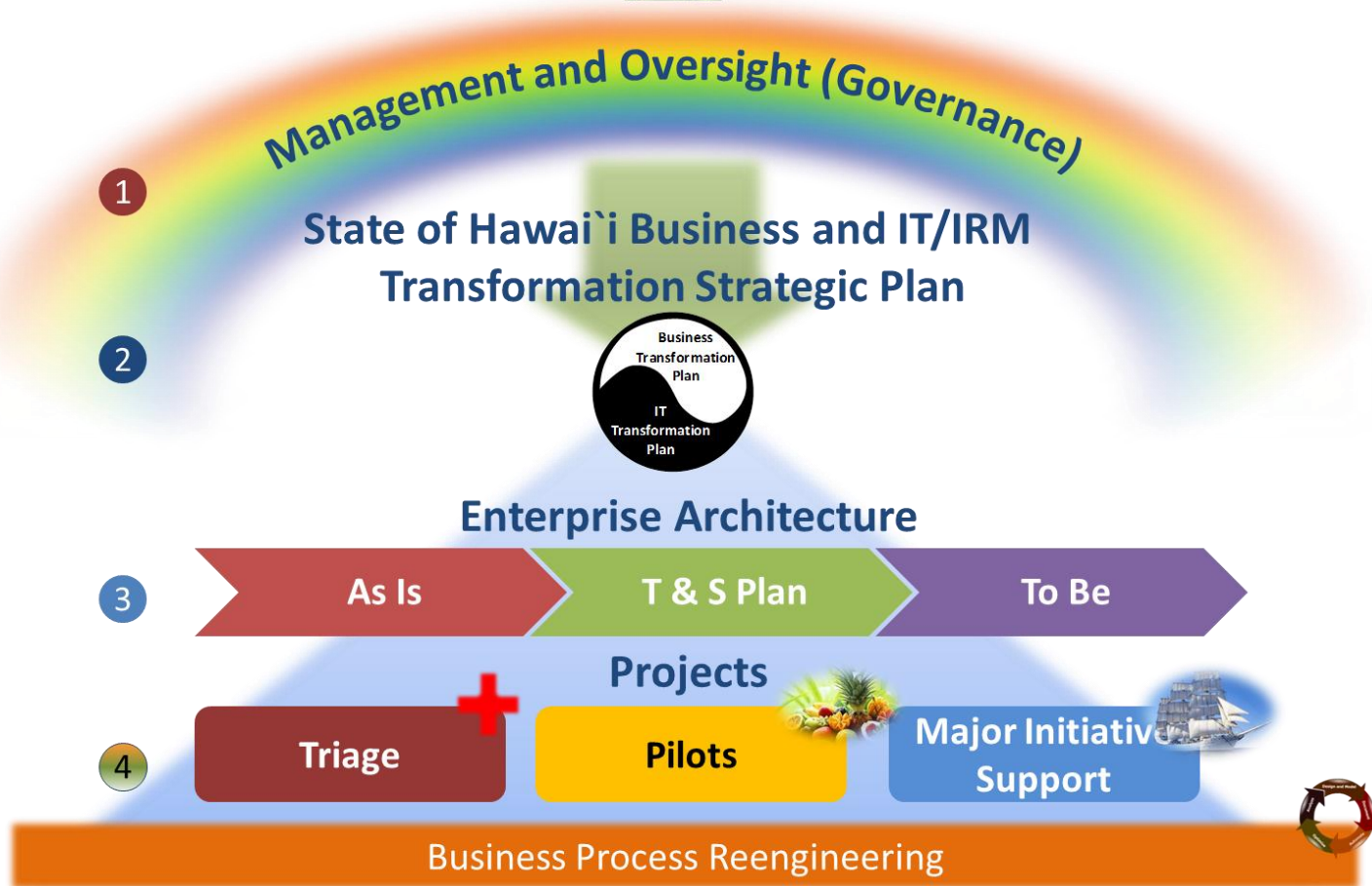# IT Steering Committee Meeting
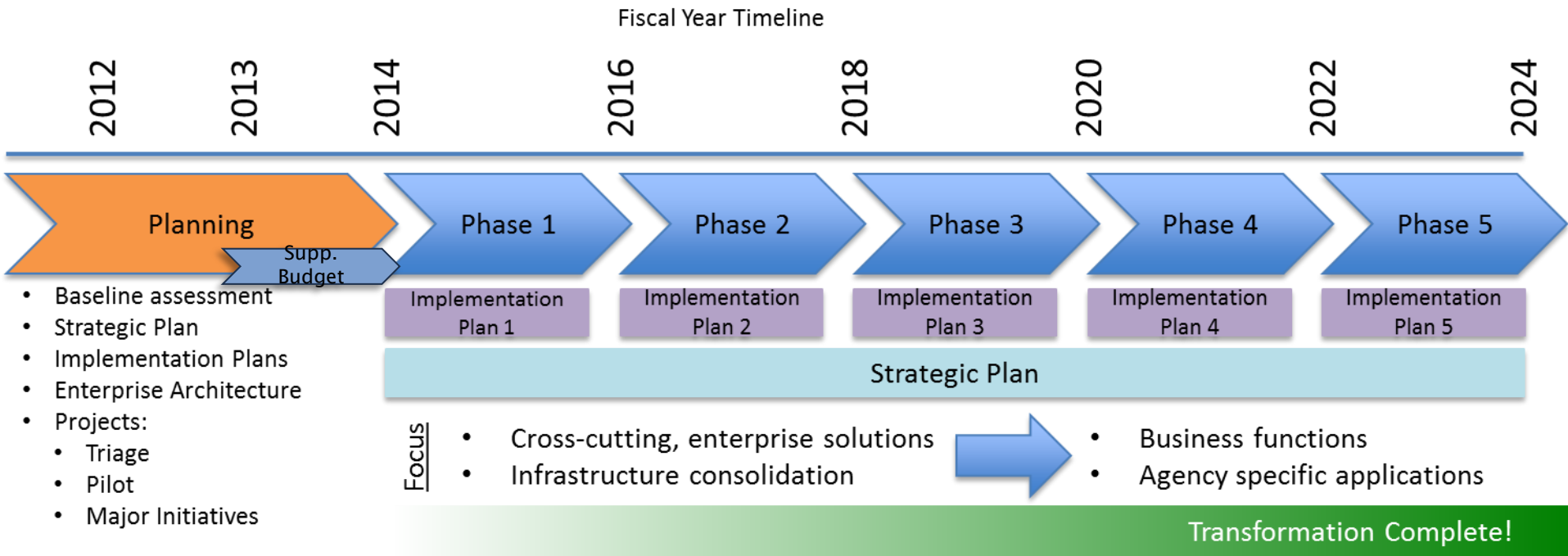
February 2, 2012
10:00 am – 11:00 am

