



Ohio IT Forum

April 25, 2011



Ohio IT Forum – Goals & Objectives

- Review stated direction for IT in Ohio
- Create “Electronic Suggestion Box”
 - Encourage strategic partnerships
 - Generate ideas and approaches to optimize enterprise IT
- Objectives
 - Re-invest in Ohio
 - Create jobs in Ohio
 - Reduce state spending
 - Increase quality of services
 - Provide sustainable model for the future



Enterprise IT Statement of Direction

- Introduction: Stu Davis
- Current State: Tom Croyle
- Other State Research: Tom Croyle
- Critical Success Factors: Spencer Wood
- Shared Governance: Spencer Wood
- Candidate Consolidation Projects: Stu Davis
- Next Steps: Stu Davis



Enterprise IT Statement of Direction

Introduction



Enterprise IT Statement of Direction

Key Elements

- **Desired outcome:** Industrial-strength, high-quality cost-effective IT services delivered for the enterprise
- **Invest in Centers of Excellence** (COE's) to drive economies of scale and best-value delivery
- **Core/Common/Unique** construct across service offerings
- **Minimize duplication** for core/common services
- **Implementation of enterprise-level value optimization** for investment and governance functions .

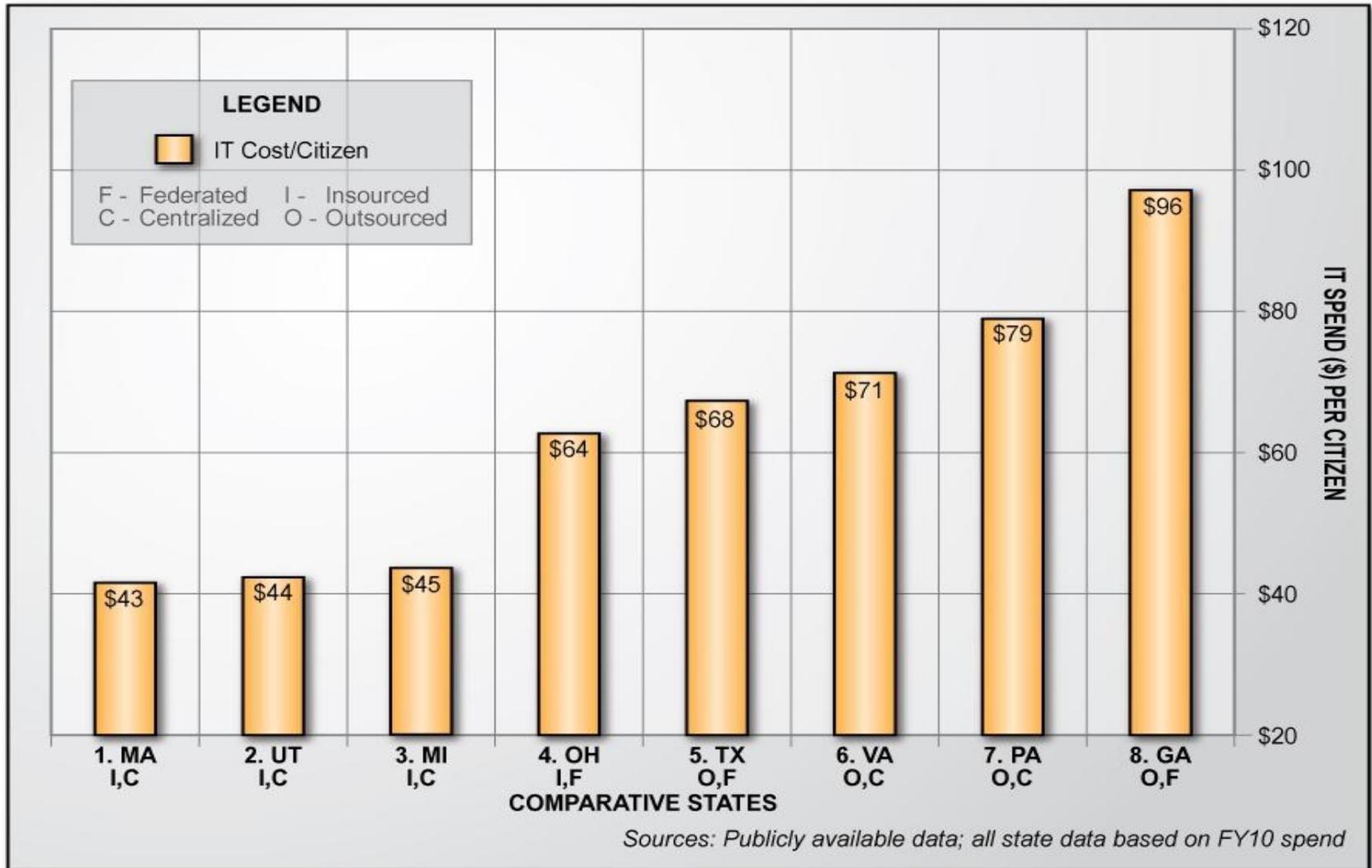
Problem/Opportunity Statement

Current reality at a critical state

- Significantly constrained budget situation
- Multiple years of declining budget and investment in assets
- Aging and fragmented enterprise portfolio of software and IT assets
- Question sustainability of current IT environment, especially given different funding sources

Need to critically examine creative options to support the business of government in the most cost-effective manner possible

Enterprise IT Statement of Direction: The Opportunity



oh das 23 v04



**Current State
and
Other State Research**

Enterprise IT Statement of Direction: IT Portfolio Analysis

Core IT Inventory 1,626 Applications - \$608M Annual Spend*				
Agency-Specific Systems	Public Interaction Systems	Inter-Agency Systems/ Data Exchange	ERP Addressable Systems (Potential)	Common Applications
979 Applications \$400 M Annual Spend (66%)	91 Applications \$31M Annual Spend (5%)	71 Applications \$24M Annual Spend (4%)	257 Applications \$78M Annual Spend (11%)	228 Applications \$75M Annual Spend (12%)

