



Florida Department of
TRANSPORTATION

Information Technology Strategic Plan

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Office of Information Systems
October 24, 2014

Update

Mission

- This Data Symposium will bring together public and private data providers to share knowledge regarding needs, **availability, and methods for sharing and integrating data** to provide optimum value and use by FDOT and its partners ... *and the citizens it serves*

Background

- FDOT and its partners currently collect and report on a variety of transportation data to accomplish business objectives
 - These data are related to roadway performance, condition and inventory
 - The data is multimodal, covering highway (auto/truck), aviation, rail, seaport, transit, pedestrian and bicycle travel/movement/ management and facilities
 - The data is used for a variety of business functions including asset management, performance measurement, planning, operations (including traveler information), maintenance, and preservation of the multimodal transportation system.

Opportunity

- FDOT is interested in *maximizing efficiency in collecting and disseminating such data* and ensuring the information derived from the data is directly relevant to business decision making and the needs of the public
- FDOT recognizes that there are a variety of private sector data solutions utilizing technology to provide similar data and information

Challenge

- Currently the Department does not have a unified approach as to how it manages information across the enterprise
- We are data rich and information poor
- The technologies and architectures to solve this challenge are mature and available today

Approach and Purpose

- FDOT undertook an initiative to **develop an Enterprise-wide Information Technology Strategy** and sponsored a **critical assessment of the Department's information technology capabilities, personnel, and infrastructure**
- The intent of the process was to **align the Department's technology assets with its functional business units' operational needs** (Central Offices, District Offices, Intelligent Transportation System, and Turnpike Enterprise)

FDOT Mission

The Department will provide a safe transportation system that ensures the mobility of people and goods, enhances economic prosperity and preserves the quality of our environment and communities.

Information Technology Strategic Initiatives

Enterprise Information Technology Governance

Establish effective enterprise governance to develop, maintain and protect FDOT's information assets

Key Tasks

- Develop a program charter defining roles, responsibilities and decision authorities
- Inventory existing governance tools and methods
- Identify gaps in needed governance methods and tools
- Align resources to implement governance structure
- Provide support for enterprise governance implementation / Communicate to ensure interested parties are informed and heard
- Engage in continuous process improvement

Enterprise Information Management

Improve decision making with an enterprise view of all financial and non-financial information

Key Tasks

- Develop a program charter defining roles, responsibilities and decision authorities
- Inventory existing information assets and sources
- Identify met and unmet information needs
- Recommend information architecture framework
- Develop policies, procedures and information architecture framework implementation plan
- Execute implementation plan
- Provide program management, communications, and change management support

Uniform Information Technology Standards

Ensure all technology is assessed, developed, deployed, and supported using consistent standards and methodologies

Key Tasks

- Develop a program charter defining roles, responsibilities and decision authorities
- Inventory existing IT standards and protocols (i.e., formal and informal standards)
- Determine additional and enhanced IT standards needed by the Department
- Collaborate across the enterprise to develop, enhance, and formalize IT standards
- Communicate and implement new standards
- Develop and implement process to ensure standards remain current

Support Strategic Initiatives through effective Communications Program, Organizational Change Management, and Project Management

