional provisions were added to existing statutes, clarifying the role of the CIO as the Information Technology and Telecommunications Purchasing Director, as established in HB 1170.

House Bill 1601 (2011)

HB 1601 established the Oklahoma State Government Business Licensing One-Stop Program which required that real-time licensing and permitting services be made available to the public online at *business.ok.gov*. The 2nd Century Entrepreneurship Center, which was to offer the business licensing

framework, and its corresponding assets and personnel were transferred to ISD.

House Bill 1086 (2011)

The Transparency, Accountability and Innovation in Oklahoma State Government 2.0 Act of 2011 established several initiatives aimed at increased transparency to the public of government functions by posting information on *documents.ok.gov*; *forms.ok.gov*; and *maps.ok.*gov and expansion of the website related to state revenue and expenditures and the *data.ok.gov* website.

House Bill 2939 (2012)

The passage of HB 2939 further refined the statewide consolidation process by making various changes related to procurement and transfer of information technology assets and positions by changing the shared services billing model to a typical customer-provider arrangement. ISD was required to publish a schedule of costs for shared services and enter into an agreement with each agency for the provision of these services. This arrangement allowed each agency to allocate its budget resources as necessary for the services provided by ISD.

House Bill 2062 (2013)

HB 2062, which took effect May 29, 2013, tweaked the accountability of ISD and state agencies by enacting a requirement that from beginning of fiscal year 2013 through the end of implementation of the consolidation plan, the state will realize an annual reduction of 3% in the aggregate by all consolidated state agencies in operational information technology and telecommunications expenditures and required that the aggregate cost of shared services will be budgeted as a separate line item through each state agency. To facilitate the Open Range initiative endorsed by Governor Fallin, certain existing provisions related to procurement by public agencies were amended to offer cost saving opportunities to public agencies by expanding the definition of "public agency". The expansion of the definition resulted in allowing additional government entities to utilize state information technology and telecommunications contracts in lieu of normal bidding procedures. In addition, a new section of law enacted through HB 2062 established the Oklahoma State Government Security Breach Transparency Initiative and required that the CIO maintain an online web presence at *security.ok.gov* for the transparency of information related to security breaches in instances in which notification may be required of any state agency.

Figure 15 provides a snapshot of applicable legislative mandates and the status of each, with respect to the information technology and telecommunication consolidation of executive state agencies:

At-A-Glance Status Recap of Consolidation Legislation   Figure 15

Bill #	Summary	Status
HB 1170 (2009)	CIO to develop a shared services model and consolidation plan of action to implement the model	Completed
	CIO has exclusive responsibility for information technology and telecommunication procurement	Completed
	15% cost savings to state, as a result of consolidation, to be realized by beginning of FY2013	Completed
HB 1304 (2011)	CIO to provide quarterly reporting of consolidation progress	Ongoing
	CIO to provide annual assessment of implementation of consolidation plan	Ongoing
	Transfer of information technology assets to ISD	In progress, with transfer occurring as part of agency-by-agency, service-by-service or service-by-agency consolidation
	Transfer of information technology positions to ISD	Completed
	ISD is the exclusive provider of shared services to executive state agencies	In progress, with transfer occurring as part of agency-by-agency, service-by-service or service-by-agency consolidation
HB 1601 (2011)	Required that real-time licensing and permitting services be made available to the public online at *business.ok.gov* under responsiblity of ISD	Completed
	Transferred 2nd Century Entrepreneurship Center, its assets and personnel transferred to ISD	Completed
HB 1086 (2011)	Increase transparency of government by establishing online locations at which government records may be available for public access at *documents.ok.gov* and *forms.ok.gov* and expand the *OpenBooks* website related to state revenue and expenditures and the *data.ok.gov* website.	Completed

Bill #	Summary	Status
HB 2939 (2012)	ISD to publish a schedule of costs for shared services	Completed
	ISD to enter into an agreement with each agency for the provision of shared services	Completed
HB 2062 (2013)	State to realize an annual reduction of 3% in the aggregate by all consolidated state agencies in operational information technology and telecommunications expenditures	Ongoing
	The aggregate cost of shared services will be budgeted as a separate line item through each state agency	New requirement as of May 29, 2013
	To provide transparency of information related to certain security breaches, CIO to maintain an online web presence at *security.ok.gov* at which security breach information may be available for public access	New requirement as of May 29, 2013

4 Conclusion

This concludes the Fiscal Yearend 2013 quarterly report (No. 7) of progress on HB 1304 and IT transformation. The next report will be posted after October 31, 2013.

Please direct any questions regarding this report to Alex Pettit, Chief Information Officer, State of Oklahoma, at alex.pettit@omes.ok.gov.

