



U.S. Department of Energy
Office of Civilian Radioactive Waste Management



Office of Logistics Management Transportation Strategic Plan

Presented to:
Nuclear Waste Technical Review Board

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Presentation Outline

- **Overview of Transportation Project Development Structure**
- **Status of each project, current planning basis and schedule for major procurements**
- **Status of Nevada Rail Alignment Environmental Impact Statement (EIS) and connection with the Repository Supplemental EIS**
- **Collaborative planning with stakeholders on key transportation program elements**
 - **National Transportation Plan**
 - **Route development (and impacts that Nevada corridor selection has on national routes)**
 - **Nuclear Waste Policy Act (NWPA) Section 180(C) policy and grant application process**
- **Conclusions**

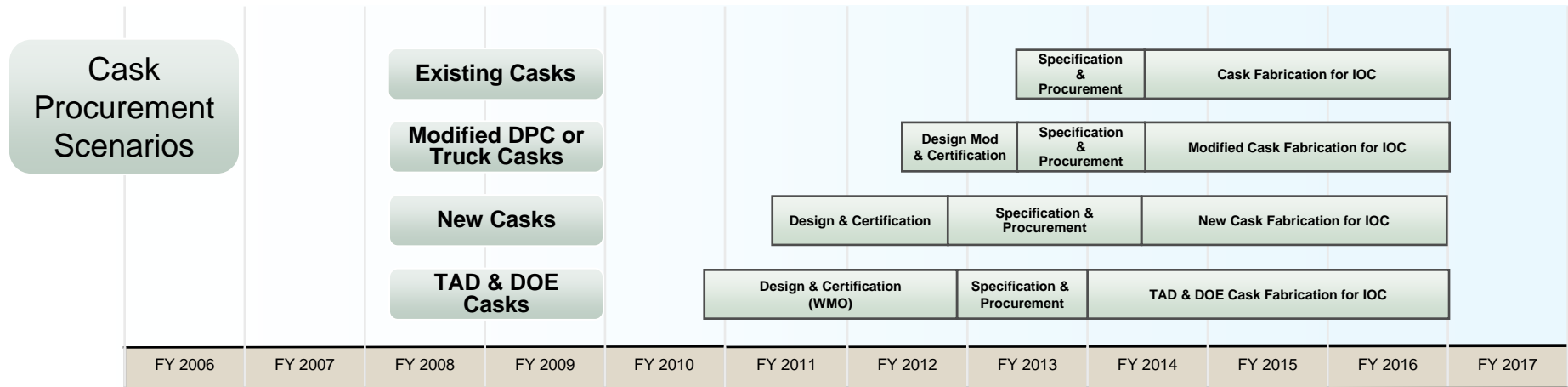


Building the Transportation System

- **The Office of Logistics Management (OLM) is responsible for designing and developing a safe, secure and efficient transportation system**
- **OLM manages two major system projects in developing the transportation infrastructure:**
 - **National Transportation**
 - ◆ **Cask Systems**
 - ◆ **Rolling Stock**
 - ◆ **Support Facilities**
 - **Nevada Transportation**
 - ◆ **Rail alignment environmental impact statement (RA-EIS)**
 - ◆ **Design & construction of a rail line to Yucca Mountain**