Transformation Framework

Notional Transformation Timeline

- Multi-year, multi-phased approach

Fiscal Year Timeline

2012　2013　2014　2016　2018　2020　2022　2024

Planning

Supp. Budget

Phase 1　**Phase 2**　**Phase 3**　**Phase 4**　**Phase 5**

- Baseline assessment
- Strategic Plan
- Implementation Plans
- Enterprise Architecture
- Projects:
  - Triage
  - Pilot
  - Major Initiatives

| Implementation Plan 1 | Implementation Plan 2 | Implementation Plan 3 | Implementation Plan 4 | Implementation Plan 5 |

Strategic Plan

Focus

- Cross-cutting, enterprise solutions
- Infrastructure consolidation

- Business functions
- Agency specific applications

Transformation Complete!

Transformation Strategic Plan

Establish the high level proposed 10- year strategy for transforming Hawaii through business process reengineering and information technology.

Implementation Plans

Detailed operational plans for executing the transformation over a given two year period.

Biennium budget requests will align with each 2-year Implementation Plan

Draft 1.0 Deliverables

▸ Governance
- CIO Council Charter
- IT Steering Committee Charter
- Draft Executive Leadership Council Charter
- Policy Handbook – Table of Contents crosswalk
- Communications and Outreach Plan
- Enterprise Architecture (EA) Methodology
- Portfolio Management (PM) Methodology
- Project Management Office and Methodology
- System Development Life Cycle Methodology
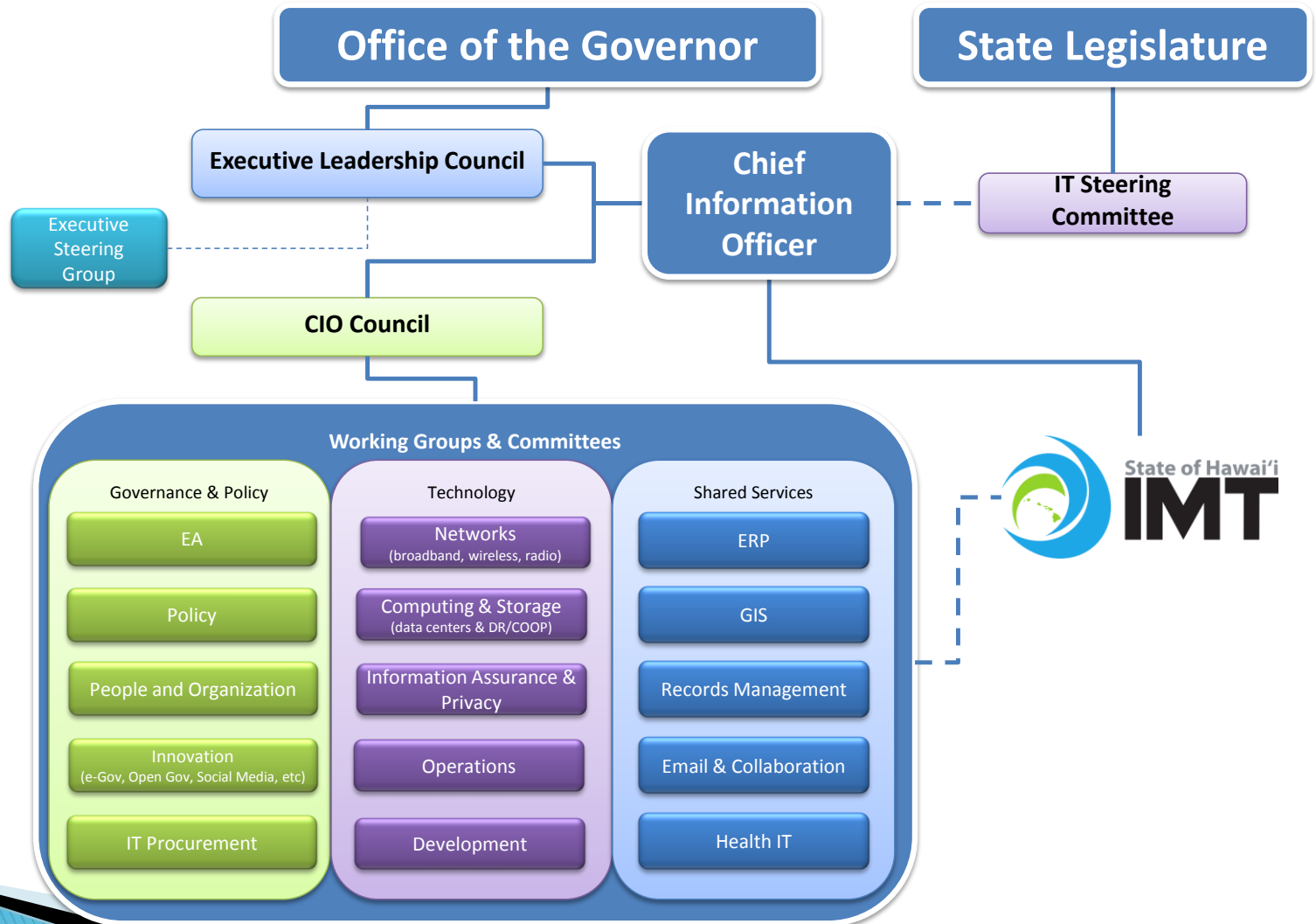
Draft 1.0 Deliverables

