



Federal Aviation Administration

***Enterprise Architecture—
an Enabler of
Secure E-Government***

SecurE-Biz Summit

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Information Services and Chief
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FAA's Enterprise Architecture Liftoff



Enterprise Architecture

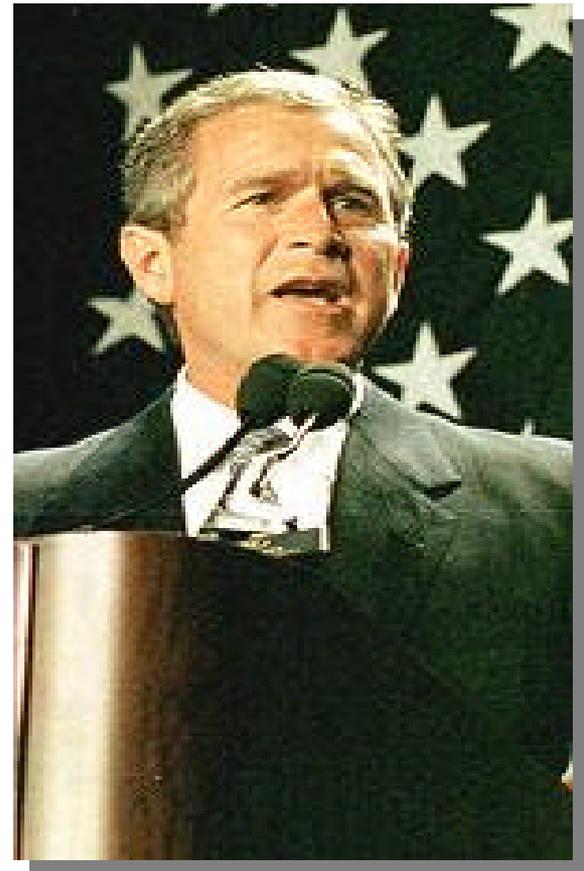
Multiple Layered Protection

Forces of Change

Information Technology Landscape

President's Management Agenda

- 1st Priority: Make Government citizen-centered
- 5 Key Components:
 1. Strategic Management of Human Capital
 2. Improved Financial Performance
 3. Expanded Competitive Sourcing
 4. [Electronic Government](#)
 5. Budget and Performance Integration



