



**2016** Department of Energy  
Project Management Workshop  
*"Enhancing Project Management"*

# Project Management Update

Michael Peek

Deputy Director

Office of Project Management Oversight and Assessments

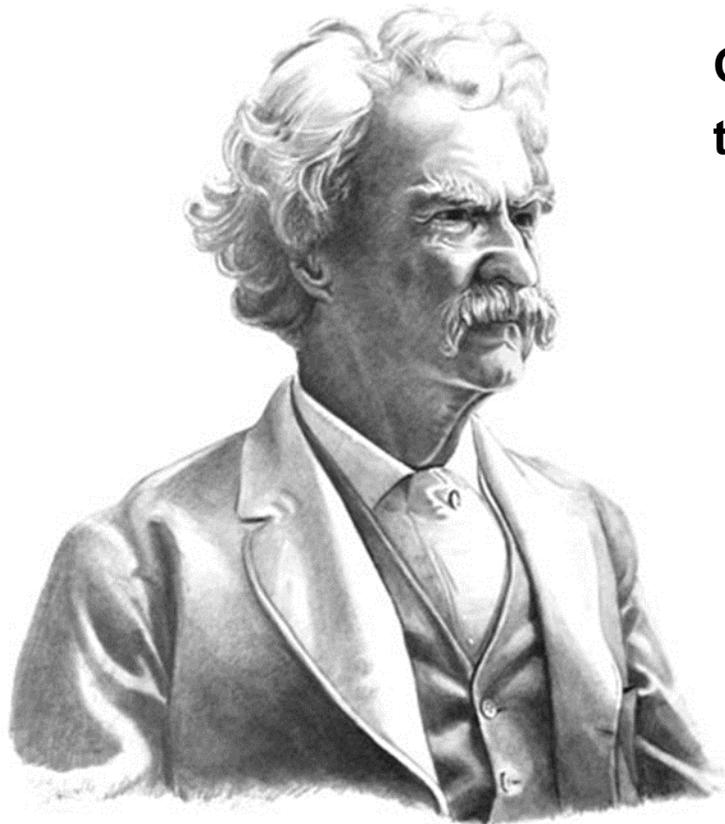


# Agenda

- Project Portfolio and Trends
- Project Management Success
- Other Performance Metrics
- GAO High-Risk Series Update
- Construction Industry Institute
- In closing



# Project Portfolio and Trends



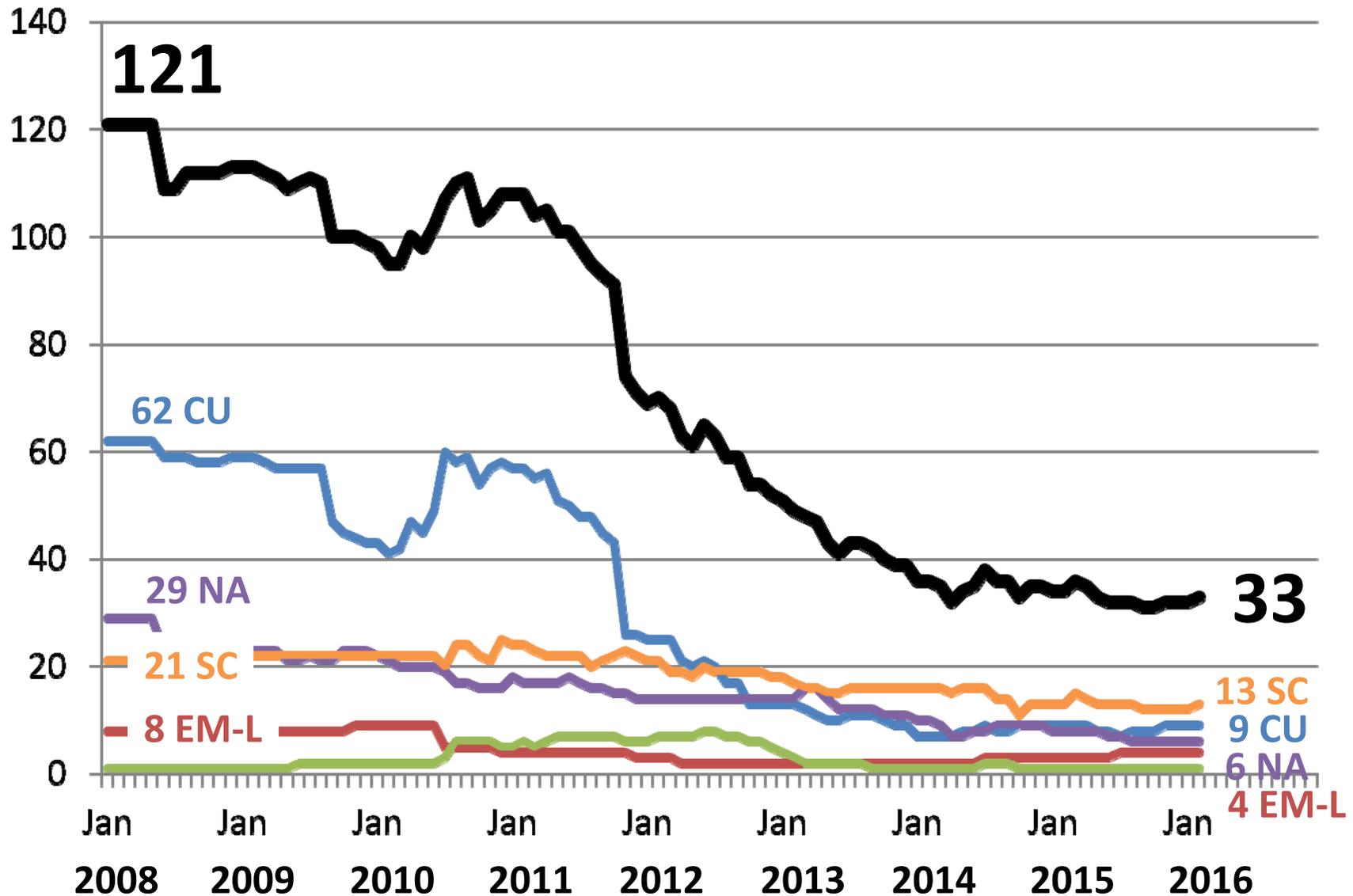
**Get your facts first, then you can distort them as you please.**