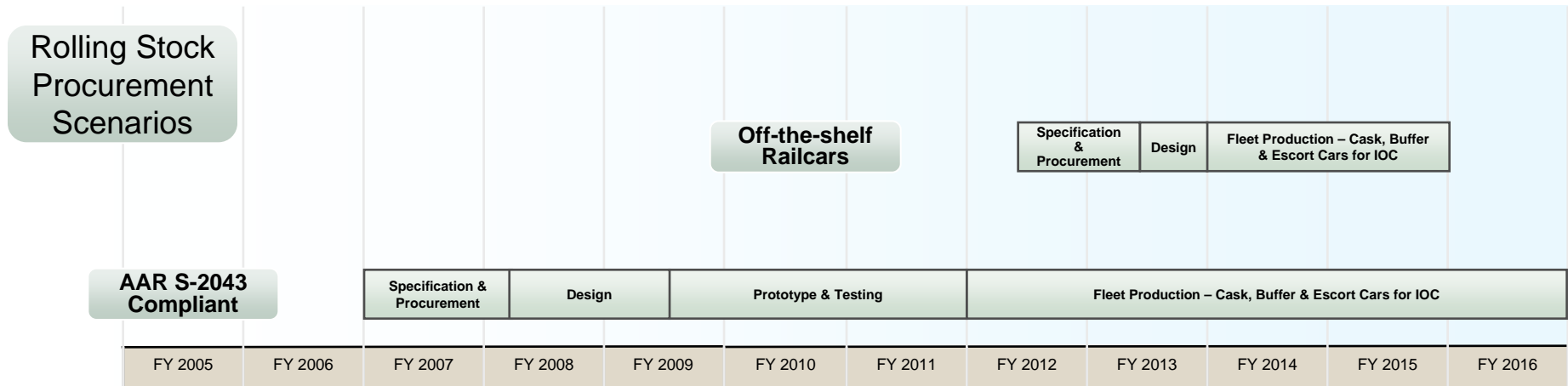
Cask Project Planning Basis



- **Transportation fleet will include rail and truck casks**
- **OLM will procure transportation casks and ancillary equipment for initial operating capabilities**
- **Development, fabrication, delivery and training on use of modified or new casks will take five to seven years**
- **Investments will be made far enough in advance to support training and dry runs with the cask assets**



Rolling Stock Planning Basis



- The lead time for developing, testing and fabricating railcars compliant with Association of American Railroads Standard, S-2043, *Performance Specification For Trains Used To Carry High-Level Radioactive Material* is similar to the lead time required for casks
- OLM is partnering with the Navy on conceptual design and prototyping of the rail security escort car – that work is underway
- Although the order of ~ 200 rail cars (cask, buffer and security) is large for DOE, it is a small procurement by railcar vendor standards
- As with casks, OLM will procure railcars necessary for initial operating capabilities far enough in advance to support training



Support Facilities Planning Basis

- **Original OLM baseline plan includes construction of new facilities:**
 - An integrated fleet management facility for storage and maintenance of casks and rolling stock, as well as for training
 - A transportation operations center providing real-time tracking of shipments and logistical services
- **Logistics and transportation facility location will impact operating costs**
 - Systems engineering studies are planned to optimize facility locations for operations
 - Review of commercial and DOE maintenance capabilities will continue as a back-up option



Nevada Transportation

- **Critical Decision-1 in June 2004 approved the Nevada rail acquisition strategy and project definition**
- **Project Execution Plan (PEP) was completed in December 2006**
- **Project planning baseline and PEP Rev. 1 for Mina will be completed by June 2007**
- **OLM has developed a request for information from potential rail design and construction vendors for publication this winter**
- **Nevada rail acquisition strategy will be updated after meetings are held with vendors**



Nevada Rail Development Status

- Caliente corridor selected from five corridor options in the Repository EIS based on fewer potential land-use conflicts
- Conceptual design for Caliente was complete; Draft RA-EIS ready to be issued on schedule and within budget
- Mina corridor was not considered in the Repository EIS due to objections from the Walker River Paiute Tribe
- In May 2006, Tribe removed objection to studying the impacts of nuclear waste shipments across their lands
- Inclusion of the Mina route in the RA EIS was announced in October and will allow the Tribe to make a more informed, final decision on a ROW



*Nevada Rail Corridors Analyzed in the Final Repository EIS Plus Mina



Nevada Transportation Project Key Milestones and Events

- **2007 - Issue draft RA EIS**
- **2008 - Issue final RA EIS and RA record of decision**
- **2008 - Start final Nevada rail design**
- **2008 - Receive Bureau of Land Management right-of-way**
- **2009 - Start Nevada rail line construction**
- **2014 - Nevada rail operational**



National Transportation Plan

- **OLM is preparing a comprehensive national spent fuel transportation plan that accommodates state, local and tribal concerns to the extent possible**
 - One of four strategic OCRWM program objectives
- **Elements of the plan include**
 - Requirements
 - Infrastructure development
 - Institutional outreach
 - Operations
- **OCRWM plans to collaborate on development of the plan and to issue a draft for public comment later this year**