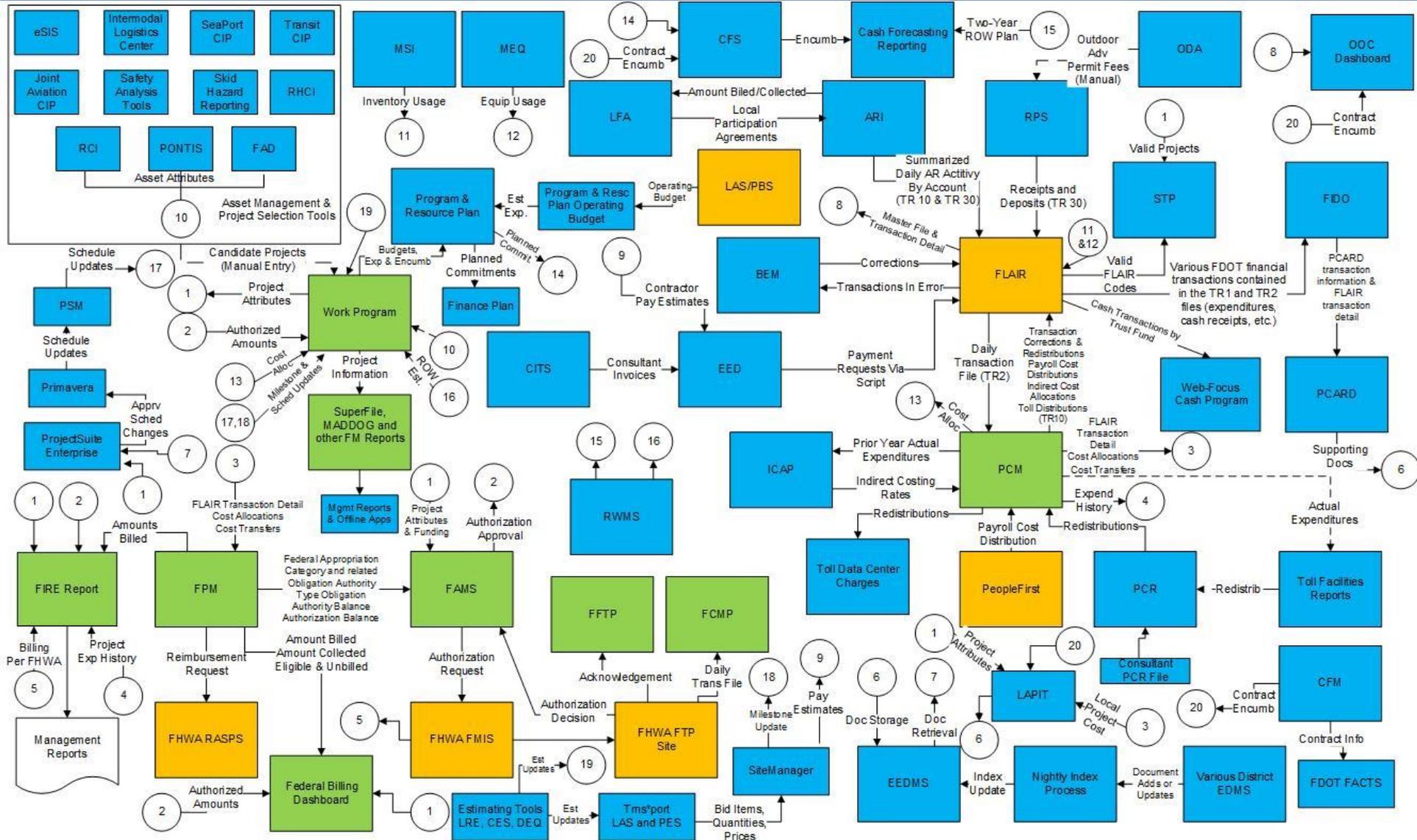
IT Improvement Initiatives

Continue to identify and implement critical OIS initiatives such as mobile technology standards development, systems and enterprise architecture definition and documentation, and enterprise infrastructure documentation.

One of Many Examples

- The following slide shows how diverse and disparate systems have evolved at FDOT without a governing IT Strategy
- ... the diversity of the underlying systems
- ... and the complexity of the resulting data interfaces