The archive of the quarterly reports on IT consolidation can be found at:

http://www.ok.gov/cio/Policy_and_Standards/Progress_on_Consolidation_Reports.html

5 Appendix A: Chart Text Descriptions

Figure 1a: IT Costs

Total IT Costs

IT Cost without Major Capital Projects

- FY 2009 - $264,071,151
- FY 2010 - $238,782,093
- FY 2011 - $220,646,533
- FY 2012 - $219,835,724

IT Costs

- FY 2009 - $264,968,416
- FY 2010 - $249,193,573
- FY 2011 - $231,072,919
- FY 2012 - $230,142,576

Return to Report

Figure 1b: IT Cost for Consolidation Agencies

Total IT Costs

IT cost

- FY 2012 - $14,687,934
- FY 2013- $11,565,550

IT cost including Capital Projects

- FY 2012 - $16,551,524
- FY 2013- $12,901,589

Return to Report

Figure 2a: Estimated Cost Reduction

Consolidation Project Savings

- Year 1, Jan. 2012 – $5,975,989
- Year 1, April 2012 - $13,869,057
- Year 1, July 2012 - $33,392,186
- Year 1, Oct. 2012 - $43,923,027
- Year 2, Jan. 2013 - $63,952,169
- Year 2, April 2013 - $77,851,944
- Year 2, June 2013 - $84,271,474

Return to Report

Figure 2b: Estimated Cost Avoidance

Consolidation Project Cost Avoidance

- Year 1, Jan. 2012 – $15,536,919
- Year 1, April 2012 - $20,607,682
- Year 1, July 2012 - $20,607,682
- Year 1, Oct. 2012 - $20,607,682
- Year 2, Jan. 2013 - $20,607,682
- Year 2, April 2013 - $20,607,682
- Year 2, June 2013 - $20,607,682

Return to Report

Figure 5: Agency-by-Agency Consolidation Approach

Transformation

- Leadership Common Vision
    - CareerTech – in concept phase
    - Dept. of Transportation – in concept phase
    - Six small agencies – in concept phase
- Team Formation

- o Health Care Authority – in initiation phase
- Project Scope and Plan
    - o Water Resources Board – in initiation phase
- Business Case
- Approve
- Detail Plans
    - o Boll Weevil – in planning phase
    - o Commerce – in planning phase
    - o Libraries – in planning phase
    - o Real Estate – in planning phase
- Transform
    - o Health Department – in execution phase

Transition

- Refined Business Case
    - o Conservation – in close phase
    - o EGID – in close phase
    - o Pardon and Parole – in close phase

Steady State

- Customer Relationship
    - o Standard Process
    - o Metrics
    - o Governance
    - o Performance Reviews

[Return to Report](#)

Figure 6: Service-by-Service Consolidation Approach

Transformation

- Leadership Common Vision
- Team Formation
- Project Scope and Plan

- pSeries Consolidation (on hold) – in initiation phase
- Business Case
- Approve
- Detail Plan
    - EA for IT Advisory Services – in planning phase
- Transform
    - Enterprise Agreement (Adobe Products) – in execution phase
    - Project Portfolio Management Rollout – in execution phase
    - Statewide Mainframe – in execution phase
    - Telecom Expense Management – in execution phase

Transition

- Refined Business Case
    - Security as a Service – in close phase

Steady State

- Customer Relationship
    - Standard Process
    - Metrics
    - Governance
    - Performance Reviews

[Return to Report](#)

Figure 7: Service-by-Agency Consolidation Approach

Transformation

- Leadership Common Vision
    - Printer Optimization – in concept phase
        - Corrections
        - Employment Security Commission
        - OSEEGIB
        - Tax
        - Department of Transportation

- o Unused Software – in concept phase
  - ▪ Construction
  - ▪ Natural Resources
- Team formation
- Project Scope and Plan
  - o Network Consolidation – in initiation phase
    - ▪ Environmental Quality
    - ▪ Mental Health
  - o Printer Optimization – in initiation phase
    - ▪ Environmental Quality
    - ▪ Historical Society (on hold)
    - ▪ Public Safety
  - o Unused Software (Infrastructure) – in initiation phase
- Business Case
- Approve
- Detail Plan
  - o Printer Optimization – in planning phase
    - ▪ ODAFF
    - ▪ Health
    - ▪ Human Services
  - o Decommission VA Network Consolidation – in planning phase
- Transformation
  - o SDE Mainframe – in execution phase
  - o Shepherd Mall Network (on hold) – in execution phase

Transition
- Refined Business Case

Steady State
- Customer Relationship
  - o Standard Process
  - o Metrics
  - o Governance

o   Performance Reviews

[Return to Report](#)

Figure 10: Accelerated IT Consolidation Plan

Year 0 (totaling 25)

- Aeronautics
- Construction Industries
- Art Council
- Physician Manpower
- Center for Advancement of Science and Technology
- Teacher's Retirement
- Disability Concerns
- Human Rights
- Ethics Commission
- Tobacco Settlement
- Interstate Oil
- Fire Marshal