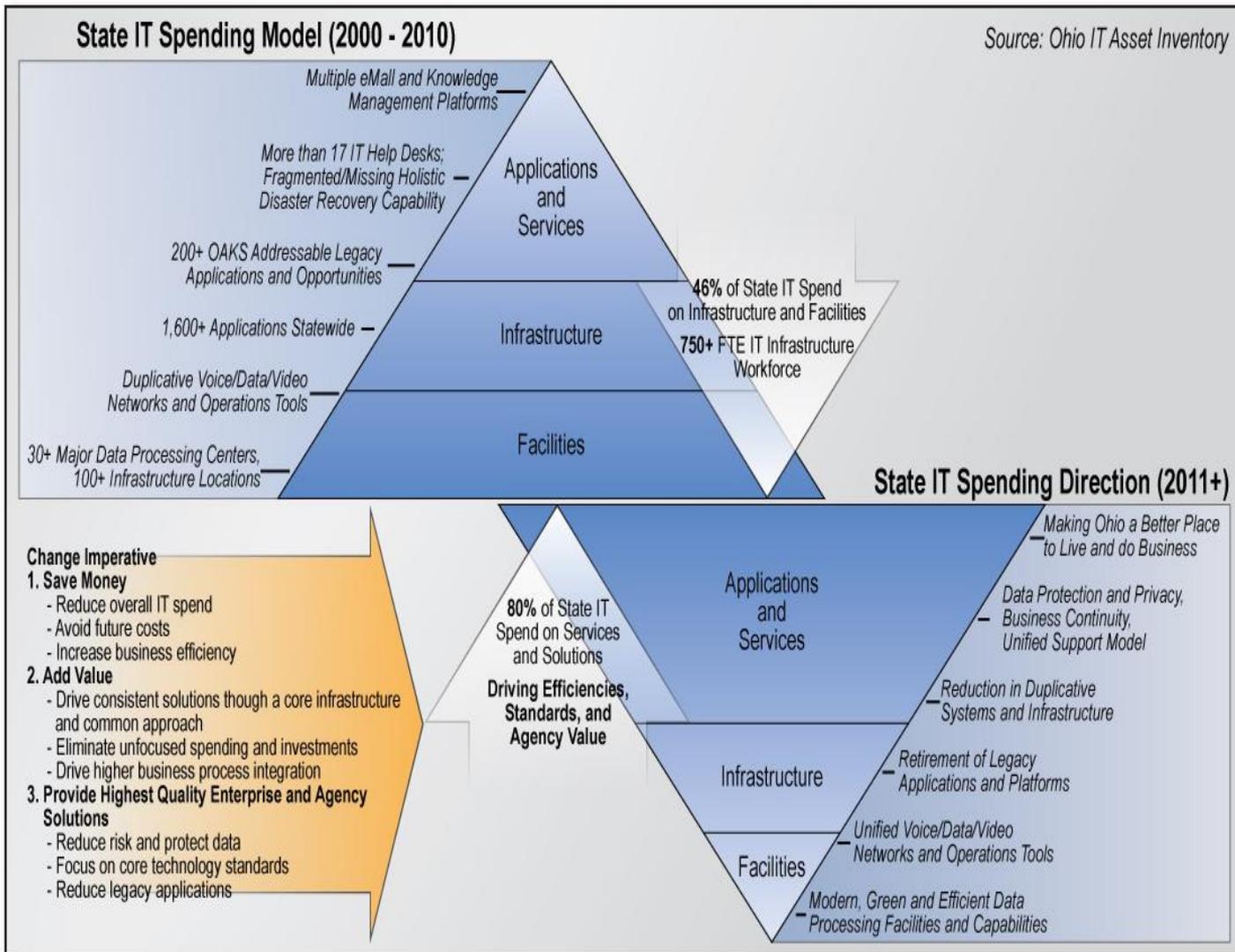
The current fully federated model of delivering technology to the state is untenable in today's economic climate

The State must review historical investments and platforms and leverage 'best-in-state' elements of the portfolio for the benefit of all agencies

Facilities	Infrastructure	Applications and Support Model	Services
<ul style="list-style-type: none"> •32-100 disparate agency processing centers •Risk profile uncertain (disaster recovery, business resiliency/continuity) •Under capacity centers with low density and low utilization •Power "issues" (distribution and UPS) cloud facility consolidation opportunities and imperative 	<ul style="list-style-type: none"> •Variety of voice, data and PBX network services implemented statewide with few common elements •5,000+ servers driving management, integration and operational complexity costs and effort higher •Insatiable appetite for more storage with limited capabilities to manage legacy/historical data •Emerging capabilities and standards that could drive complexity and costs down and provide differentiated services 	<ul style="list-style-type: none"> •Many systems should be evaluated for retirement, replacement or consolidation in all agencies •Investments in statewide ERP as the enterprise standard for finance, HR, learning and business intelligence •Need to increase agency adoption of statewide ERP and retirement of remaining legacy applications with an apparent 200+ targets of opportunity •From an imaging and routing workflow (not transactional) perspective, 18 solutions are in place in a variety of agencies •More than 26 IT Help Desks exist within the state offering desktop, desk-side and remote support services for applications and productivity software •There are at least 9 dedicated customer relationship management centers (call centers) deployed to assist citizens and businesses throughout the state - in addition, these systems are supported by a multiple of voice response/CTI systems 	<ul style="list-style-type: none"> •More than 29 email and collaboration solutions installed that support workgroups, departments and agencies •More than 37 public – facing web portal platforms (informational and transactional) •Existing business portal serves more than 14 different services across more than 50 transactions for 8 agencies and 500+ municipalities – can the state do more? •Does an Ohio citizen portal/gateway make sense in the context of an "enabled" public?

