The State of Oklahoma

PROGRESS ON UNIFICATION

Quarterly Report

GREETINGS,

The Office of Management and Enterprise Services' Information Services division is dedicated to delivering quality, cost effective and secure IT services for the state and its citizens. As Oklahoma's Chief Information Officer, I lead a dedicated team aiming to drive business innovation and collaboration through technology.

This issue of the Information Services quarterly report, *Progress on Unification*, will highlight two specific ways our response to the statewide legislatively mandated IT unification, which currently has an estimated $97 million in projected savings or reduced spending, is helping accomplish those goals.

First, our video feature will demonstrate how the Information Technology Operations Command Center will help us fix things before our clients even notice something might be going wrong. Unification has allowed Information Services the visibility and capability to monitor our clients' systems in real time and bring a level of statewide coordination and response not seen before.

Secondly, unification has strengthened the state's security posture, allowing us to better protect sensitive data. Our cybersecurity efforts are second to none, empowering the state to monitor as many as 11,000 potential threats a week and react and defend against malicious hackers who try to infiltrate our systems.

Information Services is dedicated to providing secure IT services for Oklahomans. Unification plays an essential role in allowing us to set up the state's technology infrastructure in a way that helps to ensure Oklahomans' access and information is secure.

Respectfully,

Bo Reese
Chief Information Officer

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![OMES - Office of Management & Enterprise Services logo]

Information Technology
Operations Command Center

▶

1 ➤ Real-Time Monitoring Real-Time Solutions

The Information Technology Operations Command Center is the nerve center of Oklahoma's technology infrastructure.

The ITOCC is where it all can happen, much of it before many people actually know it's happening.

Before unification, each agency was responsible for monitoring its own systems. The ITOCC has pulled together thousands of discrete elements so they can be monitored in real time.

That means quicker responses to problems and quicker resolution of those problems — often before OMES Information Services' clients realize they were having a computer problem. It helps all agencies serve Oklahomans.

"We're starting to be able to be fix it before it becomes an outage or affects customers at all," said Information Services Director of Technology Services Dustin Crossfield.

To view this video in high quality or for closed captioning visit **http://youtu.be/aqIQ42BmR74**.

ITOCC by the numbers:

12: Large screens on the wall displaying information.

500: Locations monitored at the ITOCC.

3,000: Devices monitored by staff at the ITOCC.

35,000: Discrete elements monitored by the ITOCC.

2 > Ever Vigilant: Protecting The State's Data

Oklahoma Cyber Command never rests.

"Eeeeeee! Eeeeeee! Eeeeeee!" The siren blares.

Alert: Level 10.

A text message summons members of the State of Oklahoma Cybersecurity Emergency Response Team.

The threat is identified. Malware has been spreading onto state computers through an advertisement on a major news website.

The team immediately responds by blocking the site from displaying on state computers, identifies who may have been exposed and removes all traces of the potential problem.

Less than two hours have elapsed since the initial alarm.

"Previously it would have taken weeks for the same level of security response," said Mark Gower, Oklahoma's chief information security officer and director of Cyber Command.

The previous time of which Gower spoke was before the Oklahoma Legislature mandated statewide information technology unification.

"Before unification, every agency was responsible for its own security. They had their own firewalls in place and their own anti-virus for malware," said state Chief Information Officer Bo Reese. "Now with unification, we can actually see in real time and they can respond extremely quickly."

Always Under Attack

With the state's data running through the servers in the main Information Services building, Gower's team has also set up shop there, always on the lookout for the next hacker or malware attack.

There are about 11,000 cyberincidents involving the state government's data every week. At any given time, 53 percent of the systems monitored by Cyber Command are under attack.

"It's really national and global in its scope," Gower said. A large Cyber Command monitor shows the extent of the attacks on a real-time map, with red arcing lines jumping oceans and landing in Oklahoma.

It's part of an effort that synthesizes several data sources to determine the actual threat level. Each incident is cross-referenced with social media posts, federal data and other sources. Incidents are then rated on a 1-to-10 scale, with 10 being the most severe. Of the weekly incidents, about 3,000 are serious enough to require follow-up.

Attacks will always happen. The real goal is making sure the data doesn't leave Oklahoma's systems.

"You can't keep every bad actor from gaining access to a system. That's impossible, today," Reese said. "But being able to respond quickly and keep the data from leaving the state's control is what's so important."

To date, Oklahoma Cyber Command and Information Services have been successful.

