The State of Oklahoma
PROGRESS ON UNIFICATION

Quarterly Report

GREETINGS,

As Oklahoma's Chief Information Officer I lead a team focused on reducing and stabilizing the state's information technology costs. With continued limitations in agency budgets, doing our part in helping the state is even more of an imperative.

The Office of Management and Enterprise Services' Information Services division is midstride in the statewide legislatively mandated IT unification. The effort has an estimated $97 million in projected savings or reduced spending.

Information Services realizes the goal of reducing and stabilizing IT costs for the state as a whole may sometimes cause intermediate cost increases by a few agencies as they upgrade old systems or transition to new state standards. In the long run, the overall future savings to the entire state will outweigh these temporary cost increases by a few agencies.

Still, I recognize it can be frustrating for agencies with already limited funds. OMES is committed to working closely with partner agencies to understand their needs and assist them in finding savings and operational efficiencies. We want to help agencies meet their financial goals and accomplish their missions. In order to lessen the burden on individual agencies, Information Services has committed millions of dollars to replace critical legacy infrastructure, has created shared services and has deferred projects where possible.

Information Services is dedicated to working with our partners to find solutions that allow them to affordably and efficiently accomplish their missions. We look forward to continued success.

Respectfully,

Bo Reese
Chief Information Officer

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Criminal Justice Information Systems
Center for Excellence

1 › Unified Criminal Justice Excellence

The Center for Excellence will unite state law enforcement to better serve Oklahomans.

Think of it as the brain center for state law enforcement. A room tucked securely inside a well-guarded building, where criminal justice agencies share ideas, modern technologies and data. That's the Criminal Justice Information Systems Center for Excellence.

Information Services, a division of Oklahoma's Office of Management and Enterprise Services, will build and maintain the Center for Excellence, which will be located within the Oklahoma State Bureau of Investigation's Forensic Science Center in Edmond.

The unique center is a an effort by OMES and the 14 agencies of the public safety and security cabinet to accommodate the specialized information technology needs of law enforcement and the importance of its data in meeting missions. It will enhance collaboration, efficiency and effectiveness.

To view this video in high quality or for closed captioning visit **https://youtu.be/OJlfXC8d9Ks**.

Oklahoma Public Safety and Security Cabinet

- Alcoholic Beverage Laws Enforcement Commission
- Bureau of Narcotics and Dangerous Drugs
- Council on Law Enforcement Education and Training
- Department of Corrections
- Department of Emergency Management
- Department of Public Safety
- District Attorneys Council
- Indigent Defense System
- Office of Homeland Security
- Office of the Attorney General
- Office of the Chief Medical Examiner
- Office of the State Fire Marshal
- Pardon and Parole Board
- State Bureau of Investigation

2

The Fast and the… Stable

Partnership supported OCAN provides greater opportunity.

It's about two words that don't always go together.

"Stability and speed," said Eric Hileman, the executive director for information technology services with Oklahoma City Public Schools.

Hileman explained the advantages of the Oklahoma Community Anchor Network and the broadband bandwidth and reliability it gives Oklahoma City students with those often competing concepts.

"When you're talking about student learners, the two things you want are stability and speed," he said.

It's why Oklahoma City Public Schools, along with other public schools, higher education institutions, libraries, hospitals and city governments are linking up with OCAN.

Funded by a $74 million grant from the National Telecommunications and Information Administration's Broadband Technology Opportunities Program, OCAN is a partnership between the Oklahoma Office of Management and Enterprise Services, the Oklahoma State Regents for Higher Education and the Oklahoma Department of Transportation.

"The combining of state resources and talent to administer OCAN is what allows the network to successfully fulfill the needs of those that use it," said state Chief Information Officer Bo Reese. "OCAN is enhancing the quality of life throughout the state by not only expanding broadband services into rural areas but also by enhancing services in more urban centers."

