REGIONAL MODELS OF COOPERATION
IN AIR QUALITY PLANNING

MEMPHIS URBAN AREA MPO

August 25, 2015
Background

- **Bi State MPO (TN and MS)**, includes 4 Counties:
  - Entire Shelby Co, TN
  - Entire Desoto Co, MS
  - Partial Fayette Co, TN
  - Partial Marshall Co, MS

- **Population approx. 1.1 million**

- **Major Freight Hub**
  - 5 Class 1 Railroad
  - 4th largest Inland Port
  - 2nd busiest cargo airport in the world
Background contd.

- **Memphis- TN-AR-MS MSA-**
  - 9 counties
  - Includes **2 MPOs**
    - Memphis Urban Area MPO (TN & MS)
    - West Memphis MPO, AR

**Air Quality**

- **Carbon Monoxide**- Shelby County, TN – in Maintenance, ends in 2017
- **Ozone**- Non-attainment under 2008 8 hr. Includes:
  - Entire Shelby Co and Partial Desoto Co (Memphis MPO)
  - Crittenden Co (West Memphis MPO)
Air Quality Coordination

- **Inter-Agency Consultation (IAC) Group:**

  - IAC MEMBERS
  - MPO Staff
  - Transportation Agencies
    - Transit Authority
    - Airport Authority
    - Port Authority
  - State Agencies
    - Environmental Departments
    - DOTs
  - Federal Agencies
    - FHWA
    - EPA
    - FTA
  - MPO Jurisdictions
    - TN Members
    - MS Members
  - Neighboring MPO
    - West Memphis MPO

Memphis MPO
METROPOLITAN PLANNING ORGANIZATION
Strengthening Regional Transportation
Air Quality Coordination cont.

- Requires consultation with IAC on:
  - Development of New Plans
  - Amendments to the Plan

- Cooperative and Consensus Based Approach

- MOU between the two MPOs:
  - Separate budgets, separate conformity process, separate plans
  - But continued participation in each others planning process, incl. AQ

- Budgets:
  - No MPO level budgets (Shelby Co has budgets, Desoto Co does not)
  - Hence, separate conformity analysis
Air Quality Coordination cont.

• **Data:**
  - Memphis MPO Regional Travel Demand Model (TDM)
  - Memphis MPO Regional Land Use Model
  - Some common Input
    - Metrological data from the airport
    - MOVES Model Technique (Inventory Method)
    - Age Distribution
    - Vehicle Type VMT
    - Some Model Years
Air Quality Process

**New Plan**

- Pre consensus plan for TN & MS
- Review of project list
- Submission of conformity report & draft plan for review & approval

135 Days

**Plan Amendments**

- Exempt projects
- OR
- Non-Exempt projects, but relying on previous conformity

30-105 Days

- Non-Exempt projects, requiring new conformity
- OR
- Submission of document for IAC review and approval

Release the doc for Public Review, followed by MPO Board adoption

Federal conformity finding
Example of Documentation

Plan Development

<table>
<thead>
<tr>
<th>S No</th>
<th>Project Name</th>
<th>Termini</th>
<th>Horizon Year</th>
<th>Project Description</th>
<th>Status</th>
<th>Lead Agency</th>
<th>Length</th>
<th>Func Class</th>
<th>Can it be modeled?</th>
<th>ADT</th>
<th>Regionally Significant</th>
<th>LRTP Amendment Needed</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I-40</td>
<td>E+C</td>
<td></td>
<td>Interchange improvements including replacing bridges, reconstructing acceleration and deceleration lanes and ramps</td>
<td>Non-Exempt</td>
<td>TDOT</td>
<td>NA</td>
<td>Urban Interest</td>
<td>Yes</td>
<td>83,350</td>
<td>Yes</td>
<td>No</td>
<td>Amend LRTP to remove reference to Plough Blvd in termini</td>
</tr>
<tr>
<td>2</td>
<td>I-40</td>
<td>E+C</td>
<td></td>
<td>Construct I-40 flyover ramp</td>
<td>Non-Exempt</td>
<td>TDOT</td>
<td>NA</td>
<td>Urban Interest</td>
<td>Yes</td>
<td>134,240</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I-55</td>
<td>2020</td>
<td></td>
<td>Interchange modification</td>
<td>Non-Exempt</td>
<td>TDOT</td>
<td>NA</td>
<td>Urban Interest</td>
<td>Yes</td>
<td>48,173</td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>I-240</td>
<td>2030</td>
<td></td>
<td>Interchange modification</td>
<td>Non-Exempt</td>
<td>TDOT</td>
<td>NA</td>
<td>Urban Interest</td>
<td>Yes</td>
<td>147,032</td>
<td>Yes</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Plan Amendments