Government computer networks are continually under attack because of the amount of personal data they contain, from Social Security numbers and birth dates to addresses. Hackers are always looking for the big score. The U.S. Office of Personnel Management demonstrated the damage that could be done when they disclosed in July that hackers had gained access to their systems and the sensitive information of 21.5 million people. Social Security numbers of current and former federal workers, contractors, friends and family were all exposed to what some officials believe were Chinese hackers.

Cases like that keep Gower's team always on alert.

"It's incumbent upon us to protect the data of the citizens of the State of Oklahoma and protect the government," Gower said. "We are doing something for the constituency of the State of Oklahoma."

Aggressive Response

Gower and his team are quick to respond to threats, realizing the trust put in them to protect Oklahomans' personal information. The CyberWarn system Gower and his team have created has been active for about two years, but their approach is always evolving.

The hackers aren't sitting back and using obsolete technology and methods. Cyber Command is meeting innovation with innovation.

"I think the Oklahoma citizens can be proud of what we've built here," Gower said. "Our motto is the State of Oklahoma Cyber Command is ever vigilant. We can never just sit back and rest. We're always moving forward."

3 > Summary of Unification

Consolidation Project Savings

Agency Name	Status	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
Agriculture Department Consolidation	Completed		$120,056	$125,644	$125,644	$125,644	$125,644
AIICM	Completed	$34,311	$48,511	$41,411	$41,411	$41,411	$41,411
Attorney General HelpDesk Transition	Completed		$3,086	$3,241	$3,403	$3,573	$3,751
Banking Department	Completed	$7,251	$7,251	$7,251	$7,251	$7,251	$7,251
Behavioral Health Licensure Consolidatoin	Completed			$1,857	$3,450	$3,450	$3,450
Board of Nursing	Completed	($15,543)	($9,745)	($15,245)	($15,245)	($15,245)	($15,245)
Boll Weevill Consolidatoin	Completed			$61,591	$61,591	$61,591	$61,591
Capital Assets Management	Completed	$37,194	$9,054	$14,554	$9,054	$9,054	$3,554
Capitol Improvement Authority	Completed	($1,601)	($1,052)	($1,052)	($1,052)	($1,052)	($1,052)
CareerTech Independent Contractor Consolidation	Completed		$39,960	$39,960	$39,960	$39,960	$39,960
CareerTech Position Consolidation	Completed		$98,150	$98,150	$98,150	$98,150	$98,150
Children & Youth Commission	Completed		$107,391	$90,891	$90,891	$107,391	$90,891
Chiropractic Examiners Consolidation	Completed		($2,524)	($2,524)	($2,524)	($2,524)	($2,524)
COMIT Telemanagement Billing Module	Completed		$60,675	$123,925	$123,925	$123,925	$123,925
Conservation Commission Consolidation	Completed		$14,575	$14,575	$14,575	$14,575	$14,575
Decommission MidCon	Completed		$113,160	$113,160	$113,160	$113,160	$113,160
Decommission Unused Software - Infrastructure	Completed			$88,984	$88,984	$88,984	$88,984
Denistry Board Consolidation	Completed		($2,529)	($3,857)	($3,857)	($3,857)	($3,857)
Department of Commerce Consolidation	Completed			$0	$253,462	$17,204	$8,904
Department of Corrections HCM	Completed	($132,472)	$93,753	$234,892	$234,892	$234,892	$234,892
Department of Corrections - Re-organization	Completed		$140,570	$140,570	$140,570	$140,570	$140,570