Taking the lead for OMES is the division of Information Services, which when the grant was received installed nearly 1,100 miles of fiber optic cable in 18 months from the Panhandle down to Broken Bow. Launched in August 2013, OCAN designated 33 colleges, universities, rural hospitals and libraries as community anchors designed to deliver high-speed broadband service to rural and underserved Oklahoma communities.

OKLAHOMA COMMUNITY ANCHOR NETWORK

STATE NETWORK
OCAN NETWORK
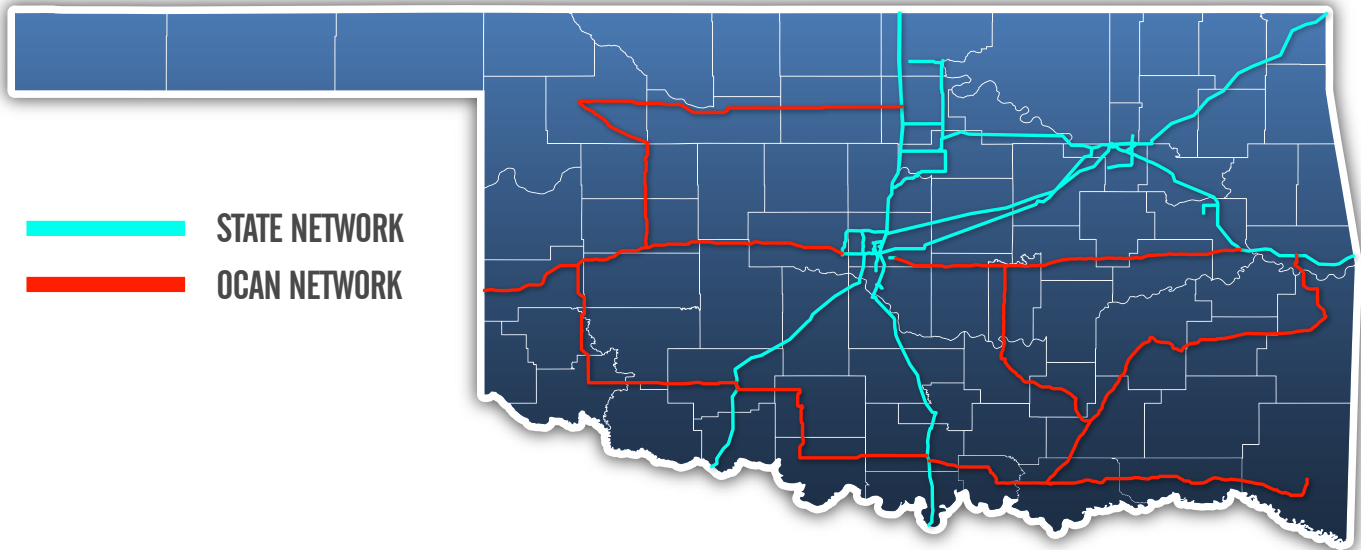
Opportunity for Rural Students

More broadband capability has meant a world of difference to rural school districts such as Butner Public Schools, a pre-K through 12th grade system with about 250 students and located roughly 60 miles east of Oklahoma City.

"We are really as well equipped as any school, and it's all because of the bandwidth," Butner Principal Melissa Baughman said.

Before Butner schools connected to OCAN they had received grant money to purchase iPads for all the students, laptops and software for video conferencing and exploring the Internet, but it "would not work," Baughman said.

"We couldn't even do our regular school business," she said. "As soon as we connected to OCAN, we could have everything connected. It's absolutely amazing."

The increased broadband has helped Butner schools in other areas as well, such as student testing and teacher recruitment.

"At the end of last year, with testing, we were one of the few schools that didn't have problems, and it was probably because of the bandwidth," Baughman said.

And when teachers see how the technology is working, the principal said, they want to work at Butner schools. "That's a big deal for rural schools that have a hard time recruiting."

