Safe Communities, Norfolk Southern, and Crude Oil by Rail

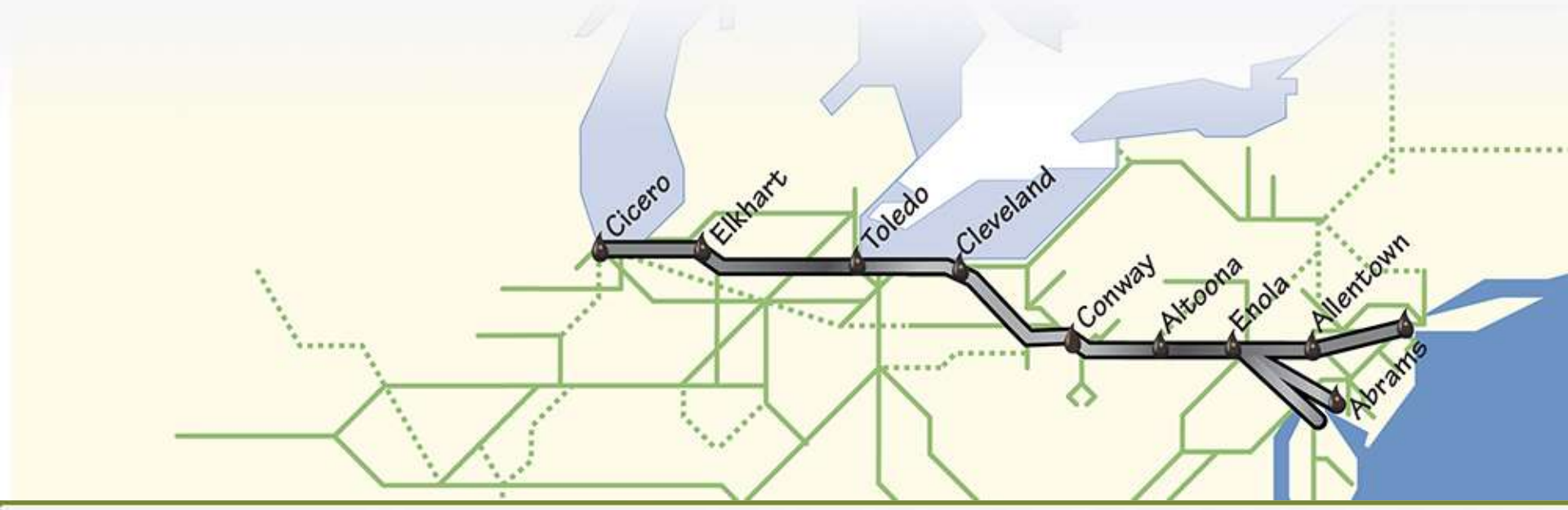
Rudy Husband

Delmarva Freight Summit
August 6, 2014
Dover, Del.

NS NORFOLK SOUTHERN
One line, infinite possibilities.

Moving crude oil is a small, growing business.

- NS transported little crude oil in 2010 and only 75,000 in 2013.
- NS also ships products for drilling – sand, cement, pipes.
- Crude oil on NS moves across our high-capacity line from Chicago to Pa., Del., N.J. – the shortest, most-direct route.
- NS is required by law to carry crude oil.

