



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



Office of National Transportation Update

Presented to:
**Transportation External Coordination
Working Group**

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**September 20, 2005
Pueblo, CO**

Transportation System Development Update

- **Development of the transportation system is linked to development of the repository**
- **The transportation system will change over its operating life to address changes in national priorities and infrastructure**
- **We are building a flexible system that can address those changes while maintaining safety, security, and efficiency**
- **The repository is a critical component of national initiatives for energy security, environmental clean-up, and national defense. Transportation is designed to support those national goals**



Transportation Update: Recent Accomplishments

- **On July 18, 2005, Office of Civilian Radioactive Waste Management's (OCRWM) Office of National Transportation (ONT) announced its decision to use dedicated trains as the usual shipment mode**
- **An Environmental Assessment (EA) was published as part of a Public Land Order submitted to the Department of the Interior through the Bureau of Land Management (BLM)**



Use of Dedicated Train Service

- **Benefits of dedicated trains include system efficiency and operational control**
 - **Enable OCRWM to better manage resources**
 - Avoiding lengthy “dwell times” in rail yards means shorter transit time
 - Increased command and control capabilities
 - Increased routing flexibility, operational control over the shipments
 - Shorter transit time provides more efficient use of assets
 - **Responsive to concerns expressed by numerous parties**
 - OCRWM has received recommendations from states, Federal Railroad Administration (FRA), Association of American Railroads (AAR), and industry to use dedicated trains