E-Government Drivers



Customer Demand



Technological Advances



Progress

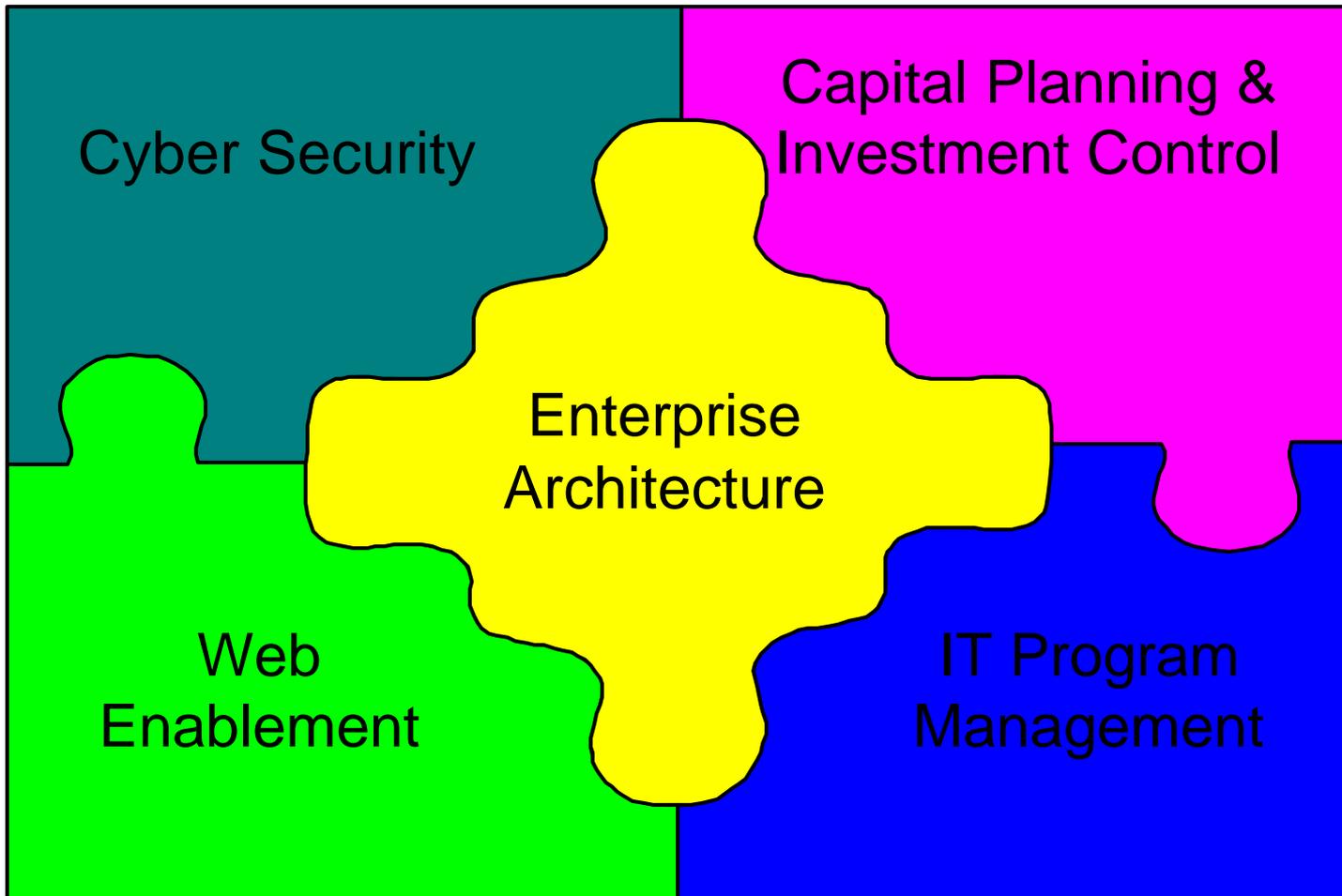


Cost and Time Pressures



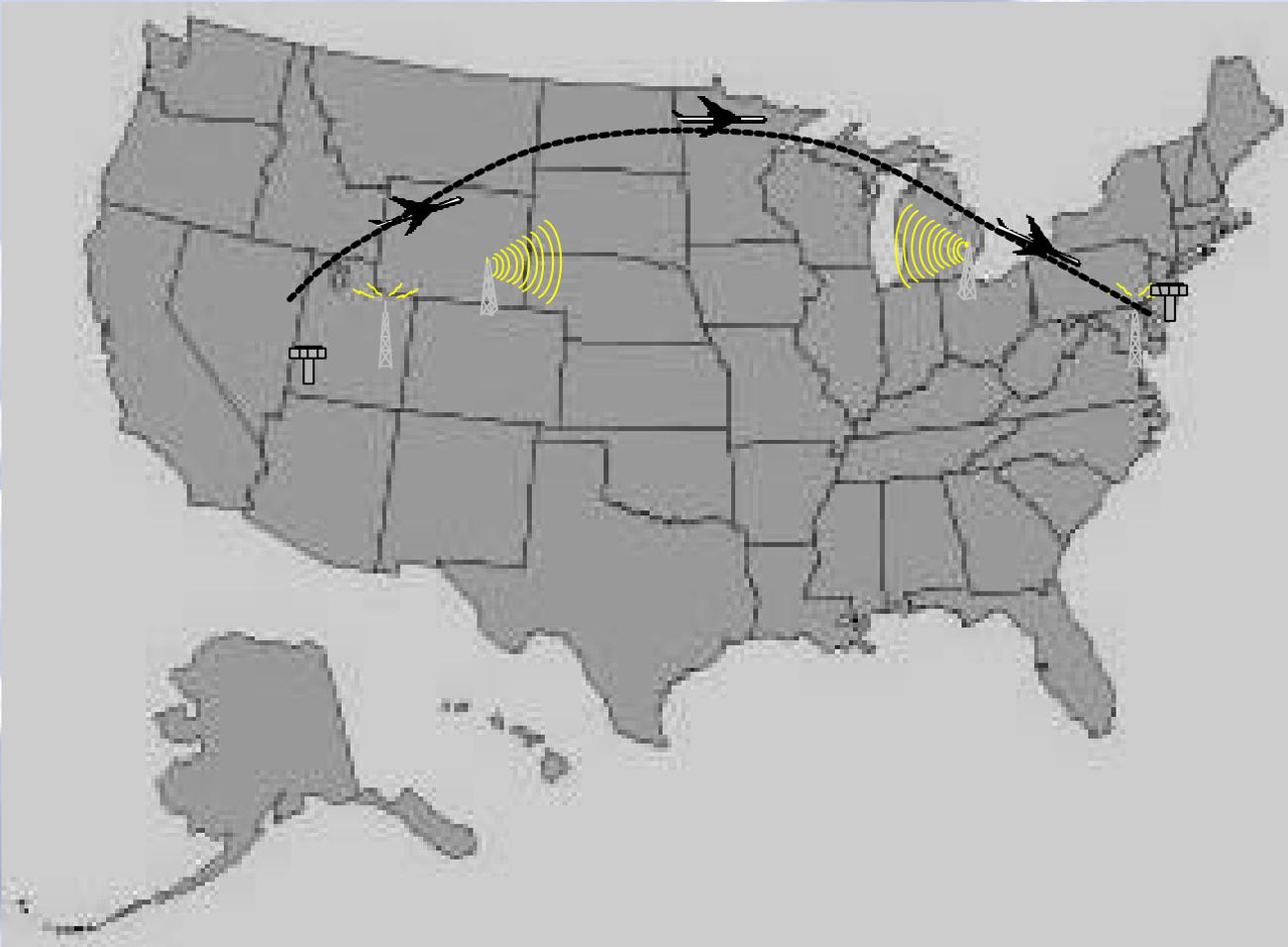
Statutory Mandates

E-Government Key Components



FAA's Job

- **Manage 35,000 commercial flights to move 2,000,000 passengers safely each day**
- **Support more than 35,000 general aviation flights on a daily basis**
- **Regulate and certify the people and aircraft that use our airspace**



- **~ 500 FAA Managed Air Traffic Control Towers**
- **~ 180 Terminal Radar Control Centers**
- **20 Enroute Centers**
- **~ 60 Flight Service Stations**
- **~ 40,000 Radars, NAVAIDs, Radios, etc.**

FAA's Enterprise Architecture Liftoff



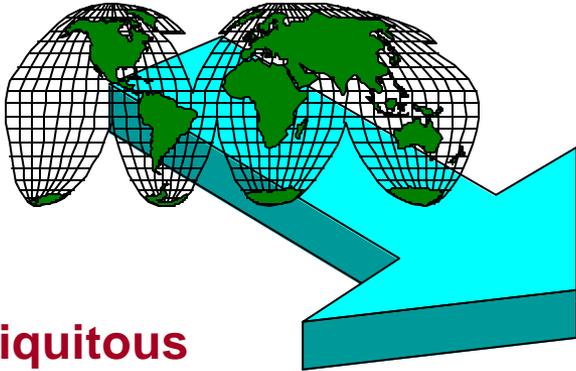
Enterprise Architecture

Multiple Layered Protection

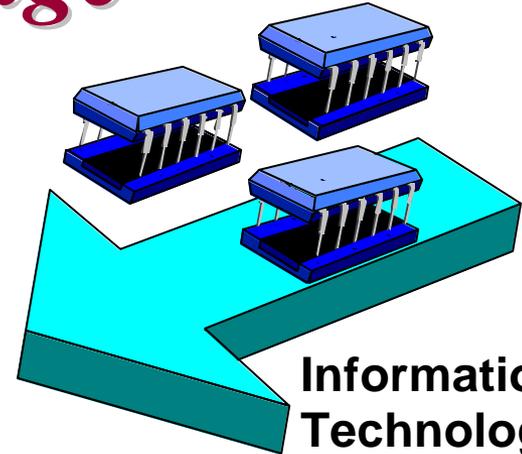
Forces of Change

Information Technology Landscape

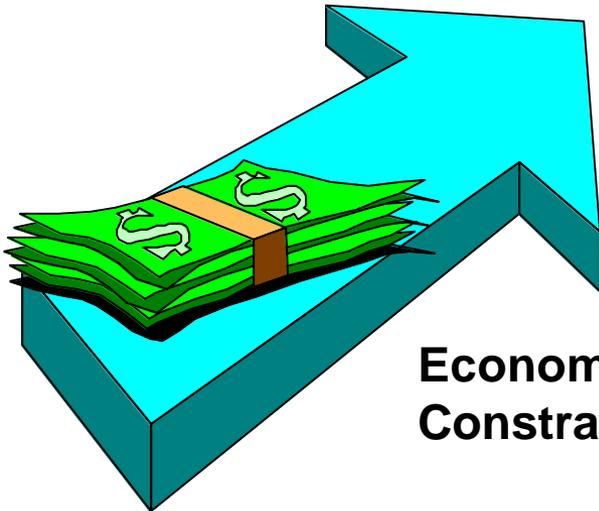
Forces of Change



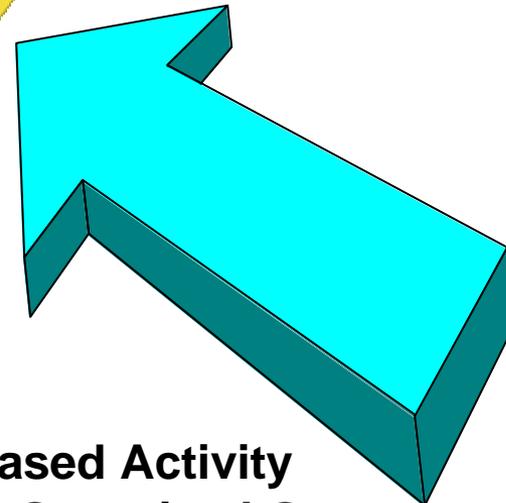
**Ubiquitous
Availability of
Information**