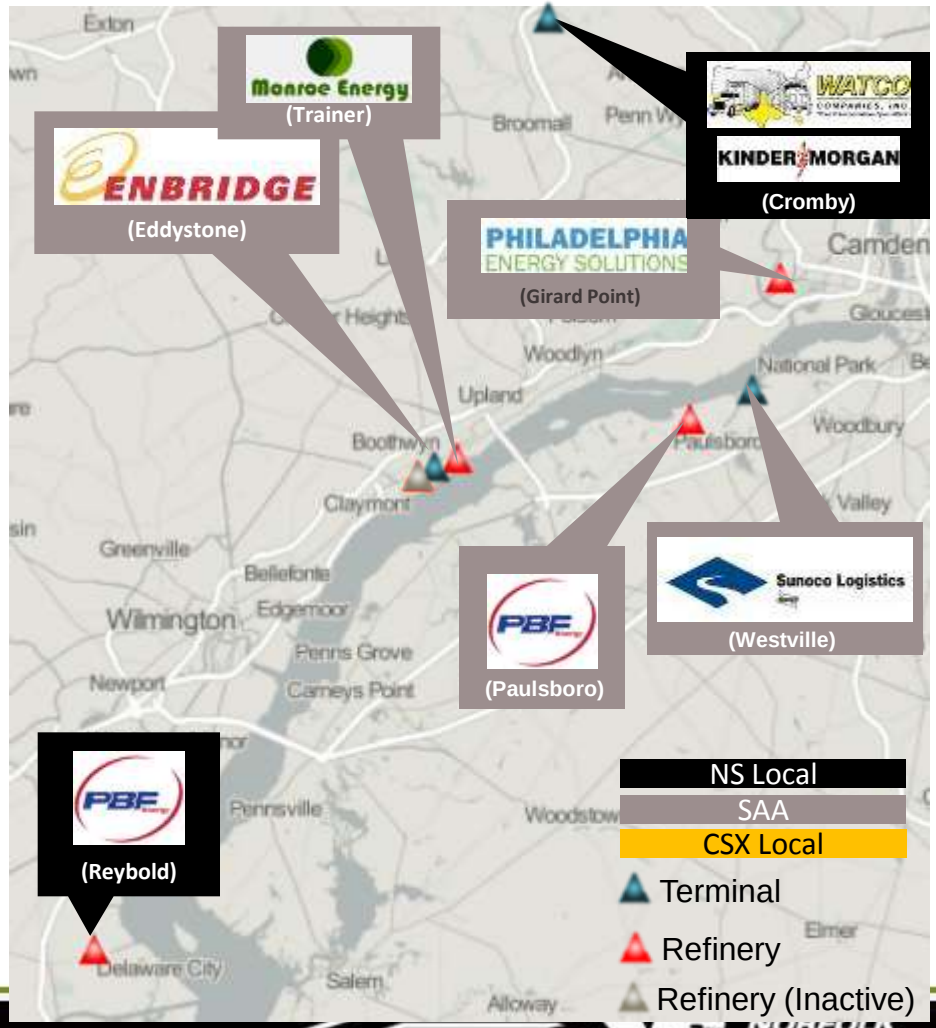


US East Coast Crude Oil Receivers

A Competitive Landscape

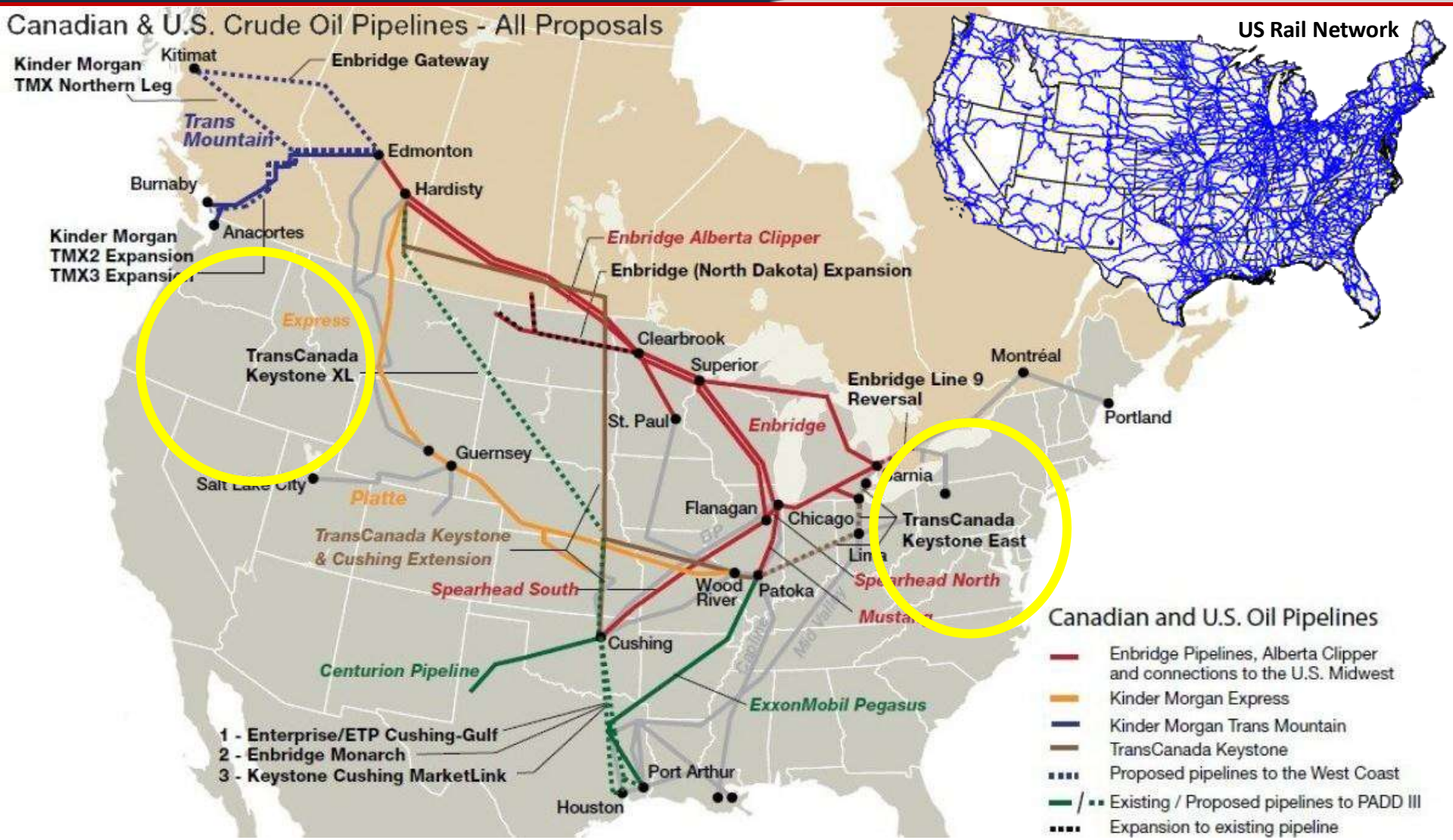
EAST COAST CRUDE DESTINATIONS

PHILADELPHIA AREA CRUDE DESTINATIONS



North American Crude Oil Pipelines

NS Markets Politically and Topographically Isolated from Pipeline Connectivity



Rail is the safe way to move oil and hazmats.

- NS carried 5.3 million hazardous materials shipments (including crude oil) 2000-2013.
- 99.997 percent arrived incident free.
- For the entire rail industry, 2012 and 2013 were safest years ever.
- Rail hazmat accident rates have declined 91 percent since 1980.

Voluntary rail/USDOT pact further reduces risk.

February 21, 2014

- Rail Corridor Risk Management System identifies safe, secure routes.
- Speed restrictions, such as 40 mph restrictions in High Threat Urban Areas (HTUA) for Key Trains meeting the agreement definition
- Additional rail inspections
- Additional advanced trackside detectors
- Training and tuition assistance for local first responders
- Creating local emergency response resource inventories
- End-of-train devices for faster train stopping

USDOT Emergency Order

- **May 7, 2014 – Docket DOT-OST-2014-0067**
  - Within 30 days railroads operating trains transporting 1,000,000 gallons or more of Bakken crude must provide applicable State Emergency Response Commissions with:
    - Reasonable estimate of the number of trains implicated by this EO that are expected to travel weekly through each county within the state.
    - The routes over which the crude oil is transported
    - Identification of at least one RR point of contact for emergency response coordination purposes.

USDOT Notice of Proposed Rule Making

July 23, 2014

- **Operating Rules (for Trains with 20 or More Carloads of Crude or Ethanol)**
  - 50 mph speed limit
  - Proposes three speed limit options for trains not meeting the new standards:
    - 40 mph nationwide
    - 40 mph in high threat urban areas
    - 40 mph in cities with populations of 100,000 or more
  - Routing analyses required
  - SERC notification in the earlier emergency order would be made permanent
  - Requires use of ECP brakes where all cars are so equipped