**~ Mark Twain**



# Number of Projects (2008-2016)

## Current Post CD-2 Workload

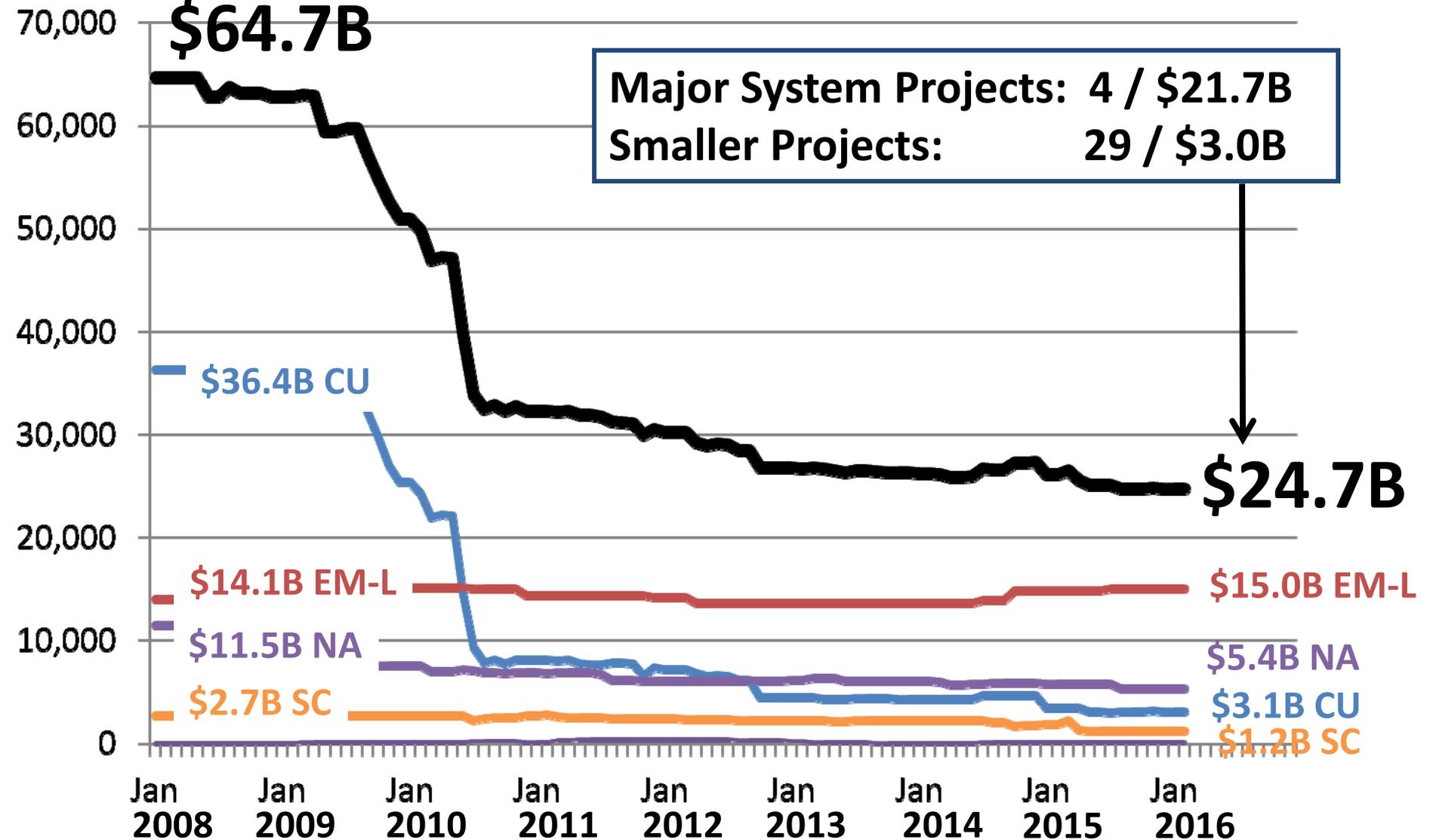




# Dollar Value of Projects (2008-2016)

## Current Post CD-2 Workload

\$ Millions





# February Project Portfolio Status

(Based on Current Performance Baseline)

Program	Total Active Projects Post CD-2		Total Projects Post CD-2 Green		Total Projects Post CD-2 Yellow		Total Projects Post CD-2 Red		% of Post CD-2 Projects with Acceptable Status	
	No.	\$(M)	No.	\$(M)	No.	\$(M)	No.	\$(M)	No.	\$(M)
EM	13	\$18,093	8	\$3,155	--	--	5	\$14,938	62%	17%
NA	6	\$5,356	3	\$260	1	\$93	2	\$5,003	67%	7%
NE	1	\$78	1	\$78	--	--	--	--	100%	100%
SC	13	\$1,211	12	\$873	1	\$338	--	--	100%	100%
DOE	33	\$24,737	24	\$4,366	2	\$431	7	\$19,941	79%	19%



# February Project Portfolio Status

(Post CD-2 Projects Greater Than \$750M)

Program	Project Name	TPC (\$M) at CD-2	TPC (\$M) Current	Overall Assessment
NA	Mixed Oxide Fuel Fabrication Facility (MOX)	\$4,814.3	\$4,857.1	R —
EM	Waste Treatment and Immobilization Plant (WTP)	\$5,781.0	\$12,263.0	R —
EM	Nuclear Facility D&D – River Corridor Closure Project	\$2,251.5	\$2,251.5	R —
EM	Salt Waste Processing Facility (SWPF)	\$900.0	\$2,322.0	G —



# Major Capital Asset Projects (>\$750M) Post CD-2 (above the line)

1. **Waste Treatment and Immobilization Plant (WTP)** – Richland, WA (\$12.3B)
    - Incremental rebaseline for LBL/DFLAW ongoing; ESAAB this August
    - Resolving technical path forward for high level waste (HLW) and pretreatment facility (PT)
    - Phased rebaselining (3 increments); contract being restructured
  2. **Mixed Oxide Fuel Fabrication Facility (MOX)** – Savannah River, SC (\$4.8B)
    - Performance Baseline being updated; required by the FY2016 NDAA
    - FY2017 PRESBUD proposes termination; future uncertain
  3. **Nuclear Facility Decontamination & Decommissioning (D&D) River Corridor Closure Project (RCCP)** – Richland, WA (\$2.25B)
    - Environmental clean-up project; Project completion (CD-4) date: September 2019
    - Some scope to be removed; BCP being prepared; ESAAB NLT November 2016
  4. **Salt Waste Processing Facility (SWPF)** – Savannah River, SC (\$2.3B)
    - Project rebaselined in August 2014; Project completion (CD-4) date: January 2021
    - Construction complete this Spring/Summer; below target cost & ahead of target schedule
- 
5. **Uranium Processing Facility (UPF) – Oak Ridge (CD-1 Cost Range: \$4.2B-\$6.5B)**
    - Seven projects and three Long Lead Procurements
    - Next major milestone, CD-2/3 for Mechanical & Electrical Bldg, approximately February 2017
  6. **Chemistry Metallurgy Research Replacement (CMRR) Project – Los Alamos (CD-1 Cost Range: \$2.4-\$2.9B)**
    - Six projects associated with this program; two done, four ready to begin (REI2, PEI1, PEI2, RC3)
    - CMRR restructuring approved November 2015

(Post)  
CD-2  
(Pre)