<table>
<thead>
<tr>
<th>S NO</th>
<th>TIP ID#</th>
<th>Lead Agency</th>
<th>County</th>
<th>Funding Source</th>
<th>Project Name</th>
<th>Proposed Changes</th>
<th>New Federal Funds</th>
<th>Old Federal Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TN-M:2011-01</td>
<td>TDOT</td>
<td>Shelby</td>
<td>NHPP</td>
<td>I-55 interchange at Crump Blvd</td>
<td>Amend the project by adding $31,500,000 in NHPP federal funds and $3,500,000 in state funds for FY 2016 Construction. The total project cost has increased so additional construction funds are needed.</td>
<td>$4,630,419</td>
<td>$29,250,000</td>
</tr>
</tbody>
</table>

TIP Document

<table>
<thead>
<tr>
<th>TIP #</th>
<th>TDOT PIN #</th>
<th>Horizon Year</th>
<th>Lead Agency</th>
<th>Conformity</th>
<th>Type of Work</th>
<th>Funding Type</th>
<th>Obligated Funds</th>
<th>Fiscal Year</th>
<th>Type of Work</th>
<th>Funding Type</th>
<th>Total Funds</th>
<th>Fed Funds</th>
<th>State Funds</th>
<th>Local Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>110296</td>
<td>E+C</td>
<td>Memphis</td>
<td>Non-Exempt</td>
<td>CONST</td>
<td>STP-M</td>
<td>$3,650,000</td>
<td>2014</td>
<td>CONST</td>
<td>STP-M</td>
<td>$2,986,000</td>
<td>$724,000</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
IAC – what makes things works

- **Communication** - email, conf calls or one to one phone calls
- **Timely delivery** of information/ documentation
- Provide **easy to read** information e.g. summary documents

- **Education**
  - EPA’s presentation in Desoto Co before non-attainment designation
  - MPO 101 for members

- **Build relationships** with the agencies responsible for SIPs and budget's
  - Helped us with our timeline for MS amendments
  - Our model is used for their budgets development, their budgets effect our plans

- **Statewide IAC calls** — hosted by federal agencies- participants include MPOs. State agencies and neighboring state
IAC – Some challenges

• Level of understanding varies –
  • For Example- request for Project changes (scope/funding) and its impact on conformity
  • Misunderstanding of the time required by the process

• Additional dedicated staff time needed for coordination

• Timeline–
  • For example-interpretation of conformity status exempt vs non-exempt

• Project Delays due to review times involved
Benefits
Takeaways

- **Read the SIP** – Be aware of changes that can impact schedule
- **Timeline** – Have a good idea of timeframe needed to complete tasks related to conformity
- **Roles** – Have a clear idea regarding participants responsibilities. If needed have an MOU
- **Data** – If possible, have same data used for conformity as well as SIP
- **Education** – IAC Members have different backgrounds/levels of expertise
- **Tracking** – Technical nature of air quality planning, document plan and amendment review, correspondence, etc.
- **Communicate** – Keep everyone is informed, Emails, Conference Calls, etc.
Contact

Ms. Pragati Srivastava,
MPO Administrator
Pragati.Srivastava@memphistn.gov

Visit us
www.memphismpo.org

Follow Us