- Strategic Plan
  - State Of Hawai'i Business And Information Technology/Information Resource Management Transformation Strategic Plan
  - Mission/Vision/Goals/Objectives/Performance Measures

Draft 1.0 Deliverables

- Enterprise Architecture
  - ◦ Enterprise Business Architecture (As-Is and To-Be)
  - ◦ Enterprise Information Architecture (As-Is and To-Be)
  - ◦ Enterprise Solutions Architecture (As-Is and To-Be)
  - ◦ Enterprise Technology Architecture (As-Is and To-Be)
  - ◦ Transition and Sequencing Plan
    - · Clinger-Cohen Act Competency Areas View
    - · Portfolio View
    - · Line-of-Business View

Governance

CIO Council Working Groups

Office of the Governor

State Legislature

Executive Leadership Council

Chief Information Officer

IT Steering Committee

Executive Steering Group

CIO Council

Working Groups & Committees

Governance & Policy

- EA
- Policy
- People and Organization
- Innovation (e-Gov, Open Gov, Social Media, etc)
- IT Procurement

Technology

- Networks (broadband, wireless, radio)
- Computing & Storage (data centers & DR/COOP)
- Information Assurance & Privacy
- Operations
- Development

Shared Services

- ERP
- GIS
- Records Management
- Email & Collaboration
- Health IT

State of Hawai'i IMT

Strategic Plan

Transformation Strategic Plan

▸ Mission, Vision, Goals, Strategies, Objectives, and Performance Measures

Mission

To assist State organizations in the effective, efficient, and convenient delivery of programs and services to the public through business transformation and information technology modernization.

Vision

A State where:

- the public engages with an open and transparent government;

- State employees, citizens and businesses have convenient and secure access to reliable information;

- government processes are streamlined, integrated and implemented to meet the public's service expectations;

- business needs closely align with information technology capabilities;

- innovation and continuous improvement are fostered.

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Transformation Strategic Plan

- **Goals** – <u>what</u> we intend to accomplish
- **Strategies** – <u>how</u> we intend to accomplish the goals
- **Objectives** – specific, measureable outcomes that illustrate <u>why</u> we want to accomplish the goals
- **Performance Metrics** – the actual numbers we can look at that tell us <u>how well</u> we are doing achieving, or at least making progress toward, our goals

Transformation Strategic Plan

1

Ubiquitous and Secure Access to State Services for all Citizens of Hawaii (e-Government)

2

A Reliable, Accessible, Sustainable, and Secure IT Environment as A Utility to State Agencies

3

Efficient and effective Management of the State's IRM and IT Resources

National Strategic Goals*

DRAFT

Strategy
Technology
People
Expertise

Our Commitment

A World-Class IT Organization*

State of Hawai'i IMT

Transformation Strategic Plan

Goal 1 | Ubiquitous and secure access to State services for all Citizens of Hawaii (e-Government).

Strategy 1.1: Web-Enable State Services

Objective 1.1.1	All State services are available through a single Portal, and the Portal is available to all Citizens
Objective 1.1.2	All State-published datasets are available to the Citizens
Objective 1.1.3	Citizens' privacy and personal data are never compromised

Strategy 1.2: Engage the Citizens and Keep Them Informed

Objective 1.2.1	Citizens can ask questions/make suggestions/file complaints, and track the responses online
Objective 1.2.2	State uses social media (e.g. Twitter, Google+, Facebook, etc) and other "Web 2.0" technologies to communicate with Citizens

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*Performance Metrics for each Objective are to be determined

State of Hawai'i IMT

Transformation Strategic Plan

Goal 2 A reliable, accessible, sustainable, and secure information technology environment as a utility to State agencies.

