Transportation & Logistics

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Suggested Discussion Topics

• Smart vehicles & highways
• Optimized package delivery
• Opportunities in food supply chains
• Optimizing transit schedules, parking, congestion
• Dynamic adaptation
Research Topics

• Next Generation Intelligent Trans. Systems
  – Real time data
  – Predictive models – including response to information
  – Historical data

• Evolulational of Intelligent Vehicles
  – Special lanes for different capability vehicles

• Multi-Modal Public Transportation Systems
  – Coordination of series of hops to destination
  – Real time information for users
Research Issues

• Scalability of local demonstrations to widespread use
• Users’ privacy desires vs. providers’ revenue maximization desires
• Understanding factors affecting use of public transportation and smart cars/highways
  – Convenience, safety, time, efficiency
Specific Ideas

• Supply chain efficiency
  – IT to enable economies of scale at low volumes
• Coordinated transportation service for elderly
• Consolidation of shipping, e.g., post office!
• Smart vehicles capturing pre-accident and accident data
• Immutability of “security theatre”
Big Trades

• Increased system performance encourages greater use which leads to needs for increased performance
  — Tends to undermine sustainability

• Increased convenience requires provision of information that may compromise privacy
  — Once forgone, privacy is difficult to recapture