**Information Age
Technology
COTS/TCP-IP**

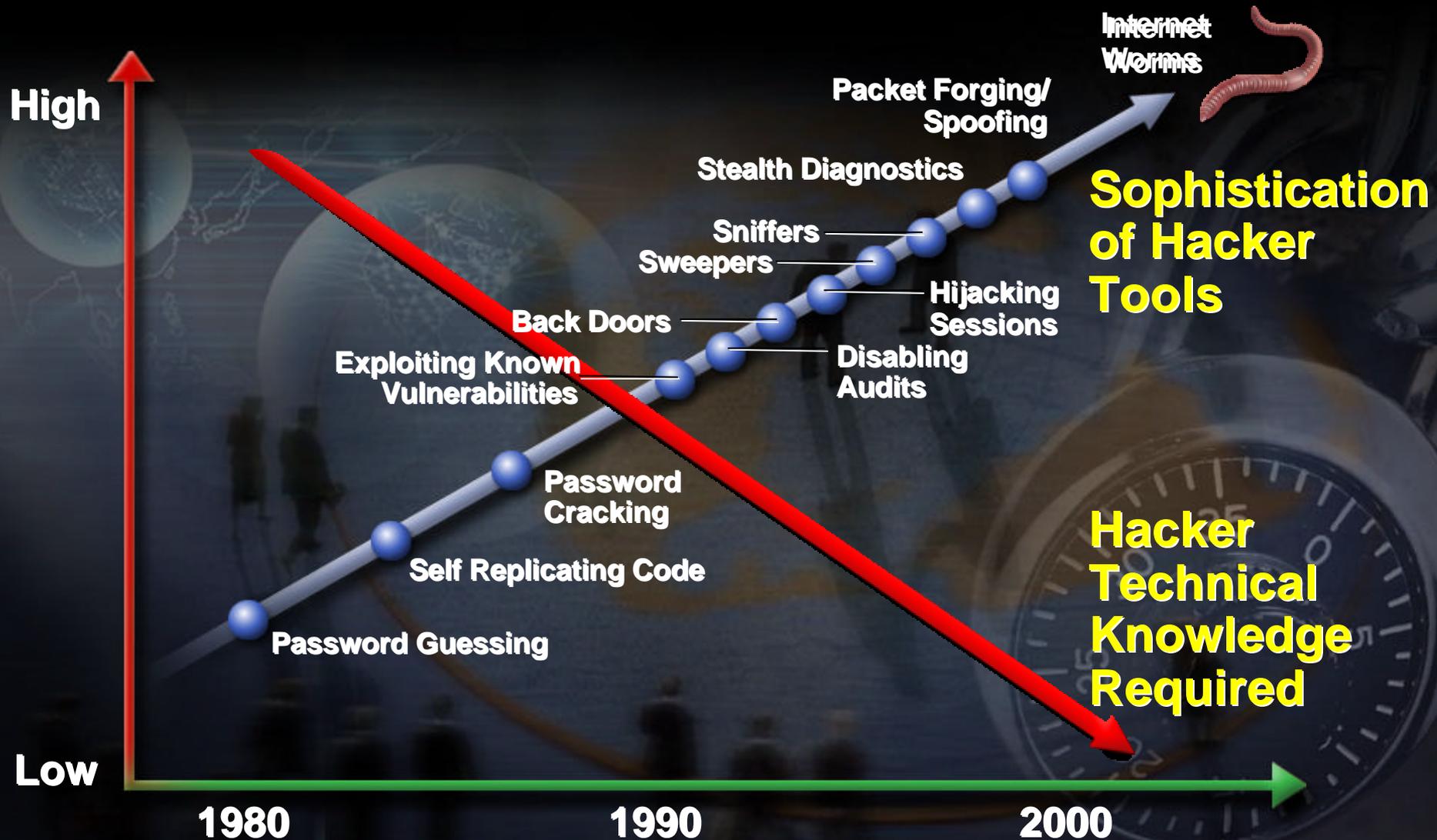


**Economic
Constraints**

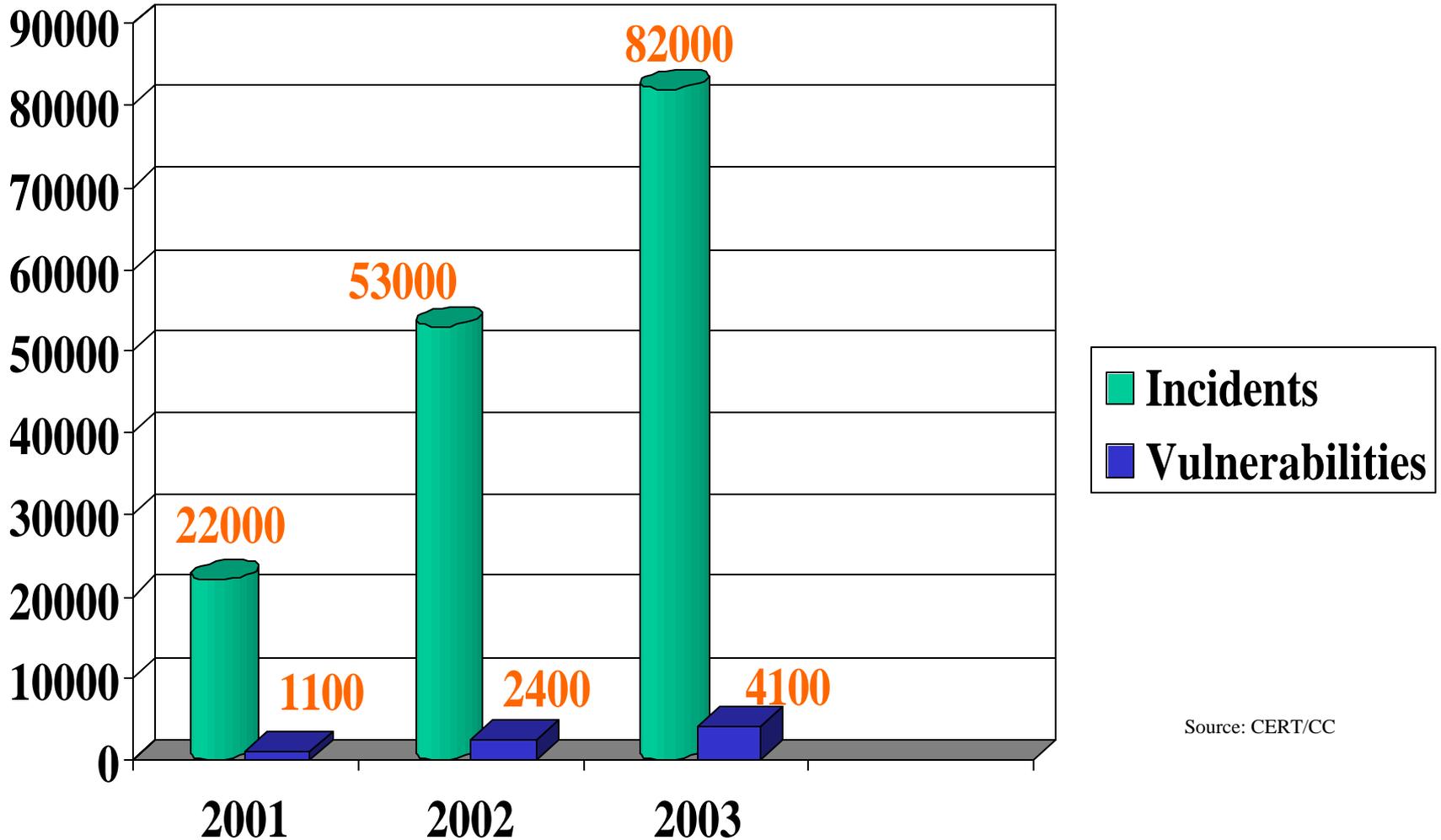


**Increased Activity
From Organized Groups
And Nation States**

Security and the Evolving Threats