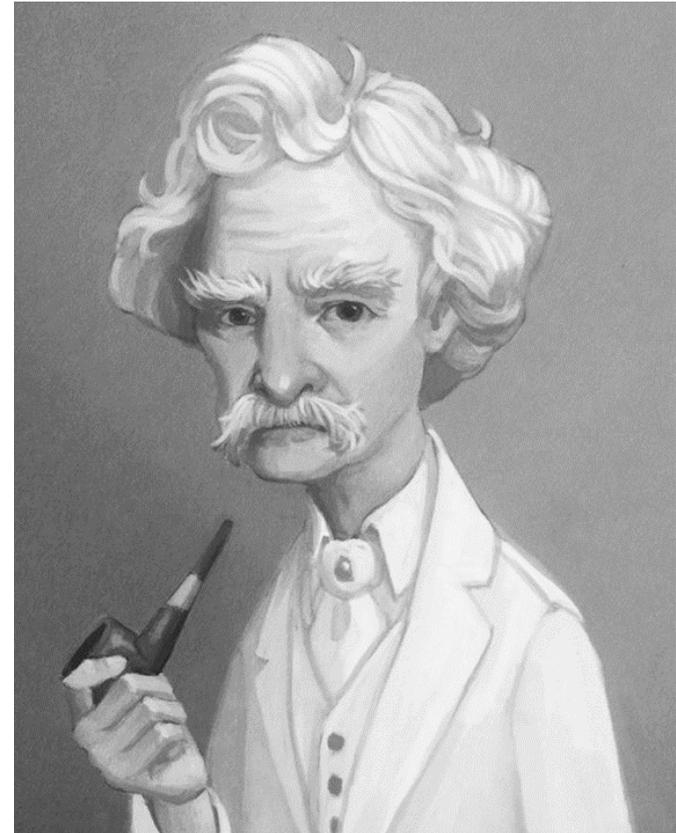
(Post)  
CD-2  
(Pre)



# Project Management Success

**Facts are stubborn, but statistics are more pliable.**

**~ Mark Twain**





# Project Management Success

(Based on Original CD-2)

- Project Management Success:
  - Project completed within the original approved scope baseline, and within 110% of the original approved cost baseline at project completion (CD-4), unless otherwise impacted by a directed change.
- Portfolio Success:
  - 90% of all projects meet project management success criteria, within a three-year rolling timeline.



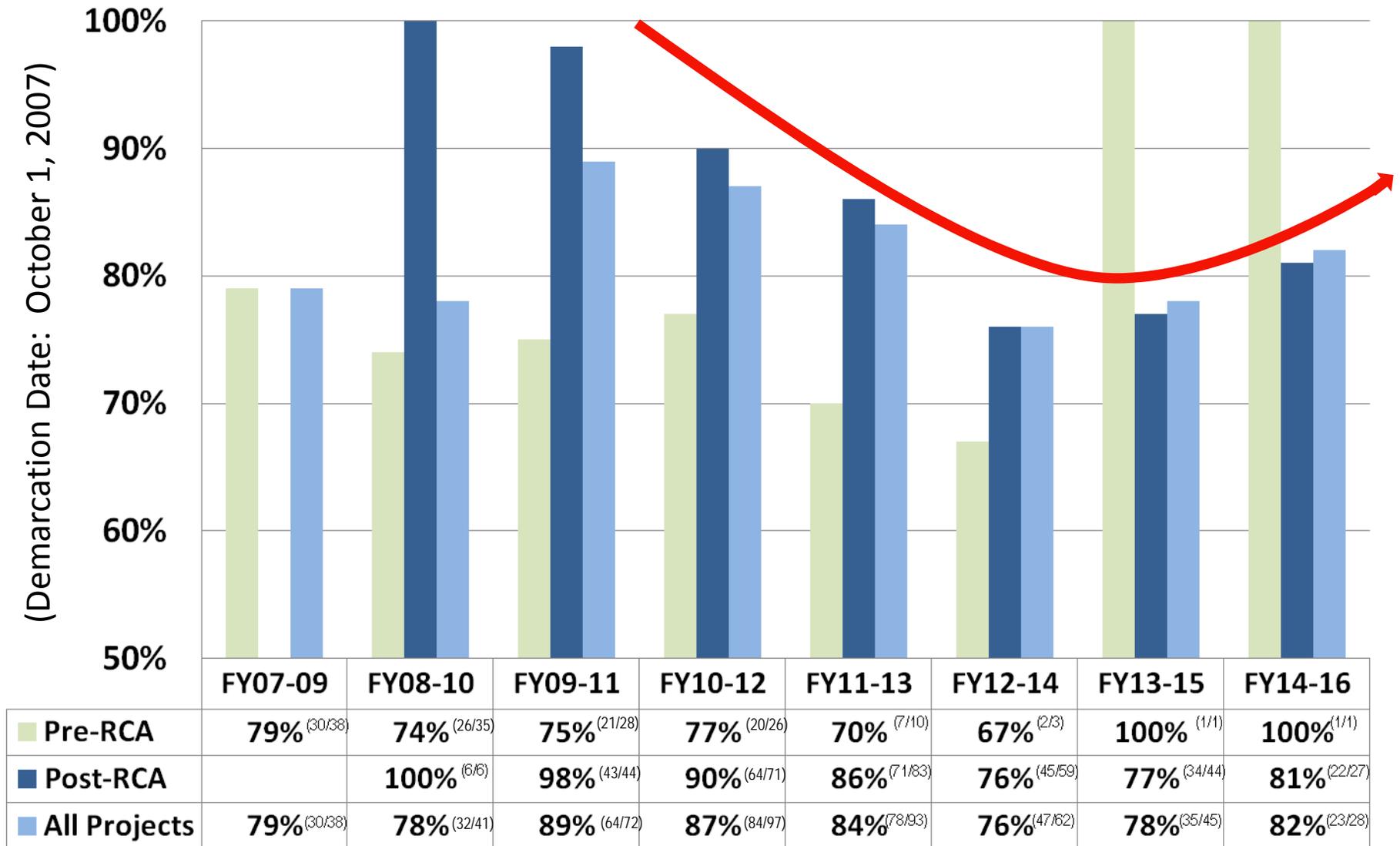
# Project Management Success – How are we Doing?

(Based on 3-year Rolling Timeline)

Capital Asset	Current Target	FY13 Actual	FY14 Actual	FY15 Actual	FY16 Forecast
Construction	90%	84% <sup>(36/43)</sup>	82% <sup>(31/38)</sup>	83% <sup>(30/36)</sup>	91% <sup>(21/23)</sup>
Cleanup	90%	84% <sup>(42/50)</sup>	67% <sup>(16/24)</sup>	56% <sup>(5/9)</sup>	40% <sup>(2/5)</sup>
Combined	90%	84% <sup>(78/93)</sup>	76% <sup>(47/62)</sup>	78% <sup>(35/45)</sup>	82% <sup>(23/28)</sup>
SC	90%	100% <sup>(17/17)</sup>	100% <sup>(17/17)</sup>	100% <sup>(17/17)</sup>	100% <sup>(14/14)</sup>
EM (Const)	90%	0% <sup>(0/3)</sup>	0% <sup>(0/2)</sup>	--	--
EM (Cleanup)	90%	84% <sup>(42/50)</sup>	67% <sup>(16/24)</sup>	56% <sup>(5/9)</sup>	40% <sup>(2/5)</sup>
NNSA	90%	64% <sup>(7/11)</sup>	55% <sup>(6/11)</sup>	54% <sup>(7/13)</sup>	75% <sup>(6/8)</sup>
Other	90%	100% <sup>(12/12)</sup>	100% <sup>(8/8)</sup>	100% <sup>(6/6)</sup>	100% <sup>(1/1)</sup>