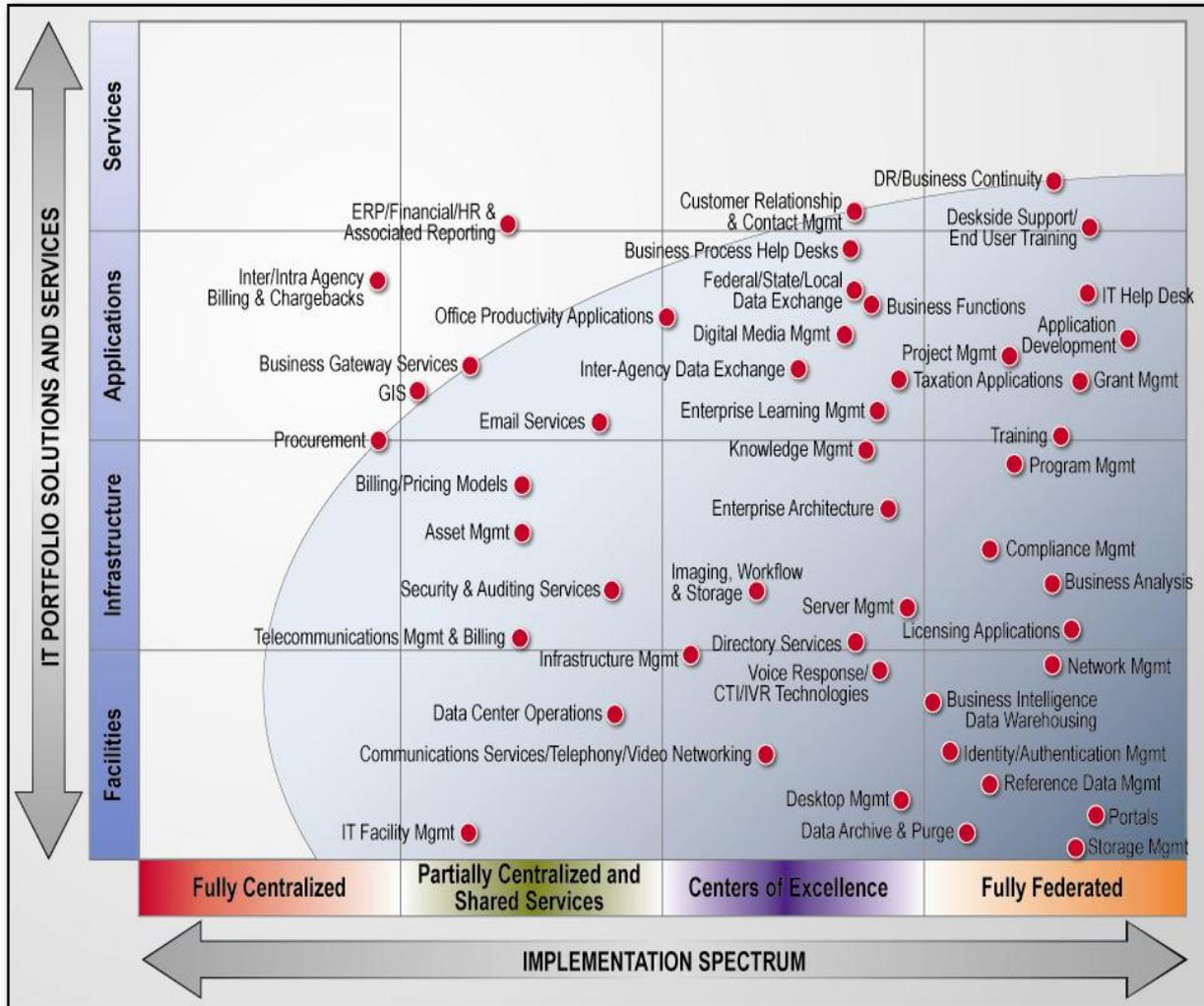
*Reflects agency IT plan data from the initial 2012/13 submission.

Enterprise IT Statement of Direction: Current State



The current Ohio placement on the framework illuminates the significant opportunity for an increased efficiency and cost-effectiveness.

