

# Talking Points on Maps and Nuclear Waste Transport to Yucca Mt in Nevada

- Maps released October 27, 2015 of projected road, rail, and barge nuclear waste routes in the event that Yucca Mt were to open were made by the State of Nevada, Office of Nuclear Projects based on Department of Energy data. 43 states and more than 100 cities of 100,000 or more are impacted.
- These projections show a total of 9,495 containers shipped by rail, and 2,650 truck shipments, for a total of 12,145 containers traveling across our nation.
- What type of waste? Highly radioactive “spent” nuclear fuel rods; by-product of nuclear power.
- Nearly all this waste is sitting at the site where it was made, either in over-full wet storage pools, or in dry containers. At least 50 million people live within 3 miles of the projected transport routes.
- More than 100 Grassroots groups nationwide have embraced “interim storage” at the reactor site and are working for improved hardened storage until a qualified final destination is available, and waste can be moved once.
- Congress is working on plans that would merely transfer the waste to a different location (consolidated storage) with no improvement in the technology while adding and compounding the hazards of transport. Some proposals include environmental devastation at a reprocessing site.
- Nuclear transport nationwide would also result if Congress were to revive the failed and terminated Yucca Mt nuclear waste site in NV.
- Yucca is, and always has been, opposed by the State of Nevada and the Western Shoshone Nation
- Yucca Mt would can hold only part of the total waste. Moving this 64,000 MTU of waste to Yucca would likely take at least 20 years of continuous shipments.
- If only truck were to be used, the number could be as high as 60,000 shipments.
- Accidents are tied to shipment miles. The DOE risk assessment under this scenario projects 50 to 260 accidents and 250 to 590 incidents over the 2 decades of transport.
- Radioactive Waste Management Associates of New York studied the rail tunnel fire in Baltimore in July 2001 and concluded that such conditions would breach a canister had the train carried “spent” fuel.
- Nuclear waste in that tunnel fire would have contaminated large areas of Baltimore, caused over 31,800 latent cancer fatalities over 50 years. Cleaning up costs were estimated to exceed \$13.7 billion.
- Shipments to Yucca would be of waste that belongs to the DOE and so federal shipments.
- This waste is thermally hot and this is a challenge in packaging and moving the waste.
- Even perfect containers emit waves of radiation (gamma); it’s as if the containers were X-ray machines going down the road in the “on” position.
- During "routine" conditions, the U.S. Nuclear Regulatory Commission allows one chest x-ray (10 millirems) per hour to be emitted at a distance of 6.6 feet away from the shipping container. But during accidents, NRC allows 1 rem (1,000 millirems) per hour of radiation at a distance of 3.3 feet away, a dose equal to 100 chest x-rays per hour.
- Shielding sufficient to stop this radiation would make the containers too heavy to move.
- Casks used to ship spent nuclear fuel are NOT required to be physically tested. Certification is provided by the NRC based only on computer simulations and scale model tests.

Source: Nuclear Information and Resource Service ([www.nirs.org](http://www.nirs.org)).