



NEXTRANS Center Inaugural Summit:

Intermodalism Panel Session

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A) (Future) Challenges

- Connectivity
 - Each mode is designed for maximization of combination of multiple criteria
 - Profit, mobility, safety,.....
 - Historical planning, financing, etc.
 - Uni-modal
 - How to account for connectivity?

A) (Future) Challenges

- Example 1: Railheads in Kansas City
 - Local vs Global Optimum
- Example 2: Inland Port
 - Railways, roadways, waterways, airfreight
 - Effect on infrastructure (see Ethanol)
- Example 3: Flood damage
 - Western USA – Factories close in China
 - Redundancy

A) (Future) Challenges

- Congestion
 - Time, productivity ... wasted resources
- Fuel costs
 - Changes in operations
- Environmental Factors
- All inter-related
 - Most efficient modes....
 - Capacity (**rail, ports**, roads, ...)
 - Obtaining rights to expand & grow
 - Finances
 - funds – procurement

A) (Future) Challenges

- Passenger: multi-modal transit
 - rail, bike, pedestrian environment
 - mixed used centers
 - Planning for future...

B) Integrated solutions?

- Hard to find an inter-modal challenge that is not integrated
 - Managers of each mode knows it's system and can optimize given constraints
 - Unlikely to be globally optimal

C) Gov. – Industry - Academia Partnership



- Information
 - Government: needed and wanted
 - Private sector
 - trucking – road conditions
 - Right information, Right time, Right location Right cost
- Security
- Regulation
- Financing



D) Integrated Solutions: Change approach?



- Research
 - Multi-disciplinary
 - Engineers do not need to become specialists in other disciplines
- Education
 - Multi-disciplinary
 - Meet needs of stakeholders (rail)
 - Multi-modal
 - Technical: competence
- Implementation
 - Intellectual Property



E) Gaps – UTC's



- Basic and advanced research
- Honest broker
 - Can accomplish things that others can't
 - Strengths
- Leadership in Education
- Technology transfer
 - Summit
 - Public, private, academia -- good example



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Intermodalism

- Existing transportation infrastructure across multiple modes can be leveraged to address challenges related to mobility and consequent negative impacts. This session seeks innovative approaches/mechanisms to integrate transportation/logistics solutions across modes to address challenges related to multi-sector stakeholders, limited budgets, energy security, ecological footprint, and performance efficiency, to move people and goods.

Overview of Panel Session

- Introduction
 - ~ 10 minutes
 - Discuss Format and Introduce Panel Members
- Panel Discussion
 - ~ 25 minutes
 - Questions from Moderator to Panel
- Open discussion
 - ~ 30 minutes
 - Open discussion by all participants
- Wrap up
 - ~ 10 minutes
 - Moderator will present key findings at general session

- National domestic freight transportation (tons)
 - Grew by about 20 percent from 1993 to 2002
 - Expected to increase another 65 percent to 70 percent by 2020 (FHWA)

A) (Future) Challenges

- Supply/delivery models
 - changing based upon fuel costs
 - location of distribution centers
 - multi-modal