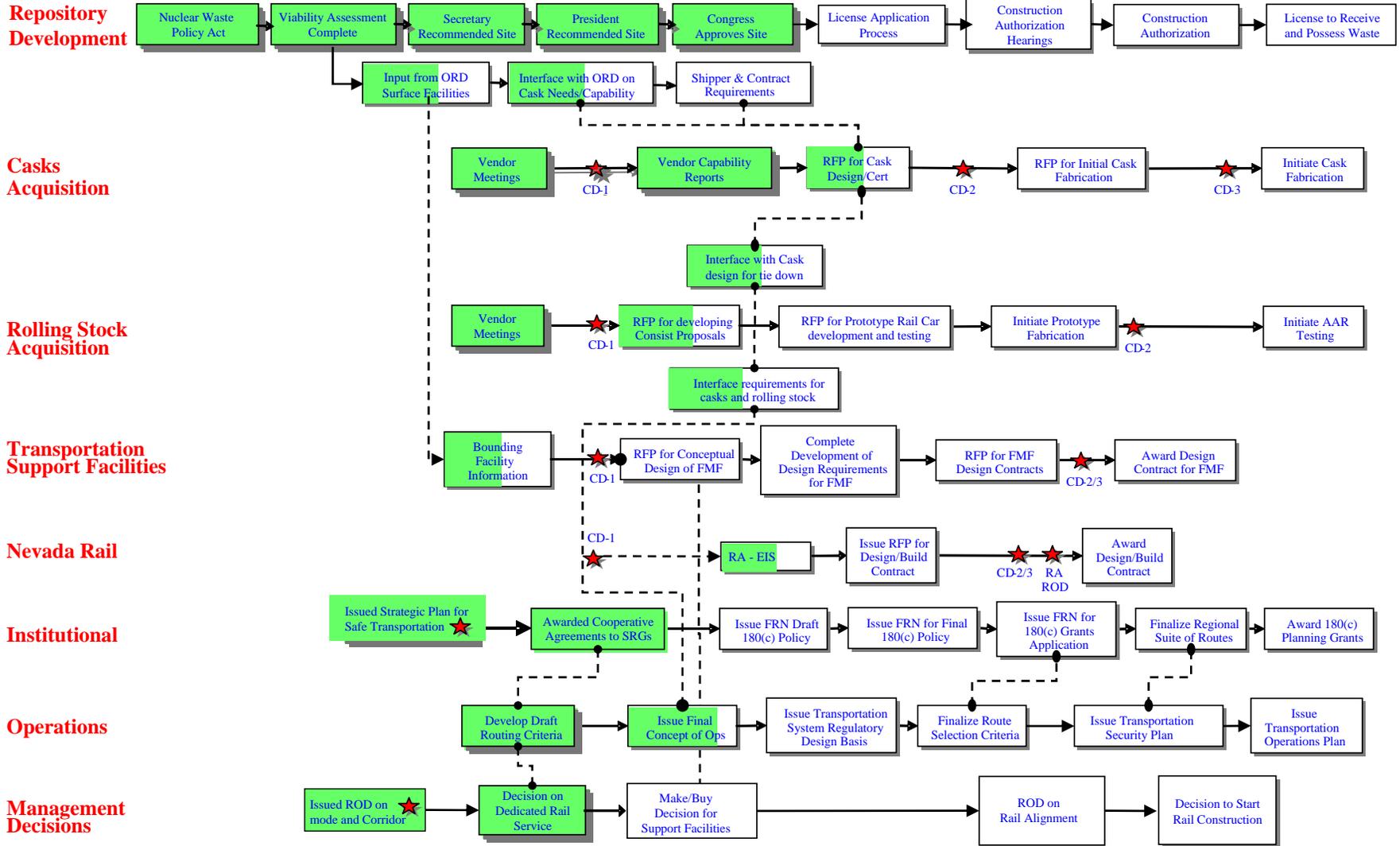


Draft EA for Protection of Public Lands from New Surface Entry

- **December 2003 application to BLM was filed to protect 308,600 acres of public lands from surface entry and mining – requested 20-year protection**
 - Land would be segregated for two years in anticipation of Rail Alignment Environmental Impact Statement (EIS) completion
 - Two-year segregation will expire in December 2005
- **Draft EA on land withdrawal will provide BLM with documentation on**
 - Mineral resources and socio-economic analyses
 - Land use and ownership
 - Public participation
 - Intergovernmental consultation
- **EA preferred alternative is for 10-year withdrawal, which should be enough time to complete the EIS and issue a record of decision on the corridor alignment**