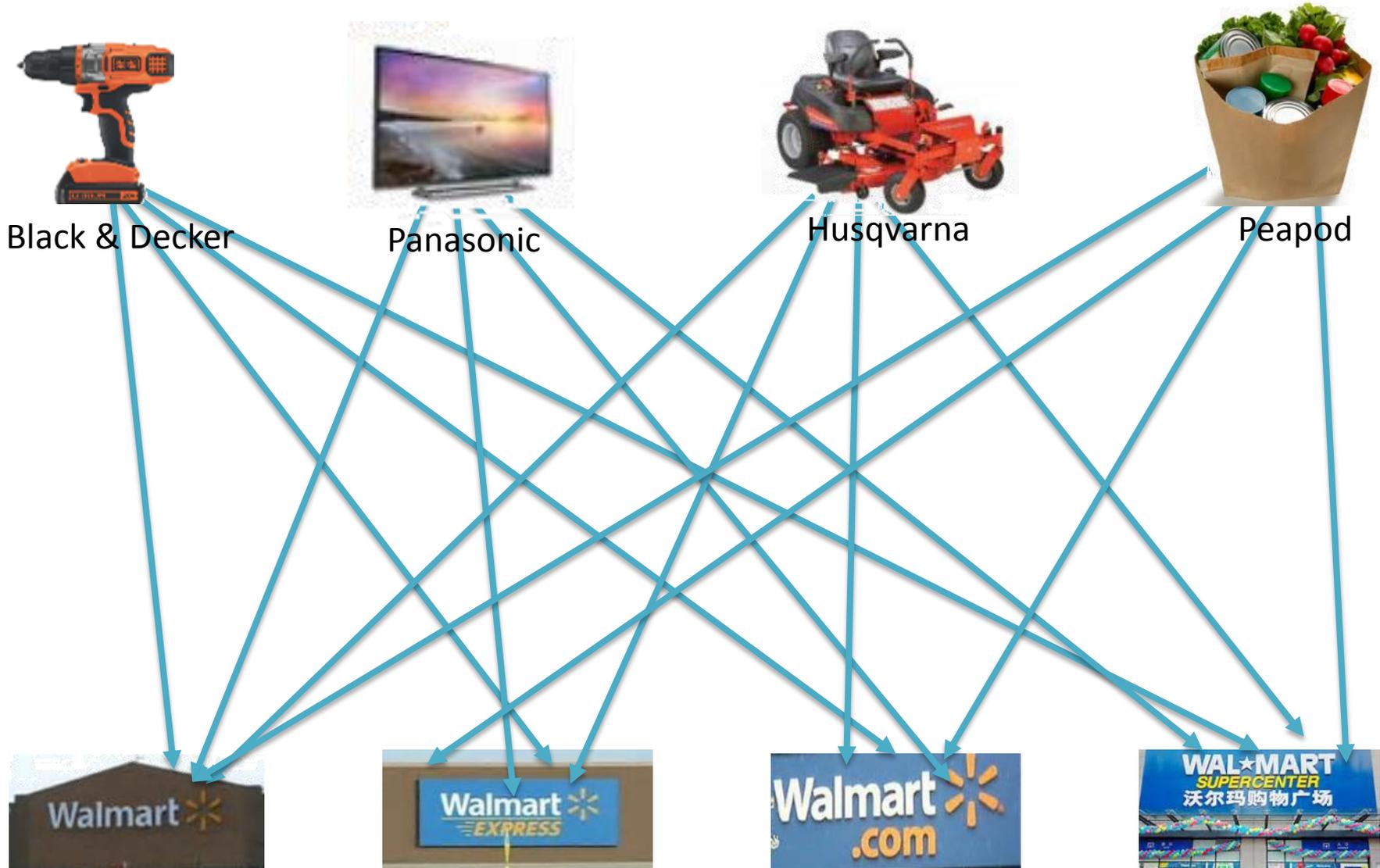
Example of One System's Landscape



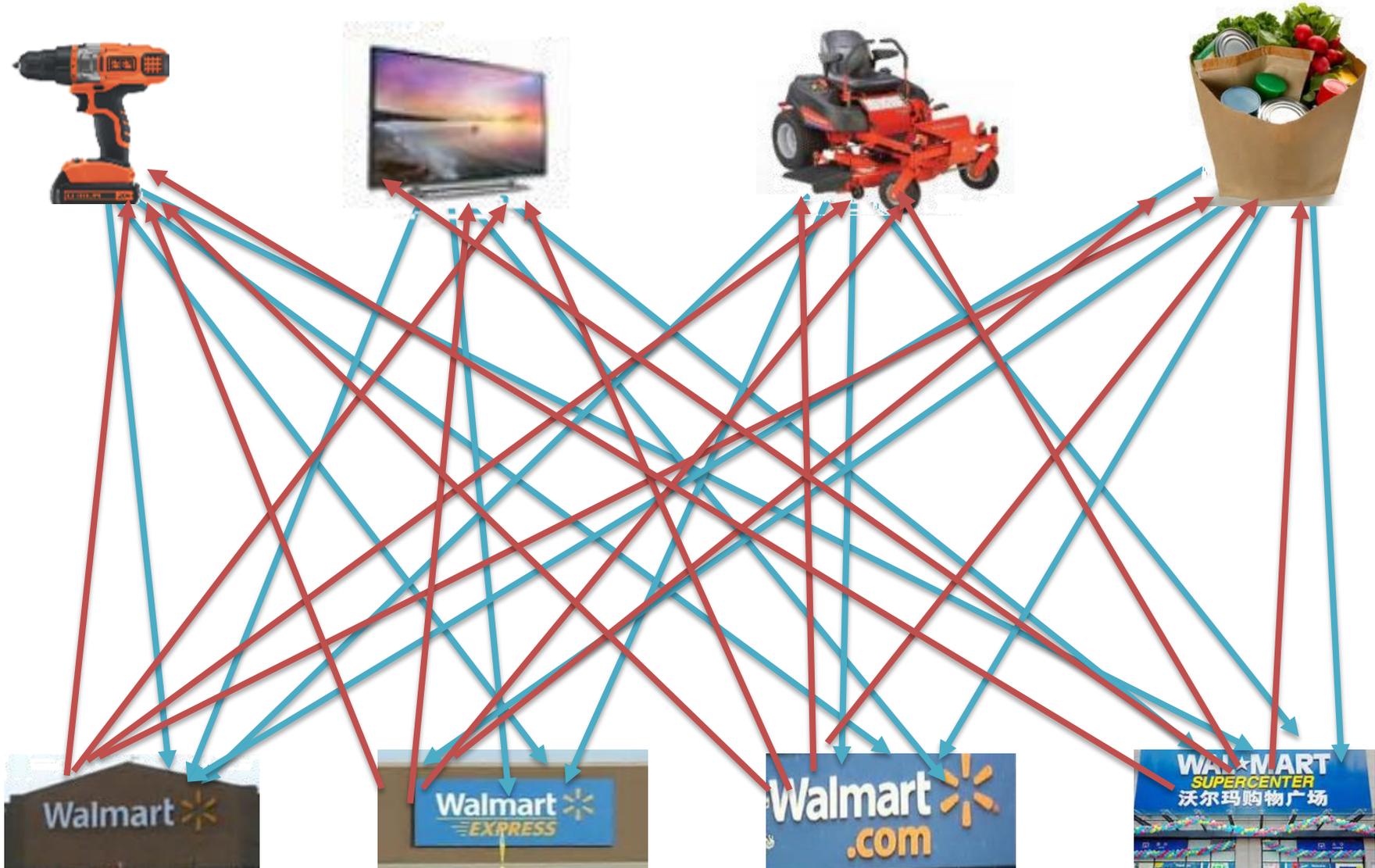
What we want to avoid

- Here is a practical example of what we want to avoid and where we want to go

An Enterprise Data Analogy



An Enterprise Data Analogy



An Enterprise Data Analogy

