Memphis Urban Area Metropolitan Planning Organization (MPO)

Regional Freight Plan
Regional Freight Plan

Agenda
- Project Progress to Date
- Freight Survey
  - Public Online Survey
  - Trucking Industry “Man on the Street”
- Megaregion Connections across North America
- Update for the Zones and select Areas – Mallory Freight Zone and the River 55 Area
- Final Report Outline
- Next Steps
Progress against the Scope of Work

- Zone visits largely completed, ± 5 to finish
- Each of the Tasks have been started, some with significant completion
- Continuing select outreach meetings

<table>
<thead>
<tr>
<th>Meetings</th>
<th>Pct. Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>FAC Meeting Completion</td>
<td>≈ 60%</td>
</tr>
<tr>
<td>PLAC Meeting Completion</td>
<td>≈ 60%</td>
</tr>
<tr>
<td>TPB Meeting Completion</td>
<td>≈ 20%</td>
</tr>
<tr>
<td>ETC Meeting Completion</td>
<td>≈ 20%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Project Tasks</th>
<th>Status / Pct. Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task 1: Existing Conditions</td>
<td>Underway / 85%</td>
</tr>
<tr>
<td>Task 2: Land Use and Transportation Planning</td>
<td>Underway / 65%</td>
</tr>
<tr>
<td>Task 3: Strategic Freight Corridors and Critical Locations</td>
<td>Underway / 65%</td>
</tr>
<tr>
<td>Task 4: Community/Stakeholder Engagement</td>
<td>Underway / 55%</td>
</tr>
<tr>
<td>Task 5: Performance Metrics</td>
<td>Initiated / 10%</td>
</tr>
<tr>
<td>Task 6: Economic Impacts &amp; Program Funding</td>
<td>Initiated / 15%</td>
</tr>
<tr>
<td>Task 7: Modal Alignment</td>
<td>Initiated / 10%</td>
</tr>
<tr>
<td>Task 8: Investment &amp; Development Program</td>
<td>Pending / 5%</td>
</tr>
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</table>
Freight Survey

- Carried in a 1:18 videoclip by Wayne Risher, in the “Commercial Appeal”,
  http://www.commercialappeal.com/videos/money/2017/02/10/surveying-state-freight/97756604/
- The “Man on the Street” surveys were conducted in three locations across the Memphis MPO Area

### Survey Results

![Graph showing the number of responses over time](image)

#### Public Survey: What Mode/Modes come to mind?

- **Air**: 25.0%  
- **Barge**: 20.0%  
- **Rail**: 30.0%  
- **Truck**: 25.0%

Ratio: # Selections / Total Selections (1,337)
Public Survey Questions and Responses
- 400 respondents, some questions allowed multiple selections
- 91.5% thought Freight Important

Public Survey: Have you faced the following?
- Undue noise resulting from a truck/rail/air
- Accidents Involving Trucks/Trains
- Extensive delays at railroad crossings
- Truck Parking in the Neighborhood

Public Survey: Does a member of your family work in ...?
- Other
- Logistics Industry
- Waterway Industry
- Rail Industry
- Trucking Industry
- Warehousing / Distribution Industry

Ratio: # Selected / # Comments (165)

Ratio: # Comments / # Respondents (300)
Trucking Industry Survey Questions and Responses

- 294 respondents, some questions allowed multiple selections

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**Trucking Industry Survey: Challenges**

- Driver shortage
- Transportation costs
- Delay at delivery (inter modal)
- Regulations - work hours, truck load...
- Information (traffic, conditions)
- Incident clearance time issues
- Safety - accidents
- Road congestion
- Turning radius
- First mile/last mile connections
- Truck parking

Ratio: # Selected / # Total Identified (967)
Trucking Industry Survey Questions and Responses
- 294 respondents, some questions allowed multiple selections

### Trucking Industry Survey: Opportunities to improve Freight Movement

- **Others**: [Bar representation]
- **More truck rest areas**: [Bar representation]
- **Better quality pavement**: [Bar representation]
- **Automated systems at delivery/pick up**: [Bar representation]
- **Getting timely information**: [Bar representation]
- **Rerouting options**: [Bar representation]
- **Reducing incident clearance time**: [Bar representation]

*Ratio: # Comments / # Total Comments (832)*
Regional Freight Plan

Megaregion connections
- Thickness of the lines represents Tons by truck in 2014
Mallory Freight Zone and River 55 Freight Area