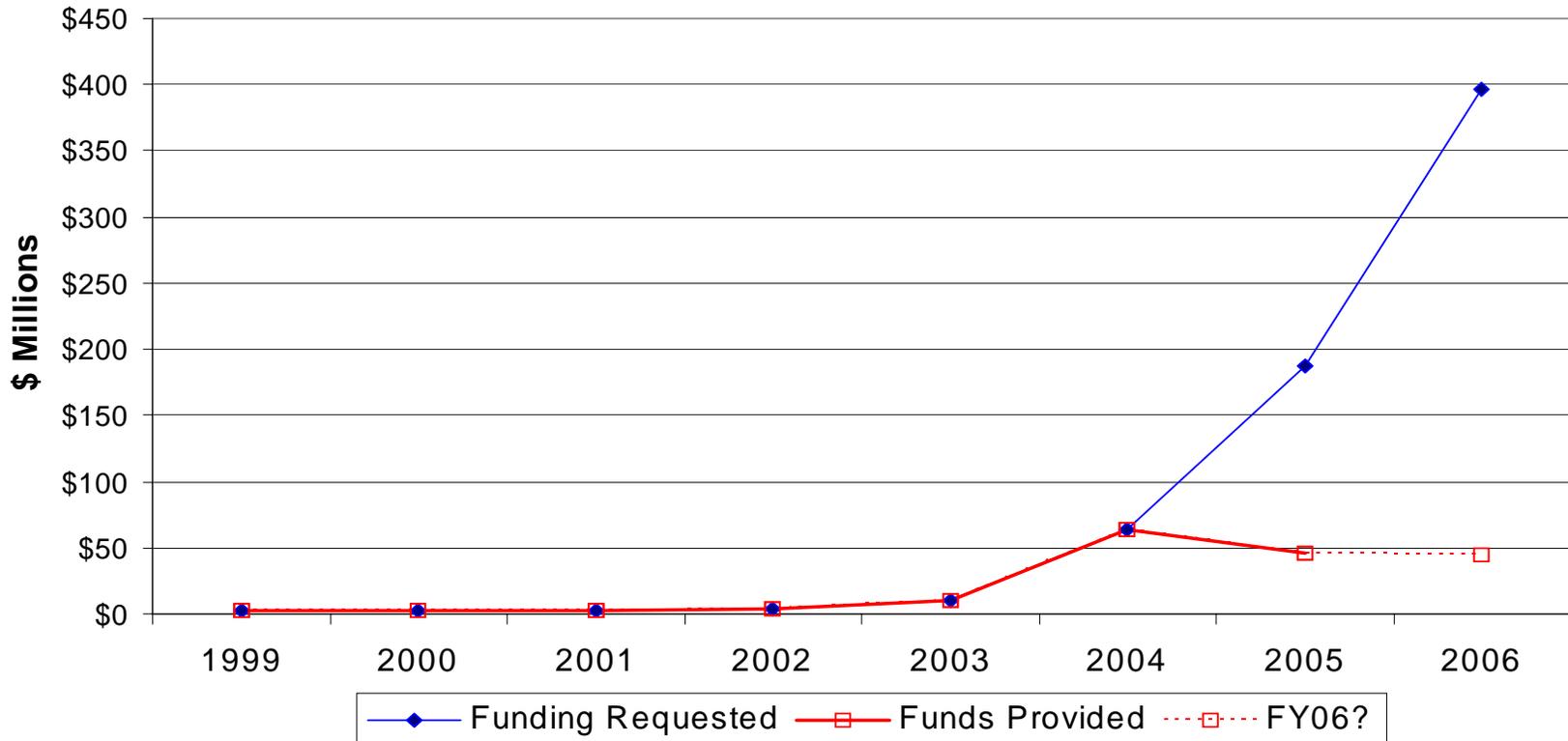
ONT Projects and Interrelationships



The CDs or Critical Decisions noted on this chart refer to an internal DOE approval process for project development.



Office of National Transportation Funding



- **ONT funding is tied to overall OCRWM funding and project status**
- **ONT will focus on acquisitions that will advance infrastructure development without major capital requirements, such as procurement of designs rather than fabrication of hardware**



Transportation Update: 2006 Priorities

- **Focus on completing Draft Nevada Rail Alignment EIS**
- **Initiate first steps in acquisition of casks by contracting for conceptual designs to close the capability gap**
- **Continue working with State Regional Groups and Tribes**
- **Coordinate with key stakeholders through the Transportation External Coordination Working Group (TEC) regarding route selection criteria, 180(c) development, and security planning**
- **Update OCRWM section of *Radioactive Material Transportation Practices Manual***
- **Begin conceptual design work on rail cask cars**
- **Conduct trade studies that further establish requirements for transportation support facilities**



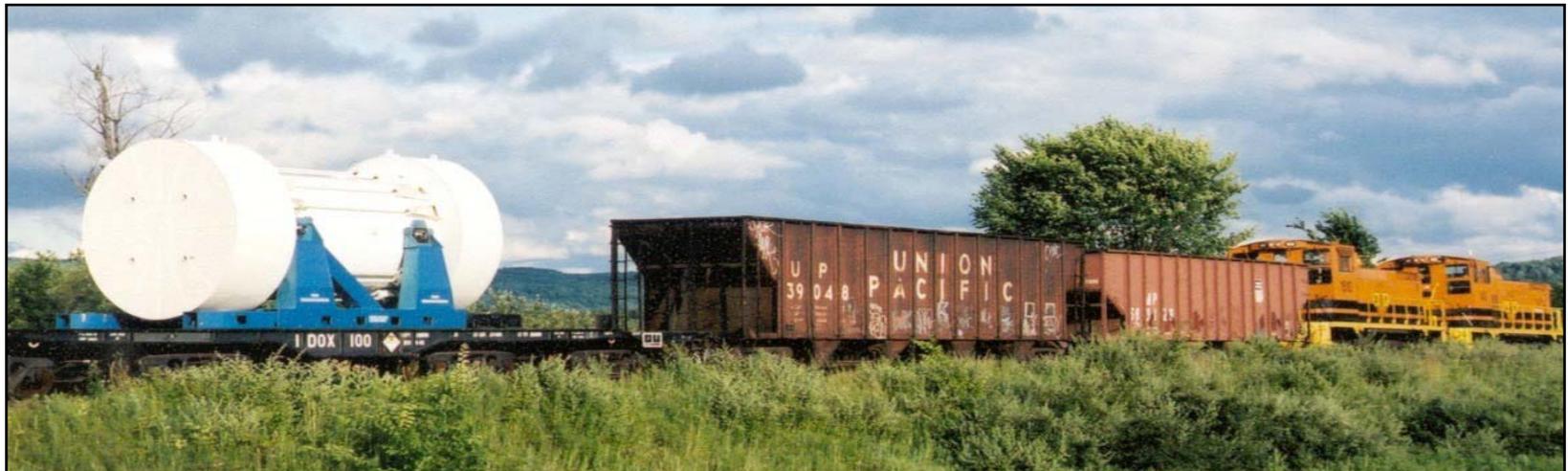
Cask Acquisition

- **ONT has a preference for cask systems that provide the maximum flexibility in terms of facility and fuel compatibility**
- **Coordination efforts are underway to ensure transportation casks are compatible with the Yucca Mountain surface facilities**
 - **Size and weight parameters accommodate facility design**
 - **Cask handling considerations are being integrated with facility design efforts**
 - **The potential contributions of cask design to overall system operations are being considered as the cask attributes are defined for acquisition**
- **Multiple cask procurements will be undertaken to accommodate differing inventories of waste, and differing facility capabilities**
 - **Various commercial spent nuclear fuel configurations (SNF)**
 - **Department of Energy (DOE) SNF and high-level radioactive waste (HLW)**



