

Memphis MPO Freight Peer to Peer Exchange

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Memphis MPO
August 21, 2008

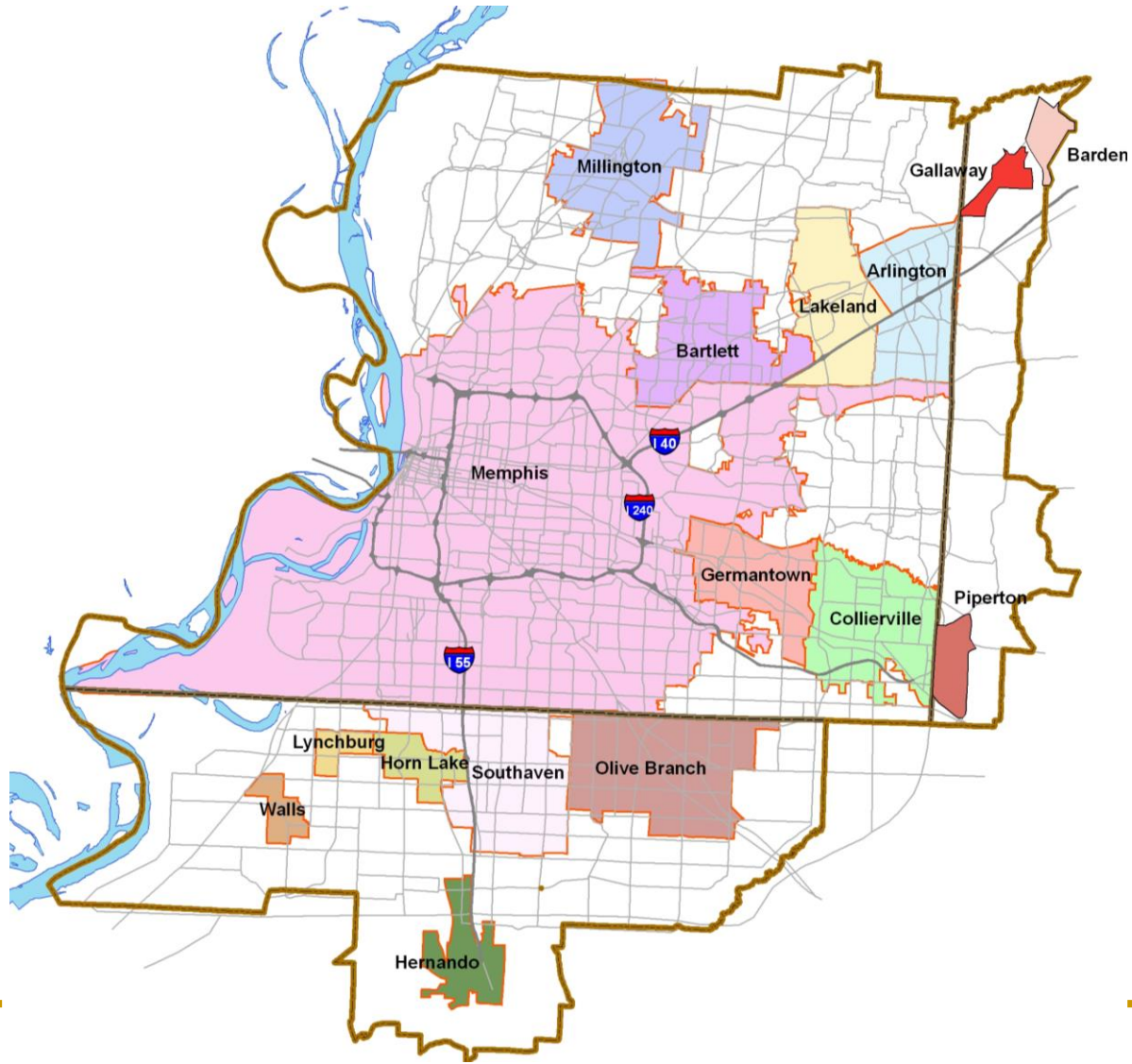


Memphis MPO Background

- Memphis MPO Staff
 - MPO Coordinator – Yep, lucky me!
 - (3) Planners
 - Paul (25 yrs),
 - Tim (2 yrs),
 - Pragati (2 yrs)
 - (2) Admin Staff



Memphis MPO Background



Memphis MPO Background

- One Board & Six Committees
- Federal Partners
 - TDOT
 - TN-FHWA
 - FTA-Region 4
 - EPA-Region 4
 - MDOT
 - MS-FHWA
 - AR Highway Dept
 - AR-FHWA
 - EPA-Region 6