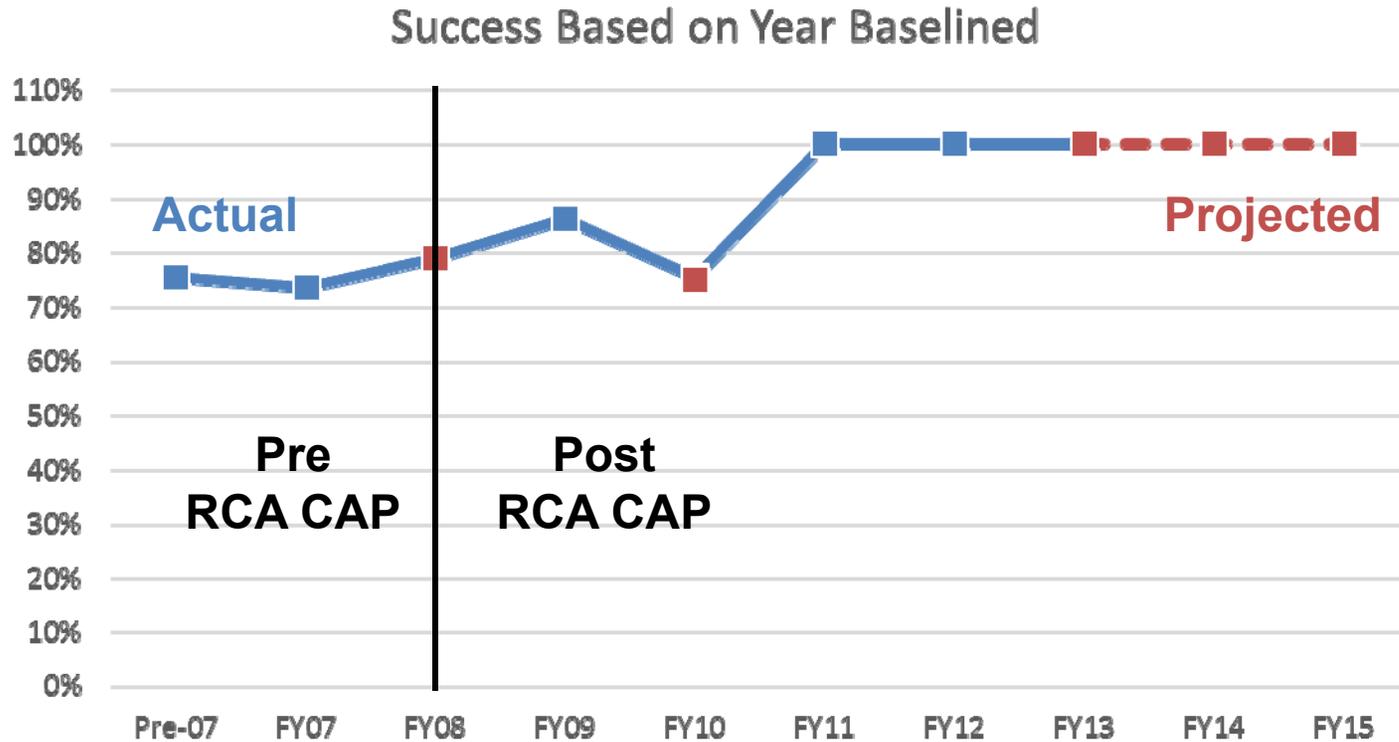


# Project Management Success - How are we Doing? Pre vs. Post-RCA (Based on 3-year Rolling Timeline)





# How are we Doing? Another Perspective – DOE Overall



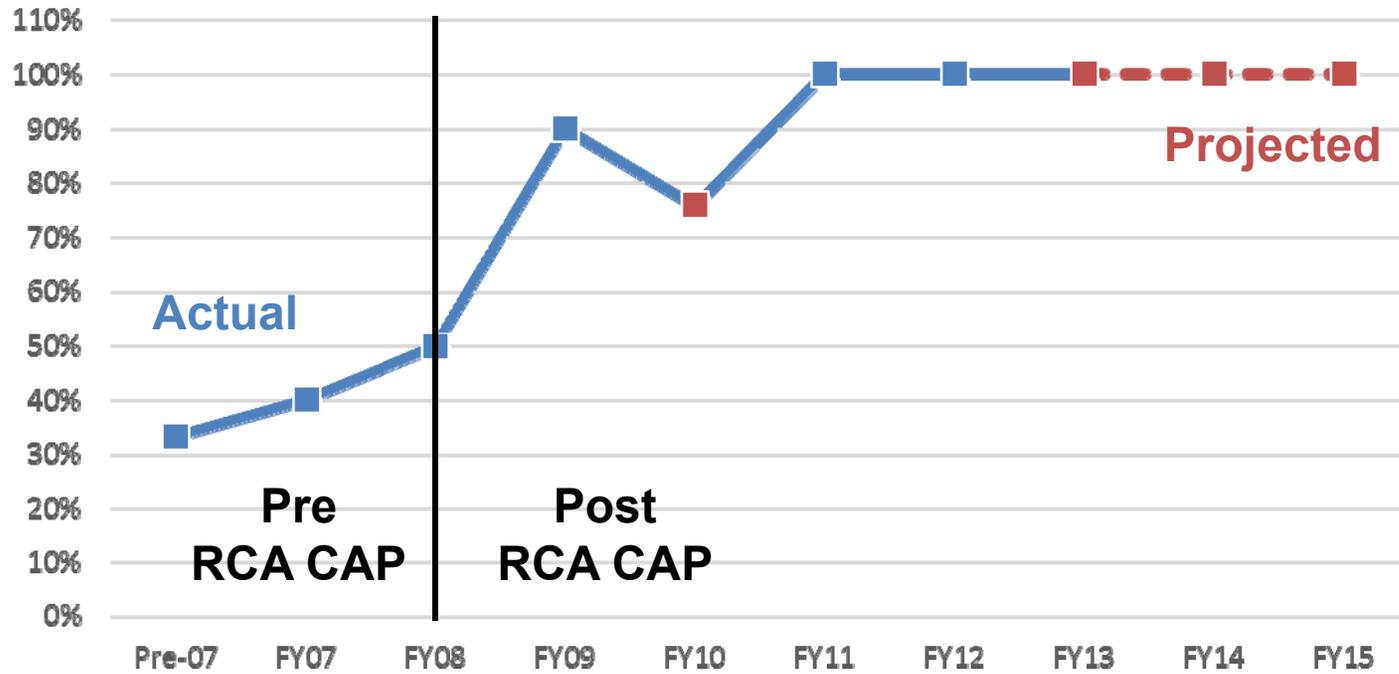
Number of Projects

	Pre-07	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15
Actual Success	49	14	14	19	39	20	4	2		
Projected Success			1		1			3	7	11
Total Success	49	14	15	19	40	20	4	5	7	11
Total Projects	65	19	19	22	53	20	4	5	7	11
Percent Success	75%	74%	79%	86%	75%	100%	100%	100%	100%	100%