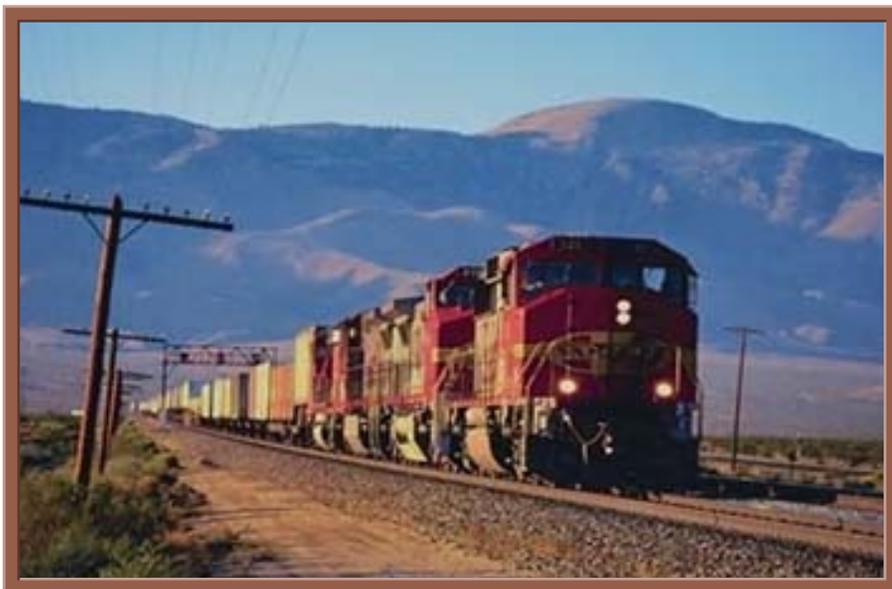
Rolling Stock Acquisition

- **ONT has met with passenger and freight car manufacturers to discuss designs of cask, escort, and buffer cars and they indicated the schedule for developing these cars was realistic**
- **A decision will be made in the future either to procure a fleet of locomotives or to utilize locomotives supplied by the railroads**
- **The DOE is currently evaluating the AAR's Performance Specification, S-2043, for trains used to carry SNF and HLW**
- **Requests for proposals for conceptual design of prototype cask, buffer, and escort railcars are pending**



Nevada Rail Development

- **Completing technical data collection along the corridor**
- **Issue draft Rail Alignment EIS in FY 2006**
 - **Hold public hearings to obtain comments on draft Rail Alignment EIS**