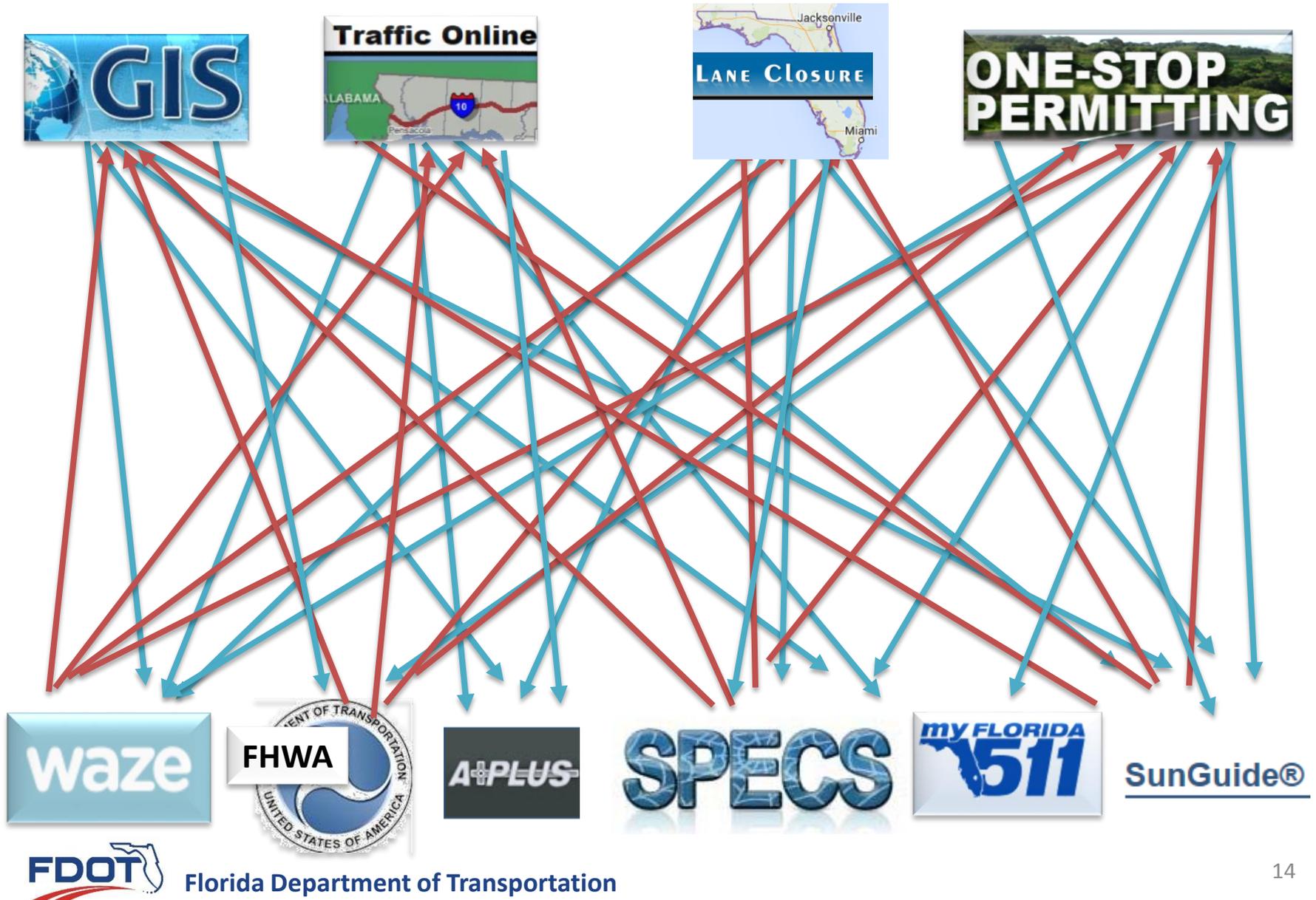


Receive,
Validate,
Inventory

Secure,
Store,
Ship



An Enterprise Data Tragedy



An Enterprise Data Strategy



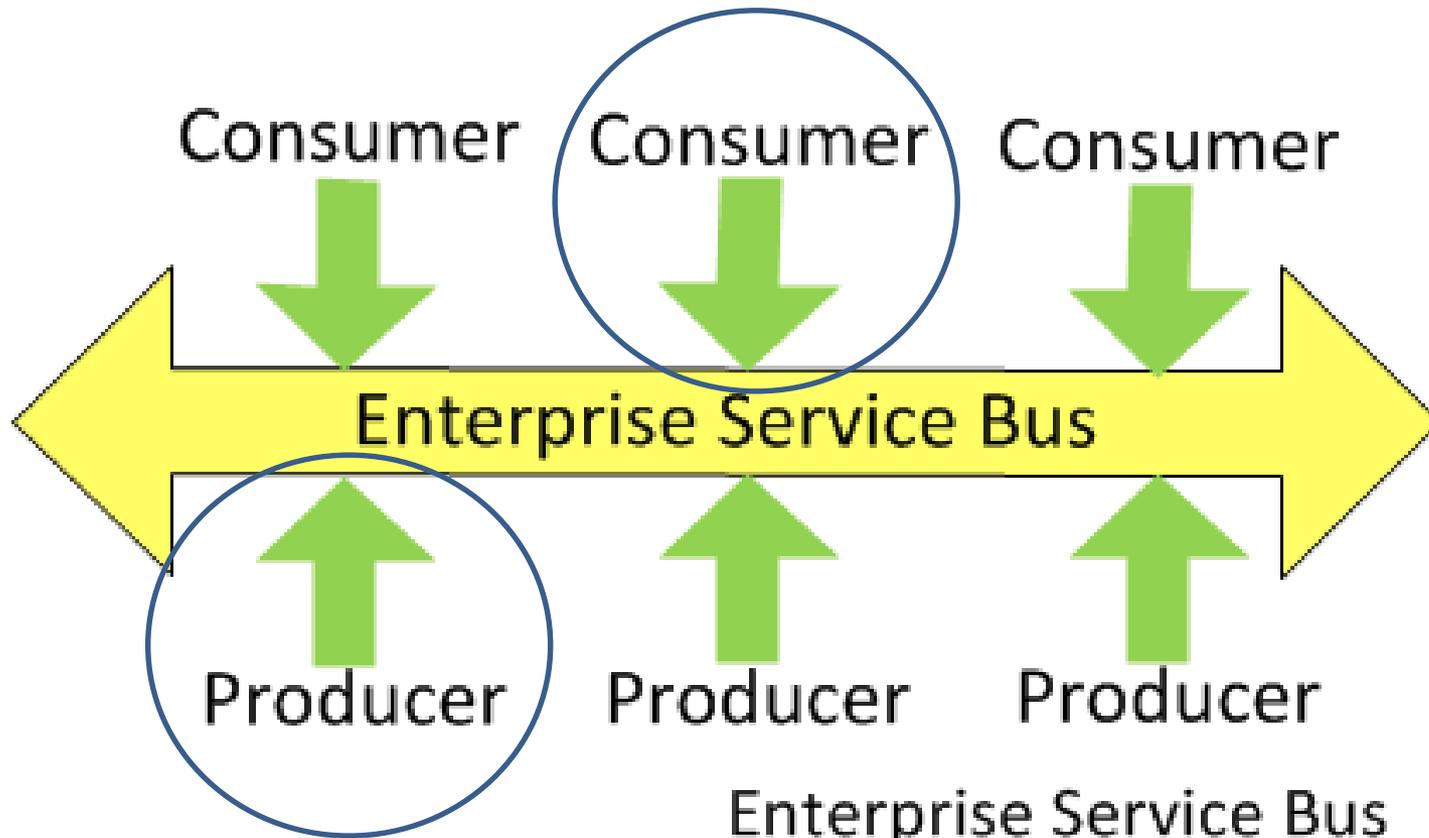
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Florida Department of Transportation