# How are we Doing? Another Perspective – EM-C & EM-L

Success Based on Year Baselined



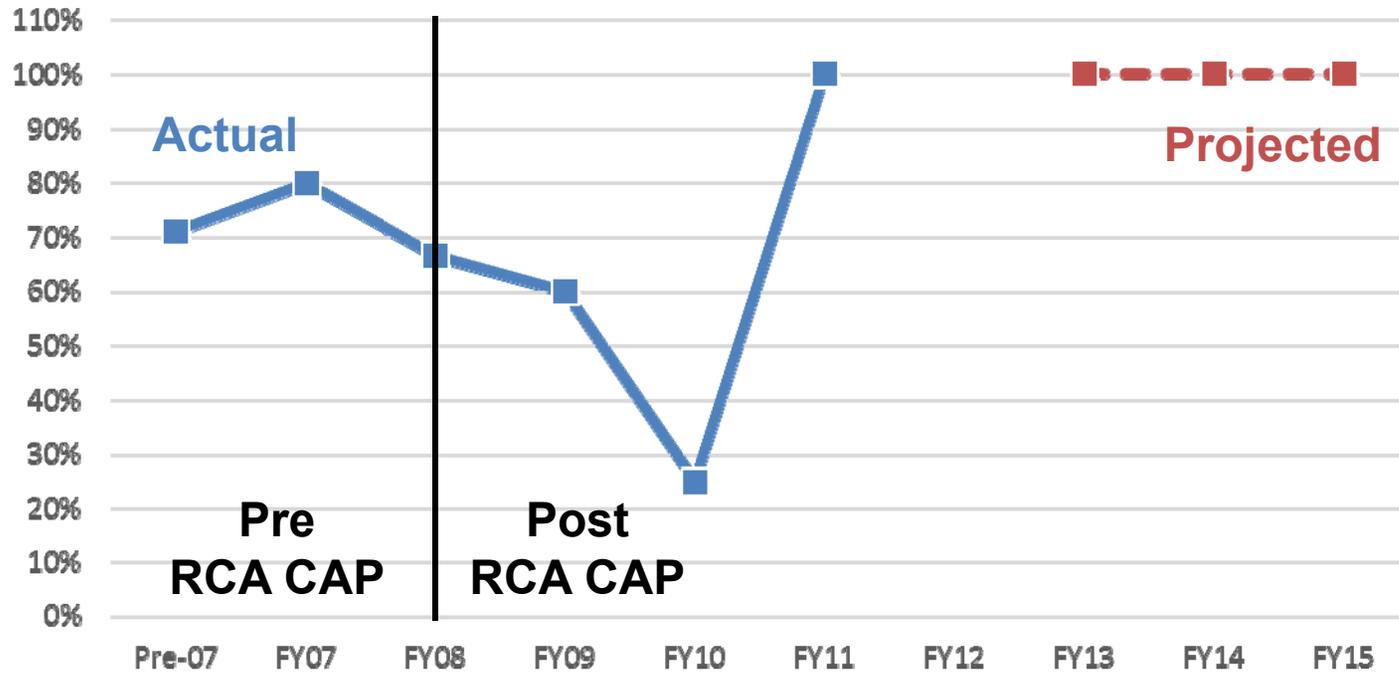
Number of Projects

	Pre-07	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15
Actual Success	1	2	3	9	30	4	1			
Projected Success					1			1	1	3
Total Success	1	2	3	9	31	4	1	1	1	3
Total Projects	3	5	6	10	41	4	1	1	1	3
Percent Success	33%	40%	50%	90%	76%	100%	100%	100%	100%	100%



# How are we Doing? Another Perspective - NNSA

Success Based on Year Baselined



Number of Projects

	Pre-07	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15
Actual Success	27	8	2	3	1	2		2		
Projected Success								1	2	1
Total Success	27	8	2	3	1	2		3	2	1
Total Projects	38	10	3	5	4	2		3	2	1
Percent Success	71%	80%	67%	60%	25%	100%		100%	100%	100%





Contract/Project Management Secondary Performance Metrics	Target	FY14 Actual	FY15 Actual	FY16 Forecast	Comments
<b>Certified Earned Value Management (EVM) System:</b> Post CD-3, 95% of projects (TPC > \$20M).	95%	89%	88%	85%	CD-3 is “Approve Start of Construction/Execution.” [Stats: 23 of 27]
<b>Certified Federal Project Directors (FPDs) at CD-1:</b> No later than CD-1, 95% of projects have certified FPDs.	95%	94%	100%	97%	CD-1 is “Approve Alternative Selection and Cost Range.” [Stats: 62 of 64]
<b>Certified FPDs at CD-3:</b> No later than CD-3, 90% of projects have FPDs certified at the <u>appropriate level</u> assigned to projects.	90%	84%	100%	96%	CD-3 is “Approve Start of Construction/Execution.” [Stats: 26 of 27]
<b>Certified Contracting Staff:</b> 85% of the “1102” contracting specialist series will be certified.	85%	93%	97%	97%	FAC-C certified 1102s verified against DOE Human Resources GS-1102 job series

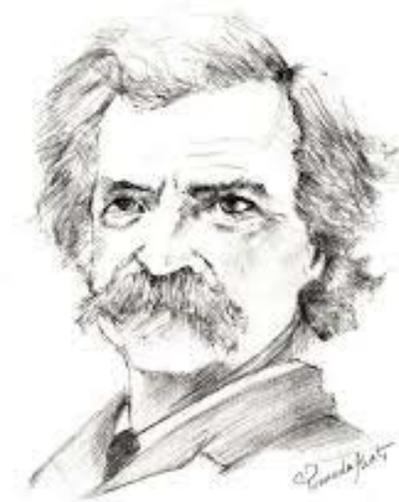
<b>Contract/Project Management Secondary Performance Metrics</b>	<b>Target</b>	<b>FY14 Actual</b>	<b>FY15 Actual</b>	<b>FY16 Forecast</b>	<b>Comments</b>
<p><b>Schedule Compliance, Projects &lt; 5 years Duration:</b> Projects will meet the project schedule metric that follows: from CD-3 to CD-4, projects less than five years in duration will be completed within 12 months of the original CD-3/4 duration.</p>	<p><b>90%</b></p>	<p><b>89%</b></p>	<p><b>85%</b></p>	<p><b>77%</b></p>	<p>CD-3 is “Approve Start of Construction/Execution.”</p> <p>CD-4 is “Approve Project Completion.”</p> <p>Based on a three-year rolling timeline.</p> <p>[Stats: 17 of 22]</p>
<p><b>Schedule Compliance, Projects &gt; 5 years Duration:</b> Projects will meet the project schedule metric that follows: from CD-3 to CD-4, projects greater than five years in duration will be completed within 20% of the original CD-3/4 duration.</p>	<p><b>90%</b></p>	<p><b>100%</b></p>	<p><b>100%</b></p>	<p><b>100%</b></p>	<p>CD-3 is “Approve Start of Construction/Execution.”</p> <p>CD-4 is “Approve Project Completion.”</p> <p>Based on a three-year rolling timeline.</p> <p>[Stats: 4 of 4]</p>



