Vinayak Dixit, Louisiana State University

Regional Scale Multimodal Evacuation Planning and Analysis

• Evidence that TRANSIMS can be an effective tool for regional multi-modal evacuation modeling and planning
• Consistent models can be useful in whole or when used separately
• How people behave needs to be incorporated in the simulation
Yi-Chang Chiu, University of Arizona

- Evaluating Regional Contra-Flow and Phased Evacuation Strategies: Central Texas Case Study
- Contra-flow plan generally achieves 8% - 10% improvement, but certain choke-points can not be relieved
- Contra-flow plan benefits inland evacuees more than those from coastal zones.
- Phase evacuation achieves 5% – 15% travel time reduction for evacuees from flood zone area
- Large-scale regional simulation useful for fast response
  - Parallel analysis of different hurricane trajectory and strength scenarios
  - Rapid decision support
Eva Kassens – Noor, Michigan State University

Planning Against Hazards for a Resilient and Sustainable Community Through Adaptive Transportation Systems

• Flexible, adaptive capacity has to be integrated in our today’s standard urban and transport planning approach.
• Adaptation has to be integrated into our built, natural and human environment.
• The concepts of social responsibility and accountability can play a powerful part in transforming communities into sustainable and resilient entities.
• In quantifying the impact, additional members may bring to resilient and sustainable communities three key questions that need to be addressed when integrating adaptive, resilient and sustainable transport systems:
  – Adaptive: “What is the most critical piece of the transport system?”
  – Resilient: “What is the most vulnerable piece of the transport system?”
  – Sustainable: “How can transport resilience and transport adaptation be integrated into the sustainability framework?”