One Architectural Alternative

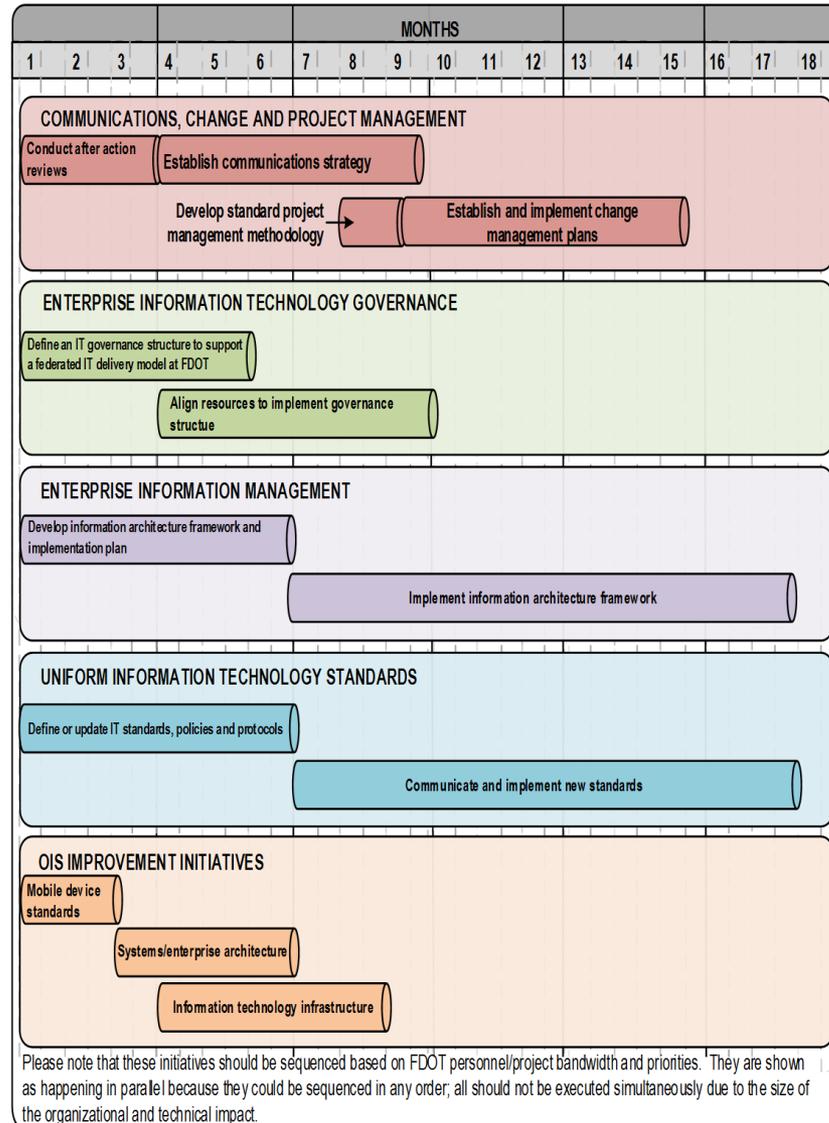


Enterprise Service Bus
simplicable.com

Follow-on Actions

- The following actions will significantly enhance the Department's ability to achieve its mission:
 - **Information Management:** Create a complete inventory of existing Department data assets
 - **Standards:** Develop, maintain, and enforce standards for information security, information management, and information technology acquisition, development, deployment, and use
 - **Governance:** Identify and empower a single unit within the Department to oversee information technology across the full enterprise spectrum
 - **Enterprise Architecture:** Document, implement, and maintain a single technology EA across the Department
 - **Budget:** Determine actual IT spend and align budgets to support Department goals