USDOT Notice of Proposed Rule Making

July 23, 2014

- **Retrofit of Existing Tank Cars**
  - DOT would require existing cars to be retrofitted to achieve the performance characteristics of the new car specification, according to the following schedule:
    - Packing Group I, by October 1, 2017
    - Packing Group II by October 1, 2018
    - Packing Group III by October 1, 2020

- **Sampling and Testing**
  - DOT is proposing a sampling and testing program.

- **Oil Spill Response Plans**

USDOT Notice of Proposed Rule Making

July 23, 2014

- **Specifications for New Tank Cars Manufactured After October 1, 2015**
  - Would be required to address the bottom outlet handle, have full-height head shields, have a non-reclosing pressure relief valve, be constructed of TC-128 Grade B normalized steel, and include a jacket with thermal protection. In addition, comment is sought on the following three proposed requirements:
    - 9/16” shell plus rollover protection and ECP brakes
    - 9/16” shell without rollover protection and ECP brakes (AAR Tank Car)
    - 7/16” jacketed CPC-1232

- **Comments due September 30, 2014**

Better tank car standards

Rail customers own the tank car fleet.

- North American fleet consists of 335,000 tank cars.
- 99 percent are owned by rail customers and leasing companies.
- Modern tank car design and construction often exceed federal standards.

NS operating standards for crude oil trains.

- "Key Trains" – crude oil, ethanol, and hazmat shipments – operate under long-standing best practices.
- Key Trains include:
  - 1 or more loads of toxic inhalation/poisonous inhalation (TIH/PIH) materials
  - 20 or more tank loads of any hazardous materials
- Special Handling for Key Trains:
  - Special identification and tracking
  - 50 mph max speed limit
  - Routes feature high standards for wayside wheel bearing detector spacing, frequency of track inspections, and maintenance of meet/pass tracks.
  - A Key Train is not left unattended on main line or siding tracks unless crew members and dispatcher conduct a detailed briefing re securement procedures, the reverser is removed, and the cab is locked.

NS keeps first responders informed.