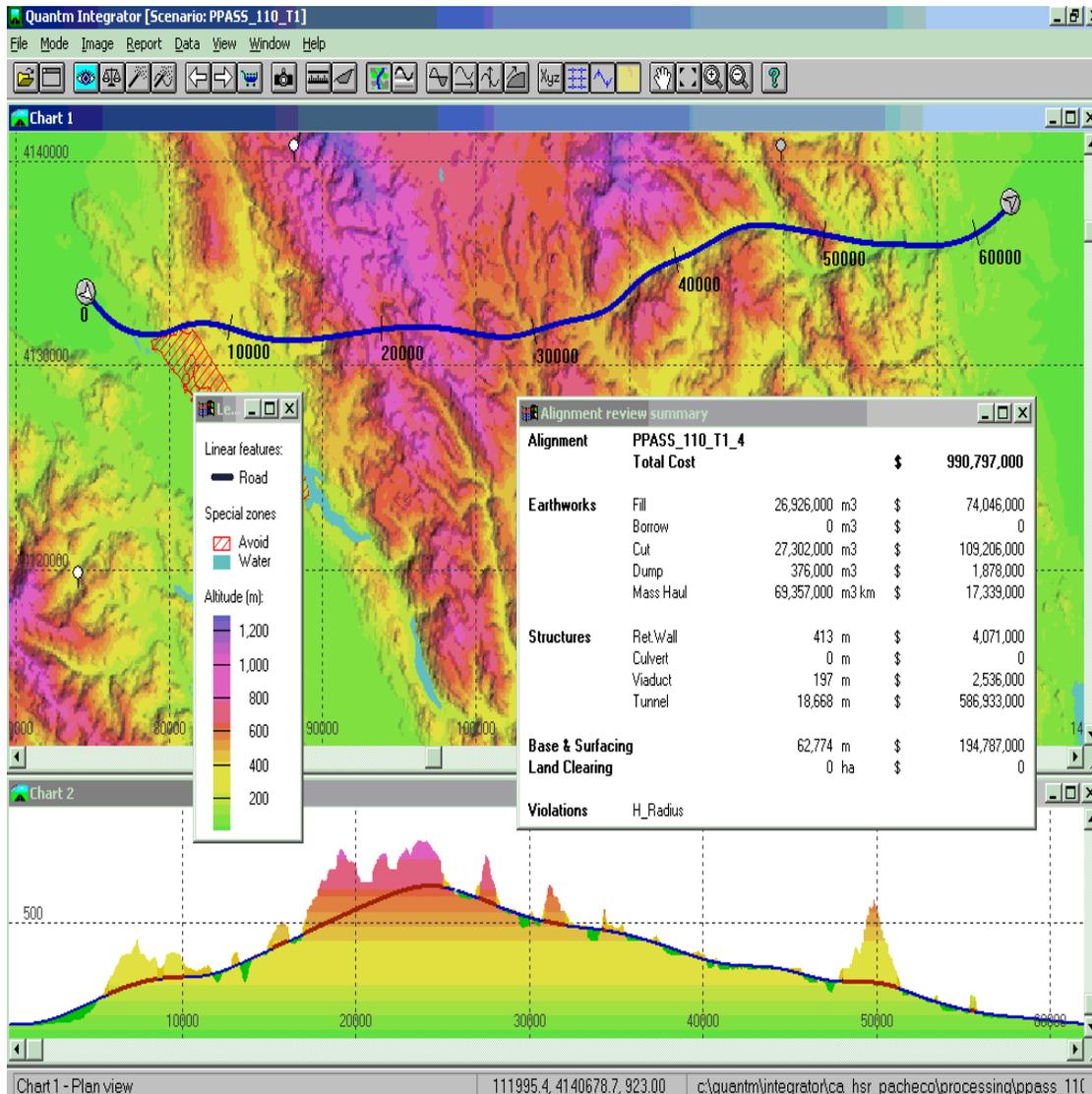


- **Issue final Rail Alignment EIS in FY 2007**
- **Issue Record of Decision for rail alignment**
- **Final design & construction of the rail line**



Rail Design Efforts

- Technical data on the Caliente corridor is being collected
- The raw data is being analyzed for development of the EIS
- The raw data is also supporting conceptual design work for the rail line
- Terrain data is being combined with geology, hydrology, cultural and other data to assess alignment options



Institutional/Operational Activities

Institutional Project

- Develop and issue Section 180 (c) Policy
- Work with State Regional Groups to develop regional suite of routes
- Meet with individual Tribes to establish consultation and coordination mechanism on topics like Section 180(c) and routing
- Update *Radioactive Materials Transportation Practices Manual (DOE M 460.2-1)*
- Develop information materials for use in exhibits, tours and by various organizations

Operations

- *Develop the Classification Guide for Secure Transportation of Nuclear Waste*
- International transportation sabotage studies
- Transportation logistics/routing models
- Operational and systems studies



Ensuring Operational Readiness

- **Future operational readiness efforts will include**
 - **Developing flexible transportation operational plans and detailed shipment campaign plans**
 - **Conducting emergency and communications exercises**
 - **Participating in readiness reviews**



Funding under Section 180(c)

- **Under Section 180(c), DOE must provide technical assistance and funds to states and tribes for training in safe, routine transportation and emergency response procedures**
 - Covers all modes of transport
 - Funding will come from the Nuclear Waste Fund
- **Section 180(c) is an assistance program to provide “gap” funding, not a program to create basic emergency preparedness infrastructure**
- **OCRWM is developing a policy and has proposed an allocation formula for distribution of the funds**
- **DOE expects to issue a draft policy for comment in FY06**



Summary



- **ONT has made significant progress despite myriad challenges, including budgetary difficulties**
- **Infrastructure acquisition plans are moving forward in phases, emphasizing flexibility**



Summary