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Strategy 2.1: Develop and Implement Critical Infrastructure Protection (CIP), Disaster Recovery (DR), and Continuity of Operations (COOP) Plans

Objective 2.1.1	Critical infrastructure is protected from threats
Objective 2.1.2	All infrastructure and services are backed up in real time with immediate fail-over capability
Objective 2.1.3	Plans are in place and periodically tested for Continuity of Operations in the event of a disaster

Strategy 2.2: Adopt a Shared Service-Oriented-Architecture (SOA) Across the Enterprise

Objective 2.2.1	Services common to multiple Departments have been identified and defined
Objective 2.2.2	Complex processes can be supported by orchestrating multiple independent ("loosely coupled") service components

*Performance Metrics for each Objective are to be determined

Transformation Strategic Plan

Goal 2   A reliable, accessible, sustainable, and secure information technology environment as a utility to State agencies.

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Strategy 2.3: Migrate Services and Data to the Cloud

Objective 2.3.1	All State services and data are available from anywhere via the Web
Objective 2.3.2	Common cloud infrastructure simplifies maintenance
Objective 2.3.3	Cloud infrastructure enables sharing of data and services

Strategy 2.4: Implement Industry-Standard Security and Privacy Practices

Objective 2.4.1	Only authorized users have access to State networks
Objective 2.4.2	Threats are identified at time of attack
Objective 2.4.3	A culture of security awareness has been established to reduce the probability of accidental loss
Objective 2.4.4	Data is encrypted so that the effects of compromise are reduced

*Performance Metrics for each Objective are to be determined

Transformation Strategic Plan

Goal 2

DRAFT

A reliable, accessible, sustainable, and secure information technology environment as a utility to State agencies.

Strategy 2.5: Adopt Modern Technologies

Objective 2.5.1	All State systems are still supported by developer
Objective 2.5.2	State can react quickly to changes in technology
Objective 2.5.3	No training on obsolete technology is required

Strategy 2.6: Establish Common Business, Technical, and Data Standards

Objective 2.6.1	Definitions and understanding of common business terms and functions are shared across the Departments
Objective 2.6.2	Departments use common infrastructure and services
Objective 2.6.3	Data taxonomies are established to reduce or eliminate redundancy
Objective 2.6.4	"XML First" is implemented

*Performance Metrics for each Objective are to be determined

Transformation Strategic Plan

Goal 3 | Efficient and effective management of the State's information and IT resources.

Strategy 3.1: Institute Strategic Planning, Lifecycle Governance, and Portfolio Management of IT Initiatives

Objective 3.1.1	All investments are aligned with strategic goals
Objective 3.1.2	Projects are managed as a portfolio
Objective 3.1.3	Reporting is done by extraction of data from management tools, not through forms or presentations
Objective 3.1.4	Data is entered once and persists through the investments' lifecycle
Objective 3.1.5	Management is done by exception

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Strategy 3.2: Establish Partnerships and Learn from Other Organizations

Objective 3.2.1	State policies and processes are in keeping with demonstrated best practices (e.g. ITIL, COBIT)
Objective 3.2.2	State participates actively in NASCIO
Objective 3.2.3	Industry is engaged periodically to provide advice and insight
Objective 3.2.4	Public–private partnerships are leveraged to benefit the State

*Performance Metrics for each Objective are to be determined

Transformation Strategic Plan

Goal 3 | Efficient and effective management of the State's information and IT resources.

Strategy 3.3: Promote Innovation, Collaboration, and Openness

Objective 3.3.1	Innovation program established
Objective 3.3.2	Enterprise collaboration tool deployed
Objective 3.3.3	Open government policy written

Strategy 3.4: Enhance the Careers of the State's IT Professionals

Objective 3.4.1	Improved career development opportunities established
Objective 3.4.2	Wireless/mobile/Tele-work solutions deployed

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State of Hawai'i IMT

*Performance Metrics for each Objective are to be determined

Transformation Strategic Plan

Goal 3 | Efficient and effective management of the State's information and IT resources.

Strategy 3.5: Implementing Organizational Change Management Practices to Sustain and Enhance Transformation

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Objective 3.5.1	Change management is an integral part of any transformation effort
Objective 3.5.2	Communications are targeted to the appropriate audiences and effectively convey the intent of IT efforts
Objective 3.5.3	Dashboards enable both Citizens and executives to monitor the status of State initiatives

Strategy 3.6: Simplifying and Automating IT Procurement

Objective 3.6.1	Departments can purchase IT hardware, software, and services online from a catalog
Objective 3.6.2	Enterprise licenses and service-level agreements are in place for most procurements
Objective 3.6.3	Purchase of IT that is identified in the target architecture is pre-approved from OCIO