# GAO High-Risk Series

**Do the right thing. It will gratify some people and astonish the rest.**

**~ Mark Twain**





# GAO High-Risk Series

## EM/NNSA “Contract” Management

GAO designated DOE’s contract management, which includes both contract administration and project management, as high risk due to:

- Inadequate management
- Inadequate oversight
- Not holding contractors accountable
- Inconsistently following DOE policies and procedures



# GAO High-Risk Series Update

## Contract Management for NNSA and EM

### Scorecard (2013 vs. 2015) Comparison

Criteria Agencies Must Meet Before High-Risk Designations Can Be Removed	2013 DOE Has		2015 DOE Has		
	Met Criteria	Not Yet Met Criteria	Met Criteria	Partially Met Criteria	Not Yet Met Criteria
Demonstrate strong commitment and leadership	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		
Demonstrate progress in implementing corrective measures	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>
Develop a corrective action plan that identifies root causes, effective solutions, and a near-term plan for implementing the solutions	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	
Have the capacity (people and resources) to resolve the problems		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>
Monitor and independently validate the effectiveness and sustainability of corrective measures		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>



# GAO High-Risk Series Update

## Contract Management for NNSA and EM

### Scorecard (2015 vs. 2017) Comparison

Criteria Agencies Must Meet Before High-Risk Designations Can Be Removed	2015 DOE Has			2017 DOE Has		
	Met Criteria	Partially Met Criteria	Not Yet Met Criteria	Met Criteria	Partially Met Criteria	Not Yet Met Criteria
Demonstrate strong commitment and leadership	<input checked="" type="checkbox"/>					
Demonstrate progress in implementing corrective measures			<input checked="" type="checkbox"/>			
Develop a corrective action plan that identifies root causes, effective solutions, and a near-term plan for implementing the solutions		<input checked="" type="checkbox"/>				
Have the capacity (people and resources) to resolve the problems			<input checked="" type="checkbox"/>			
Monitor and independently validate the effectiveness and sustainability of corrective measures			<input checked="" type="checkbox"/>			

Coming January 2017



# Construction Industry Institute

**There are basically two types of people.  
People who accomplish things, and people  
who claim to have accomplished things. The  
first group is less crowded.**

**~ Mark Twain**





# Construction Industry Institute (CII)

- Corporate membership
  - Board of Advisors: Paul Bosco & Bob Raines (Alt)
- Principal Points of Contact: request an account
  - NNSA: Cameron Manning
  - SC: Steve Meador
  - EM: Rodney Lehman
  - All Other Programs - PM: Brian Kong



The Knowledge Leader for Project Success

Owners • Contractors • Academics

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## Spring Board of Advisors Meeting Open for Registration

April 6–7, the Board of Advisors meets in Denver to direct new CII research.

*Click for details.*



photo credit: Hogs555

Research | Academic | Implementation | Professional Development | Performance Assessment | Knowledge Management

### Get Engaged

- Join
- Learn
- Execute
- Measure
- Collaborate



### Free Online Courses

- Introduction to Construction Safety: Part I
- Introduction to Construction Safety: Part II

### In the News

- BOA to Vote on 2016 Research Topics
- Jewell Walters and Steve Thomas Retire
- CII Committees Drive Homepage Redesign
- CII Welcomes New Director

### CII News Home



### Tweets by @CIIProjSuccess

CII-ProjectSuccess Retweeted

**Valency**  
@MarkatValency

"What's CII?" and "What does it mean to be an Education Provider for CII?" [ow.ly/YWqK5](http://ow.ly/YWqK5)  
@CIIProjSuccess

Introduction to the Construction Industry Institute

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**PUBLICATIONS AND EVENTS CENTER**

**SEARCH PUBLICATIONS AND EVENTS CENTER**


# Knowledge Structure

The **CII Knowledge Structure** consists of 14 Knowledge Areas that are broken down into 60 Focus Areas. These Focus Areas are further divided into 15 Best Practices, other Practices, and Information Areas. Each Focus Area is supported by tools, products, and/or references.

0 item(s) (\$0.00) [+ Show](#)

**UPCOMING EVENTS**

- ALL**
- [Committees](#)
- [Conferences](#)
- [Professional Development](#)
- [Webinars](#)

**FEATURED EVENTS**

**HIGHLIGHTS**

[Newest](#) [Specials](#)



**RR300-11 (electronic)**

Member Price: **\$0.00**  
Non-member Price:



**RR306-11 (electronic)**

Member Price: **\$0.00**  
Non-member Price:



**KNOWLEDGE AREA**

- 00 - General CII Information
- 01 - Project Planning
- 02 - Design Optimization
- 03 - Procurement and Materials Management
- 04 - Construction
- 05 - Facility Startup and Operations
- 06 - Human Resources Management
- 07 - Project Organization and Management
- 08 - Business and Project Processes
- 09 - Project Controls
- 10 - Risk Management
- 11 - Safety, Health, and Environment
- 12 - Information Management and Technology Systems
- 13 - Globalization Issues
- 14 - Security
- PIP



## In Closing ...

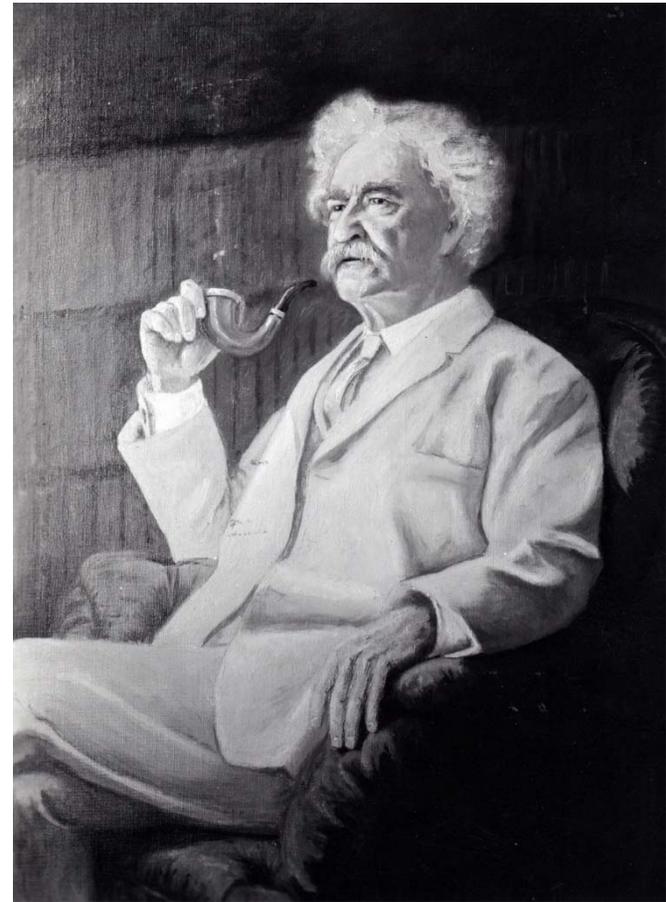
- Project management – not easy
- We have improved – We are doing better
- We have a solid project management governance structure, processes and procedures – use them!