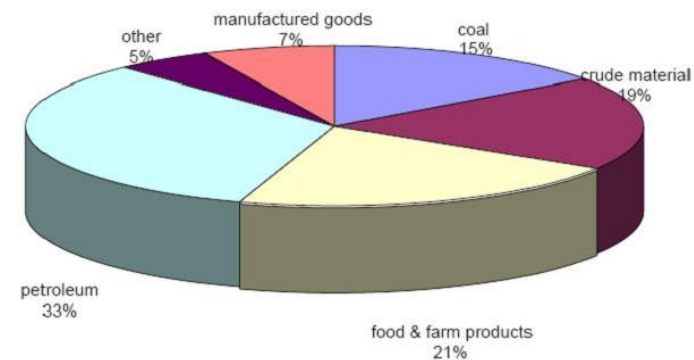
Transportation Modes-Air

- World's largest air cargo airport since 1991 and handled over 4 million metric tons in 2006
- The new 11,500 ft "World Runway" just completed, will be long enough to handle nonstop overseas flights to cities in Pacific Rim
- FedEx Worldwide headquarters & World hub in Memphis
- Memphis International Airport is home to one of the hubs of Northwest Airlines with daily flights to over 90 cities
- 15 Cargo Airlines in addition to FedEx
- RPS and UPS have hub/sort facilities in Memphis



Transportation Modes-Water

- The Nation's 4th largest busiest inland river port
- The Nation's only fully enclosed Lash barge operation, LITCO
- 15 Mile Jurisdiction
- Harbor to 44 private terminals
- Harbor to 5 public terminals
- Handles more than 16 million tons of cargo per year
- Channel depth maintained at 9 feet minimum – width of 300 feet