*Performance Metrics for each Objective are to be determined

Transformation Strategic Plan

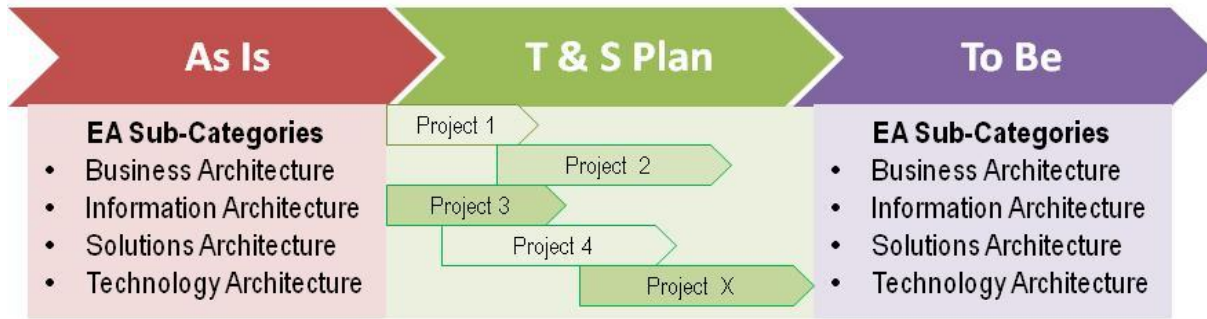Goal 3 | Efficient and effective management of the State's information and IT resources.

Strategy 3.7: Applying Enterprise Architecture (EA) and Business Process Reengineering (BPR) to Transform the State's Information Technology and Information Resource Management (IT/IRM)

| Objective 3.7.1	All processes in the State have been reviewed and reengineered to optimize efficiency and effectiveness
Objective 3.7.2	All transformation projects are a combination of business process and IT
Objective 3.7.3	A Project Management Office (PMO) is in place to oversee and assist with the management of transformation projects
Objective 3.7.4	Transformation projects are managed by the Departments, in compliance with OIMT policy, with assistance from OIMT

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State of Hawai'i IMT

*Performance Metrics for each Objective are to be determined

Architecture

Enterprise Architecture

State of Hawai`i EA Practice

| Architecture	FEA/FSAM Reference Model	Features
Enterprise **Business** Architecture	• Business Reference Model • Performance Reference Model • (Business perspective of) Services Component Reference Model	• LOB Stewardship • Value Chain • Core Mission Areas • Internal Support Areas • Horizontal Enterprise Services Layer

Enterprise **Information** Architecture	• Data Reference Model	• Management of Shared Data
		  - Enterprise
		  - LOB
		• Data Stewardship
		• Data Standardization

Enterprise **Solutions** Architecture	• (IT perspective of) Services Component Reference Model	• IT Services Integration Layers
		  - Enterprise
		  - LOB

Enterprise **Technology** Architecture	• Technical Reference Model	• Solution Patterns (Reference Architectures) • Technology Architecture Taxonomy • Guiding Principles • Technology Standards & Guidelines
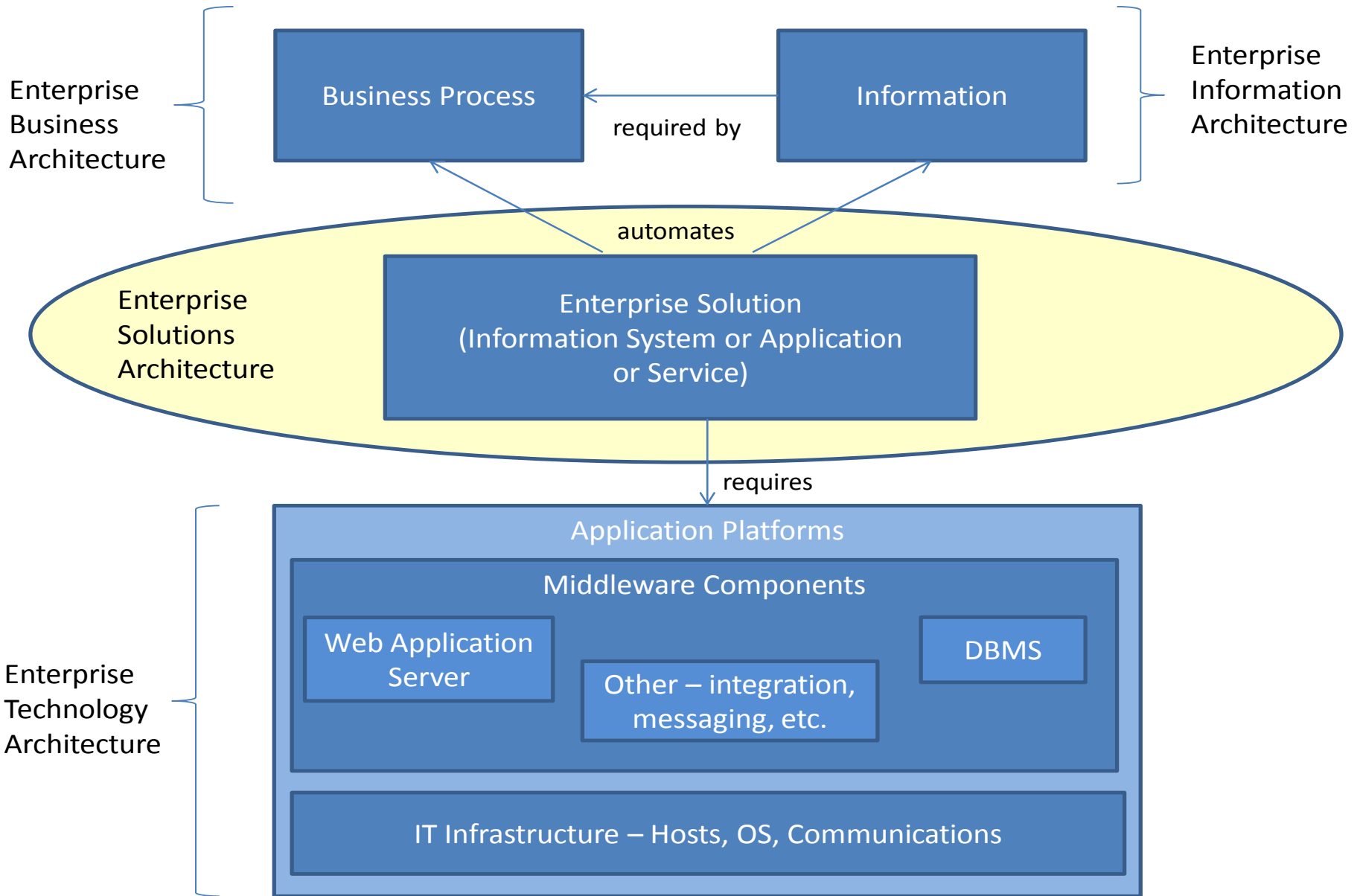
State of Hawaii Business Model

