Emergency Preparedness

Relation to Economic Competitiveness

Emergency events can disrupt local, national, and international economies

Hurricane Katrina Impact:
- $96-125 Billion in damages
- Total economic impact of $250 billion
- In 2005,
  - US 3\textsuperscript{rd} quarter GDP was 3.8%
  - US 4\textsuperscript{th} quarter GDP was 1.3%

Mass evacuations require:
- Multi-modal evacuation advanced planning
- Plan for returning the transportation network back to normal operation

Evacuation preparation for foreseen and unforeseen events

- Foreseen Events: Hurricane or Blizzard
  Allows for road closures, advanced warning and communication

- Unforeseen Events: Terrorist Attack, Earthquake
  On the fly evacuation with little or no warning

Related Work at NTC@Maryland

Optimal Scheduling of Evacuation Operations

An Integrated Multi-Modal Emergency Evacuation System for the Baltimore Metropolitan Area

Improving Traffic Signal Timing for Evacuation

A Region-Wide Evacuation & Traffic Monitoring System (I-495/I-95)