Agency Name	Status	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
Department of Education	Completed	$1,098,231	$1,054,231	$933,231	$960,731	$1,054,231	$1,435,231
Department of Education - CAS Contract Consolidation	Completed			$20,000	$21,000	$21,000	$21,000
Deparment of Education - Child Count Contract Consolidation	Completed		$18,500	$23,700	$23,700	$23,700	$23,700
Department of Education - Child Nutrition Contract Consolidation	Completed		$60,399	$60,399	$60,399	$60,399	$60,399
Department of Education - GED Lifelong Scoring	Completed		$5,838	$5,838	$5,838	$5,838	$5,838
Department of Education - HUPP Consolidation	Completed		$85,942	$92,056	$89,249	$86,357	$83,379
Department of Education Managed Print Services	Completed	$200,251	$279,251	$279,251	$279,251	$279,251	$279,251
*Department of Education - Printer Consolidation Phase 2	Completed		$84,247	$5,247	$5,247	$5,247	$5,247
Department of Education - Scantron Contract Consolidation	Completed			$140,548	$147,575	$147,575	$147,575
Department of Labor	Completed		$86,293	$83,814	$86,925	$95,629	$93,429
Department of Libraries Consolidation	Completed		$115,599	$115,599	$110,099	$110,099	$115,599
Department of Public Safety - E-Seek Barcode MSR Reader Solution	Completed			$4,452	$4,452	$4,452	$4,452
Department of Tourism	Completed	$93,607	$94,407	$93,727	$93,727	$93,727	$93,727
Department of Transportation Consolidatoin	Completed			$12,266	$272,463	$362,462	$362,461
Department of Transportation - Video Editing System	Completed			$29,670	$0	$0	$0
Department of Veterans Affairs HelpDesk Transition	Completed		$145,700	$145,700	$145,700	$145,700	$145,700
DEQ - Position Cost Cost Savings	Completed		$113,475	$113,475	$113,475	$113,475	$113,475
Disaster Recovery Services	Completed	$247,344	$419,245	$203,524	$203,524	$203,524	$203,524
Educational Quality and Accountability Unification Project	Completed				$3,744	$14,209	$14,209
*Eliminate Unused Software - Shared Services	Completed		$125,204	$128,960	$132,829	$136,814	$140,918
Employee Benefits Council	Completed	$150,115	$214,084	$208,584	$214,084	$208,584	$214,084
Employee Benefits Div - VM Ware	Completed			$5,357	$5,357	$5,357	$5,357
Employees Group Insurance Division Consolidation	Completed			$60,500	$1,233,193	$1,584,006	$1,584,006
Employees Group Insurance Dept. - Mng Engine Renewal	Completed			$4,148	$4,148	$4,148	$4,148
Fiber - Classen Buildings	Completed		($33,336)	$14,592	$14,592	$14,592	$14,592
Fiber - First National Building	Completed	$11,895	$49,115	$49,115	$49,115	$49,115	$49,115
Fiber - LandMark Tower	Completed		($49,514)	$14,821	$14,821	$14,821	$14,821
Fiber - Professional Engineers & Land Surveyors	Completed		($29,922)	$4,164	$4,164	$4,164	$4,164
Fiber Optic Asset Tracking System	Completed			$6,292	$2,454	$2,454	$2,454
Health Department Consolidation	Completed		$60,000	$1,431,406	$169,474	$597,780	$597,780
Health Department Network Consolidation	Completed		$1,822,537	$1,437,627	$1,437,627	$1,437,627	$1,437,627
*Health Department Printer Optimization	Completed		$342,190	$362,190	$362,190	$362,190	$362,190
IPSH Health Exchange Information	Completed			$74,000	$196,100	$196,100	$196,100
ITSW1004 Cable Materials and Accessories	Completed			$2,604,000	$0	$0	$0
ITSW1024 Encrypted Email Software	Completed			$54,000	$5,400	$5,400	$5,400
ITSW1030 Good Technology RFP	Completed			$5,340	$5,340	$5,340	$5,340
LIMS - Laboratory Information Management System	Completed			$580,056	$116,034	$116,034	$116,034
Live Scan Fingerprinting System	Completed			$45,000	$45,000	$45,000	$45,000
Medical Claims Clearinghouse	Completed			$48,000	$28,200	$28,200	$28,200
Medical Examiners Consolidation	Completed		$13,932	$8,432	$13,932	$8,432	$13,932
Medicolegal Inv.- Software for LC/MS Liquid Crystal/Mass Spectronomy	Completed			$357,933	$0	$0	$0
Mines Department	Completed		($10,913)	($16,413)	($16,413)	($10,913)	($16,413)
Multi Injury Trust Fund IT Consolidation Project	Completed			$1,461	$6,461	$1,461	$1,461
ODAFF - Oracle Licensing Application	Completed			($7,470)	$5,028	$5,028	$5,028
Office of Personnel Management	Completed	$70,596	$77,933	$77,046	$70,746	$70,746	$70,746
OSBI-Desktop/Laptop Replacement	Completed				$27,953	$0	$0
OSDH - NetIQ Contract	Completed			$8,637	$8,114	$8,114	$8,114

