The meeting started at 9AM and the following Advisory Committee members were present at the meeting:

- John Lancaster, Chair, MATA
- Stephen Edwards, City of Memphis
- Jim Vasquez, Shelby County Housing
- Aury Kangelos, TDOT
- Sean Isham, Collierville
- Gregory Love, Memphis/Shelby County Office of Planning and Development
- Heather Sparkes, Vice-Chair, Arlington
- Carlos McCloud, TDOT
- Jessica Dilley, MDOT
- Ted Garrod, DeSoto County
- Rusty E Bloodworth, Boyle

The following members of the public were present:
- Dennis Lynch, Sierra Club

The following Consultants were present:
- Alex Shoemaker, Kimley-Horn
- Kenny Monroe, Kimley-Horn
- Kevin Tilbury, Gresham Smith and Partners
- Thomas Rossi, Cambridge Systematics
- Anurag Komanduri, Cambridge Systematics

The following Memphis MPO staff members were present:
- Pragati Srivastava
- Sajid Hossain
- Peter Jenkins
1. Introduction

Mr. John Lancaster convened the meeting and welcomed the committee to the third meeting of the Planning and Land Use Advisory Committee. He stated that Mr. Alex Shoemaker would be leading the presentation, after which members of the committee and public briefly introduced themselves.

2. Summary of Previous Meeting

Mr. Alex Shoemaker outlined the agenda including the Study Design and Map Package. He explained that previous meetings had examined limitations to the last MPO Land Use Model as well as model enhancements for the 2014 Land Use Model. Mr. Alex Shoemaker added that the purpose of the third PLAC meeting was to review the Land Use Model Study Design, the County Control Totals for population and employment and the model's allocation of population and employment for 2040.

3. Study Design and Methodology

Mr. Alex Shoemaker and Mr. Kevin Tilbury outlined the Study Design including model enhancements.

   a. Final Grid Structure

      i. Mr. Kevin Tilbury explained that the new Land Use Model switched from a polygon based structure to a uniform grid based structure, utilizing both 40 acre (quarter mile by quarter mile) and 640 (mile by mile) acre grids that reduced the size of the model from over 400,000 parcels to just fewer than 35,000 grids.

      ii. Mr. Alex Shoemaker explained that all of the grid units correspond to a Traffic Analysis Zone (TAZ) in order to view population and employment in 2040 by TAZ, which will then integrate with the MPO's Travel Demand Model Update.

   b. Redevelopment

      i. Mr. Kevin Tilbury described that the new model would also take into consideration redevelopment as a new model component and as part of the allocation. This is calculated using a ratio of building value over land value.

   c. Placetypes

      i. Mr. Alex Shoemaker outlined the general attributes within a placetype and explained that the attribute data changes per jurisdiction before highlighting the placetype map, which was created using current zoning, land use and/or comprehensive plans of the jurisdictions. Mr. Alex Shoemaker solicited feedback regarding the placetype map.

         1. Ms. Jessica Dilley noted that the new intermodal facility in Marshall County should be considered.
2. Mr. Rusty Bloodworth asked for clarification regarding how existing zoning or land use is informing the placetypes.

3. Ms. Jessica Dilley explained that the new I-269 interchange is not shown but new development is anticipated when built. She asked if the LRTP roadway network is included in the model. Yes, fiscally constrained projects are included in analysis.

d. Suitability Analysis

Mr. Alex Shoemaker described the suitability analysis and how it rates the attractiveness of land to assign development or redevelopment to the placetype grids.

1. Mr. Dennis Lynch asked why there is no suitability factor for mixed-use. The mixture of uses occurs within the placetypes by percentages of different uses and can also be addressed within future models under scenario planning (i.e. Transit-Oriented, mixed-use development).

2. Mr. Rusty Bloodworth recommended having different suitability factors for each unique placetype.

ii. Mr. Alex Shoemaker explained the proximity to major roads placetype as well as proximity to transit. He also explained that the suitability factor, cost of land, was not yet incorporated into the model.

1. Mr. John Lancaster explained that the travel threshold for transit use is 1/2 mile for bus (walking), ¼ for rail (walking) and 1-1.5 miles for park and ride.

2. Ms. Jessica Dilley recommended that the model should adjust for proximity to rural vs. urban road (i.e. two miles for rural but ½ mile for urban).

iii. Mr. Alex Shoemaker presented the suitability score map for residential. He mentioned that the model does not show as much suburban sprawl as previous models.

