**Freight Efficiency**

**Relation to Economic Competitiveness**

The efficient and timely delivery of goods drives economic performance.

**Freight Delay Costs:**
- National:
  - 4.2 Billion of delay per year
  - 2.9 Billion gallons of excess fuel
  - Total cost of $78 Billion (TTI)

**State of Maryland:**
The total cost of freight delay on Maryland’s Primary Trucking Routes was $172.4 Million in 2013

**Freight Research Areas:**
- Inter-Modal Exchanges and Logistics
- Efficiency of Port Operations
- Federal Regulations
- Truck Rest Stops
- Truck Safety
- Travel Time Reliability
- Freight impact on the economy

**Related Work at NTC@Maryland**

**Efficiency and Reliability in Freight Transportation Systems**

**Dynamic Decision Making for Less-Than-Truckload Trucking Operations**

**Transfer Coordination in Intermodal Freight Transportation Systems**

**Economic Impact Study of Intercounty Connector:**
Logistics and Freight Impact Assessment

**Ex-Post Value for Money Analysis of Public Private Partnerships in Freight Transportation Infrastructure**