Also for Urban Students

Larger school districts are also joining OCAN and reaping benefits. About a year ago the 45,000-student Oklahoma City Public Schools made the switch. The system has more than 3,300 students using iPads and more than 3,400 using laptops on a 10 gigabit Internet connection supplied by OCAN fiber optic cable.

"We had 10 gigabits before, but I don't think we were realizing the full benefit," Hileman said. "Now, it's like highway versus city miles."

The biggest advantage has been eliminating system outages, he said. OCAN allows schools and other entities to connect to OneNet, the higher education regent's Internet service provider.

"The direct connect to OneNet on the OCAN network was outstanding," Hileman said. "It's taken the instability variable out. It hasn't been down at all since the switch."

More than Students

Rural libraries have benefited greatly from the higher broadband speed available through OCAN.

"It means they can get access to broadband speed they had never been able to even dream about before in the rural areas," said Susan McVey, director of the Oklahoma Department of Libraries. "Such speed would not be affordable without OCAN."

The libraries department was able to purchase video conferencing equipment using a separate grant, and OCAN provided the structure and speed to be able to use it.

A rural library can now use its video equipment to allow authors to talk with their readers, to offer online courses for those aspiring for a higher education degree, to enable teachers to take certification courses and to broadcast health programs for seniors and others.

"There are classes for bankers, nurses and even long-distance job interviews," McVey said. "They've done programs on diabetes, strokes, healthy eating and even yoga."

OCAN's Future

"With the structure in place and OCAN proving its use in the public sector, we think there will be more private sector ventures in the future," Reese said. "We are working with local Internet providers and other businesses in underserved areas to enhance economic opportunity in those smaller communities."

OCAN is about the future — its own expanding future and the future of those it helps like students in Oklahoma City and Butner. OCAN's combination of stability and speed opens up a limitless future.

"OCAN is 100 percent helping prepare students for the future and what they will have to do in it," Baughman said. "The sky's the limit."

Summary of Unification

Consolidation Project Savings

Agency Name	Status	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
AIICM	Completed	$34,311	$48,511	$41,411	$41,411	$41,411	$41,411
Banking Department	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 Authority	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 Management	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
State Dept of Education	Completed	$1,098,231	$1,054,231	$933,231	$960,731	$1,054,231	$1,435,231
State 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

Agency Name	Status	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
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 - Professional Engineers & Land Surveyors	Completed		($29,922)	$4,164	$4,164	$4,164	$4,164
Labor Department	Completed		$86,293	$83,814	$86,925	$95,629	$93,429
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 Commission	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 Department	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 Count 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 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
Denistry 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 Scantron Contract Consolidation	Completed			$140,548	$147,575	$147,575	$147,575
ODOT Video Editing System	Completed			$29,670	$0	$0	$0
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
Multi Injury Trust Fund IT Consolidation Project	Completed			$1,461	$6,461	$1,461	$1,461
Security as a Service - Phase I	Completed		$57,542	$723,798	$723,798	$723,798	$723,798
Real Estate Commission Conslidation	Completed			$118,756	$118,756	$118,756	$113,056
Department of Libraries Consolidation	Completed		$115,599	$115,599	$110,099	$110,099	$115,599
Decommission Unused Software - Infrastructure	Completed			$88,984	$88,984	$88,984	$88,984
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
ODAFF - Oracle Licensing Application	Completed			($7,470)	$5,028	$5,028	$5,028
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
Boll Weevill Consolidatoin	Completed			$61,591	$61,591	$61,591	$61,591
Behavioral Health Licensure Consolidatoin	Completed			$1,857	$3,450	$3,450	$3,450