# Questions?

**Few things are harder to put up with than  
the annoyance of a good example.**

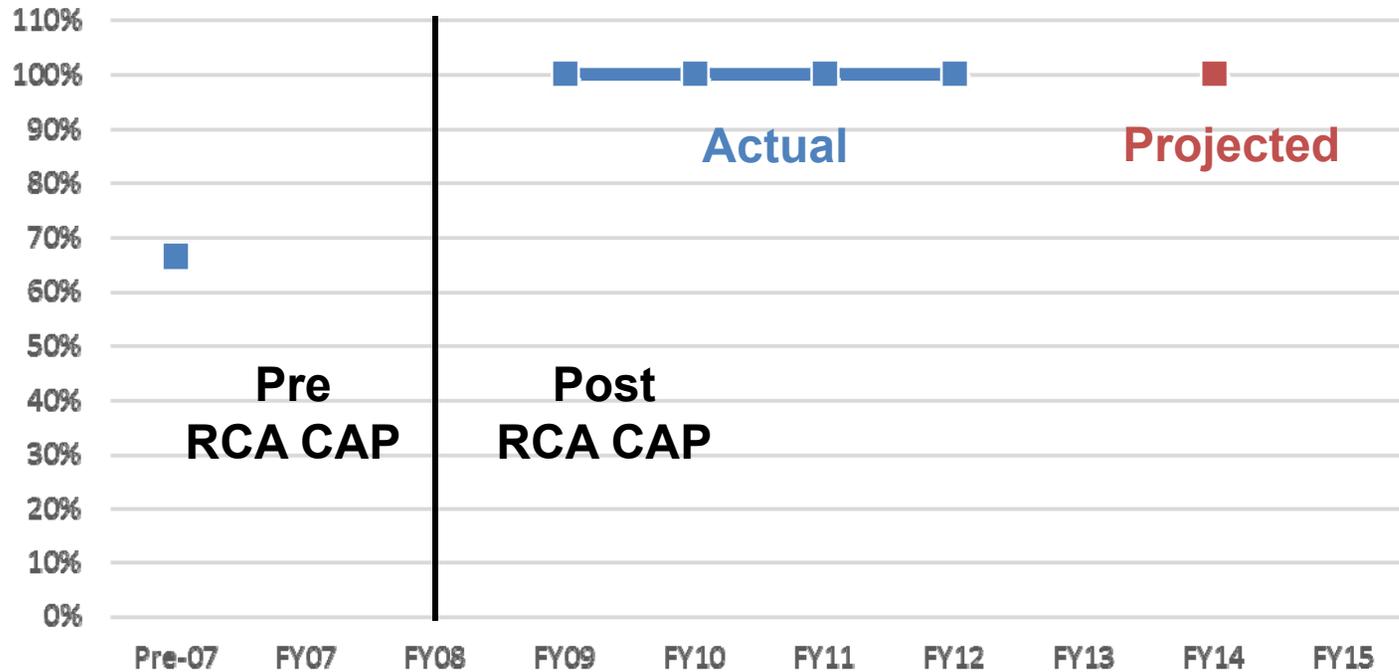
**~ Mark Twain**





# How are we Doing? Another Perspective – EE, FE, NE

Success Based on Year Baselined



Number of Projects

	Pre-07	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15
Actual Success	2			4	2	6	1		0	
Projected Success									1	
Total Success	2			4	2	6	1		1	
Total Projects	3			4	2	6	1		1	
Percent Success	67%			100%	100%	100%	100%		100%	



## Research

- Committee
- RT Sponsors
- Teams
  - Kickoff Meetings
  - Active
  - Historical
- Product Review Board
- Universities
- CII Outstanding Researcher
- CII Outstanding Graduate Research Assistant

## Conducting Research

- RFQ
- Quality Research

- RC Workplan
- FAQs
- Staff

## CII Home

## Active Research Teams

The following Research Teams are active in CII research:

- 308** Achieving Zero Rework through Effective Supplier Quality Practices (2012 - )
- 311** Successful Delivery of Flash-track Projects (2013 - )
- 313** Creating Standards for Industry-wide Quality Metrics (2013 - )
- 314A** (Continuation) PDRI Tool for Small Infrastructure Projects
- 317** Safety Performance through Operational Discipline (2013 - )
- 320** Definition and Measurement of Engineering/Design Deliverable Quality
- 321** Using Precursor Analysis to Prevent Low-frequency High-impact Events, Including Fatalities
- 322** Improving Project Progress and Performance Assessment
- 323** Finding Leading Indicators to Prevent Premature Starts, and Assuring Uninterrupted Construction
- 324** Future Construction Needs of Virtual Design Models
- 325** Best Practices for Succession Planning
- 326** Maximizing Virtual Team Performance in the Construction Industry
- 330** The Role of Frontline Supervision in Improving Construction Productivity and Performance
- 331** Assessing the Maturity and Accuracy of FEED to Support Phase-gate Approvals
- 332** Measuring the Productivity of Model-based Engineering
- 333** Transition Management between Construction Completion, Pre-commissioning, Commissioning, and Operations
- 334** Best Practices for Preventing Out-of-sequence Construction Activities and Minimizing their Impacts
- 335** Improving the U.S. Workforce Development System

Last modified and verified on 8-26-15 by [CII Research Webmaster](#)





# RT 331 - Assessing the Maturity and Accuracy of FEED to Support Phase-Gate Approvals

- Question - How do we best quantify and communicate the maturity and accuracy of engineering in the early Front End Engineering and Design (FEED) phases to allow for informed stage-gate approvals?
  - Owner and engineer/designer have to be aligned as project design progresses. Owner's expectation is to be able to make reliable cost and schedule predictions to determine whether the project is a "go" or a "no-go". What level of FEED maturity should owners expect to make such decisions? What is the best way to quantify and communicate the accuracy of these data, considering their criticality to overall project quality?
  - Note: RT 320, Definition and Measurement of Engineering/Design Deliverable Quality, is developing a definition and method of measurement for engineering/design deliverable quality.
- Chair - Mark Balcezak, Manager Cost Estimating, Chevron
- Vice Chair - Anup Seshadri, Program Manager/Director, Emerson Process Management
- Principal Investigators - Mounir El Asmar, Assistant Professor, Arizona State University (ASU)
  - G. Edward Gibson, Jr., Dir, School of Sustainable Engineering & the Built Environment, ASU
- Members
  - Stephen Cabano, President, Pathfinder, LLC
  - John Clarkin, Sr. Mgr, Global Project Mgmt, Honeywell International
  - **Matthew West, Engineer/Project Analyst, U.S. Dept of Energy**
  - Boris Frenkel, Principal Project Mgr, Honeywell International
  - Rob Garrison, Baton Rouge Operations Leader, Hargrove Engrs + Constructors
  - Harvey Ivey, General Mgr Engineering Design, Southern Co
  - Eric Ochsner, Project Engineering Dept Mgr, Georgia-Pacific Chemicals, LLC
  - Jose Riggio de Lima, Engineering Mgr, Construtora Norberto Odebrecht S.A.
  - Soundar Venkatakrishnan, Corporate Engineering Mgr, Huntsman Corp
  - Salvatore Scocca, Project Engineering Mgr, Technip USA
  - John Fish, Project Support Svcs Dir, Ford, Bacon & Davis, Inc./S&B Engrs & Constructors, Ltd
  - Abdulrahman Yussef, Graduate Research Assistant, ASU
  - Carlos Pineda, Engineering Mgr, Kiewit Energy Grp
  - David Cobb, Fluor Corp
  - Kevin Maloney, Zachry Grp
  - Scott Maish, Director - Programs, Faithful+Gould
  - Hans P. Ryham, Occidental Petroleum Corp
  - Samin Shokri, Service Offers Mgr, Coreworx
  - Thomas Hefferan, Eli Lilly and Co
  - Daniel Verner, Irving Oil Ltd