Incidents Reported



Source: CERT/CC

FAA's Enterprise Architecture Liftoff



Enterprise Architecture

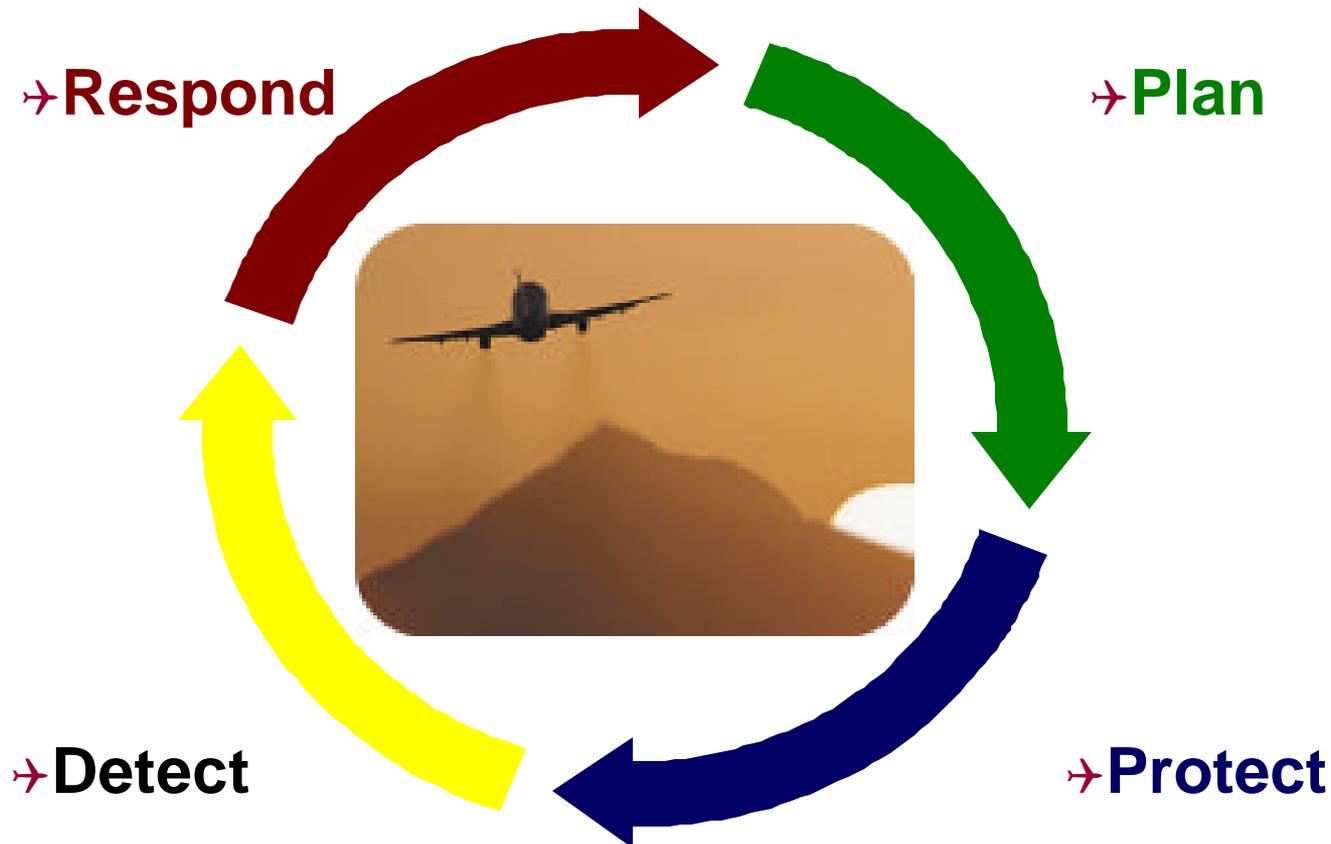
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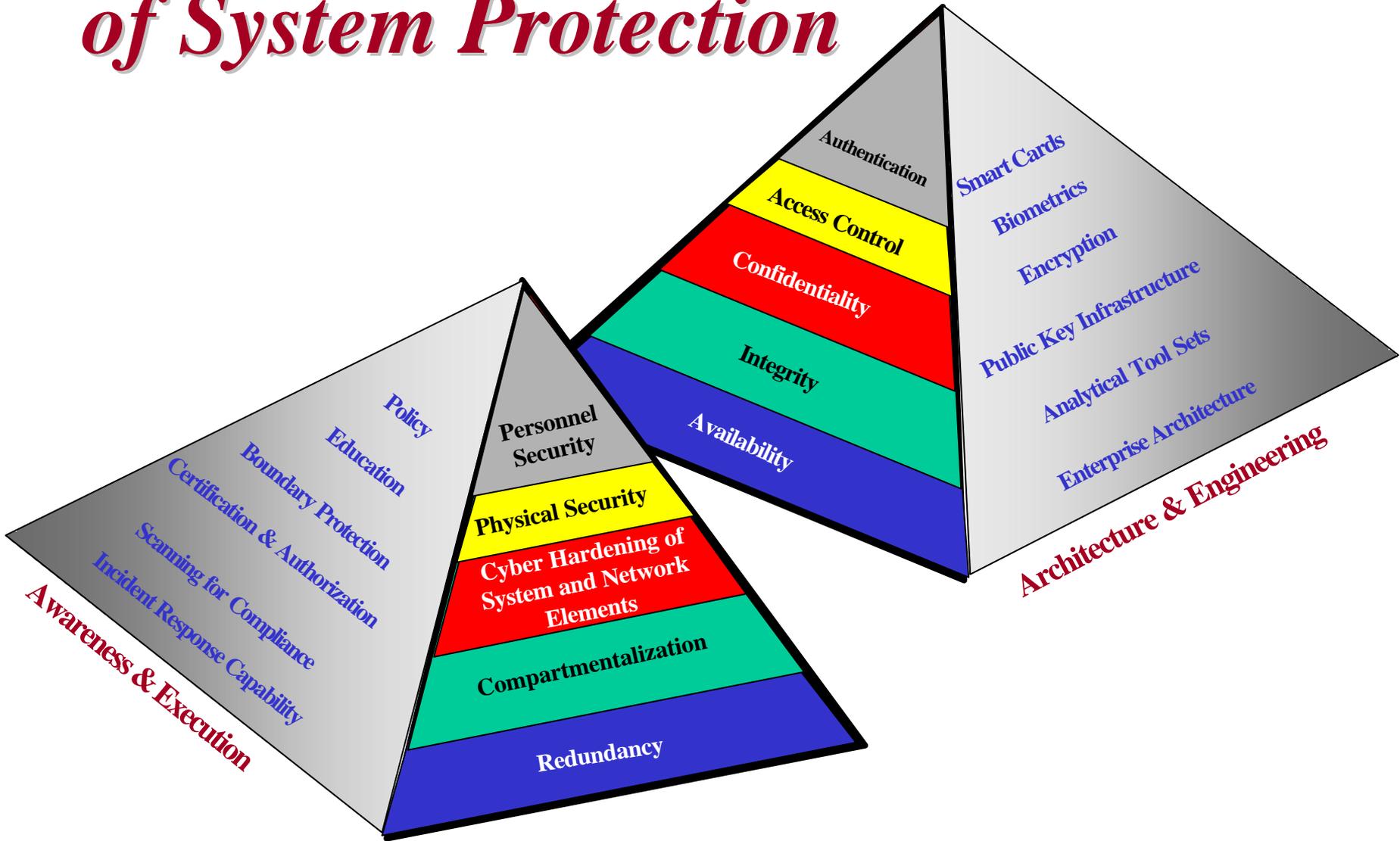
Information Technology Landscape