Agency Name	Status	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
OSDH - NetIQ Contract	Completed			$8,637	$8,114	$8,114	$8,114
ITSW1030 Good Technology RFP	Completed			$5,340	$5,340	$5,340	$5,340
Pardon & Parole Board Consolidation	Completed		$38,052	$32,552	$32,552	$32,552	$32,552
OWRB - Annual Permitted Water Use Survey and Administrative Fee Mailing	Completed		$3,209	$0	$0	$0	$0
*Health Department Printer Optimization	Completed		$342,190	$362,190	$362,190	$362,190	$362,190
Medicolegal Inv.- Software for LC/MS Liquid Crystal/Mass Spectronomy	Completed			$357,933	$0	$0	$0
Statewide Mainframe Consolidation	Completed		$2,021,035	$2,341,345	$3,170,748	$3,176,610	$3,778,929
Fiber Optic Asset Tracking System	Completed			$6,292	$2,454	$2,454	$2,454
DPS E-Seek Barcode MSR Reader Solution	Completed			$4,452	$4,452	$4,452	$4,452
Department of Commerce Consolidation	Completed			$0	$253,462	$17,204	$8,904
Used Motor Vehicles Commission	Completed			$0	$69,016	$63,516	$63,516
Health Department Consolidation	Completed		$60,000	$1,431,406	$169,474	$597,780	$597,780
IPSH Health Exchange Information	Completed			$74,000	$196,100	$196,100	$196,100
Uniform Crime Report	Completed		$707	$1,107	$1,107	$1,107	$1,107
Educational Quality and Accountability Unification Project	Completed				$3,744	$14,209	$14,209
Virtual Technology Storage	Completed		-$491,410	$533,441	$545,978	$580,191	$617,826
OSBI-Desktop/Laptop Replacement	Completed				$27,953	$0	$0
Department of Transportation Consolidatoin	Completed			$12,266	$272,463	$362,462	$362,461
EGID Consolidation	Completed			$60,500	$1,233,193	$1,584,006	$1,584,006
Printer Optimization-Public Safety	Planning				$197,230	$222,230	$222,230
OHCA Consolidation	Planning		$654,792	$654,792	$654,792	$654,792	$654,792
OASIS/OKLeX Consolidation	Planning		-$37,704	$35,704	$35,704	$35,704	$35,704
ITSW1044 - Identity Management	Planning			$55,000	$14,950	$14,950	$14,950
Board Member/1st Yr Superintendent Points	Planning			-$9,217	$3,547	$3,494	$3,439
*OKDHS Printer Optimization	Execution		$135,000	$160,000	$160,000	$160,000	$160,000
*OKDHS Eliminate Unused Software	Execution		$286,273	$202,987	$202,987	$202,987	$202,987
Career Technology Consolidation	Execution			$86,167	$86,167	$91,513	$91,513
Total Annual Savings		**$4,403,598**	**$11,566,687**	**$18,775,200**	**$16,958,584**	**$17,748,293**	**$18,743,296**
Savings Over 6 Years 1		**$78,537,197**					

Notes:[1]Fy12 plus NPV of savings achieved in FY13 - FY17

*Vendor and/or Em ployee Cost Savings Idea

This data reflects point-in-time information. There may be unreimbursed IT costs incurred by OMES ISD 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
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

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		$684,585.00
42818	Educational Television Authority IT Unification	Initiation	20		$7,396.00
42464	Department of Human Services IT Unification Project	Initiation	32		$804,200.00
42456	Lottery Commission IT Consolidation	Initiation	20		$195,500.00
42189	ABLE Commission Consolidation	Initiation	20	$398,037.00	$94,550.00
42191	Water Resources Board Consolidation	Initiation	20		$165,117.00
42190	DEQ IT Consolidation	Initiation	32		$526,600.00
38052	Emergency Management IT Consolidation	Planning	44	($57,856.00)	$80,250.00
34970	OHCA Consolidation	Planning	28	$3,432,510.00	$154,150.00
37981	Career Tech Consolidation	Execution	36	$731,612.00	$634,199.00
42188	Historical Society IT Consolidation Project	Execution	44	($956,112.00)	$161,550.00