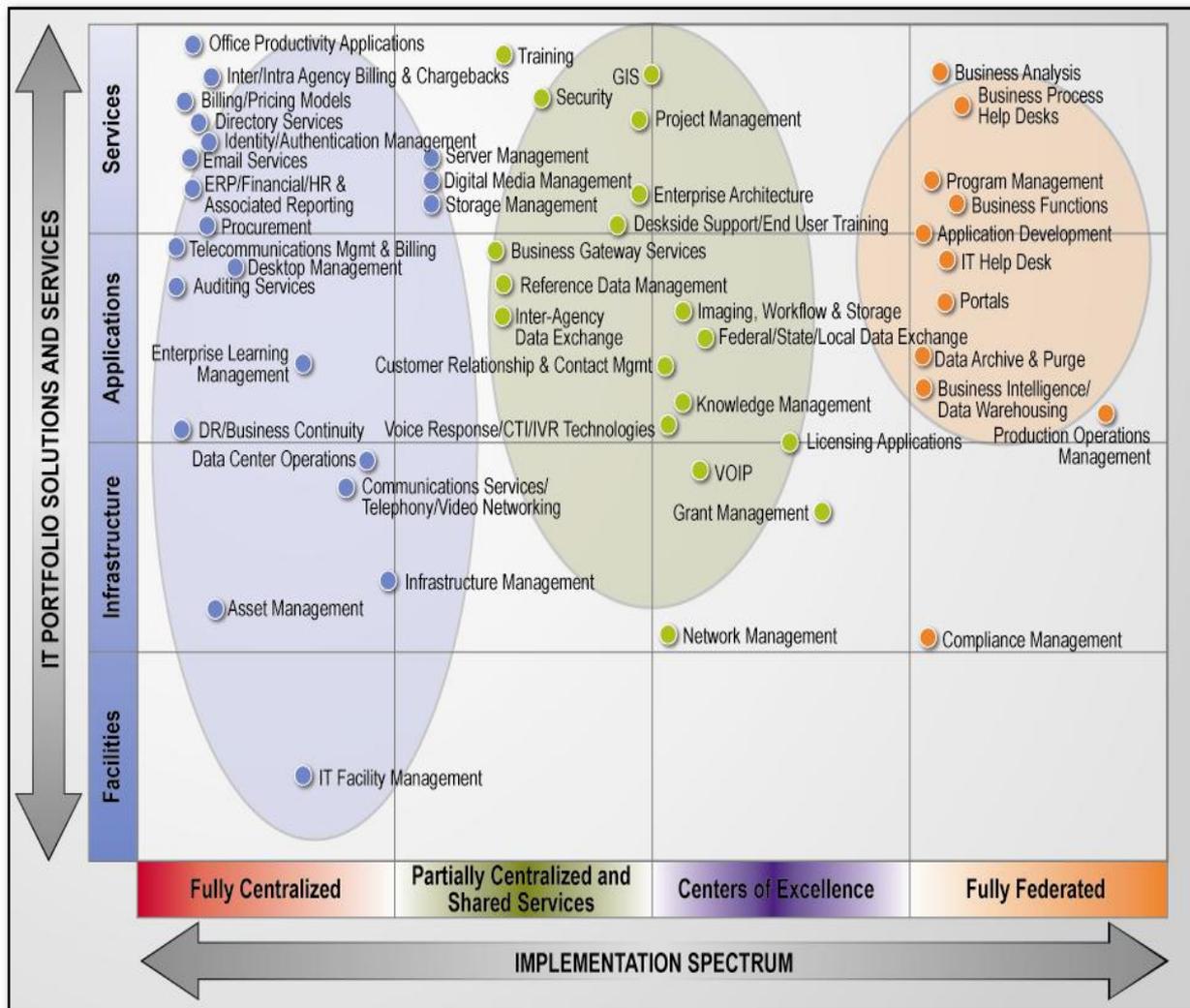
Enterprise IT Statement of Direction: Current State - 2



oh das 02 v06

- As might be expected in an environment that has been **highly federated over the past 10-15 years**, with a modest set of centrally operated functions and older applications/technology elements, current services are clustered in the lower right – **a less-than-ideal positioning**.
- The results of this type of alignment are clear: **highly fragmented systems and high spend on infrastructure elements** as opposed to services.
- This situation has directly driven the duplication of services and infrastructure, **resulting in higher investment, operations / maintenance costs, workforce specialization** (reducing the opportunity for optimizing the use of workforce), and training, to name a few of the direct costs and consequences to the State.
- Current Ohio placement on the framework illuminates the **significant opportunity for a increased efficiency and cost-effectiveness**.

Enterprise IT Statement of Direction: Desired Future



oh das 05 v05

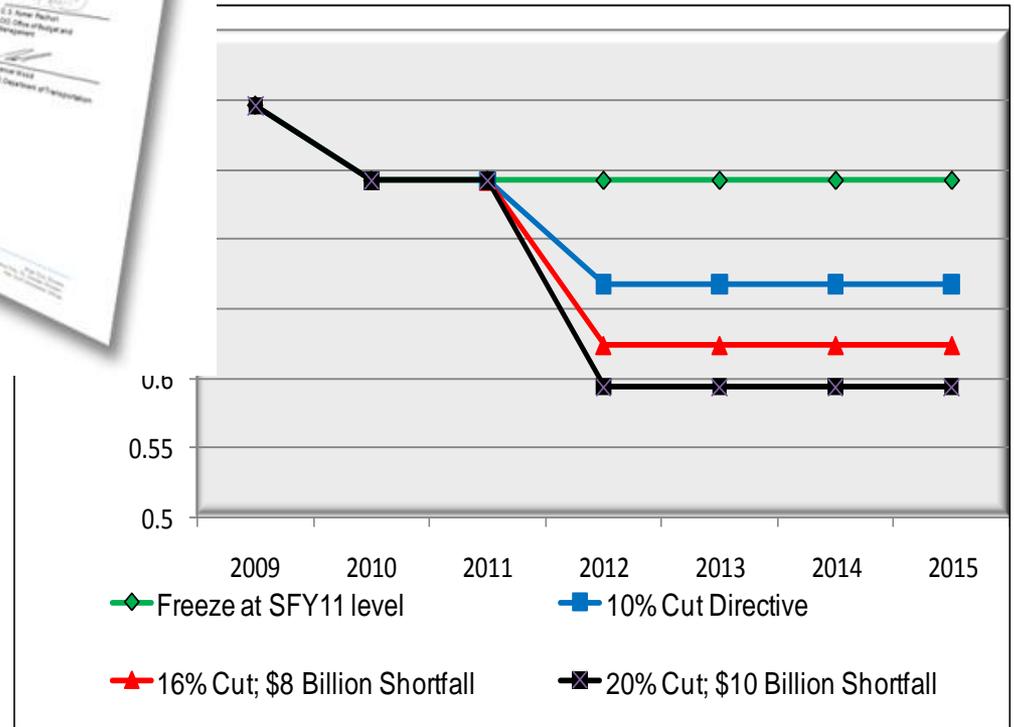
- Drive the stratification of IT services into **core** (to all agencies), **common** (to many agencies) and **unique** (to a specific agency) domains,
- Leverage existing investments and competencies to the greatest extent** practicable while working to minimize duplication through investment in central agency and individual agency Centers of Excellence (COE), positioning them to deliver core and common services;
- Drive effective, consolidated operations for core services.** These services will be commoditized, with a single provider/COE, all agencies will use the services for a fixed rate, scale is assumed and quality should be assumed;
- Establish well-managed, operations with consolidated decision making** for common services. This list will be a broader menu of services, likely will be offered by a limited set of providers/COEs, rates will be set for each COE, scale and could be variable, depending on the provider;
- Over time, limit federated and unique services to where they make sense.** These services will continue the investment primarily driven by the agency, with appropriate governance.

