

# North Dakota State University: Rail/Intermodal Transportation Programs

## NURail Conference 2014

Denver Tolliver

Director: Upper Great Plains Transportation Institute

# Background/History

- 1967: UGPTI established by ND legislature
- 1988: Mountain-Plains Consortium (MPC) selected as Region 8 UTC
  - NDSU, CSU, UD, UCD, USU, UU, UW, SDSU
- 2002: Transportation & Logistics (TL) Program (4 colleges/8 departments)
- Administration: UGPTI (Provost); TL (CGIS)
- Funding (biennial): GF=\$4 mil.; NDDOT=\$4-\$5 mil.; Federal=\$8-\$10 mil.

# Rail/Intermodal Research

- Railroad timber bridges (MPC)
- Energy efficiency (rail, barge, truck)
- Class II/III investment needs → FRA
- Freight flows/freight planning
  - Grain shipment data by elevator and destination
  - Coal & oil shipment data (Industrial Commission)
  - Manufacturing/intermodal (DOC)
- Truck/rail share → highway investment plans
- Regional railroads: infrastructure needs

# Future Rail/Intermodal Research

- Rail safety
  - Transportation Safety Advisory Committee (FHWA, FRA, PHMSA, FMCSA, NDDOT, NDHP, NDES)
  - FRA/PHMSA rulemaking
  - Emergency response planning/security
  - Grade crossings
- Regional railroad infrastructure: modernization/investment, service levels, safety
- Crude oil logistics

# Undergraduate Educational Program

- Civil engineering
  - CE 456/656 (3 credits)
    - 2/3 design; 1/3 planning
    - Class project
  - Future: summer lab?
- Applied economics/business
  - Introduction to Transportation
  - Supply Chain Management

# Graduate Program