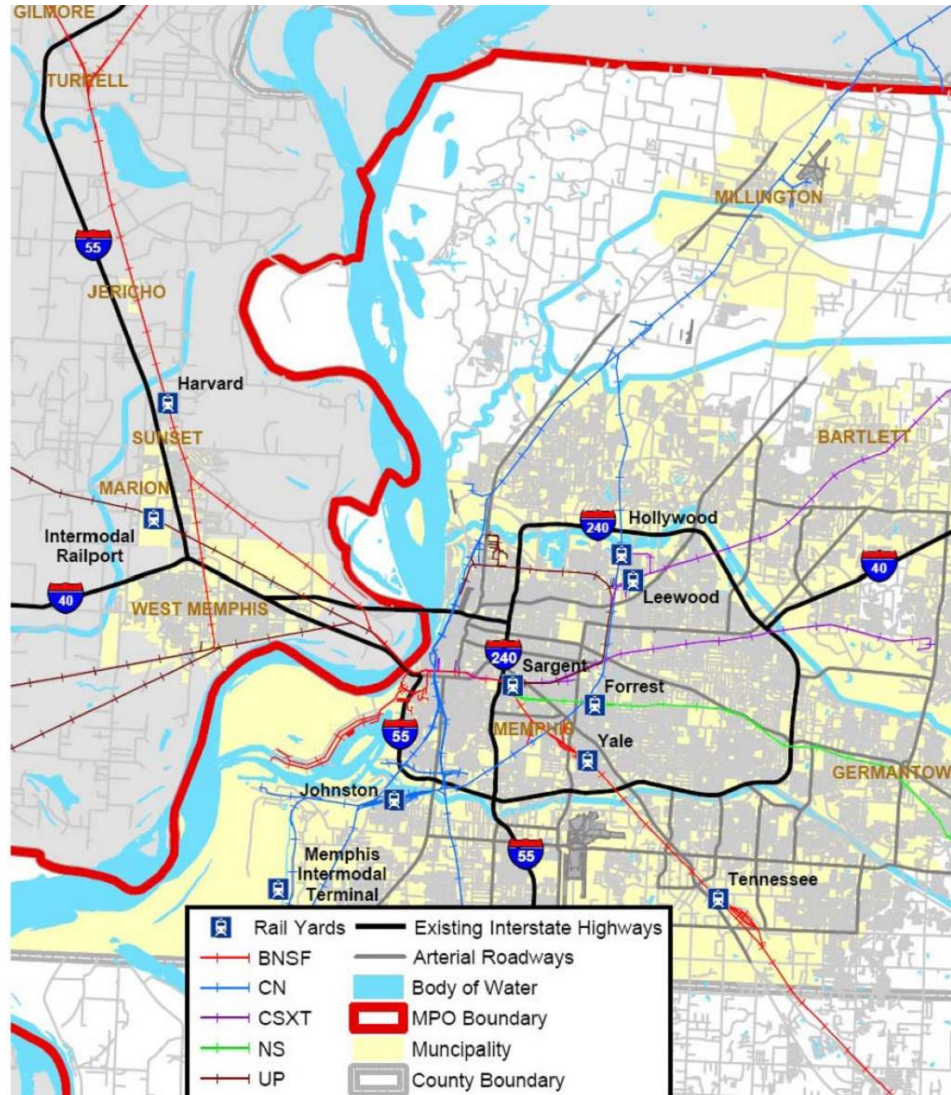


Transportation Modes-Rail

- Memphis is 1 of 3 U.S cities served by **five Class-I rail systems**
- Two rail bridges crossing MS River
 - Harahan Bridge built in 1917
 - Frisco Bridge built in 1892
 - The two bridges combined handle over 1.4 million rail cars annually
- 220 trains travel through Memphis daily



Transportation Modes - Rail



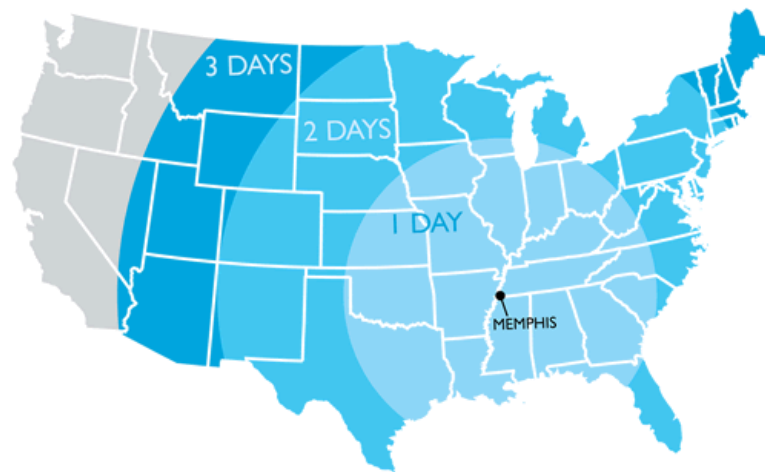
Transportation Modes- Roadways

- I-40, major east/west transportation route across U.S., intersects in Memphis with I-55, the major north/south route for U.S.
- I-69, designated as High Priority Corridor, will serve Port Huron, MI at the Canadian border and then south through Memphis and Houston to the Texas/Mexico border.
- 7 Major U.S. highways converge in Memphis
- I-40 and I-55 span the Mississippi River in Memphis



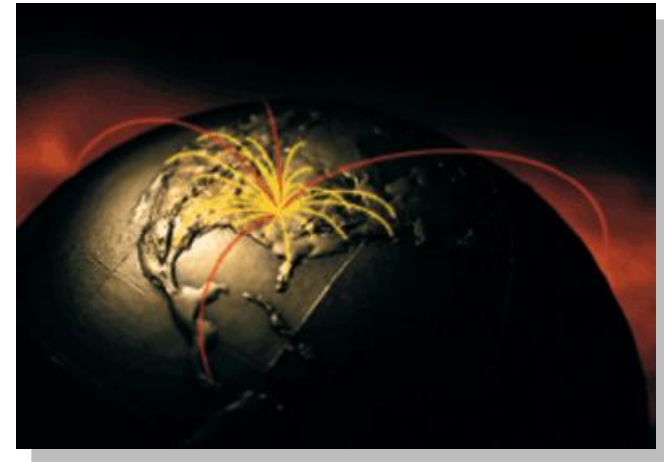
Transportation Modes- Roadways

- Truck Services
 - 163 Truck Terminals
 - Over 300 Motor Freight Companies offering services to 48 contiguous states as well as Canada and Mexico
 - 152 Metropolitan markets are reachable by truck overnight
 - 35 States can be reached within 2 days



International Transportation

- Two Foreign Trade Zones with multiple sites
- 30 International freight forwarders operate in Memphis
- More than \$10 Billion of goods clears U.S. Customs annually at Memphis
- FedEx provides daily non-stop service to London, Paris, Toronto, Mexico City, Rio DeJaneiro and direct service to Hong Kong
- 15 Steamship lines and agencies have offices in Memphis
- 5 Railroads have in-bound container services
- Nation's only enclosed Lash barge facility



Land Use and Freight Planning-Past Practices

- Viewed freight as production and attractions
 - Didn't really do it
 - Where did the trucks start and end
 - Was there enough capacity on adjacent roads to handle the freight traffic?