Agency Name	Status	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
OWRB - Annual Permitted Water Use Survey and Administrative Fee Mailing	Completed		$3,209	$0	$0	$0	$0
Pardon & Parole Board Consolidation	Completed		$38,052	$32,552	$32,552	$32,552	$32,552
People Move 2012	Completed	$2,336,741	$2,336,741	$2,336,741	$2,336,741	$2,336,741	$2,336,741
Pharmacy Board Consolidation	Completed		$94,000	$88,500	$88,500	$88,500	$88,500
Pre-Surplus Clearing House	Completed		$173,446	$0	$0	$0	$0
Private Vocational Schools	Completed		($1,155)	($605)	($605)	($605)	($605)
Psychologists Examiners Consolidation	Completed		($1,408)	($1,408)	($1,408)	($1,408)	($1,408)
Real Estate Commission Conslidation	Completed			$118,756	$118,756	$118,756	$113,056
Scenic Rivers Commission	Completed		($6,195)	($6,195)	($6,195)	($6,195)	($6,195)
Security as a Service - Phase I	Completed		$57,542	$723,798	$723,798	$723,798	$723,798
State Treasurer's Office	Completed	$277,473	$277,474	$277,475	$277,476	$277,477	$277,477
Statewide Mainframe Consolidation	Completed		$2,021,035	$2,341,345	$3,170,748	$3,176,610	$3,778,929
Used Motor Vehicles Commission	Completed			$0	$69,016	$63,516	$63,516
Uniform Crime Report	Completed		$707	$1,107	$1,107	$1,107	$1,107
Vet Board Consolidation	Completed		($3,904)	($3,904)	($3,904)	($3,904)	($3,904)
Virtual Technology Storage	Completed		-$491,410	$533,441	$545,978	$580,191	$617,826
VOIP OKC County Health Department	Completed	($11,794)	$41,814	$41,814	$41,814	$41,814	$41,814
Wheat Commission	Completed		$3,598	($1,902)	($1,902)	($1,902)	($1,902)
ABLE Commission Consolidation	Planning				$92,986	$92,986	$92,986
Board Member/1st Yr Superintendent Points	Planning			-$9,217	$3,547	$3,494	$3,439
ITSW1044 - Identity Management	Planning			$55,000	$14,950	$14,950	$14,950
OASIS/OKLeX Consolidation	Planning			-$37,704	$35,704	$35,704	$35,704
OHCA Consolidation	Planning			$654,792	$654,792	$654,792	$654,792
Printer Optimization-Public Safety	Planning				$197,230	$222,230	$222,230
Career Technology Consolidation	Execution			$86,167	$86,167	$91,513	$91,513
Commerce IT Stabilization	Execution				$654,792	$654,792	$654,792
*OKDHS Eliminate Unused Software	Execution		$286,273	$202,987	$202,987	$202,987	$202,987
*OKDHS Printer Optimization	Execution		$135,000	$160,000	$160,000	$160,000	$160,000
Total Annual Savings		**$4,403,598**	**$11,566,687**	**$18,775,200**	**$17,706,363**	**$18,496,071**	**$19,491,074**
Savings Over 6 Years 1	**$80,455,793**						

Notes: 1 FY 12 plus NPV of savings achieved in FY13-FY17

*Vendor and/or Employee Cost Savings Idea

This data reflects point-in-time information. There may be unreimbursed IT costs incurred by OMES IS that are not included in the total costs as they are not billed. These unreimbursed costs could reduce the amount of savings reported.

Cost Avoidance

Project Name	Status	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
Health Network Consolidation	Completed		$1,822,538	$1,437,628	$1,437,628	$1,437,628	$1,437,628
ISD Procurement	Completed	$81,654	$81,654	$81,654	$81,654	$81,654	$81,654
Microsoft EES Statewide Contract	Completed		$1,139,031	$1,139,031	$1,139,031	$1,139,031	$1,139,031
Microsoft Enterprise Agreement	Completed	$1,778,419	$1,778,419	$1,778,419	($2,047,273)	($2,047,273)	($2,047,273)
SSL Certificate Savings	Completed	$7,888	$7,888	$7,888	$7,888	$7,888	$7,888
Statewide IT Contracts	Completed	$920,266	$1,679,846	$1,679,846	$1,679,846	$1,679,846	$1,679,846
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] FY 12 plus NPV of savings achieved in FY13-FY17