20 Core LOBs
~150 Services

14 Support LOBs
~50 Services
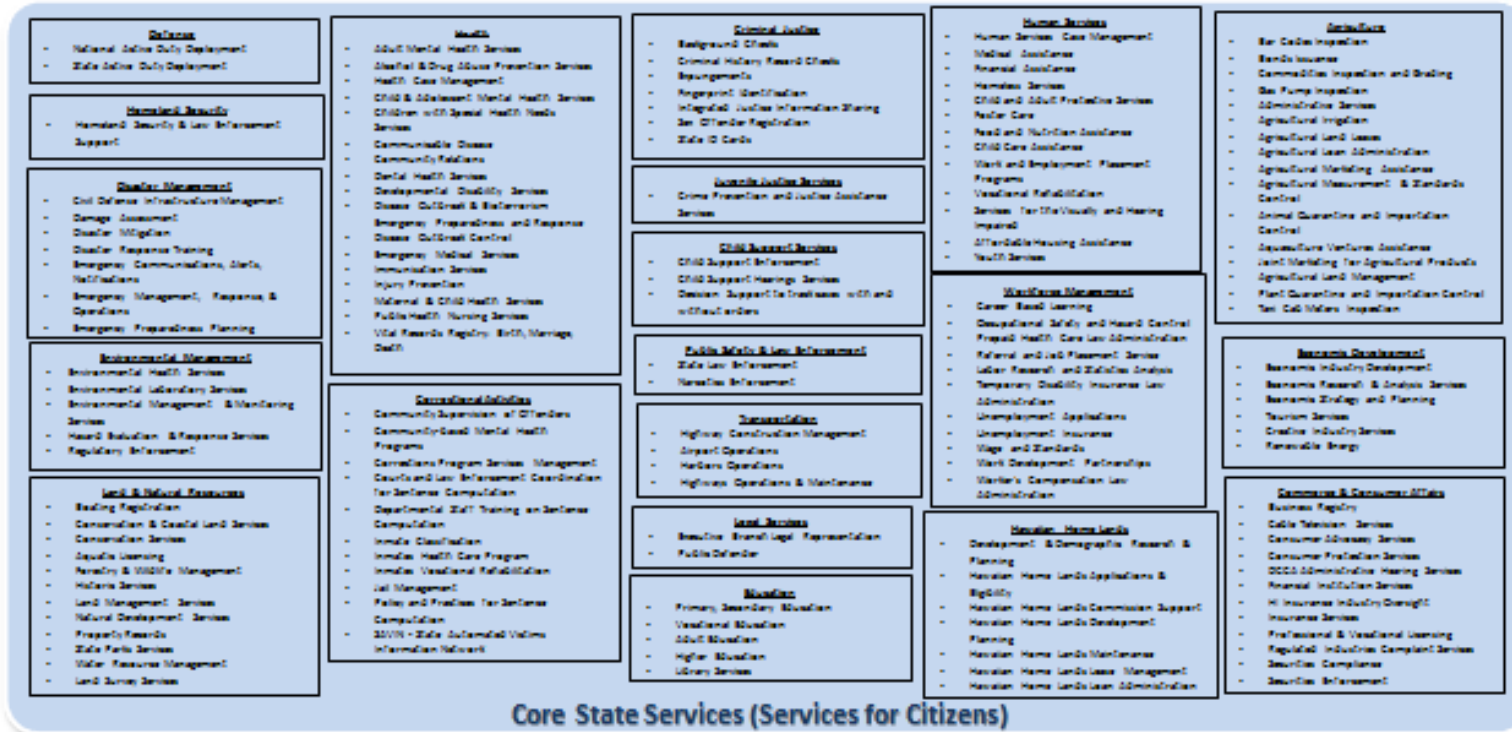
Core State Services (Services for Citizens)
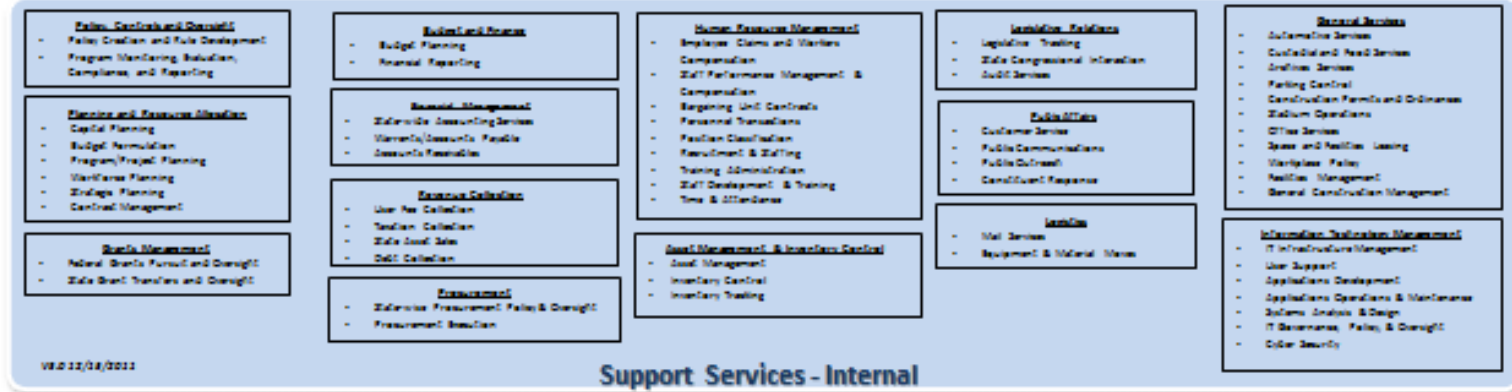
Support Services - Internal