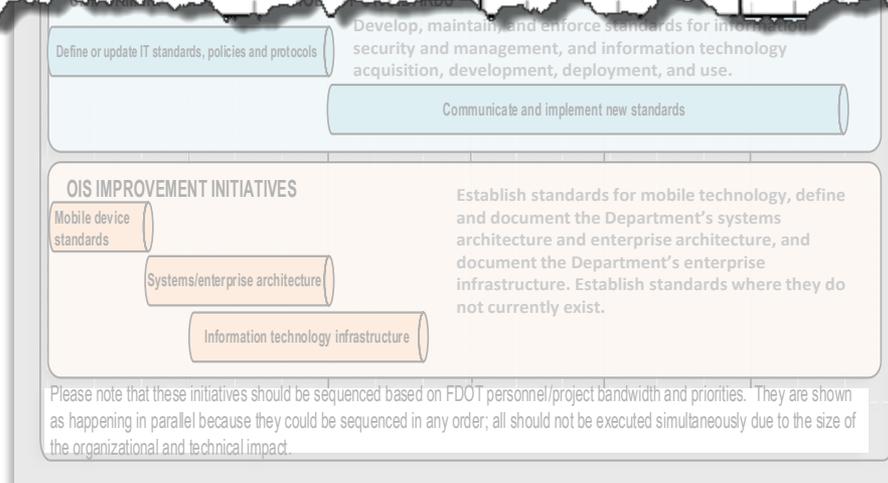
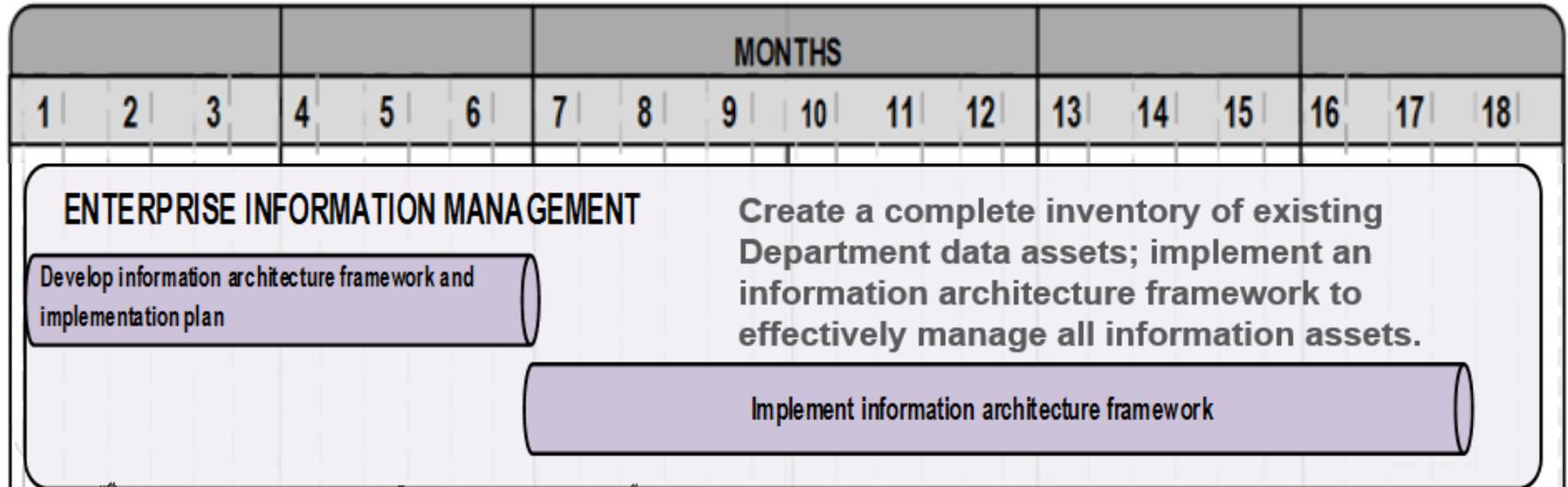
Next Steps - Roadmap