Service by Agency

Project No	Project Name	Project Phase	Risk Rating (10 - 48)	CBA NPV	Total Forecast Cost
31929	Printer Optimization - Evironmental Quality	Initiation	24	$581,270	
32346	Printer Optimization - Public Safety	Planning	28	$1,140,922	$25,000
32531	Printer Optimization - OKDHS	Execution	20	$814,703	$25,000
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	$184,400

Service by Service

Project No	Project Name	Project Phase	Risk Rating (10 - 48)	CBA NPV	Total Forecast Cost
37655	INFRASTRUCTURE:Critical System Protection	Execution	32		$336,850

unification approach
agency by agency

leadership common vision

CONCEPT:
- ABLE Commission
- DEQ
- Funeral Board
- OETA
- Lottery Commission
- Corporation Commission
- DPS
- Homeland Security
- LP Gas Commission
- OKDHS
- Water Resource Board

project scope & plan

team formation

business case

approve

detail plan

PLANNING:
- OHCA
- OEM
- Historical Society

transform

EXECUTION:
- Career Tech

refined business case

CLOSE:
- EGID
- ODOT

customer relationship

- Standard Process
- Metrics
- Governance
- Performance Reviews

transformation | transition | steady state
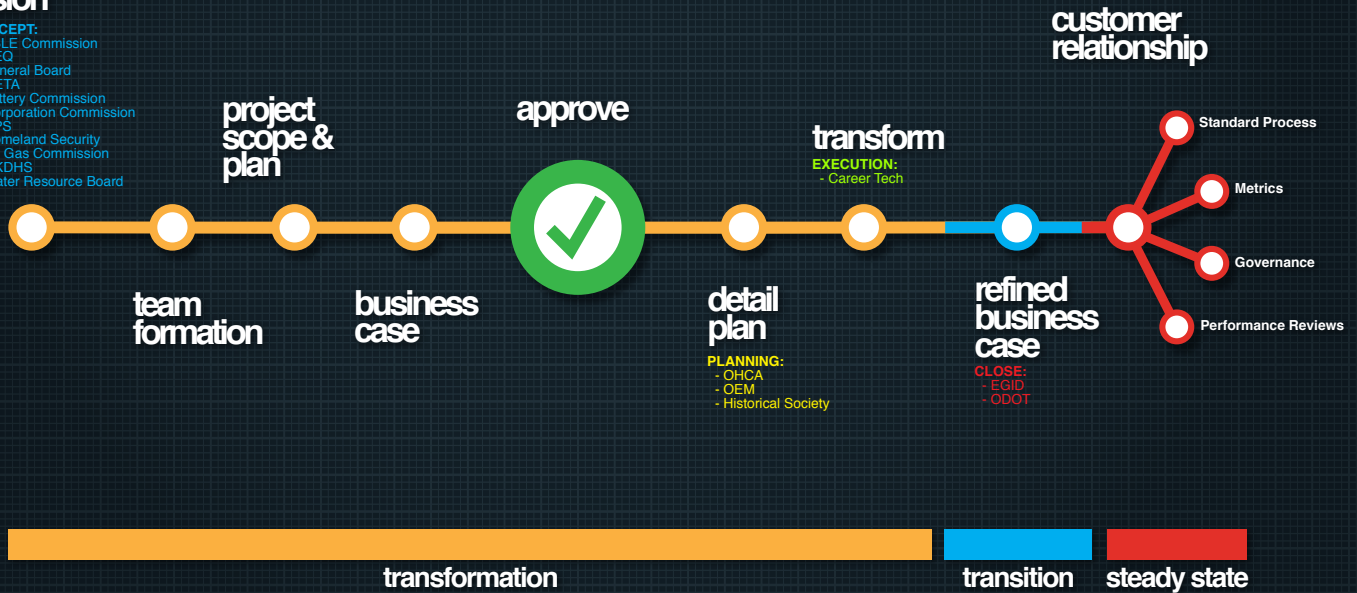
Agency-by-Agency Completion