Land Use and Freight Planning-Current Practices

- Attempting to Approach Freight planning in two perspectives
 - Economic Development and Business Logistics
 - Infrastructure and Telecommunications



Land Use and Freight Planning-Current Practices

- How are we doing this?
 - Implemented a MPO Freight Committee
 - Next we began to participate in already organized groups:
 - In Memphis Chamber Regional Logistics Council
 - Major Roads Sub-Committee



Land Use and Freight Planning-Current Practices

- Incorporated freight component in Travel Demand Model, that includes
 - 3 trip types
 - Internal Trips
 - External-Internal/Internal-External Trips
 - External-External Trips
- For each 3 trips future truck volumes are forecasted by 3 vehicles
 - Four-tire commercial vehicles
 - Single unit trucks with six or more tires
 - Combination trucks



Land Use and Freight Planning

- Now, we are studying and updating plans:
Updating
 - Memphis and Shelby County Governments Unified Development Code – Update
 - Breakthrough in our community’s traditional approaches to codes
 - MPO is promoting efficient land use and development patterns to ensure safety, economic vitality to meet existing and future transportation needs



Land Use and Freight Planning-Studies

- Regional Infrastructure Assessment
 - Study area – 16 counties, 3 states (TN,AR,MS)
 - Identifying capabilities and capacities of the region's current infrastructure, (roads, bridges, ports, airports, telecommunications)
 - Plan will be used to:
 - Coordinate activities of infrastructure operators to avoid duplication
 - Guide future infrastructure investments and funding requests
 - Generate data for marketing and economic development



Land Use and Freight Planning-Studies

- Memphis Aerotropolis Plan
 - Plan to capitalize on Memphis International Airport by offering businesses unique package locations, logistics, and community support
 - Target boundary encompasses footprint including 3 parts of 3 states that are within a 15 minute drive from the airport
 - Access corridors are essential to leverage this kind of connectivity to Memphis' quadramodal assets of air, highway, rail and port.
 - Four sub-committees – Transportation/Access, Corridor development, Gateways/Beautification, Marketing/Branding



Land Use and Freight Planning-Studies

- Mississippi River Crossing – 3rd Bridge – Tolling Feasibility Study
 - 2 Rail Bridges Frisco (1892) and Harahan (1917)
 - 2 Interstate Bridges I-55 (1949) and I-40 (1973)
 - 2007 TN Tollway Act passed – authorized exploration of tolling – two pilot projects 1 bridge and 1 highway
 - Aging transportation infrastructure means increasing share of transportation funds needed to maintain existing network = fewer funds for new facilities
 - If the I-55 and I-40 Bridges were closed, destroyed, etc., it is estimated that the financial impact would be well over \$1 billion annually to the economy
- TDOT has Cambridge Systematics as on-call consultant for MPO Freight Planning Assistance



Region's Needs, Challenges

■ Needs

- Well defined land use plan for MPO Area
- Expansion of multimodal facilities
- Multimodal crossing for the MS River
- Infrastructure improvements to accommodate the growth

■ Challenges

- Reduction in funding allocations from Highway Trust Fund
- Keeping skilled employed workforce



[4 Trigger Questions]

1. **What land use and infrastructure strategies can support the liability of established freight districts' in metropolitan areas?**
 - Local jurisdictions adopt and enforce land use plan
 - MPO role is to help coordinate the plans across the jurisdictional boundaries within the MPO area.



4 Trigger Questions

- 2. What MPO planning strategies are available to plan for and assess transportation impacts as new suburban and rural freight areas emerge?**
- Promote land use and development patterns to ensure safety, economic vitality, and to meet existing and future transportation needs.
 - Encourage the development of land use plans in the rural and suburban areas, which are supported by the local major transportation plans.
 - Plans should identify industrial/freight districts where adequate facilities are planned for when developed.
 - Promote the concentration of future employment and other activity centers along the existing and planned major travel corridors
 - Continue to improve coordination and cooperation between engineering, planning and enforcement agencies involved with transportation activities.



[4 Trigger Questions]

- 3. How can MPO Encourage consideration of freight-oriented developments as a regional transportation and land use planning strategy to address the expected rapid growth in demand or large freight sites?**
 - Active participation in Regional Chambers
 - MPO Freight Committee
 - Recommendations to Policy Board members who are the elected officials of the various jurisdictions.

[4 Trigger Questions]

- 4. What transportation-related benefits, including congestion and vehicle emissions reductions, do freight oriented developments provide in contrast to traditional intermodal terminals and warehousing and distribution districts?**
- Opportunity for different multimodal options
 - Safety (may remove trucks from local streets)
 - Reduce congestion
 - Reduce vehicle emissions
 - Opportunity to improve security

[Questions]