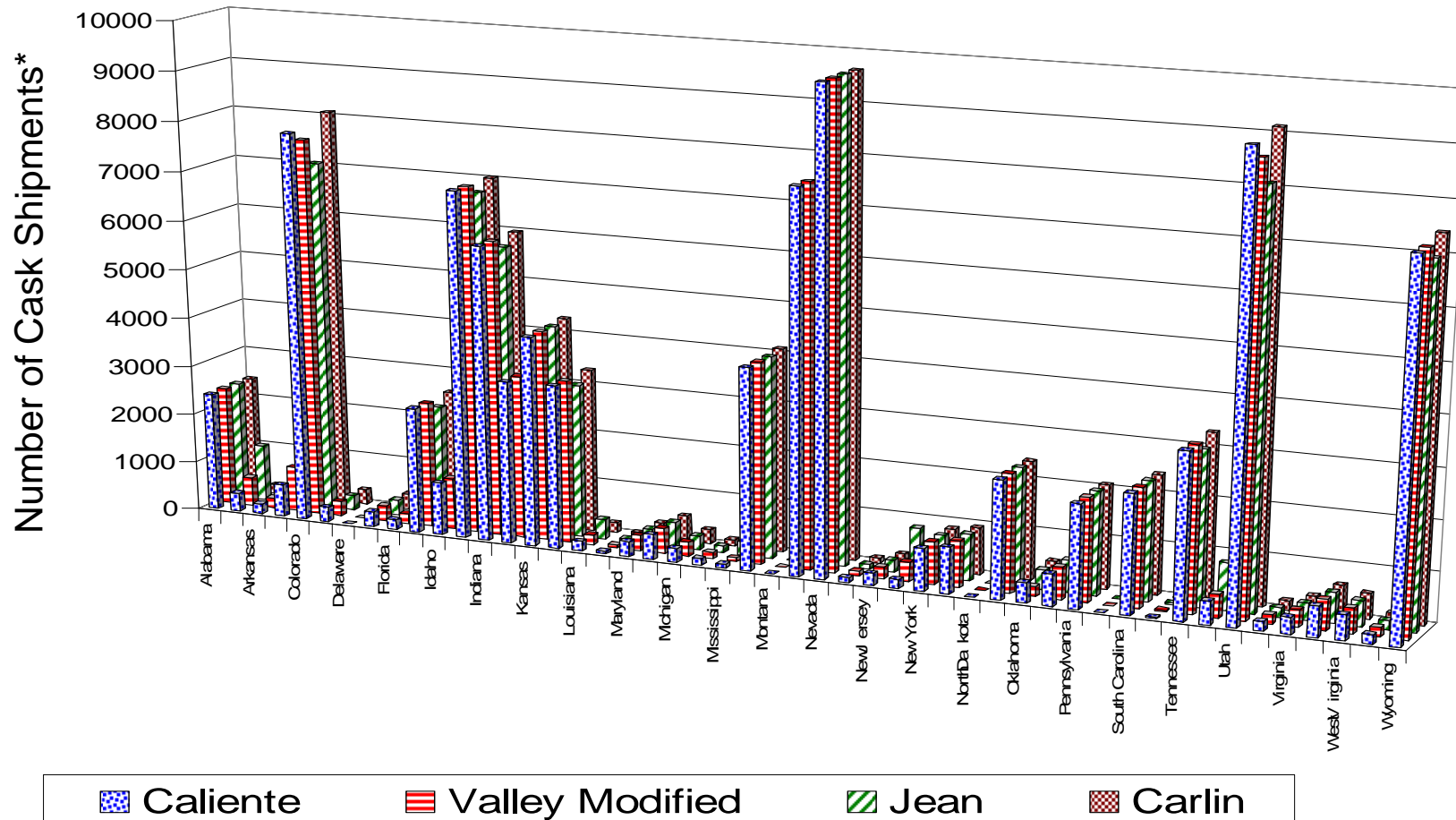


Approach to Developing Routing Process

- **Routing process will:**
 - Identify national suite of routes
 - Provide information for NWPA Section 180(c) pilot programs and determination of funding allocation for states and tribes
 - Coordinate with supplement to the Yucca Mountain final EIS
 - Support planning of transportation operations and security
- **The approach to developing routes includes:**
 - Create the Route Development Collaborative Approach
 - Establishing a Routing Topic Group
 - ◆ Membership is comprised of representatives from TEC Working Group member organizations
 - ◆ Participation from states, tribes, local officials and private sector



Graph Indicating National Routing Implications of Corridor Selection



* Data from the YM FEIS based on bare fuel rail cask shipments



Proposed schedule for routing analysis

- **Routing Process Plan** **September 2006**
- **Form Routing Topic Group** **October 2006**
- **Initiate discussions with carriers** **November 2006**
- **Establish draft routing criteria** **February 2007**
- **Review and revise criteria based on stakeholder input** **April 2007**
- **Finalize routing criteria** **June 2007**



Section 180(c) Implementation

- **Draft 180(c) Policy and Grant Application developed with stakeholder input**
 - State, tribal, and local officials, emergency response associations and nuclear and transportation industry represented
- **NWPA only authorizes the Department of Energy (DOE) to provide funding to supplement existing emergency preparedness capabilities**
- **Section 180(c) pilot program will be conducted at prior to the distribution of planning grants**
- **Planning grants will be available to states and tribes five years prior to shipments starting**
- **Formula-based training grants three years in advance of shipments**



Conclusions

- **Developing a comprehensive national spent fuel transportation system is an OCRWM Program priority**
- **The updated program schedule supports the collaborative development of the transportation system**
- **Collaboration with stakeholders is integral to implementing a transportation system that is safe, secure, efficient and merits public confidence**

