



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



Office of National Transportation Update

Presented to:
U.S. Transport Council
Yucca Mountain Summit III

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OCRWM 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 an essential link to support national initiatives for energy security, environmental clean-up, and national defense. Transportation is designed to support those national goals.**

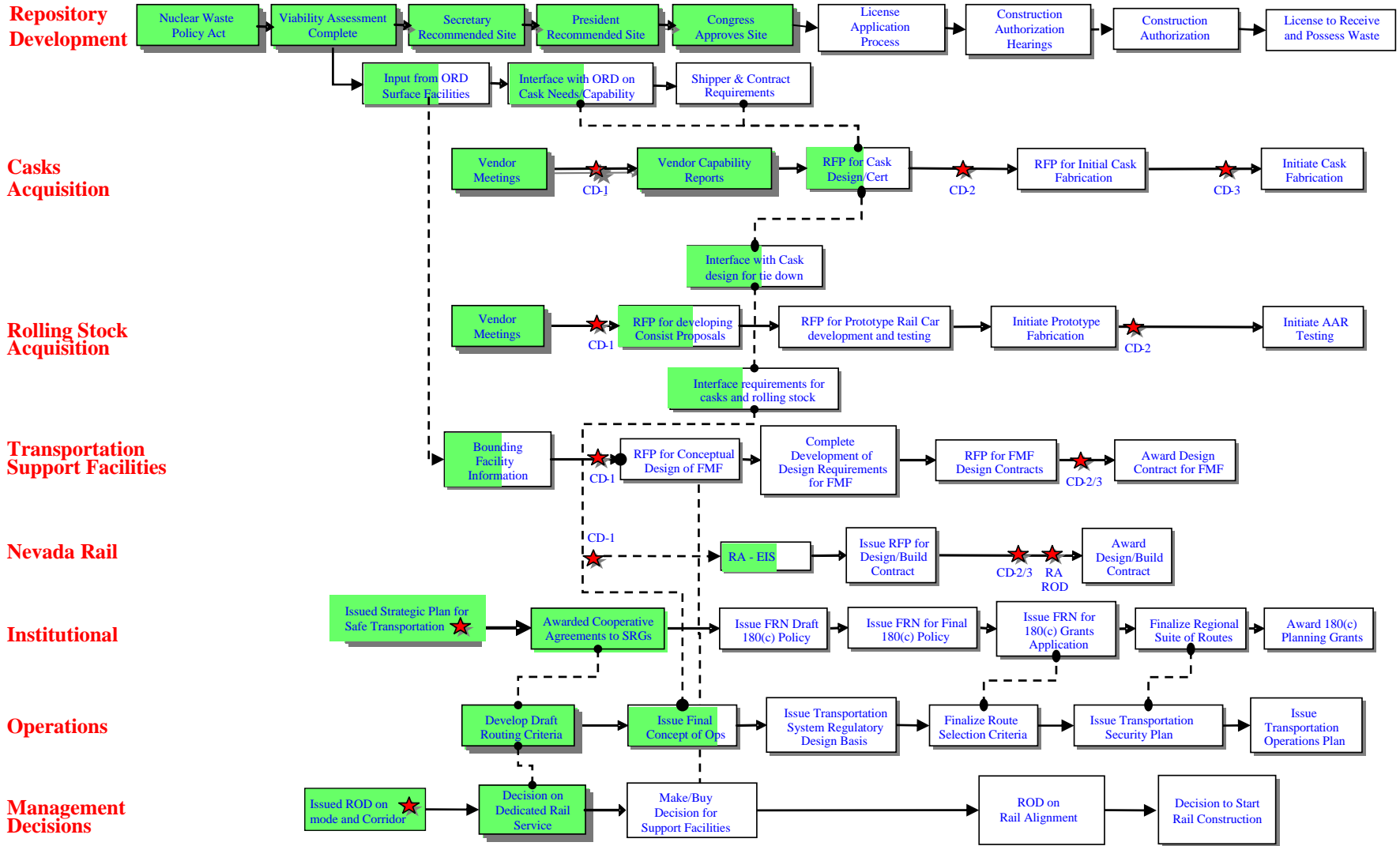


Transportation Update: Recent Accomplishments

- **On July 18, 2005 the 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 was published as part of a Public Land Order submitted to the Department of the Interior through the Bureau of Land Management.**