- Agency by Agency Completion:
- ABLE Tech
- Abstractors Board
- Accountancy Board
- Aeronautics Commission
- Agriculture
- Anatomical Board*
- Architects Board
- Arts Council
- Athletic Commission
- Banking Department
- Boll Weevil
- Bond Advisor
- Building Bonds-Commission
- Capital Investment Board
- Capitol Improvement Authority
- Center for Advancement of Science and Technology- OCAST
- Central Services- DCS
- Children & Youth Commission
- Chiropractic
- Commerce

- Conservation
- Construction Industries Board
- Consumer Credit Department
- Dentistry Board
- Disability Concerns
- Education Department
- Education Quality & Accountability
- Employees Benefits Council
- Ethics Commission
- Finance Authority
- Fire Marshall
- Governor
- Health Dept.
- Human Rights Commission
- Interstate Oil Compact Commission
- Industrial Finance Authority
- Judicial Complaints Council*
- Labor Department
- Libraries
- Licensed Social Workers Board

- Liquefied Petroleum Gas Board
- Long Term Care Admin. Board
- Marginal Well Commission
- Medical Examiners
- Merit Protection Commission
- Mines Department
- Motor Vehicle Commission
- Multiple Injury Trust Fund*
- Native American Cultural & Education Authority
- Nursing, Oklahoma Board of
- Optometry Board
- Pardon & Parole
- Personnel Management Office
- Pet Breeders*
- Pharmacy
- Physician Manpower Training Commission
- Private Vocational Schools Board
- Professional Engineers & Land Surveyors

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

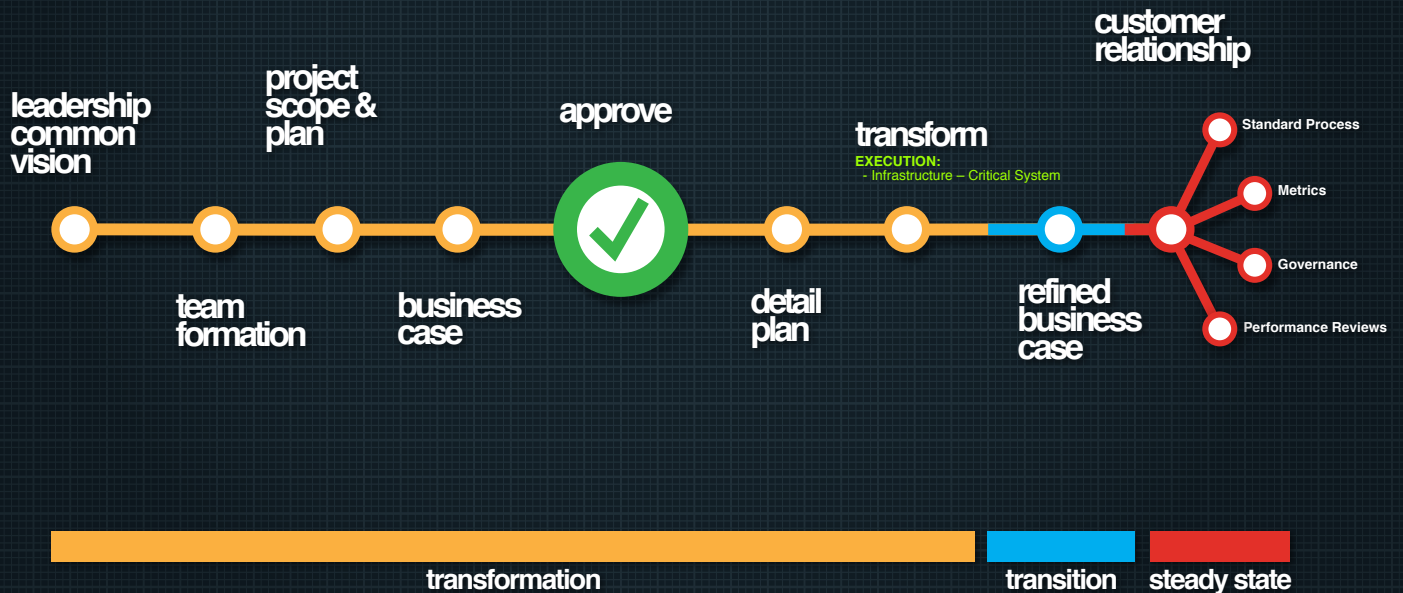transformation | transition | steady state