RE OMES-FORM-CP-035 lodging exception 3 docx.msg   LP Gas

- Marginal Wells
- Motor Vehicle
- Long Term Care
- Professional Engineers and Land Surveyors
- Licensed Social Workers
- Consumer Credit
- Abstractors Board
- Governor's Office
- Uniform Building Code
- Teachers Prep

- Optometry Board
- Accountancy Board

FY 2012 (totaling 15)

- Treasurer
- Education
- Tourism
- Employees Benefit Council
- Department of Central Services
- Personnel Management
- American Indian Cultural Center and Museum
- Nursing
- Banking
- Capitol Improvement
- Commercial Pet Breeders (No IT services)
- Building Bonds (No IT services)
- Multiple Injury Trust Fund (No IT services)
- Capital Investment Board (No IT services)
- Anatomical Board (No IT services)

FY 2013 (totaling 24)

- Agriculture
- EGID
- OBPVS
- Labor
- Pardon and Parole
- Medical Examiners
- University Hospital Authority (No IT services)
- Mines
- Judicial Complaints (No IT services)
- Wheat
- Conservation Commission
- School of Science and Math

- Scenic Rivers
- Development Finance Authority
- Children and Youth Commission
- MPC
- Sorghum Commission
- Bond Advisor
- Industrial Finance Authority
- Chiropractic Board
- Dentistry Board
- Pharmacy Board
- Psych Board
- Vet Board

FY 2014 (totaling 14)

- Health – in progress (2013 carryover)
- Health Care Authority – in progress
- Commerce – in progress
- Libraries – in progress
- Real Estate – in progress
- Boll Weevil – in progress
- CareerTech
- ODOT
- Six small agencies

FY 2015 (totaling 21)

- One Giant Agency
- Six Large Agencies
- 14 Small and Medium Agencies

FY 2016 (totaling 15)

- One Giant Agency
- Two Large Agencies
- 12 Small and Medium Agencies

FY 2017 (totaling 15)

- 15 Small and Medium Agencies

[Return to Report](#)

Figure 11: Consolidation Acceleration Plan vs. Actual

2017 Planned – Totaling 129

- Small – 83*
- Medium – 33*
- Large – 10*
- Giant – 3*

2016 Planned – Totaling 114

- Small - 70*
- Medium - 38*
- Large – 6*
- Giant - 2*

2015 Planned – Totaling 99

- Small - 60*
- Medium - 34*
- Large - 5*
- Giant - 2*

2014 Planned – Totaling 78

- Small - 55*
- Medium - 18*
- Large - 4*
- Giant - 1*

2013 Actual – Totaling 64

- Small - 55*
- Medium - 6*
- Large - 3*

2013 Actual – Planned 56

- Small - 45*
- Medium - 7*
- Large - 3*

- Giant - 1*

2012 Actual – Totaling 40

- Small - 35*
- Medium - 4*
- Large - 1*

2012 Actual – Planned 36

- Small - 30*
- Medium - 5*
- Large - 1*

Year 0 Actual – Totaling 25

- Small – 24*
- Medium -1*

Year 0 Actual – Planned 25

- Small – 24*
- Medium -1*

approximate totals

[Return to Report](#)

Figure 12: Current and Future Annual Totals

Current Annual Total = $14, 907,397

- Hardware
  - No upgrade options or support as of June 2012
  - $1,020,227
- Software
  - Non-supported operating system levels and software
  - Duplicate software
  - $7,320,393
- Resources
  - Diminishing "Intellectual Capital"

- o Professional Service Support
- o $6,566,777

Future Annual Total

- Hardware
  - o Four or more years of upgrade options and supportability
  - o $431,871
- Software
  - o Supported operating system levels and software
  - o Standardize software
  - o Enhanced data security
  - o $6,737,646
- Resources
  - o Growing and developing the State's "Intellectual Capital"
  - o 50% reduction in staffing needs
  - o $3,676,815

Figure 14: 2013-2014 Transformation Schedule

2013

- January
  - o OMES
- February
  - o OMES
  - o OKDHS
  - o Mainframe Service Rate
- March
  - o OMES
  - o OKDHS
  - o Mainframe Service Rate

- April
  - o Personnel Transition
  - o OKDHS
  - o ODOT
  - o Mainframe Service Rate
- May
  - o Personnel Transition
  - o ODOT
  - o DPS
  - o Mainframe Service Rate
- June
  - o ODOT
  - o DPS
  - o Mainframe Service Rate
- July
  - o DPS
  - o OTC z/OS 1.11
  - o Mainframe Service Rate
- August
  - o OTC z/OS 1.11
  - o Mainframe Service Rate
- September
  - o Freeze Period
  - o Mainframe Service Rate
- October
  - o Freeze Period
  - o Mainframe Service Rate
- November
  - o OTC z/OS 1.11
  - o Mainframe Service Rate
- December

- o OTC z/OS 1.11
- o Mainframe Service Rate

2014

- January
  - o OTC
  - o Mainframe Service Rate
- February
  - o OTC

[Return to Report](#)