Overview of Crude By Rail (CBR) Movements – United States

- **Facts:**

  - Per U.S. EIA, in 2014 the **U.S. became the No. 1 producer of oil** in the world and with that continuing into 2015 – bigger than Saudi Arabia or Russia.

  - Per the American Association of Railroads, 2014 carloads carrying oil **rose by more than 5,000 percent** when compared with the numbers in 2008 – approximately 350,000,000 barrels in 2014.

  - Key U.S. production regions: **Texas, Gulf of Mexico offshore** and **North Dakota**, which combined account for more than one-half of U.S. production.
Crude By Rail: Why It Grew

- **Within the past 10 years:**
  - Rapid expansion of crude oil production in inland U.S.
  - Very limited pipeline capacity – North Dakota in particular
  - Lack of pipeline network to coastal regions supplied in recent decades by imported or Alaskan crude oil
  - Domestic crude less expensive than imported
  - Quick capability of railroads to expand crude oil capacity
  - A positive economic equation for producers, refiners, and railroads
West Coast Sources of Crude By Rail

- Five Petroleum Administration for Defense Districts (PADD) in the U.S.
  - The West Coast, Alaska, and Hawaii are located in PADD 5

- Largest movement is originating from PADD 2, with sources from North Dakota oil fields
West Coast Crude Oil Movements in Detail

- **Crude by Rail transported to:**
  - Unloading facilities at refineries in Washington and California
  - Terminals in California, Washington, and Oregon.

- **CBR Importance of West Coast:**
  - Supply serves needs of key population centers
  - Bakken accounts for 90% of West Coast receipts delivered by rail
The Pacific Northwest Rail Network

- Seven principal rail routes to refineries and ports in British Columbia, Washington, and Oregon:
  - UP Columbia River Gorge
  - BNSF Columbia River Gorge
  - BNSF Stampede Pass (Pasco-Auburn)
  - CP-BNSF via Bellingham, Washington
  - CP-UP via Eastport, Idaho
  - CP to Vancouver, B.C.
  - CN to Vancouver, B.C.
High-profile accidents have introduced the need to improve public safety, while also reducing the potential for rail spills.

In 2015, USDOT strengthened safety standards for rail transportation of flammable liquids:

- Improved tank car standards
- Phase-out of older tank cars
- Improved train operation requirements
- New testing and sampling requirements to determine crude oil volatility
- Revising current operational protocols