Consolidation Portfolio Active Projects

Agency by Agency					
Project No	**Project Name**	**Project Phase**	**Risk Rating** **(10 - 48)**	**CBA NPV**	**Total Forecast Cost**
42465	Corporation Commission Unification Project	Initiation	20		$684,585
42456	Lottery Commission IT Consolidation	Initiation	20		
42190	DEQ IT Consolidation	Initiation	32		
42191	Water Resources Board Consolidation	Initiation	20		$4,874,800
38052	Emergency Management IT Consolidation	Planning	44	($57,856)	$91,750
42464	Department of Human Services IT Unification Project	Planning	32		$874,550
34970	OHCA Consolidation	Planning	28	$3,432,510	
42189	ABLE Commission Consolidation	Planning	20	$398,037	
37981	Career Tech Consolidation	Execution	36	$731,612	
42188	Historical Society IT Consolidation Project	Execution	44	($956,112)	$161,550
Service by Agency					
31929	Printer Optimization - Evironmental Quality	Initiation	24	$581,270	
32531	Printer Optimization - OKDHS	Execution	20	$814,703	
33034	Department of Veterans Internal Wiring 7 Hospitals	Execution	20	$954,706	$3,850,000
35107	Infrastructure - DHS Cloud Email	Execution	44	$1,335,374	
Service by Service					
41328	OMES Office 365	Initiation	0		$10,603,222.00
41385	Retire SL100	Initiation	0		$1,379,830.00
37655	INFRASTRUCTURE:Critical System Protection	Execution	32		

unification approach
agency by agency

leadership common vision

CONCEPT:
- Corporation Commission
- DPS
- Funeral Board
- LP Gas Commission
- OETA
- Homeland Security

team formation

project scope & plan

INITIATION:
- Lottery Commission
- DEQ
- Water Resources Board

business case

approve

detail plan

PLANNING:
- ABLE Commission
- OHCA
- OEM
- OKDHS

transform

EXECUTION:
- Career Tech
- Historical Society

refined business case

CLOSE:
- EGID
- ODOT

customer relationship

- Standard Process
- Metrics
- Governance
- Performance Reviews

transformation | transition | steady state

Agency-by-Agency Completion

- ABLE Tech
- Abstractors Board
- Accountancy Board
- Aeronautics Commission
- Agriculture, Food and Forestry
- Anatomical Board*
- Architects Board
- Arts Council
- Athletic Commission
- Banking Department
- Boll Weevil Commission
- Bond Advisor
- Building Bonds Commission
- Capital Assets Management
- Capital Investment Board
- Capitol Improvement Authority
- Center for Advancement of Science and Technology- OCAST
- Children & Youth Commission
- Chiropractic Board

- Conservation Commission
- Construction Industries Board
- Consumer Credit Department
- Dentistry Board
- Disability Concerns Office
- Education Department
- Education Quality & Accountability
- Employees Benefits Department
- Ethics Commission
- Finance Authority
- Fire Marshal's Office
- Governor
- Health Department
- Human Capital Management
- Human Rights Commission
- Interstate Oil Compact Commission
- Industrial Finance Authority
- Judicial Complaints Council*
- Labor Department

- Libraries Department
- Licensed Social Workers Board
- Liquefied Petroleum Gas Board
- Long Term Care Administrators Board
- Marginal Wells Commission
- Medical Examiner's Office
- Merit Protection Commission
- Mines Department
- Motor Vehicle Commission
- Multiple Injury Trust Fund*
- Native American Cultural & Education Authority
- Nursing Board
- Optometry Board
- Pardon & Parole
- Pet Breeders Board
- Pharmacy Board
- Physician Manpower Training Commission
- Private Vocational Schools Board
- Professional Engineers & Land Surveyors Board

- Psychologists Board
- Real Estate Commission
- Scenic Rivers Commission
- School of Science and Math
- Sorghum Commission
- Speech Pathology Board
- State Treasurer's Office
- Teacher Preparation Commission
- Teachers Retirement System
- Tobacco Settlement Endowment Trust
- Tourism & Recreation Department
- Uniform Building Code Commission
- University Hospitals Authority*
- Used Motor Vehicle Commission
- Veterinary Medical Examiners Board
- Wheat Commission
- Workers Compensation Commission