ONT Projects and Interrelationships



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

Current Status

- **New Principal Deputy Director, Paul Golan**
- **New Director nominated, Ward Sproat**
- **Re-evaluation of the program – including transportation**

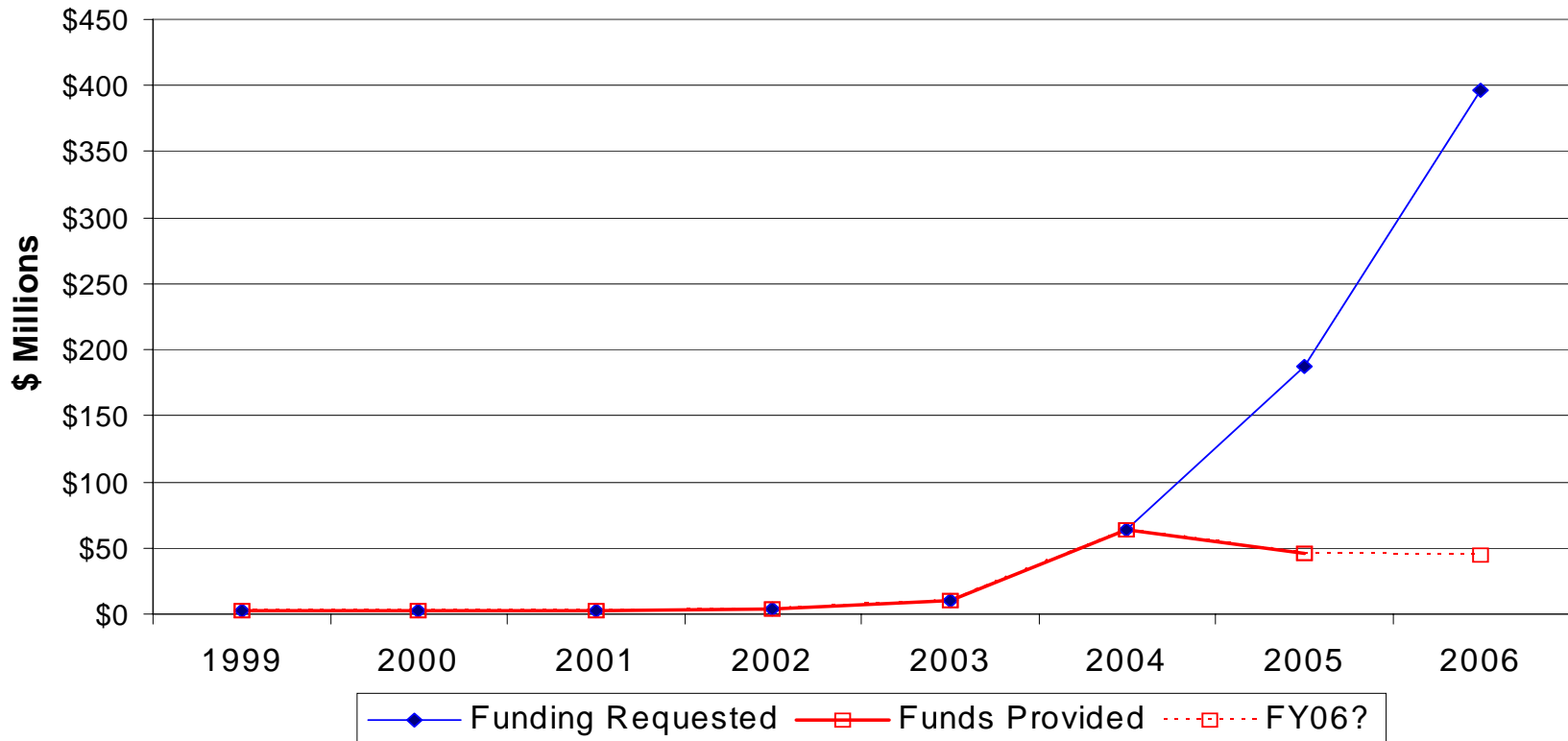


Total System Modeling

- **Models all components of the system with ability to run impacts using different variables, i.e.**
 - originator locations,**
 - routes,**
 - modes,**
 - packaging at the Repository,**
 - heat loads,**
 - dose levels,**
 - costs,**
 - amount in aging,**
 - permanent disposal options,**
 - potential litigation damages**
- **The model has proved helpful in efforts to evaluate program costs and impact of schedule delays**



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 RW section of Radioactive Materials Transportation Practices Manual;**
- **Begin conceptual design work on rail cars;**
- **Conduct trade studies that further establish requirements for transportation support facilities.**