State of Hawai'i IMT

34 Total LOBs
~200 Services

Future State
Enterprise Information Architecture Vision

State of Hawai'i
IMT

OPEN GOVERNMENT & CITIZEN ENGAGEMENT

INFORMATION STEWARDSHIP & GOVERNANCE

Data → Information → Knowledge

SECURITY/PRIVACY

FEDERATED SEARCH
KNOWLEDGE MGMT
COLLABORATION
DOCUMENT MGMT

LOB

Enterprise

LOB

LOB

LOB

WEB 3.0 Semantic Web Environment

XML
RDF
SPARQL

COMMON INFORMATION FRAMEWORK

- Information Standardization (Syntax & Semantics)
- Information Classification
- Information Confidentiality, Integrity, & Availability

"… one Web ...of Data and Services, on Everything, for Everyone"

WIRELESS/ MOBILE/ RADIO

SmartPhone

Tablet

Web

Laptop

Customer Portal

State of Hawai'i
IMT

Future State
Enterprise Solutions Architecture Vision
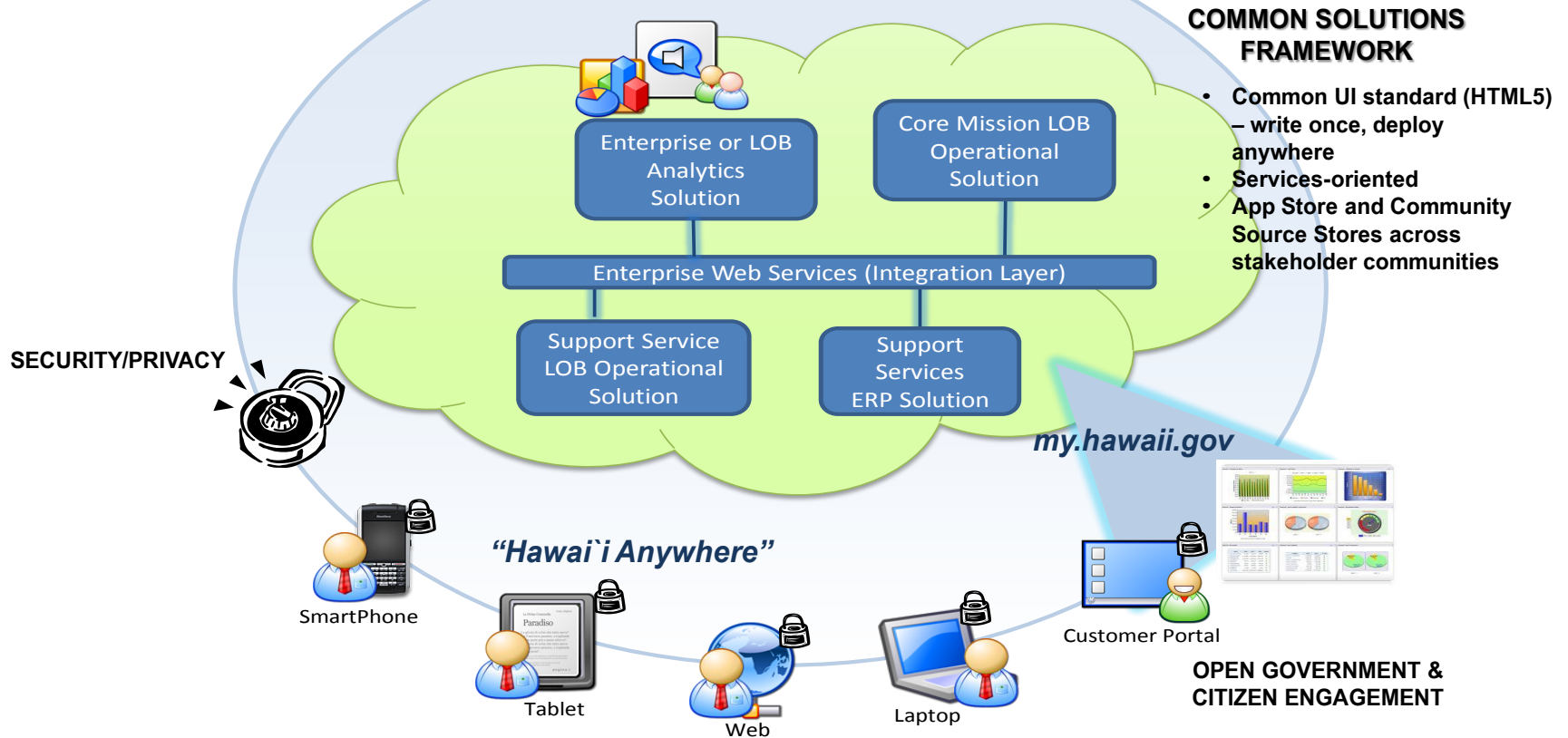
COMMON SOLUTIONS FRAMEWORK