CIO's Cyber Security Mission

Protect the FAA's information infrastructure and help the aviation industry reduce security risks through leadership in innovative information assurance initiatives



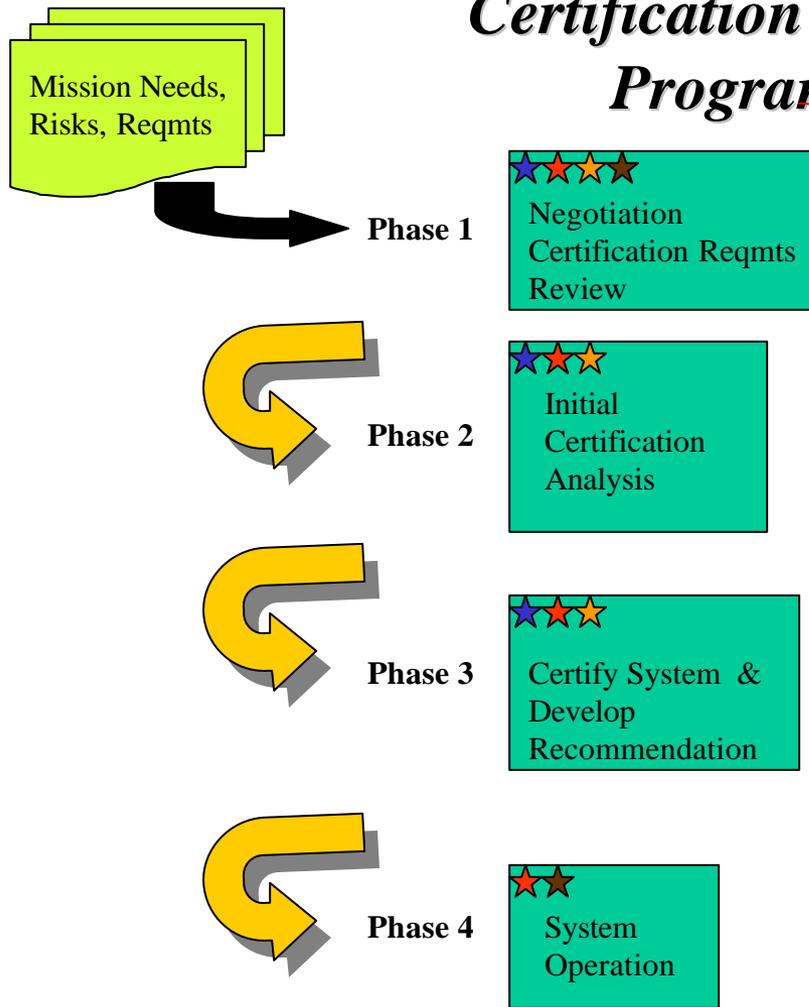
FAA's 5 Layers of System Protection



Securing Individual Systems

National Information Assurance Certification and Accreditation Program (NIACAP)