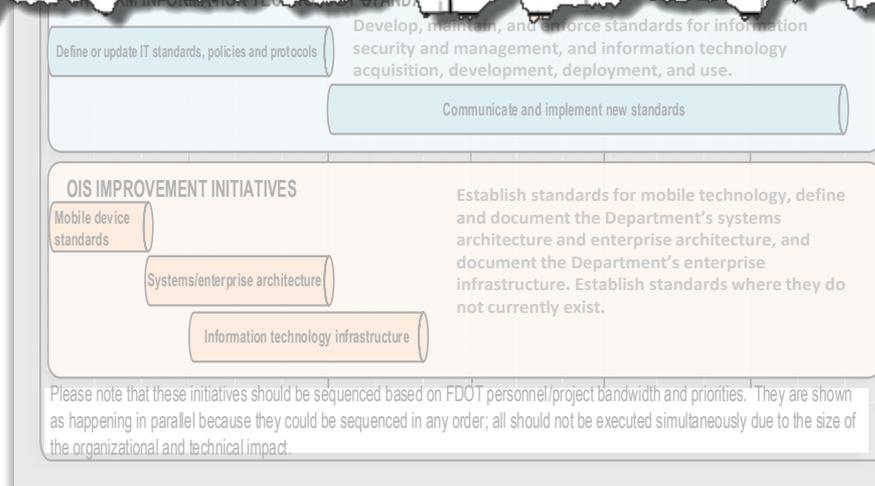
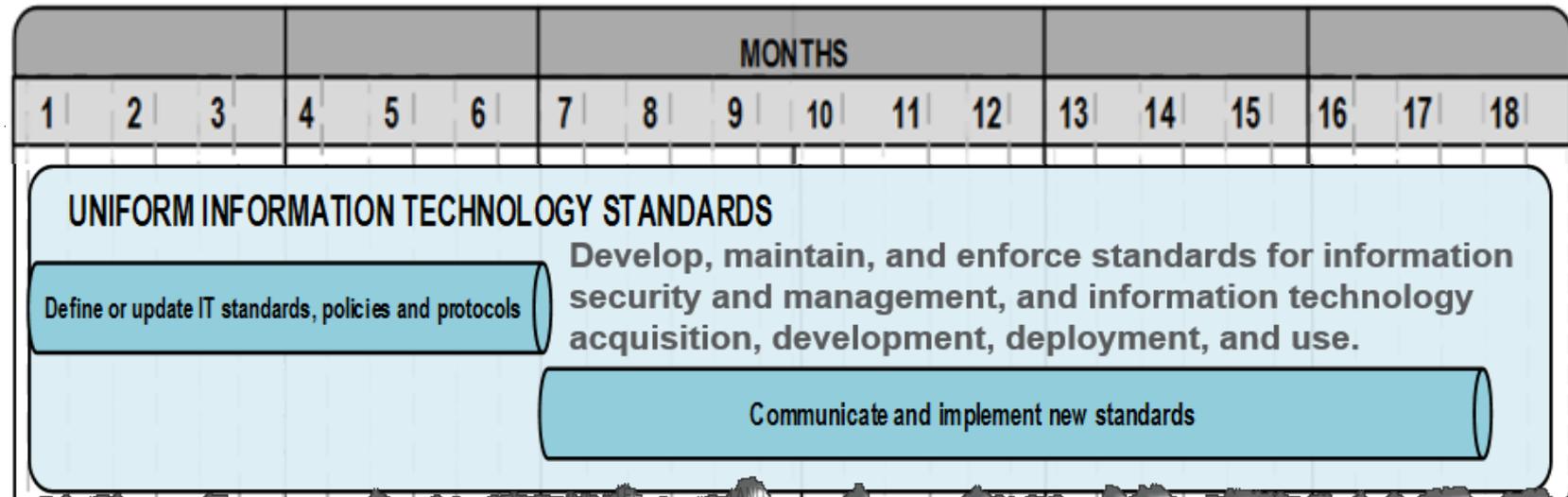
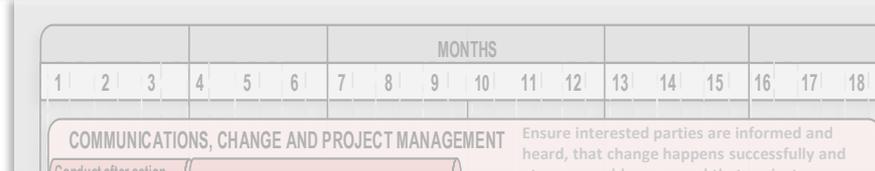


Questions?