Critical Success Factors



Political Will

Funding

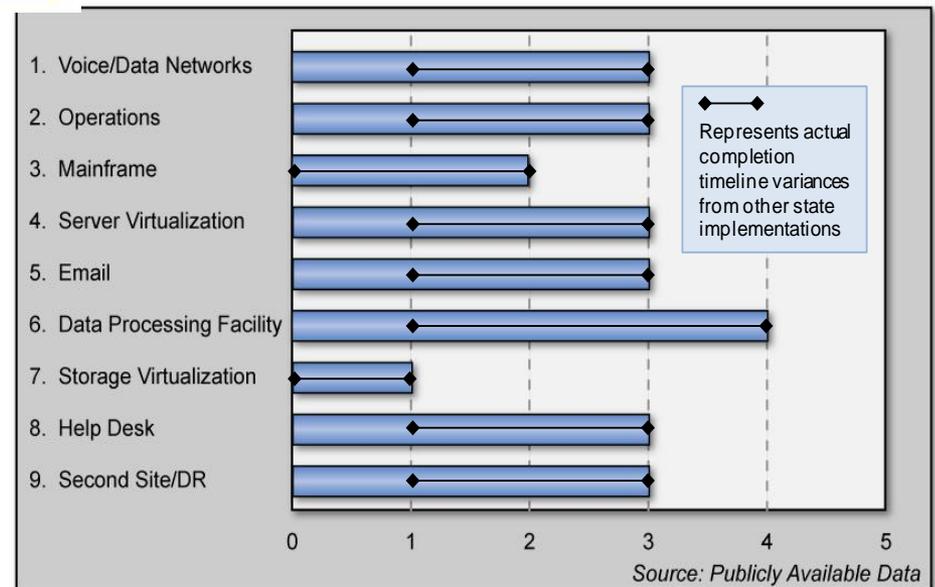


Critical Success Factors– Resources and Time

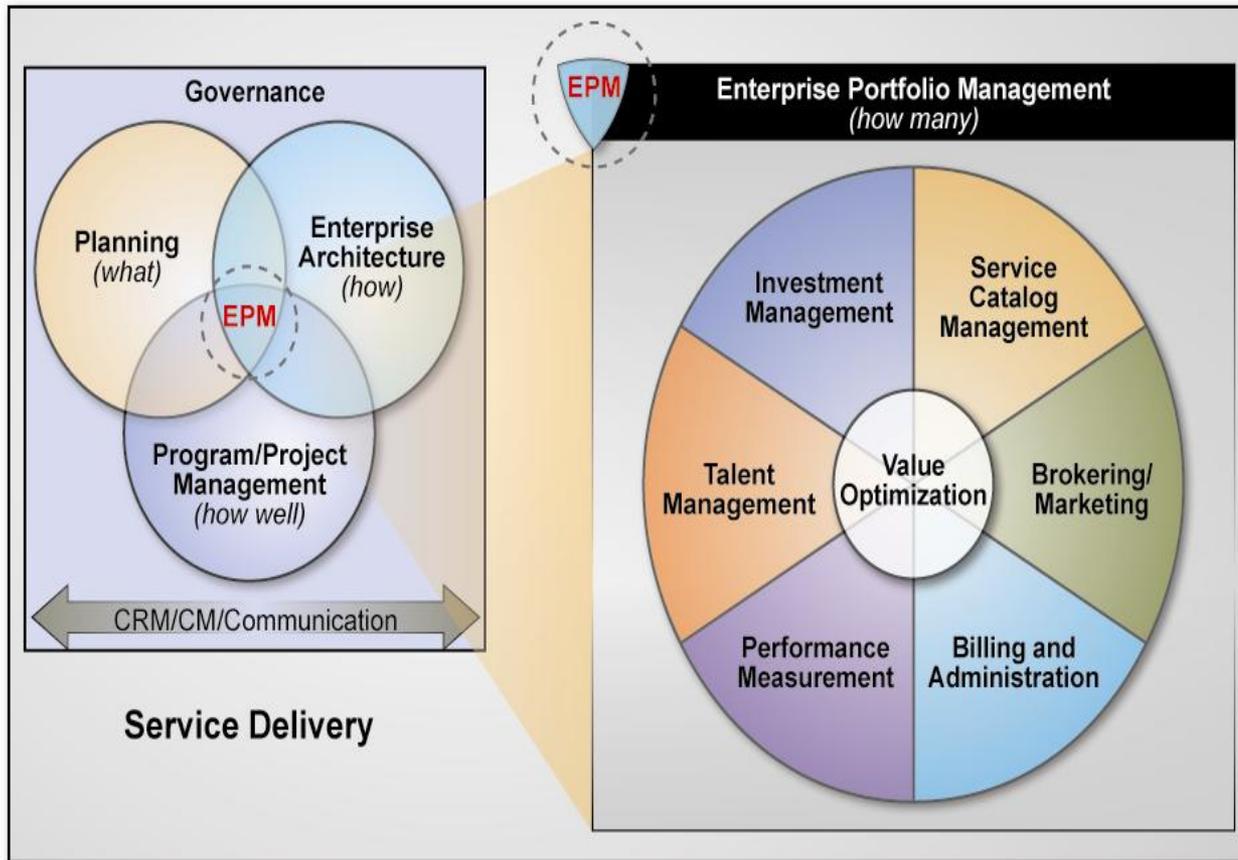
Consolidated State CIO Resources	MI	OH	PA	UT	VA
Portfolio Management	✓	✗	✓	✓	✓
PMO – Large Investments	✓	✗	✓	✓	✓
Planning	✓	✗	✓	✓	✓
Internal Audit	✓	✗	✗	✗	✓
Communications	✓	✗	✗	?	✓
IT Purchasing	✓	✗	✓	?	✓
Application Development	✓	✗	✓	✓	✗
Security & Privacy	✓	Partial	✓	✓	✓
Shared Services	✓	✗	?	?	✗
Enterprise Architecture	✓	Partial	✓	✓	✓