Service-by-Agency Completion

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

- ISD - Unused Software
- Landmark Tower – Fiber
- ODAFF - Help Desk
- ODAFF – Printer Optimization
- ODOT VoIP
- OKC County Health Dept - 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

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Spotlight: Laying Fiber

The State of Oklahoma has more than 2,400 miles of optical fiber cable in its broadband network, bringing high-speed connections to all parts of the state. It's the communications and technology backbone for schools, libraries, state government operations, public safety institutions, businesses and more.

Ever wonder what is actually in that vital vein that runs underground? Information Services Director of Technology Services Dustin Crossfield recently explained what constitutes a piece of optical fiber cable.
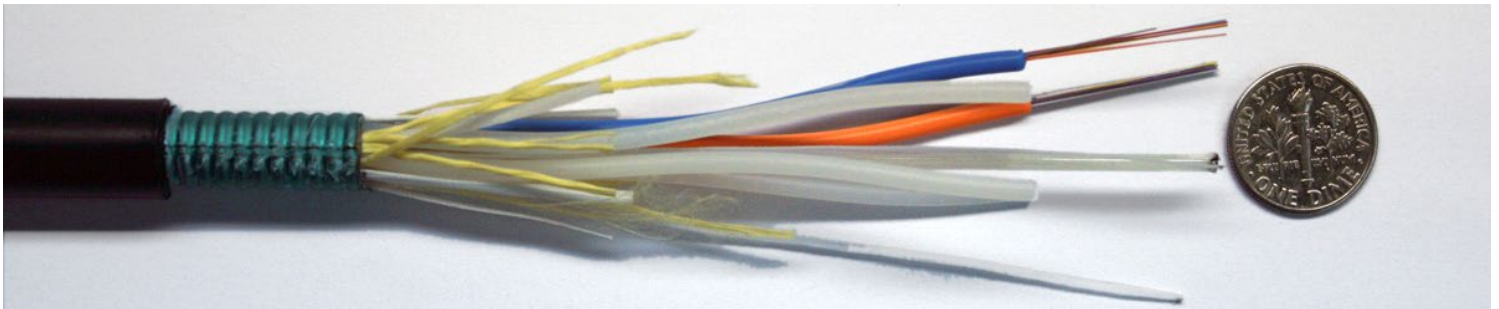
Black Cover – The jacket is made of plastic with numbers and letters printed on it. Those figures are code, indicating manufacturer and the number — 24 in this case — and type of strands inside. The figures appear sequentially every 3 feet so a particular section can be located using the code.

Green Casing – The shield, usually made of copper or aluminum, is typical for fiber buried underground. It can protect the core from impacts, such as those from a shovel. An above-ground detector can also locate the cable by bouncing a signal off the metal shield.

Yellow Strands – The Kevlar strands wrap around the core, providing an extra level of protection but allowing some bend.

Strong inner plastic – A hard piece of plastic keeps the cable from bending too much, therefore preventing kinks in the line.

White rip cords – The rip cords can be pulled back to cut through the shield and jacket to expose the inner workings of the cable.

Blue and Orange Casing – The buffer tubes bundle strands of fiber. This cable has two buffer tubes — orange and blue — and three empty white tubes used as placeholders. Each buffer tube is color coded to indicate the type of fiber it contains.

Individual fibers within buffer tubes – Twelve strands of fiber are located within each buffer tube. Each smaller strand of fiber has cladding, also color coded, to insulate the core. The core is a small strand of glass where light bounces along, carrying a signal to a computer, phone or other digital device.