# RT 312-2 – Critical Success Factors for Project Commissioning and Startup (CSU)

- Question - “What are the Best Practices for commissioning and start-up that define, achieve, and maintain owner operational performance?”
  - Note: CII IR121-2 Planning for Start-up (April 1988) developed a resource with 18 model activities to support start-up. This model identified eight phases of a project, and created various “tools” (really checklists, assignment matrices, definitions, etc.) that could be used during each phase to enhance the commissioning and start-up process.
- Key Findings, Products & Tools
  - CSU Critical Success Factor Checklist
  - Critical Success Factor Implementation Timing (graph)
  - Innovative CSU Technologies -- Optimal Timing of Application (graph)
- Chair – Tom Pierie, Ameren Corporation
- Principal Investigator - Jim O’Connor, University of Texas at Austin (UT)
  - Matthew Winkler, University of Texas at Austin (UT)

## Members:

- Daniel Barrett, ConocoPhillips
- Ron Johnson, Lauren Engineers & Constructors, Inc.
- **Tony Ermovick, U.S. Dept of Energy**
- Elizabeth Shaw, ArcelorMittal (Canada)
- Edward McDaniel, CH2M
- Rob Murray, Irving Oil Limited (Canada)
- Mitchell Suchyta, Barton Malow
- Paul Foster, Alstom Power, Inc.
- Matt Sikstrom, Ontario Power Generation, Inc. (Canada)
- Dale Millsap, The Williams Company, Inc.
- Brian Nordmann, Emerson Process Management
- Mauricio Rodriguez, Smithsonian Institution
- Mark Bennett, Black & Veatch
- Quint Herbet, Conoco Phillips
- Michael Rugh, Technip North America
- Jonah Collins, Southern Company
- Joel Tremblay, Chevron



# RT 315 - Successful Delivery of Mega-Projects

- Question - “What changes in project planning and execution are needed to increase the likelihood of mega-project success?”
- Key Findings
  - Identified and prioritized 34 factors that impact the successful delivery of mega-projects and grouped them in to five categories
  - Developed IR 315-2 Mega-Project Assessment of Criticality Tool (MPACT)
- Chair - Ronnie Stephens, The Williams Companies
- Vice Chairs - Dean Poillucci, Skanska
  - David Taylor, Emerson Process Management
- Principal Investigators - Carlos Caldas, University of Texas at Austin (UT)
  - Ashish Gupta, UT
- Members
  - Ubaldo T. Ciminieri, Executive Project Director, Technip
  - Steven Heise, Vice President, eProject Management
  - Mark Howard, Vice President, Emerson Process Management
  - Jeff Knight, Construction Engineer/Superintendent, ConocoPhillips
  - Samara Merrighi, Vale
  - Mike Pratt, Project Manager, Bechtel
  - Ward Witherspoon, Project Manager, ConocoPhillips
  - Robin Duszynski, Vice President, Wood Group Mustang
  - Terence Henn, Major Project Manager, American Transmission
  - Howard Irwin, Project Manager, FHR – Koch Industries
  - Steve Owen, Project Director, Southern Company
  - Mauricio Villegas, Vice President, IHI E&C International Co.
  - **John White, Dir, Project Assessments, U.S. Dept of Energy**



# GAO High-Risk Series Update

Report Number	Title	Issued Date
GAO-15-272	DOE Facilities: Better Performance and Life Cycle Cost Analysis Would Improve Disposition Planning	3/19/15
GAO-15-331	NNSA: Reports on the Benefits and Costs of Competing M&O Contracts Need to Be Clearer and More Complete	3/23/15
GAO-15-532T	NNSA: Observations on Management Challenges and Steps Taken to Address Them	4/15/15
GAO-15-354	Hanford Waste Treatment: DOE Needs to Evaluate Alternatives to recently Proposed Projects and Address technical and Management Challenges	5/07/15
GAO-15-216	NNSA: Actions Needed to Clarify Use of Contractor Assurance Systems for Oversight and Performance Evaluation	5/22/15
GAO-15-662T	DOE: Actions Needed to Improve DOE and NNSA Oversight of Management and Operating Contractors	6/12/15
GAO-15-525	DOE Project Management: NNSA Should Ensure Equal Consideration of Alternatives for Lithium Production	7/13/15
GAO-15-499	Modernizing the Nuclear Security Enterprise: NNSA Increased its Budget Estimates, but Estimates for Key Stockpile and Infrastructure Programs Need Improvement	8/06/15
GAO-16-118	Assessment of NNSA's Nonproliferation Programs	10/30/15
GAO-16-23	Nuclear Weapons Sustainment: Improvements Made to Budget Estimates Report but Opportunities Remain to Further Enhance Transparency	12/10/15



# GAO High-Risk Series Update

Engagement Code	Title	Issued Date
361599	NNSA's Enhanced Surveillance Program	Ongoing
361578	Nuclear Weapons: B61 Life Extension Program	Ongoing
100156	DOE Management and Operating Contracts	Ongoing
361644	Plutonium Facility Replacement: Chemistry and Metallurgy Research Replacement	Ongoing
361607	Program Operations at the DOE Waste Isolation Pilot Plant	Ongoing
100208	Hanford Low Activity Waste	Ongoing
100192	Defense-Related High Level Waste and DOE's Plans for Separate Management	Ongoing
100301	DOE's Nuclear Waste Environmental Liabilities	Ongoing
100443	NNSA Program Management Capabilities	Ongoing
100468	NNSA Enriched Uranium Strategy	Ongoing
100510	DOE's Transuranic Waste Volumes	Ongoing
361626	NNSA Plan for Improving and Integrating Financial Management of Nuclear Security Enterprise	Suspended
	Review of DOE's Waste Isolation Pilot Plant (WIPP)	Planned
	Review of DOE's Hanford Waste Treatment Plant	Planned