Resources

Time



EPM Through Shared Governance



oh das 08 v04

- A concerted, deliberate phasing of key central enterprise functions of IT services optimization including:
 - **Services catalog management**, including demand assessment through business/technical optimization;
 - **Brokering/marketing** of services across the enterprise;
 - **Billing and administration**, including pricing/chargeback;
 - **Investment management** and fiscal oversight;
 - **Talent management / workforce development**,
 - **Performance management**
- Focused **evolution** toward EPM thru **shared governance**



Candidate Consolidation Projects

Candidate Consolidation Projects – OVERALL

Scope	Key Cost Area	Estimated Annual Operating Costs	Savings Strategy/Approach	Note(s)	Investment / Transition Cost Range (\$M)	5 Year Savings (\$M) less Investment / Transition Cost
Spending	Spending: Utilization; Negotiation; Sourcing	\$ -	Costs Management Improvements, Smart Sourcing		\$ - - \$ -	\$ 40 - \$ 50
	Standardization / Consolidated Buying Power	\$ -	Standardize Common Items, Consolidate Sourcing		\$ - - \$ -	\$ 50 - \$ 60
	Project Controls	\$ -	Improve Contracts and Project Management Controls for Investments		\$ - - \$ -	\$ 30 - \$ 40
	Multi-Agency Agreements	\$ -	Negotiate State Agreements for Software and Support		\$ - - \$ -	\$ 40 - \$ 50
	Misc.	\$ -	Grants, Salvage Improvements, Retire/Cancel, Other		\$ - - \$ -	\$ 10 - \$ 15
	<i>subtotal</i>	\$ 13		7	\$ 10 - \$ 20	\$ 160 - \$ 195
Applications & Services (number) less Infrastructure	eMail	\$ 10	Consolidate Statewide eMail	1,2,6	\$ 8 - \$ 9	\$ 13 - \$ 14
	Desktop Help Desk	\$ 15	Consolidate Statewide Desktop Support	2,6	\$ 7 - \$ 8	\$ 13 - \$ 14
	Agency Specific Applications (979)	\$ 274	Eliminate 5% Obsolete Systems	3	\$ 19 - \$ 21	\$ 76 - \$ 84
			Consolidate 10% Redundant Systems	3	\$ 76 - \$ 84	\$ 114 - \$ 126
	Common Applications (228)	\$ 51	Eliminate 5% Obsolete Systems	3	\$ 4 - \$ 4	\$ 14 - \$ 16
			Consolidate 10% Redundant Systems	3	\$ 14 - \$ 16	\$ 21 - \$ 23
	ERP Addressable Systems (257)	\$ 54	Eliminate 5% Obsolete Systems	3,6	\$ 4 - \$ 4	\$ 15 - \$ 16
			Consolidate 10% Redundant Systems	3,6	\$ 15 - \$ 16	\$ 22 - \$ 25
	Inter-Agency Data Exchange (71)	\$ 17	Eliminate 5% Obsolete Systems	3	\$ 1 - \$ 1	\$ 5 - \$ 5
			Consolidate 10% Redundant Systems	3	\$ 5 - \$ 5	\$ 7 - \$ 8
Public Interaction Systems (91)	\$ 21	Eliminate 5% Obsolete Systems	3	\$ 1 - \$ 2	\$ 6 - \$ 6	
		Consolidate 10% Redundant Systems	3	\$ 6 - \$ 6	\$ 9 - \$ 10	
	<i>subtotal</i>	\$ 441			\$ 160 - \$ 177	\$ 315 - \$ 348
Infrastructure	Infrastructure Operations (Labor)	\$ 105	Optimize workforce, infrastructure, network, facilities	4	\$ 100 - \$ 110	\$ 25 - \$ 28
	Infrastructure Operations (Software and Tools)	\$ 55	Consolidate software licenses, tools and maintenance 15% reduction	4	\$ 13 - \$ 15	\$ 26 - \$ 29
	Telecommunications Networks (Voice & Data)	\$ 59	Consolidate, drive higher utilization on networks, consider VoIP	2,4	\$ 28 - \$ 31	\$ 28 - \$ 30
	Distributed Server Infrastructure	\$ 33	Complete Virtualization @66%	1,2,4	\$ 20 - \$ 22	\$ 78 - \$ 86
	Distributed Storage Infrastructure	\$ 15	Complete Virtualization @66%	1,2,4	\$ 10 - \$ 11	\$ 38 - \$ 41
	Mainframe Computing Environments	\$ 50	Consolidate, Reduce Usage by 10%	4	\$ 10 - \$ 11	\$ 24 - \$ 26
	<i>subtotal</i>	\$ 317			\$ 179 - \$ 198	\$ 218 - \$ 241
Facilities	State Computing Center	\$ 11	Remediate SOCC, Drive Mandatory Agency Use	5	\$ 18 - \$ 19	\$ 31 - \$ 34
	Alternate Data Centers (Mainframe/DR)	\$ 10	reduce reliance/provision on non-State data centers by 30%	1,2,4	\$ 3 - \$ 3	\$ 11 - \$ 12
	2nd Site Disaster Recovery	\$ -	Obtain DR Site - risk reduction, nominal savings	5	\$ 3 - \$ 3	n/a - n/a
	Agency Provided Data Processing Facilities	\$ 8	Eliminate Major Agency Data Processing Facilities (>5,000 sqft)	1,2,4	\$ 4 - \$ 4	\$ 28 - \$ 31
	Additional Data Processing Sites	\$ 3	Eliminate Minor Agency Data Processing Facilities (~1,000 sq ft)	1,2,4	\$ 1 - \$ 1	\$ 11 - \$ 12
	<i>subtotal</i>	\$ 31			\$ 28 - \$ 31	\$ 81 - \$ 90
	<i>estimated total</i>	\$ 802			\$ 377 - \$ 426	\$ 774 - \$ 874
Notes/Key						
1 State Internal business case data 2000						
2 2008 State IT Infrastructure Assessment - Accenture						
3 2010/11, 2012/13 IT Asset & Investment Analysis - TopS						
4 State Investment Management Analysis 2010						
5 State SOCC/2nd Site Analysis & Strategy - TopS						
6 Statewide Benchmark (IT Portfolio) 2008 - Hackell						
7 Builds Upon Preliminary Results Already Realized Through Improvement Management Controls						
Average annual savings net of investment						\$155 - \$175