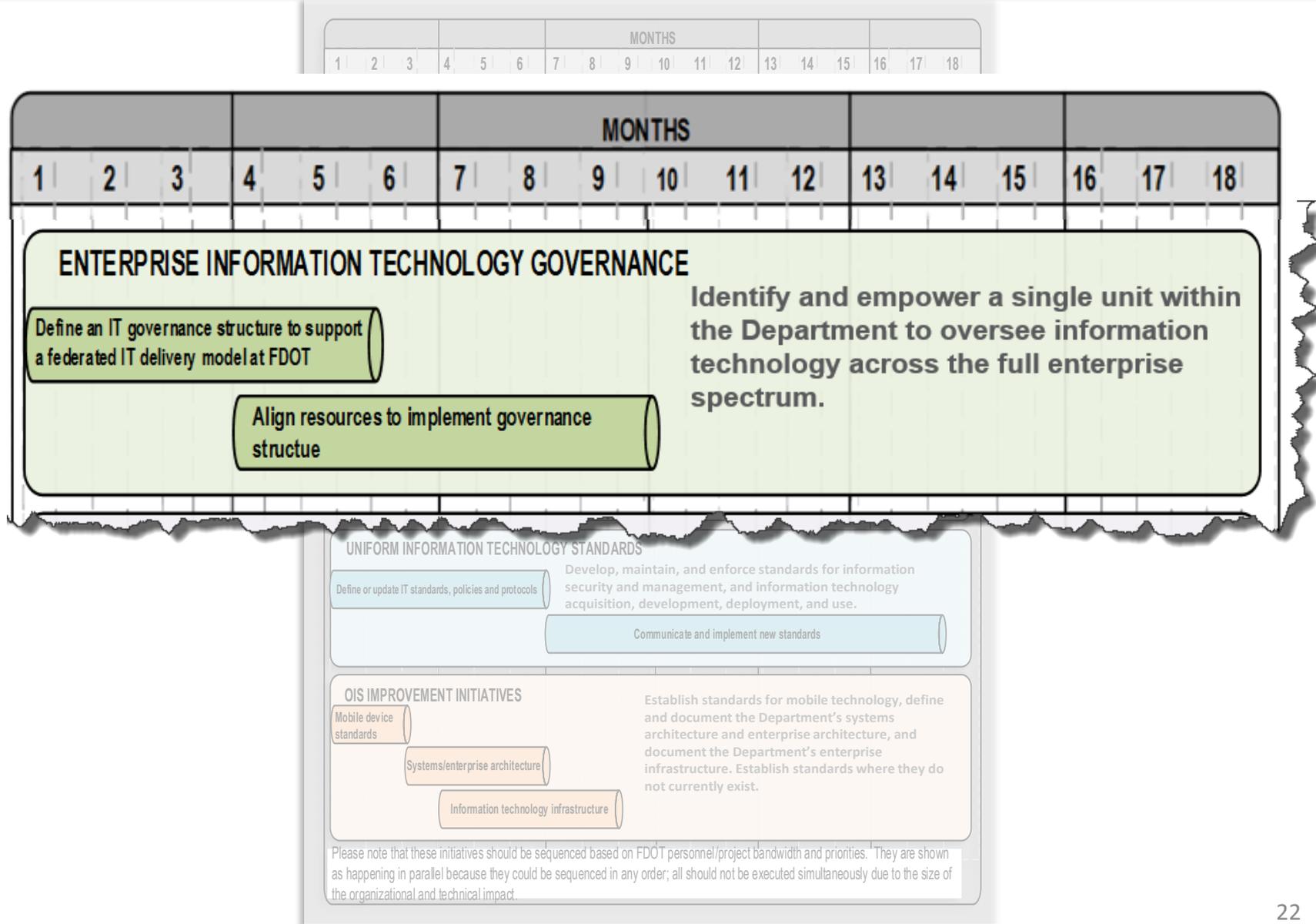
Next Steps – Information Management



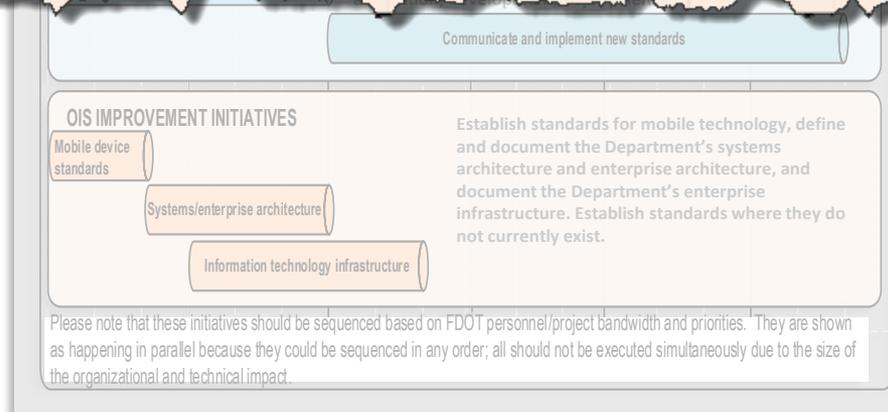
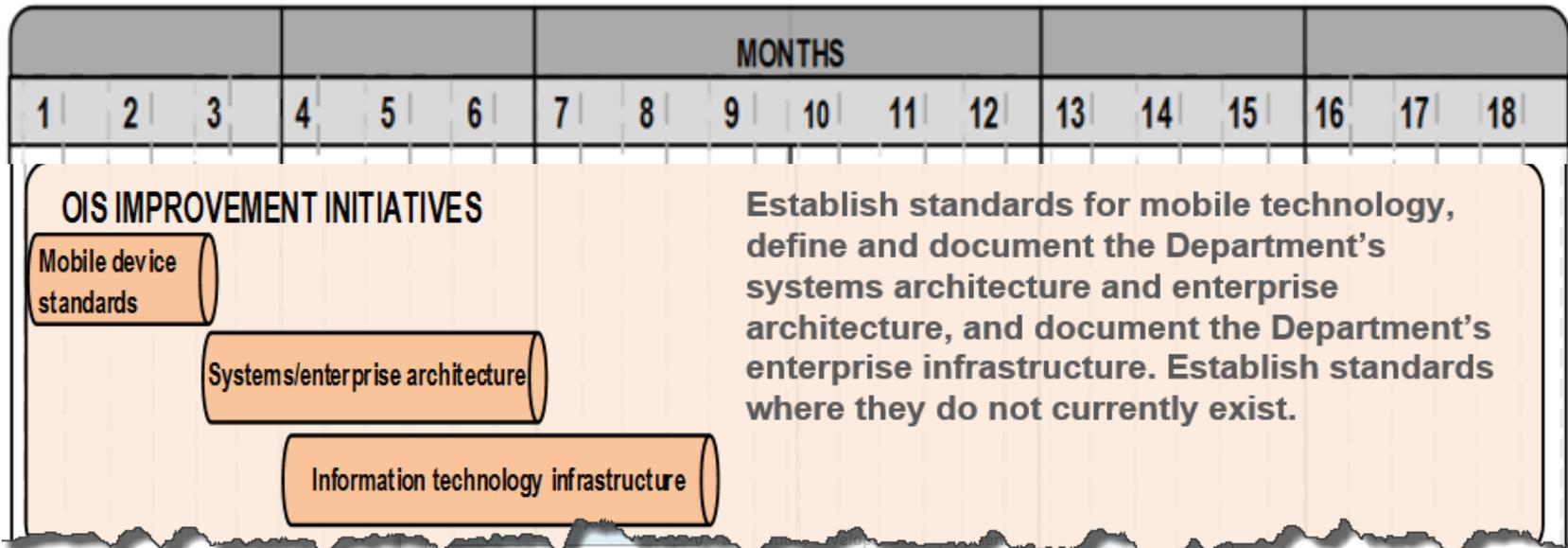
Next Steps - Standards



Next Steps - Governance



Next Steps – OIS Improvements



Next Steps – Change Management