- ★ Developer
- ★ Operator
- ★ Certifier
- ★ User Rep

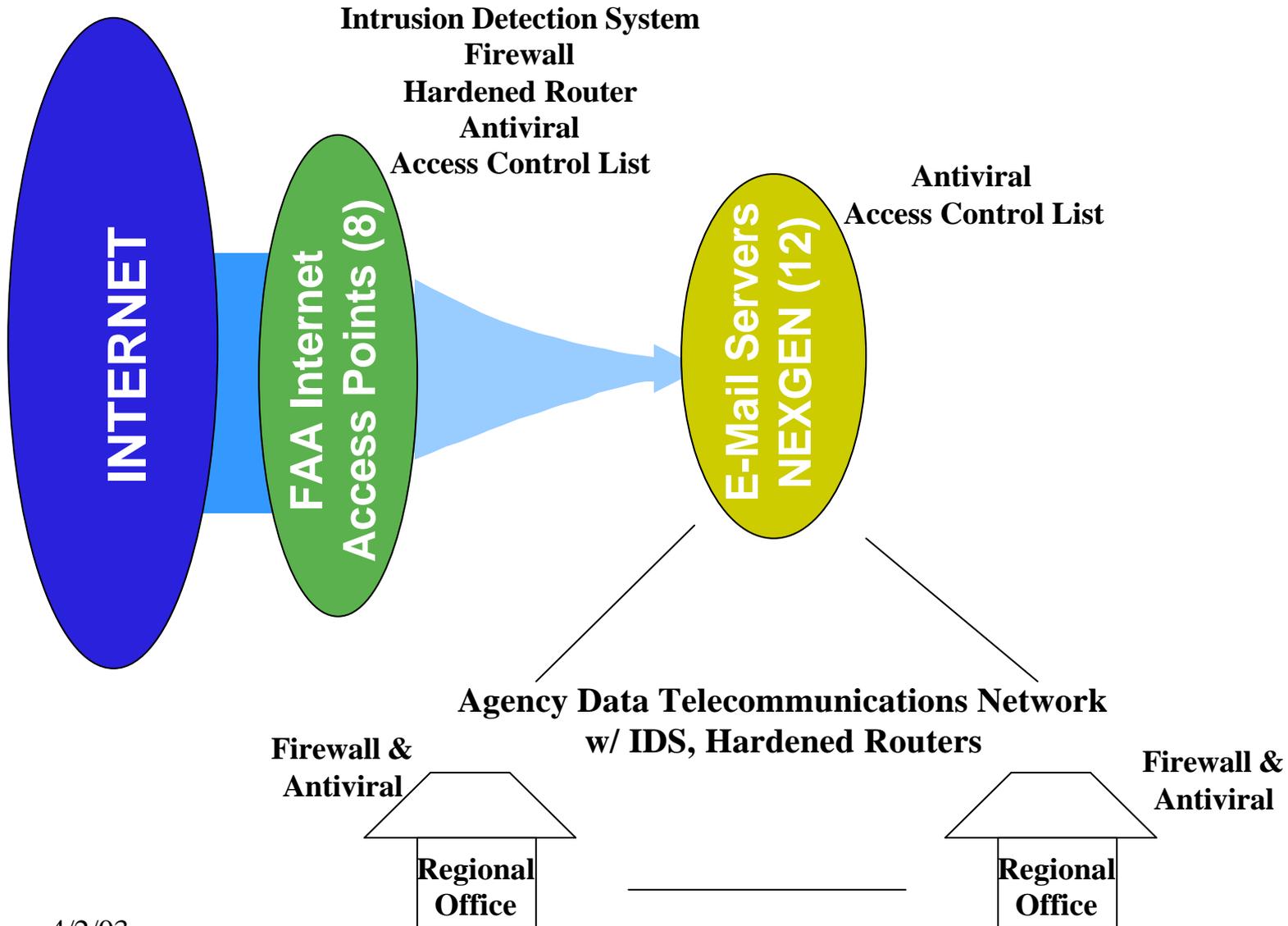


Nationally Recognized Process

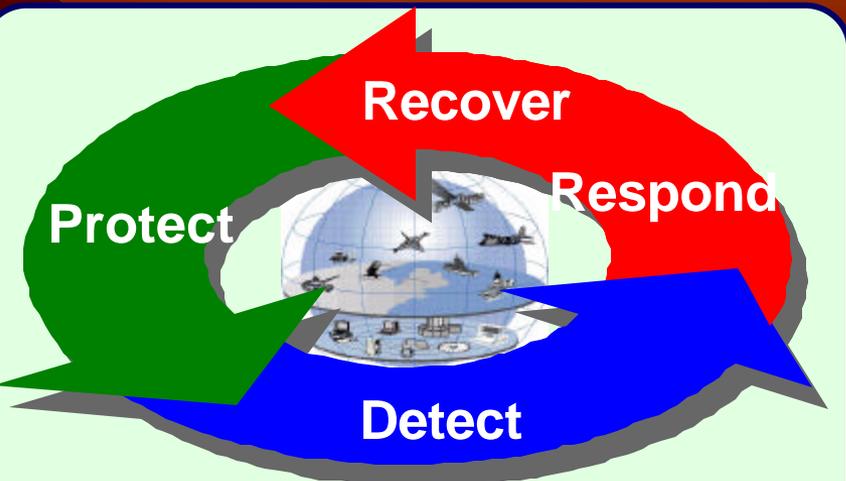
**Security Requirements Review
During Milestone Zero**

Cradle to Grave Program

Boundary Protection



COMPUTER SECURITY INCIDENT RESPONSE CENTER (CSIRC)