- Helps local Emergency Planning Committees (LEPCs) assess hazmats moving through their communities
- Assists LEPCs in assessing safeguards against unintentional releases
- Provides specific commodity flow info to emergency response agencies and planning groups
- Provides train and hazmat information to CHEMTREC for quick relay to responders in event of major incident.

NS is prepared for incidents.

- 24x7x365 hazmat, environmental operations, and industrial hygiene groups
- Certified subject matter expert employees
- More than 300 “NS Sentinels” – employees specially trained under Occupational Safety and Health Administration (OSHA) and Hazardous Waste Operations and Emergency Response (HAZWOPER) certification programs.
- NS Sentinels stationed on key train routes

NS supports emergency first responders.

- Training for 4,800 state, local responders at 108 locations in 2013 alone
- Scholarships for emergency management agencies to attend Security and Emergency Response Training Center in CO.
- Full-scale drills for staged accidents involving crude oil
- 14 national achievement awards from the Transportation Community Awareness and Emergency Response Program (TRANSCAER)

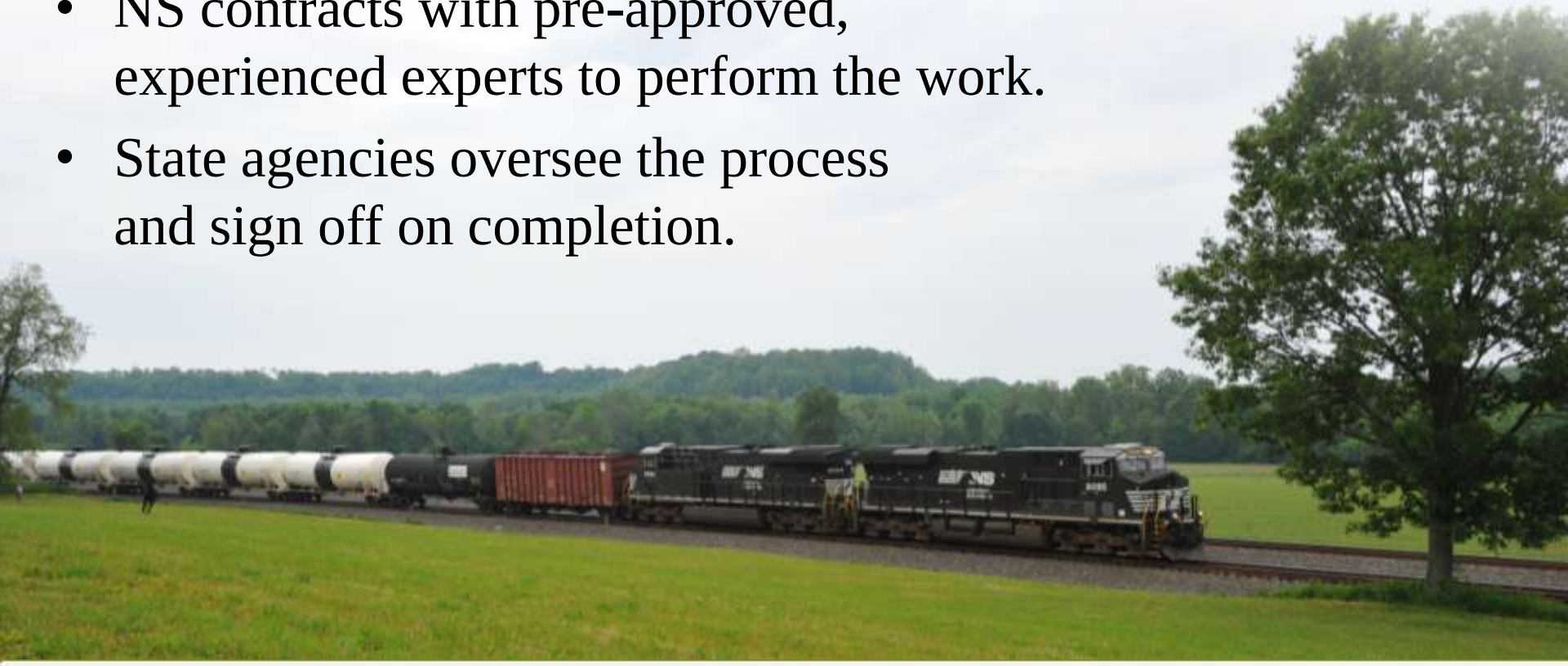
Additional expertise is on call.

NS brings outside resources to bear through master contracts with:

- 44 emergency response contractors throughout the rail system
- Experts in environmental remediation and ecological assessment
- Leading organizations in worker protection, exposure assessment, vapor plume modeling, air monitoring

Site remediation is comprehensive.

- NS is responsible for mitigation and restoration in the event of a spill.
- NS contracts with pre-approved, experienced experts to perform the work.
- State agencies oversee the process and sign off on completion.



THANK YOU