



United States  
**Election Assistance Commission**

*Presentation to the Special Committee on Defining Issues of Voting System Sustainability*

EAC Board of Advisors Meeting  
June 6-7, 2011  
Westin Washington, DC City Center



# Voting System Lifecycle Management

**Definition:** The process, procedures and policies adopted by an election jurisdiction in order to effectively maximize the useful life of the voting system hardware and software.

In general, an information technology lifecycle can be thought of as the period of time during which a system is expected to be usable for the purpose it was acquired. For voting systems specifically, a wide variety of factors effect lifecycle management.

These factors include, but are not limited to:

- Modifications to the system requested by a jurisdiction or mandated by changes to Federal or State law.
- Manufacturer generated software changes and hardware modifications.
- OS patches.
- COTS product end-of life and refresh rates.
- Manufacturer quality assurance and configuration management practices.
- Field issues requiring modifications.
- Certification timeframes (both Federal and State).
- Jurisdiction budget constraints + system refresh, replacement plans.
- System warranty, maintenance and repair programs.
- Normal election related wear and tear.



# EAC Roundtable

- **Preparing for 2012: The Life Cycle of Voting Machines** May 5, 2011, Washington, DC
  - Record number of viewers on webcast.
  - Archived webcast continuing to be watched by election officials,



# Participants

- Merle King
- Tom Caddy
- Ken Carbullido
- Lowell Finley
- Brian Hancock
- Neal Kelley
- Mike DeBonis
- Kathy Scheele

- Linda Lindberg
- Traci Mapps
- Wendy Noren
- Frank Padilla
- Andy Rodgers
- Jim Silrum
- Chris Thomas
- Doug Lewis  
(Unable to Attend)



# Introduction

In the years 2002-2005, there was an unprecedented surge in the acquisition and deployment of voting systems. Old and antiquated systems were replaced with newer technologies. Now, as we approach the 2012 election cycle, the states are facing the challenge of managing ageing voting systems in an environment of sharpened public awareness and heightened public expectations of the security and performance of voting systems. This Roundtable seeks to explore the issues associated with the sustainability of the nation's voting systems.



# General Discussion Questions

## Media:

- How do you notify the public about issues related to voting systems?
- What events or circumstances make voting systems issues newsworthy?
- Does the abbreviated and spontaneous format of social media present new challenges for reporting the complicated issues surrounding election procedures and voting technologies?



# General Discussion Questions

## Costs & Obstacles:

- Who bears the cost of introducing new voting systems and new voting technologies? Are these costs well understood by all stakeholders?
- Can the serviceable life of a voting system be extended beyond the life of typical IT products (perhaps 3-5 years)?
- What are the obstacles and associated strategies for extending the life of a voting system?



# General Discussion Questions

## Replacement Indicators & Risks and Responsibilities:

- When does it become practical for a jurisdiction to replace their voting system rather than continue efforts to sustain it?
- What are the responsibilities of local election officials to sustain and extend the life of the voting system?
- What risks are associated with this extension?



# General Discussion Questions

## Preparing for 2012:

- What are the potential risks facing jurisdictions in 2012 because of aging voting systems?
- If we are to avoid a large scale election disaster (or disasters), what tasks and issues should we focus on?
- What is the role of each of the following entities?
  - Federal testing and certification organizations
  - State election officials
  - Local election officials
  - Vendors and contractors
  - Others?



# Comments from the Participants

- The life cycle is not just a function of the existing systems, but is actually the span of time from deployment to deployment.
- Adequate Tech support is important to extending the life of the system.
- Testing can be optimized to address federal & state requirements.
- Total ownership cost is a more appropriate perception.
- Leasing of equipment may be an option.
- Lower the cost of testing to states will permit states to economize changes.
- Must be a joint effort of Federal/State/local officials.
- Invest time & effort into the development of fair & comprehensive contracts.
- We need to be less reliant on vendors.



# Comments from the Participants

- The problem for 2012 is a people problem; cut back in personnel is the most serious challenge.
- Preventative maintenance should be a top priority.
- The effort needed to develop a plan for replacement of the current systems will be considerable. Could take longer than 5 years.
- Need to develop a funding formula to sustain our voting systems.
- 2012 may not be an issue for the voting systems... but 2016 will.
- The complexity of system is a function of their need to address multiple jurisdictions needs: this complexity impacts every aspect of system testing.



# Conclusions/Next Steps

- Band-aid solutions will work... but only for a limited period of time.
- Unfortunately, additional funding is the only long term solution both for the replacement of aging systems and for the continued health of the industry.
- More and better State/Federal cooperation in testing.
- Development of User Groups to share information.
- Because refurbished systems are more common- potential for EAC to sponsor a summit meeting with the manufacturing community with the goal of producing industry developed standards for refurbished equipment.
- 1st of potentially annual meetings of Federal and State Certification officials may be held at Kennesaw State University in Serptember 2011 timeframe.