- **Common UI standard (HTML5) – write once, deploy anywhere**
- **Services-oriented**
- **App Store and Community Source Stores across stakeholder communities**

Enterprise or LOB Analytics Solution

Core Mission LOB Operational Solution

Enterprise Web Services (Integration Layer)

Support Service LOB Operational Solution

Support Services ERP Solution

SECURITY/PRIVACY

my.hawaii.gov

"Hawai`i Anywhere"

SmartPhone

Tablet

Web

Laptop

Customer Portal

OPEN GOVERNMENT & CITIZEN ENGAGEMENT

Enterprise Technology Architecture Vision
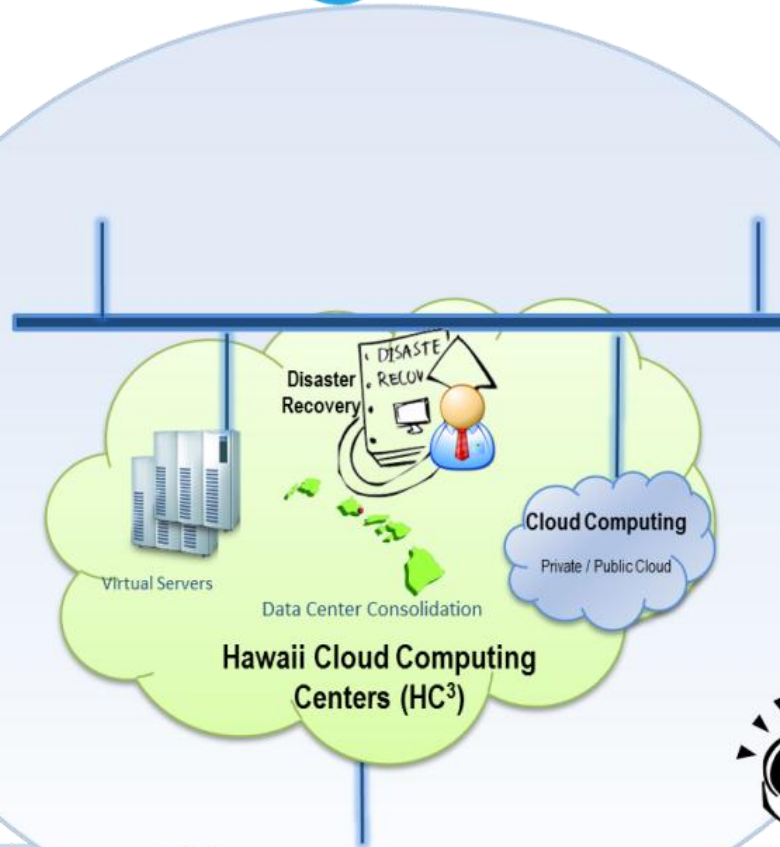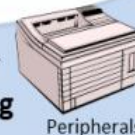
Projects

Triage Projects

- AD/DNs
- DLP
- Virtual Server
- Wireless Lt Gov
- High Speed Printer
- Data entry

Pilot Projects

- Open Data
- Web Site design
- IT Dashboard
- Training
  - Burton research site
  - Quotes to review
    - Total Network Solutions
    - Global Knowledge
    - ESI International
    - HAWAII Computer Training & Solutions
- Summit – Center for Digital Government 1/25

Major Initiatives

- Health IT
- Broadband
- Longitudinal Data Systems
- GIS - Strategic Planning Working Group meeting held January 27