

## Logistics Assessment of the Delta Region



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### Regional Strategy Background




- 2003 Battelle study – regional chemistry & agricultural assets
- 2006 Memphis Bioworks Foundation steering committee
- Public groups funded study across 98 counties in five states




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### Our Role





- Overview of logistics infrastructure
- Assess farm to factory supply chain
- Review logistical strengths and weaknesses



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### Roads and River Crossings

- Good system of primary, secondary, and connecting roads for material movement
- Inter- and intra-county mobility
- 10 MS River road crossings

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### Ports, Rail, and Intermodal

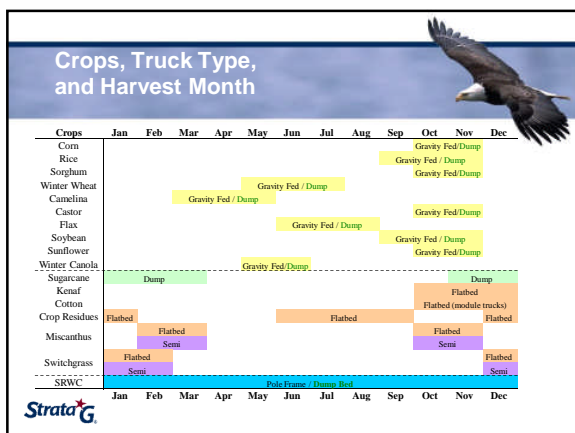
- Memphis is significant
  - 19M tons freight annually
  - 4<sup>th</sup> largest U.S. inland port
- 5 Class I railroads, 2 Class II railroads
- Over 75 intermodal facilities
- 17 public river ports

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### Creative Use of Rolling Stock

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- ### Key Observations and Conclusions
- **Transportation and logistics infrastructure is a strength:**
    - Development of a regional bioprocessing industry
    - Adequate for decentralized economic development
    - Potential advantage for pipeline blending/export of compatible second generation liquid biofuels
  - **Lignocellulosic feedstocks likely processed within region**
    - Low bulk density biomass processed close to production
    - Barge export of densified biomass products and high density products may be regional advantage

- ### Critical Logistics Issues
- **Availability of biomass --- Density of biomass**
  - **Recognize strain on transportation and storage**
  - **Equipment not in use or manufactured**
  - **Consolidated supply points**
  - **Year-round processing**
  - **State and regional decisions – farm truck vs. commercial, year-round truck use, DOT issues, etc.**