Candidate Consolidation Projects – SPENDING

Key Cost Area	Estimated Annual Operating Costs	Savings Strategy/Approach	Note(s)	Investment / Transition Cost Range (\$M)	5 Year Savings (\$M) less Investment / Transition Cost
Spending; Utilization; Negotiation; Sourcing	\$ -	Costs Management Improvements, Smart Sourcing		\$ - - \$ -	\$ 40 - \$ 50
Standardization / Consolidated Buying Power	\$ -	Standardize Common Items, Consolidate Sourcing		\$ - - \$ -	\$ 50 - \$ 60
Project Controls	\$ -	Improve Contracts and Project Management Controls for Investments		\$ - - \$ -	\$ 30 - \$ 40
Multi-Agency Agreements	\$ -	Negotiate State Agreements for Software and Support		\$ - - \$ -	\$ 40 - \$ 50
Misc.	\$ -	Grants, Salvage Improvements, Retire/Cancel, Other		\$ - - \$ -	\$ 10 - \$ 15
<i>subtotal</i>	\$ 13		7	\$ 10 - \$ 20	\$ 160 - \$ 195

- Estimates based on LMC, MAC, ETA SC work
- Selected results to date
 - Endpoint standardization at \$14M
 - VMWare discount at \$6.2M
- In progress
 - Standardized L/W components, servers, desktops/notebooks
 - Multi-agency agreements with MS, Symantec, Cisco Maintenance, HP maintenance.

Candidate Consolidation Projects – APPLICATIONS AND SERVICES

Key Cost Area	Estimated Annual Operating Costs	Savings Strategy/Approach	Note(s)	Investment / Transition Cost Range (\$M)	5 Year Savings (\$M) less Investment / Transition Cost
eMail	\$ 10	Consolidate Statewide eMail	1,2,6	\$ 8 - \$ 9	\$ 13 - \$ 14
Desktop Help Desk	\$ 15	Consolidate Statewide Desktop Support	2,6	\$ 7 - \$ 8	\$ 13 - \$ 14
Agency Specific Applications (979)	\$ 274	Eliminate 5% Obsolete Systems	3	\$ 19 - \$ 21	\$ 76 - \$ 84
		Consolidate 10% Redundant Systems	3	\$ 76 - \$ 84	\$ 114 - \$ 126
Common Applications (228)	\$ 51	Eliminate 5% Obsolete Systems	3	\$ 4 - \$ 4	\$ 14 - \$ 16
		Consolidate 10% Redundant Systems	3	\$ 14 - \$ 16	\$ 21 - \$ 23
ERP Addressable Systems (257)	\$ 54	Eliminate 5% Obsolete Systems	3,6	\$ 4 - \$ 4	\$ 15 - \$ 16
		Consolidate 10% Redundant Systems	3,6	\$ 15 - \$ 16	\$ 22 - \$ 25
Inter-Agency Data Exchange (71)	\$ 17	Eliminate 5% Obsolete Systems	3	\$ 1 - \$ 1	\$ 5 - \$ 5
		Consolidate 10% Redundant Systems	3	\$ 5 - \$ 5	\$ 7 - \$ 8
Public Interaction Systems (91)	\$ 21	Eliminate 5% Obsolete Systems	3	\$ 1 - \$ 2	\$ 6 - \$ 6
		Consolidate 10% Redundant Systems	3	\$ 6 - \$ 6	\$ 9 - \$ 10
<i>subtotal</i>	\$ 441			\$ 160 - \$ 177	\$ 315 - \$ 348

- Applications/services estimates are net of infrastructure
- Ohio statistic
 - 20% of systems >20 years old
 - 56% > 5 years old
- Maintenance statistic
 - >20-year old applications cost 3x to maintain
 - >10-year old cost 2x

Candidate Consolidation Projects – INFRASTRUCTURE

Key Cost Area	Estimated Annual Operating Costs	Savings Strategy/Approach	Note[s]	Investment / Transition Cost Range (\$M)	5 Year Savings (\$M) less Investment / Transition Cost
Infrastructure Operations (Labor)	\$ 105	Optimize work force, infrastructure, network, facilities	4	\$ 100 - \$ 110	\$ 25 - \$ 28
Infrastructure Operations (Software and Tools)	\$ 55	Consolidate software licenses, tools and maintenance 15% reduction	4	\$ 13 - \$ 15	\$ 26 - \$ 29
Telecommunications Networks (Voice & Data)	\$ 59	Consolidate, drive higher utilization on networks, consider VoIP	2,4	\$ 28 - \$ 31	\$ 28 - \$ 30
Distributed Server Infrastructure	\$ 33	Complete Virtualization @66%	1,2,4	\$ 20 - \$ 22	\$ 78 - \$ 86
Distributed Storage Infrastructure	\$ 15	Complete Virtualization @66%	1,2,4	\$ 10 - \$ 11	\$ 38 - \$ 41
Mainframe Computing Environments	\$ 50	Consolidate, Reduce Usage by 10%	4	\$ 10 - \$ 11	\$ 24 - \$ 26
	<i>subtotal</i> \$ 317			\$ 179 - \$ 198	\$ 218 - \$ 241