Protect the information infrastructure

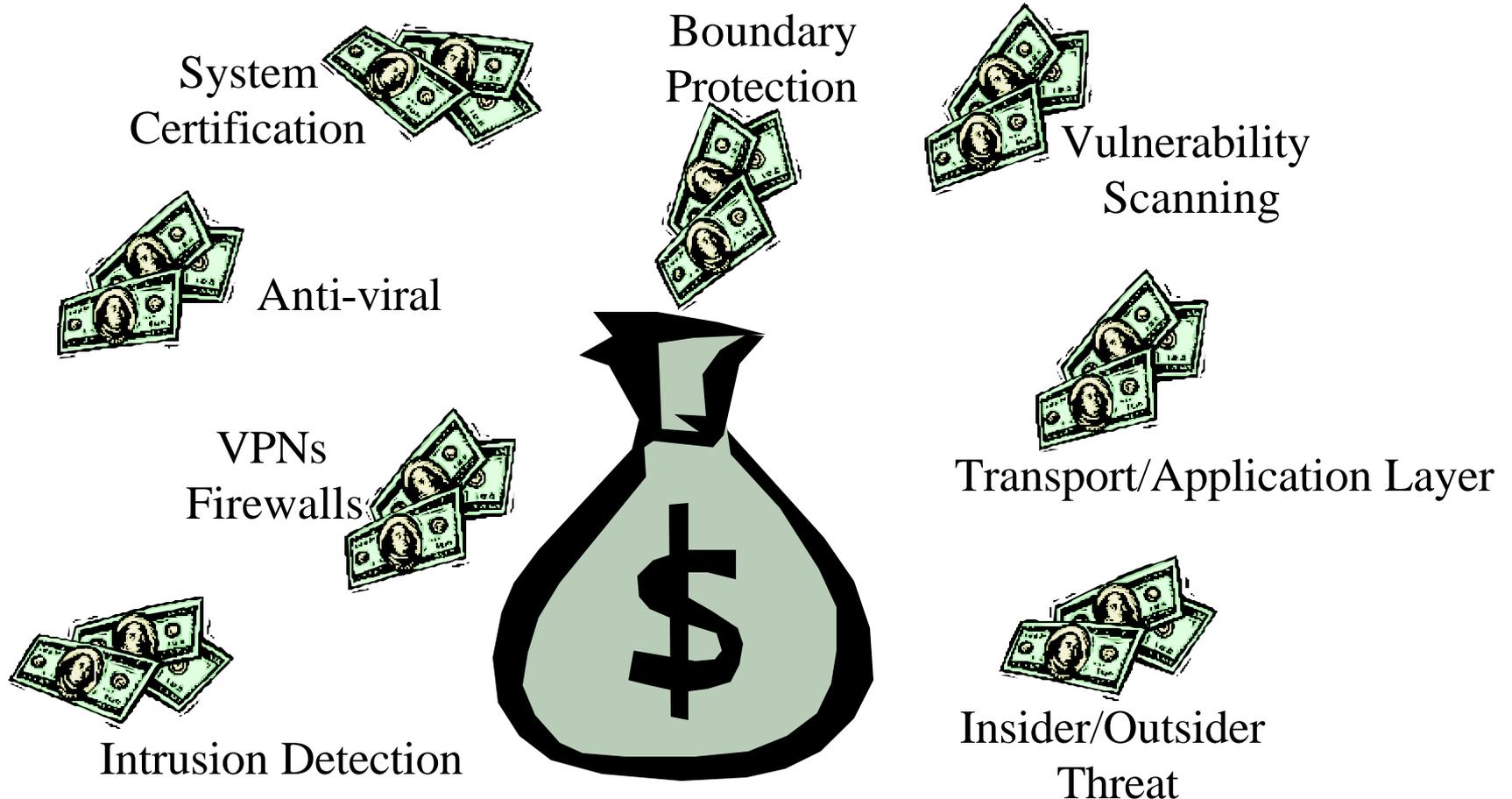
Detect anomalous traffic

Respond to any intrusion that threatens to impede operations

Recover and restore affected systems in a timely fashion



How to Invest Scarce Resources



FAA's Enterprise Architecture Liftoff



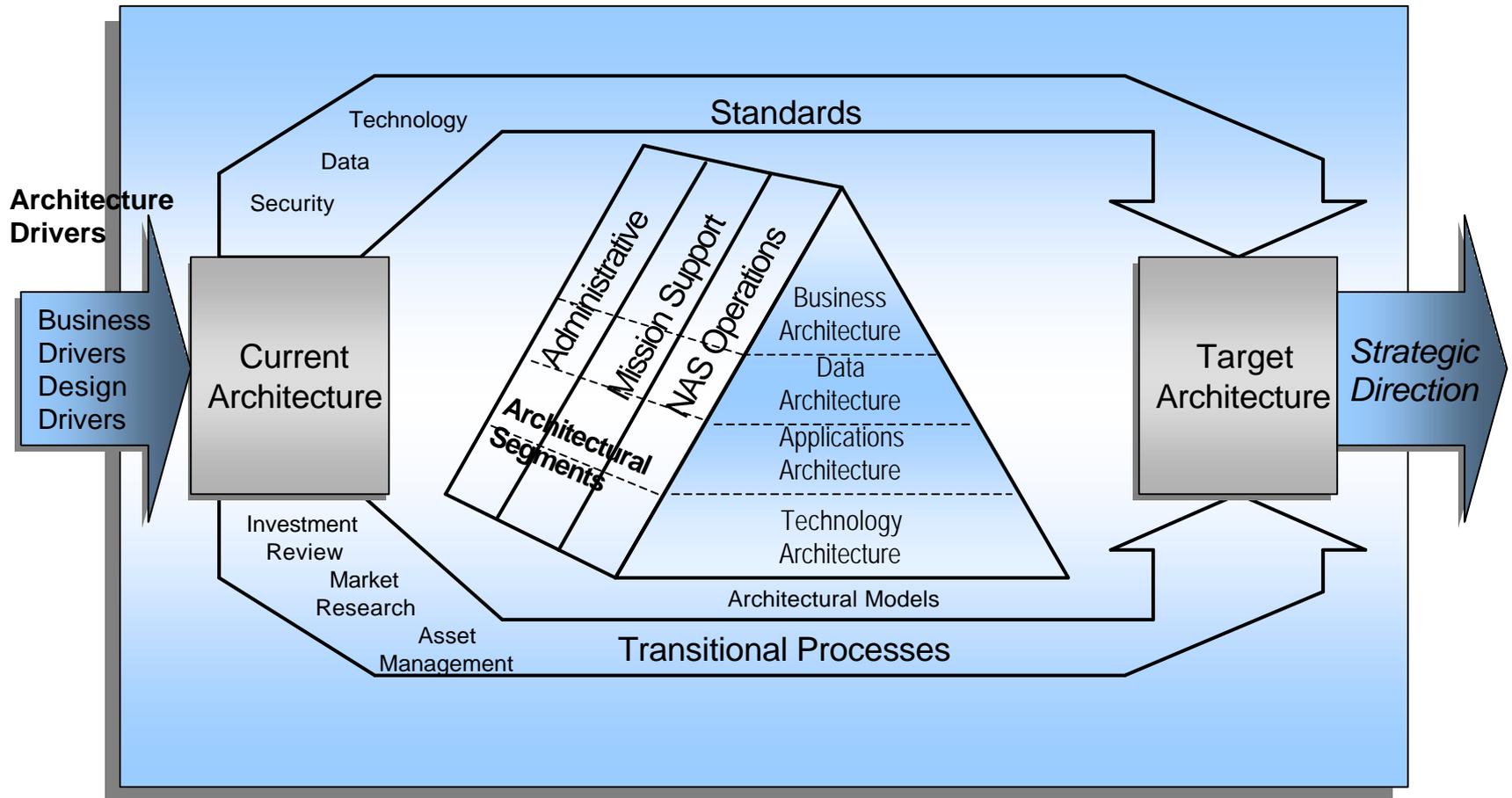
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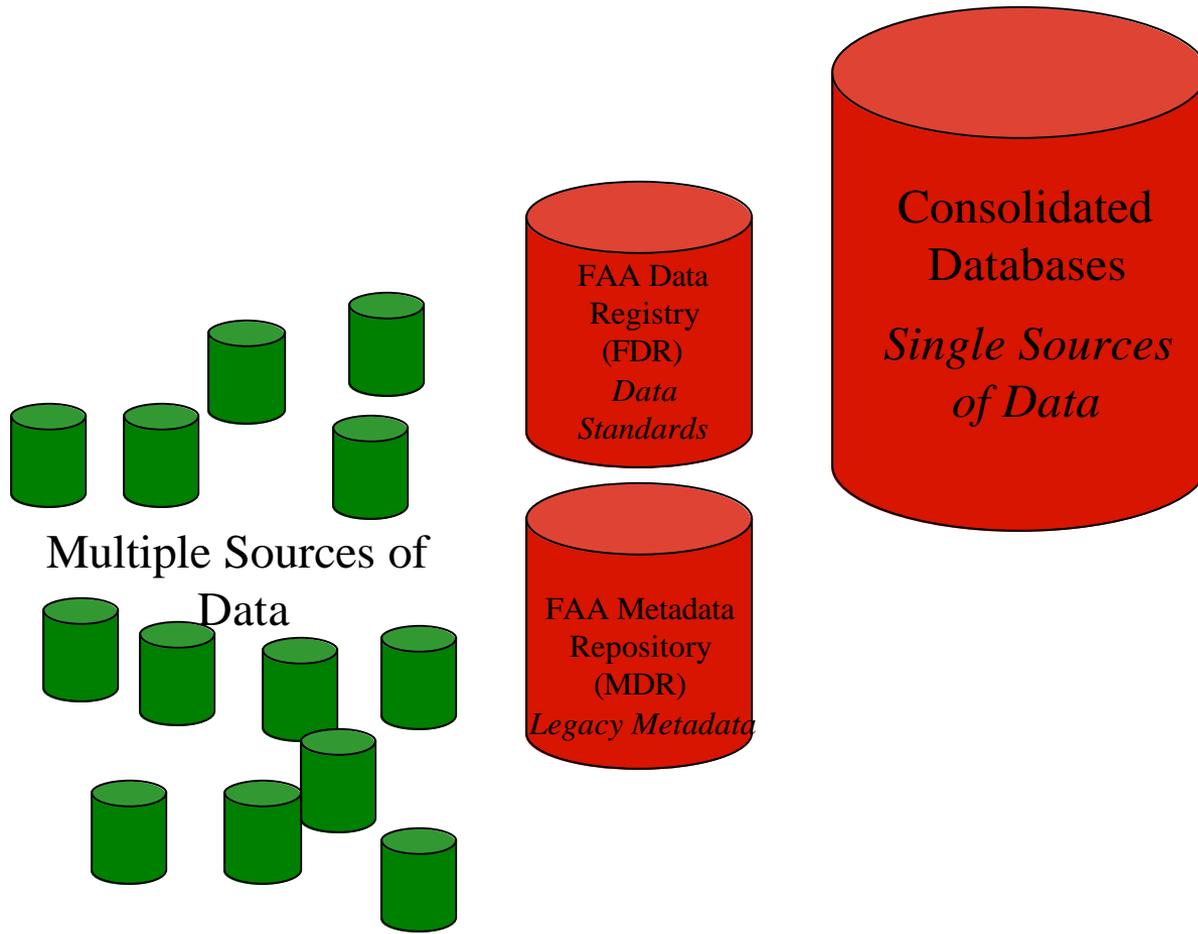
Enterprise Architecture Framework