<table>
<thead>
<tr>
<th>Industrial Space</th>
<th>Inventory Buildings</th>
<th>Inventory Square Feet</th>
<th>Average Building Size</th>
<th>Occupancy Percentage</th>
<th>Net Absorption</th>
<th>Delivery Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>50</td>
<td>5,263,968</td>
<td>105,279</td>
<td>85.5%</td>
<td>-383,357</td>
<td>0</td>
</tr>
<tr>
<td>2014</td>
<td>51</td>
<td>5,663,968</td>
<td>111,058</td>
<td>95.6%</td>
<td>-6,800</td>
<td>0</td>
</tr>
<tr>
<td>Average 09-14</td>
<td>50.8</td>
<td>5,597,301</td>
<td>110,095</td>
<td>92.2%</td>
<td>88,221</td>
<td>66,667</td>
</tr>
<tr>
<td>CAGR 09-14</td>
<td>0.4%</td>
<td>1.5%</td>
<td>1.1%</td>
<td>2.3%</td>
<td>-55.4%</td>
<td>N/A</td>
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<tr>
<td>Total Change 09-14</td>
<td>1</td>
<td>400,000</td>
<td>5,779</td>
<td>10.1%</td>
<td>376,557</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: CoStar
Mallory Freight Zone and River 55 Freight Area
• Examine Zone Employment
• Total employment, as well as by age and salary groupings

Mallory Employees by Industry Sector (2009-2014)
Mallory Freight Zone and River 55 Freight Area

- Examine Zone Employment by worker education
- Compare on a zone, area, regional and nationwide basis
Regional Freight Plan

Mallory Freight Zone and River 55 Freight Area
• Look at Zone proximity, characteristics and local transportation network configurations to identify Freight Areas

Evaluation Metrics
• Total Employment
• Industrial Employment
• Total Available Space (SF)
• Total Occupied Space (SF) or Rate (%)
• Total Vacant Space (SF) or Rate (%)
• Total Industrially Zoned Space*
• Location Quotients of Workforce
• Cumulative Net Absorption over year(s) period (2009-2014, etc.)
Mallory Freight Zone and River 55 Freight Area

- Look at Zone travel time in the peak hours, here increments to 18 minutes
- Build into the corridor level of evaluation next
Mallory Freight Zone and River 55 Freight Area
- Look at Zone traffic volumes and safety metrics
## Regional Freight Plan

### Final Report Outline

<table>
<thead>
<tr>
<th>Chapter Headings</th>
<th>6. Inland Waterways</th>
<th>11. Performance Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Executive Summary</td>
<td>a. Existing Conditions: Infrastructure and Freight Movement</td>
<td>a. Description of Freight Metrics</td>
</tr>
<tr>
<td>2. Regional Overview</td>
<td>b. Emerging and Changing Trade patterns</td>
<td>b. Performance Benchmarks and Comparison</td>
</tr>
<tr>
<td>a. The Region today</td>
<td>7. Air Cargo</td>
<td>c. Peer Practices</td>
</tr>
<tr>
<td>b. Freight Movement in the Greater Region</td>
<td>8. Emerging Zone Development</td>
<td>12. The Greater Memphis Region as a Global Logistics Hub (Based on output from Task 7)</td>
</tr>
<tr>
<td>c. Near and medium term needs</td>
<td>a. Regional Industrial Areas</td>
<td>a. Concept of what Regional Goals and Desires looks like</td>
</tr>
<tr>
<td>d. Future outcomes in 5 to 10 years</td>
<td>b. Industrial Access to the Global Marketplace</td>
<td>b. Gap Analysis for what needs to be done to get there</td>
</tr>
<tr>
<td>3. Workforce and Community</td>
<td>8.c. Future Traffic Impacts on Industrial Areas</td>
<td>c. Strategies for how to get there</td>
</tr>
<tr>
<td>a. Regional Voice</td>
<td>d. Rural</td>
<td>13. Plan Alignment with Future Conditions</td>
</tr>
<tr>
<td>b. Connecting Communities to Jobs</td>
<td>9. Environment</td>
<td>a. Freight Funding and Programs</td>
</tr>
<tr>
<td>4. Road Network Connections</td>
<td>a. Identified Improvement Areas</td>
<td>b. Recommended Strategies</td>
</tr>
<tr>
<td>a. Arterial / Freeway Connections</td>
<td>b. Mitigation Strategies</td>
<td>c. Recommended Improvements</td>
</tr>
<tr>
<td>c. Operational and Geometric Deficiencies</td>
<td>a. Data and Information Systems</td>
<td>a. Zone Level Analysis (Appendix 1-Appendix 35)</td>
</tr>
<tr>
<td>5. Greater Memphis Area Railroad Network</td>
<td>b. Vehicles and Control</td>
<td>b. Area Level Analysis (Appendix 36-Appendix 44)</td>
</tr>
<tr>
<td>b. Bottlenecks</td>
<td></td>
<td></td>
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<tr>
<td>c. Connectivity to other regions</td>
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</table>
Next Steps

• Build a corridor level assessment within and through the Region
• Collaborate on the Area, Zone and Region wide evaluations
• Regional characteristics from the industrial zone clusters
• Railway & roadway networks
• Inland Waterways & Transshipment
• Public sector strategies
• Regional characteristics from the industrial zone clusters
• Formulate Programs and Projects
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