- Estimates include labor, maintenance, software/tools, networks, servers, storage, mainframes
- Infrastructure: 2:1 ratio for state/consultant staff; 1:1 for costs.
- Server – VMWare tool to estimate
 - State currently at 33% of physical infrastructure done.
 - Estimate assumes 66% of remaining; net overall estimate at 50%
 - Current experience is coming in at 80%
- Mainframe
 - 8 mainframes exist now; goal is fewer, ultimately 1 with 1 backup

Candidate Consolidation Projects – FACILITIES

Key Cost Area	Estimated Annual Operating Costs	Savings Strategy/Approach	Note[s]	Investment / Transition Cost Range (\$M)	5 Year Savings (\$M) less Investment / Transition Cost
State Computing Center	\$ 11	Remediate SOCC, Drive Mandatory Agency Use	5	\$ 18 - \$ 19	\$ 31 - \$ 34
Alternate Data Centers (Mainframe/DR)	\$ 10	reduce reliance/provision on non-State data centers by 30%	1,2,4	\$ 3 - \$ 3	\$ 11 - \$ 12
2nd Site Disaster Recovery	\$ -	Obtain DR Site - risk reduction, nominal savings	5	\$ 3 - \$ 3	n/a - n/a
Agency Provided Data Processing Facilities	\$ 8	Eliminate Major Agency Data Processing Facilities (>5,000 sqft)	1,2,4	\$ 4 - \$ 4	\$ 28 - \$ 31
Additional Data Processing Sites	\$ 3	Eliminate Minor Agency Data Processing Facilities (~1,000 sq ft)	1,2,4	\$ 1 - \$ 1	\$ 11 - \$ 12
<i>subtotal</i>	\$ 31			\$ 28 - \$ 31	\$ 81 - \$ 90
<i>estimated total</i>	\$ 802			\$ 377 - \$ 426	\$ 774 - \$ 874

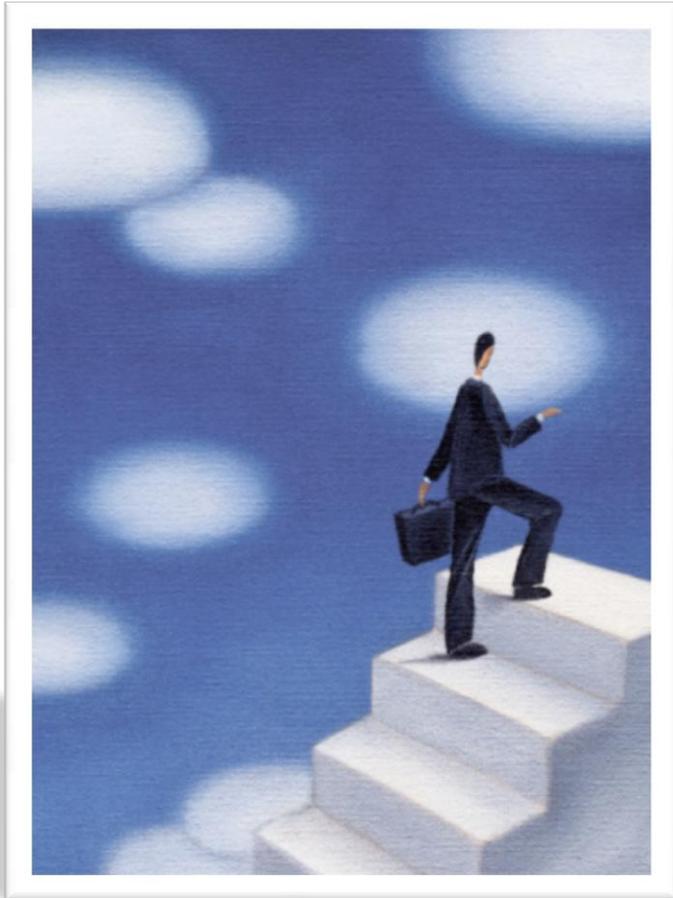
- SOCC remediation
- 32 DC's now.
- Estimates assume sweeping into 1 plus one DR
- DR is assumed at 30% sweep into single environment



Enterprise IT Statement of Direction

Next Steps

Initial Steps to Implementation



- **Formalize new central service delivery model**
 - Recruitment and selection
 - Compensation model
 - Funding (move away from current model, reinvest savings)
 - Performance metrics
- **Formalize IT Investment Governing Board**
 - ORC: includes DAS, OBM, and agency representation
 - Supports core service implementations, reviews and recommends business case for common services, EA standards and enterprise strategic investments
- **Establish enterprise portfolio management methodology**
 - Develop and implement common portfolio practices
 - Carefully phase in short-term needs rather than comprehensive implementation
- **Develop business case and identify funding implications**
 - Common methodology to identify and compare costs and savings
 - Transparent rate development
- **Stratify core, common, and unique service offerings**
 - Core = central service delivery model
 - Common = considers COE model
 - Unique = agency-specific
- **Consolidate core infrastructure assets**
 - Workforce optimization
 - Email, server virtualization, storage consolidation, data center, DR, network and procurement



Current Initiatives – Status and Next Steps

INITIATIVE	IMPLEMENTATION STRATEGY
EMAIL	In progress
MAINFRAME CONSOLIDATION	Work with each affected agency
NETWORK CONSOLIDATION	Pilot program with interested agencies
IDENTITY MANAGEMENT	ETA SC / WG
STORAGE	Pilot program with interested agencies
UNIFIED COMMUNICATION	ETA SC / WG
FISCAL TOPICS	Small team
IT PROCUREMENT	Small team



Next Steps - “Electronic Suggestion Box”

- Submission “form” available at:
<http://das.ohio.gov/Divisions/InformationTechnology.aspx>
- Submit suggestions on or before May 17, 2011 to
IT.Transformation@ohio.gov
- Address questions to IT.Transformation@ohio.gov
 - Please do not contact individual state agencies



Thank you!