FY15
*No IT Services

unification approach
service by agency

leadership common vision

CONCEPT:
Printer Optimization
- Corrections
- Employment Security Comm
- EGID
- Tax
- Dept of Transportation
Unused Software
- Construction
- Natural Resources

project scope & plan

INITIATION:
Printer Optimization
- Environmental Quality

approve

transform

EXECUTION:
Printer Optimization
- Dept of Human Services
Infrastructure
- DHS Cloud Email
- VA Internal Wiring 7 Hospitals

customer relationship

team formation

business case

detail plan

PLANNING:
Printer Optimization
- Dept of Public Safety

refined business case

CLOSE:
Printer Optimization
- ODAFF

Standard Process

Metrics

Governance

Performance Reviews

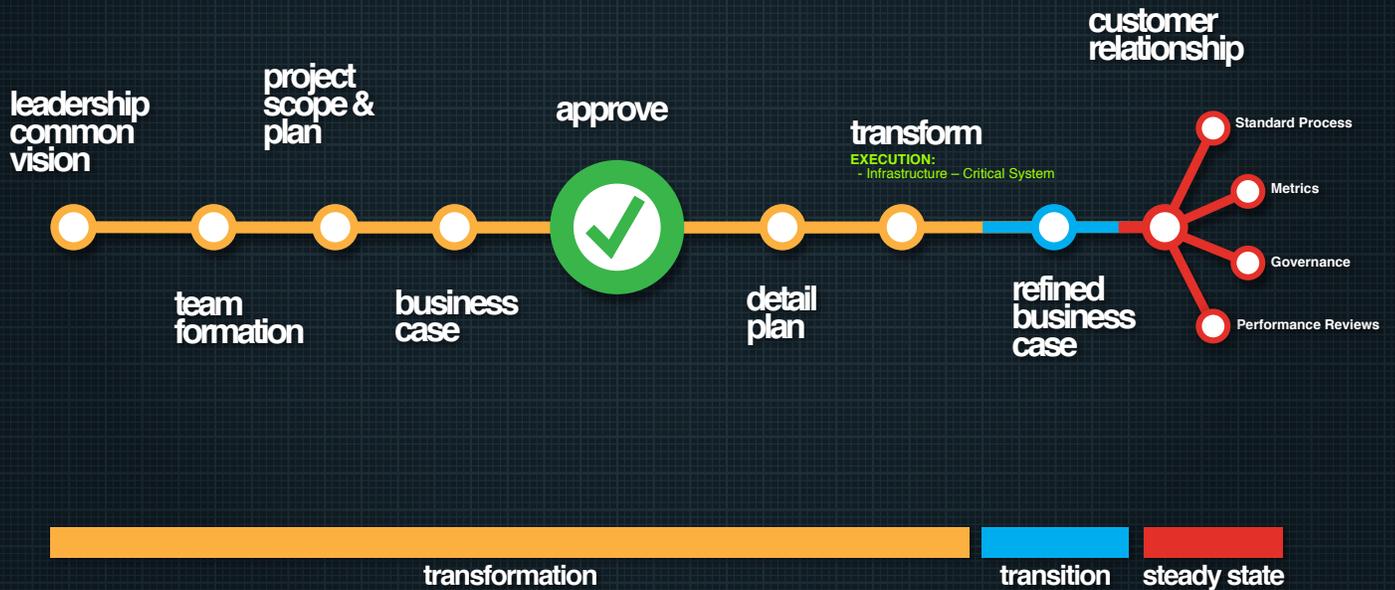transformation | transition | steady state

Service-by-Agency Completion

- 1st National Building — Fiber
- Career Tech — Email Consolidation
- Classen Buildings — Fiber
- Corrections — HCM
- Health Department — Network
- Health — Unused Software
- Health — Printer Optimization
- DHS — Disaster Recovery

- IS — Unused Software
- Landmark Tower — Fiber
- ODAFF — Help Desk
- ODAFF — Printer Optimization
- ODOT VoIP
- OKC County Health Department — VoIP
- Prof. Engineers & Land Surveyors — Fiber
- SDE — HUPP Contract Consolidation

- SDE — Mainframe
- SDE — Print Services Phase 1
- SDE — Print Services Phase 2
- VA — Help Desk

unification approach

service by service

customer relationship

leadership common vision

project scope & plan

approve

transform

EXECUTION:
- Infrastructure – Critical System

Standard Process

Metrics

Governance

Performance Reviews

team formation

business case

detail plan

refined business case

transformation

transition

steady state

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
- Security as a Service Phase I
- Project Portfolio Management Rollout
- IT Advisory Services
- Security Education & Training
- Statewide Mainframe Consolidation