Regional Freight Plan

Agenda
• Project – Executive Summary
• Freight Zones
• Regional Transportation Networks
• Technological Innovations
• Freight Performance Measures
• Global Logistics Hub
• Freight Plan Alignment
Regional Freight Plan

Executive Summary

• The air, road, rail, inland waterway and pipeline facilities in the Greater Memphis MPO Region are an integral part of the North American freight transportation networks and the global supply chains that travel across and between the modes
• The Greater Memphis MPO Region is a “Hub City”
• Freight is dynamic, the investment and infrastructure landscape is always changing
Executive Summary

- Industrial land use is clustered within the region
- Locations influenced by the River, roadways and airport
- New development along the I-269 Corridor
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Freight Zones:
Looks at Zone proximity, characteristics and local transportation network configurations to identify Freight Areas

<table>
<thead>
<tr>
<th>Stateline Accessibility</th>
<th>Airport Accessibility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interstate Access Points</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>Rail Accessibility</strong></td>
<td>0</td>
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<tr>
<td><strong>Intermodal Accessibility</strong></td>
<td>BNSF (Tennessee) – 5.1 miles</td>
</tr>
<tr>
<td></td>
<td>CN/CSX (Gateway) – 7.6 miles</td>
</tr>
<tr>
<td></td>
<td>UP (Marion) – 21.1 miles</td>
</tr>
<tr>
<td></td>
<td>NS (Rossville) – 24.6 miles</td>
</tr>
<tr>
<td><strong>Air Accessibility</strong></td>
<td>MEM – 4.6 miles</td>
</tr>
<tr>
<td><strong>Water Accessibility</strong></td>
<td>President’s Island – 9.7 miles</td>
</tr>
</tbody>
</table>

BNSF (Tennessee) – 4.8 miles
CN/CSX (Gateway) – 6.6 miles
UP (Marion) – 19.0 miles
NS (Rossville) – 24.0 miles
MEM - 0.0 miles
President’s Island – 8.4 miles
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Freight Zones:
Individual zone information such as truck traffic, travel time, crash rates, etc. are included.
Freight Zones:
Employment and other demographic is also included (educational attainment, earnings, etc.)

### Airport Freight Zone

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Basic Industries</td>
<td>1,462</td>
<td>1,300</td>
<td>5.2%</td>
<td>-2.3%</td>
<td>-162</td>
</tr>
<tr>
<td>Trade &amp; Transportation</td>
<td>20,359</td>
<td>19,458</td>
<td>77.9%</td>
<td>-0.9%</td>
<td>-901</td>
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<tr>
<td>Professional Services</td>
<td>2,073</td>
<td>2,653</td>
<td>10.6%</td>
<td>5.1%</td>
<td>580</td>
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<tr>
<td>Retail &amp; Transactions</td>
<td>1,112</td>
<td>1,283</td>
<td>5.1%</td>
<td>2.9%</td>
<td>171</td>
</tr>
<tr>
<td>Other Services</td>
<td>373</td>
<td>282</td>
<td>1.1%</td>
<td>-5.4%</td>
<td>-91</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>25,379</strong></td>
<td><strong>24,976</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>-0.3%</strong></td>
<td><strong>-403</strong></td>
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</table>

### Stateline Freight Zone

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>Basic Industries</td>
<td>283</td>
<td>153</td>
<td>7.3%</td>
<td>-11.6%</td>
<td>-130</td>
</tr>
<tr>
<td>Trade &amp; Transportation</td>
<td>896</td>
<td>1,102</td>
<td>52.6%</td>
<td>4.2%</td>
<td>206</td>
</tr>
<tr>
<td>Professional Services</td>
<td>238</td>
<td>246</td>
<td>11.7%</td>
<td>0.7%</td>
<td>8</td>
</tr>
<tr>
<td>Retail &amp; Transactions</td>
<td>397</td>
<td>524</td>
<td>25.0%</td>
<td>5.7%</td>
<td>127</td>
</tr>
<tr>
<td>Other Services</td>
<td>41</td>
<td>71</td>
<td>3.4%</td>
<td>11.6%</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,855</strong></td>
<td><strong>2,096</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>2.5%</strong></td>
<td><strong>241</strong></td>
</tr>
</tbody>
</table>

Source: US Census
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Freight Zones:
Retail Space info

Airport Freight Zone

Stateline Freight Zone

Source: Costar
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Regional Transportation Networks

- Industrial land use, and intermodal terminals, frame the origins and destinations of regional freight movement
- The regional freight traffic + through traffic, shape the connections across North America
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Regional Transportation Networks

- Enhance intermodal connections, often affected by external factors
- The Greater Memphis MPO Region hosts a unique combination of modal connections
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Regional Transportation Networks

• The port is designated as a Port of Entry and Foreign Trade Zone and consists of the Port of Memphis, in Tennessee, and the Port of West Memphis, in Arkansas.

• Large organizations shipping over a long distance on the landside can leverage the rail and roadway networks to increase efficiency.

• Navigational Structure Conditions
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Regional Transportation Networks

• The Memphis international Airport is an anchor as it pertains to freight in the Memphis area.
• The Memphis International Airport is located amongst many of the major freight corridors.
• Some improvements to the roadways are needed
• Support Airport’s Master planning Efforts
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Technological Innovations
• Advanced technology will change the freight industry such as autonomous vehicles and truck platooning
• Thirteen states, including Tennessee, have currently passed some form of legislation related to autonomous vehicles.
• Policy guideline developed by USDOT’
• Coordinated efforts between Federal, State, Local, and Private Sector would be needed
Freight Performance Measures

- Increasing role for direct private sector participation
- Investment and operating outcomes will be more closely tracked
- Peer programs and increasing use of “Big data” will keep changing
- State programs and performance metrics reflect local, state and national priorities
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Global Logistics Hub
• Livability 2040 RTP for the Greater Memphis MPO Region
• Track continuous system performance, enabling an integrated management approach
• Multimodal access, involves infrastructure and land use
• Multimodal expansion
• Mitigate barriers to freight movement
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Plan Alignment

• LRTP is the Region’s framework
• Industrial land use, and intermodal terminals, frame the regional freight movement origins and destinations
• Efforts to enhance the alignment of the Region’s workforce and workplaces
• Balance within & across project categories, e.g., Non-Interstate Road Projects
• Factors
  ◦ Safety
  ◦ Congestion
  ◦ State of Good Repair
  ◦ Sustainability / Quality of Life
  ◦ Resiliency
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