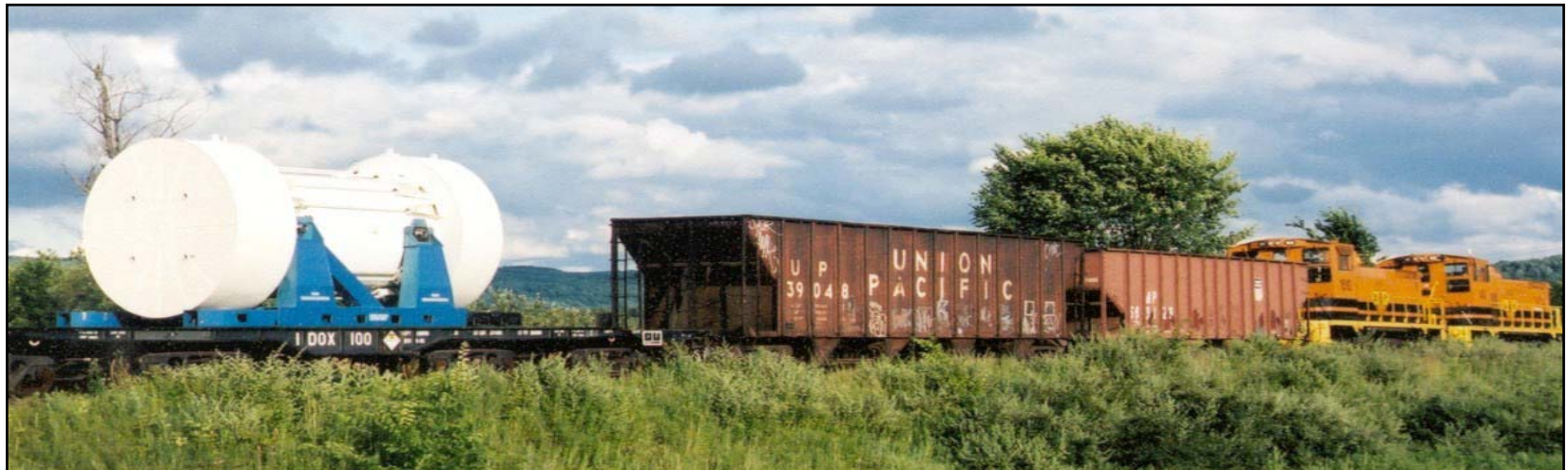
Cask Acquisition

- **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**

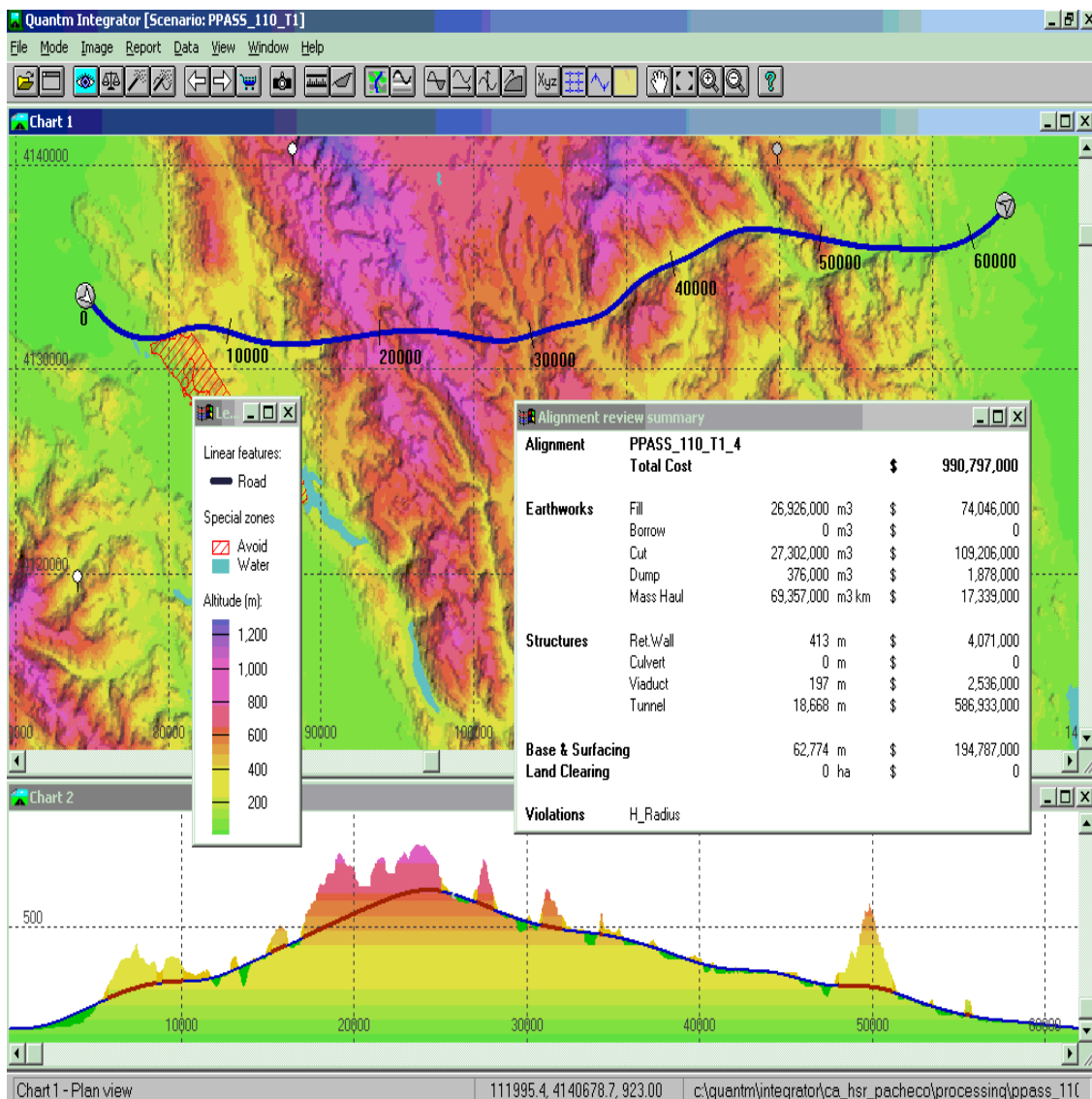


- **Issue Final Rail Alignment EIS in FY 2007**
- **Issue Record of Decision for rail alignment & construction**
- **Final design & construction of the rail line**



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 suites of routes
- Meet with individual tribes to establish consultation and coordination mechanism on topics like Section 180(c) and routing
- Update Transportation Practices Manual
- Develop information materials for use in exhibits, tours and by various organizations

OPERATIONS

- Classification Guide development
- 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 crafting a policy built on collaborative development of an allocation formula for distribution of the funds**
- **DOE expects to issue a draft policy for comment in FY06.**



Summary



- **ONT continues to make progress within the budget constraints**
- **Infrastructure acquisition plans are moving forward in phases, emphasizing flexibility**