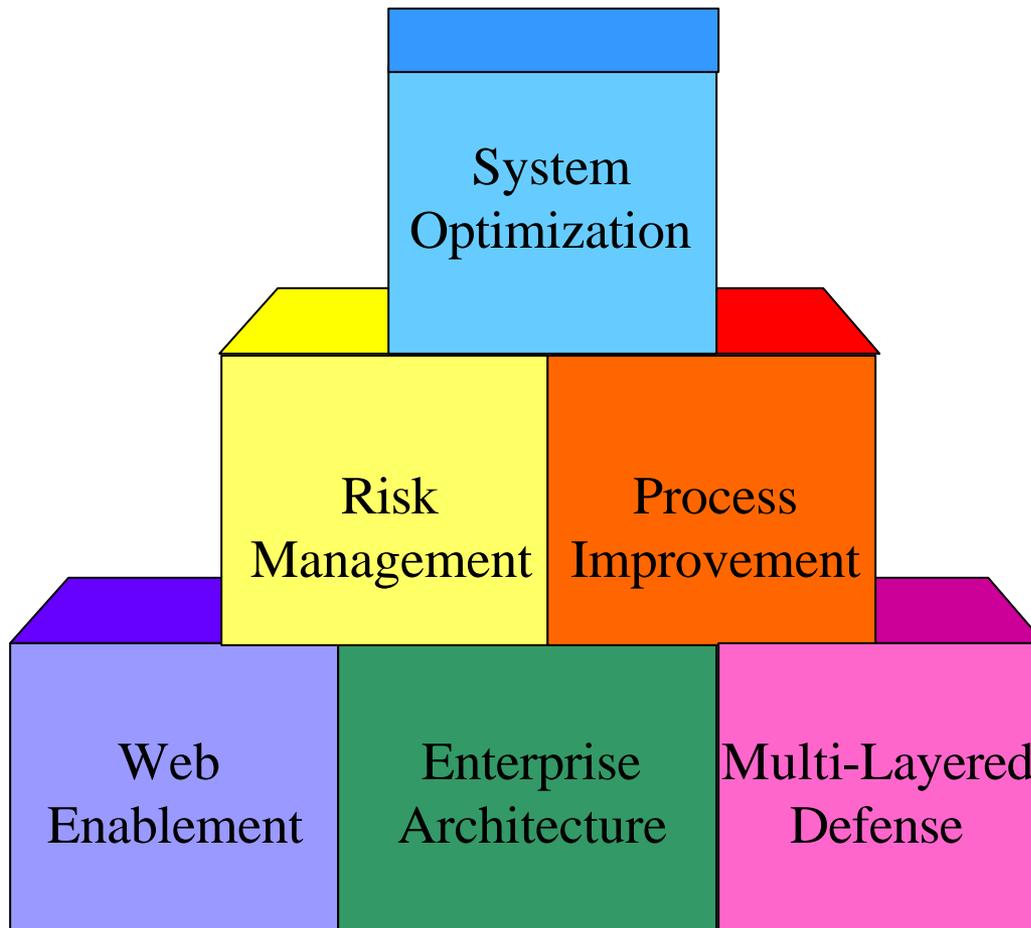
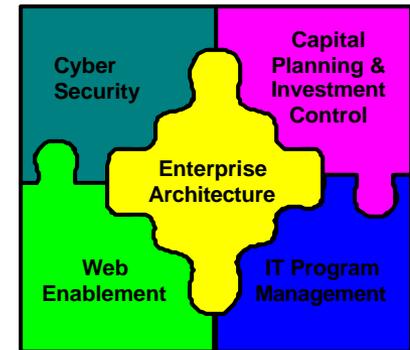
Enterprise Architecture & *Capital Planning*

- Establishes Agency-wide roadmap to achieve an efficient IT environment
- Three Segments
 - NAS Operations
 - Mission Support
 - Administrative
- Acquisition Management System
- Joint Resources Council
- Portfolio Management
- Exhibit 300s

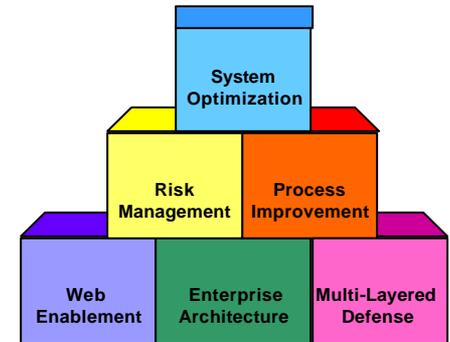
FAA Database Evolution



Enterprise Architecture— Key to Secure E-Business



Major Themes



- E-Government will define the way we communicate among ourselves and with others
- Technology is enabling us to enhance the way we manage and share information
- Securing the critical cyber infrastructure is a must for E-Government to flourish
- Enterprise Architecture will be a key driver and enabler to optimize FAA investment