1. Mr. Carlos McCloud recommended showing less breaks in the ranges.

2. Mr. Dennis Lynch commented that there still remains strong suburban sprawl within the residential suitability heat map.

3. Mr. Rusty Bloodworth explained that Coldwater River is a big barrier to development. He also suggested that Macon Rd. in Fayette County is underemphasized regarding its suitability score. This map shows just the suitability score and not the Household Allocation. Suitability does not show carrying capacity which factors out environmental constraints.
4. Mr. Stephen Edwards asked how redevelopment suitability is taken into account and how it is based on redevelopment potential and densities of development. The placetypes prescribe density (i.e. mixed-use, urban neighborhood, etc.) He also mentioned that a higher cost of land may indicate potential for denser development.
   a. Mr. John Lancaster added that denser redevelopment locations could be reflected by an overlay district within certain areas of the model.
   b. Mr. Dennis Lynch added that we could take into consideration tax incentives that encourage development in certain locations.

5. Mr. Anurag Komanduri asked how proximity to major roads is accounted for. Scores are calculated relative to every other polygon out of a range of 1-100. If a suitability factor has a weight of 5 and another has a weight of 10, the factor with a weight of 10 will influence twice as much as the factor with a weight of 5.

Mr. Alex Shoemaker also presented the suitability score heat maps for non-residential and industrial development.

e. Control Totals

Mr. Tom Rossi presented the base year and 2040 county control totals for Households and Employment. The Travel Demand Model and Land Use Model interact in a two way manner, given TDM outputs feed into the LUM and the LUM outputs feed into the TDM. Household and Population are broken into TAZ geographies. Persons, Workers, Income, Number of Vehicles, etc. are categories in the Household Data. Employment is broken down by employment types and densities.

i. Mr. Kevin Tilbury noted that the region added 3 jobs per one household. Mr. Carlos McCloud added that this is consistent with TDOT projections and Mr. Tom Rossi highlighted that this is attributed to people traveling in to the region for work from outside the model boundaries.

ii. Mr. Dennis Lynch suggested that Travel Demand Models often forecast travel at a higher rate than is observed. Mr. Tom Rossi explained they are using multiple data sources and analyzing multiple trends both current and historic to inform the model. Mr. Tom Rossi explained they do ‘backcasts’ to check the model.

iii. Mr. Rusty Bloodworth suggested that Shelby County population projections are too high and Fayette and Marshall Counties population projections are too low. He suggested doing a regional allocation of population and employment rather than by county.
2040 Model Allocation Results

f. Household Allocation

i. Mr. Stephen Edwards suggested the model does not reflect as much growth as we can expect in downtown Memphis, University District and redevelopment in East Memphis. *The consultants expect as they revise the model that these areas of Memphis will experience greater allocation.*

ii. Mr. Rusty Bloodworth suggested that allocation to Tipton was too high and growth in Fayette was too low. He suggested that many areas within the loop are losing households in Shelby as disinvestment continues to occur. He stated that there may be some removal of housing stock and there may be more greenfield space and population loss.

iii. Ms. Jessica Dilley suggested that there is a level of rural roadway missing in the model that could influence allocation.

iv. Mr. Ted Garrod explained suburbanization is a trend that will continue to the east and south of Memphis. He explained congestion will influence suburbanization as well as location choice for real estate development. There needs to be a dynamic map looking at land development and roadway congestion, as one influences the other.

v. Mr. Stephen Edwards suggested that demographic change has shown otherwise, that millennials want to live in an urban context with walkable communities and shorter commute times. He explained there are multiple views across the region about the type of places where people want to live.

vi. Mr. Carlos McCloud suggested cross referencing land use with traffic volumes and congestion. *Right now there are no volumes within the model but, we will have that analysis capability when the TDM and LUM models are complete.*

vii. Mr. Sean Isham suggested looking at historic trends in household growth or loss to help inform the Land Use Model. Specifically, trends in household development by Census Tract.

1. Mr. John Lancaster recommended looking at trends by Planning Districts. Mr. Stephen Edwards suggested looking at special districts like Germantown’s Smart Growth policy.

viii. Mr. Rusty Bloodworth suggested meeting with municipalities and developers and working to find out where they are developing. He added it could be a useful predictor of development.
1. Mr. Ted Garrod added that many new developments are already on the books (approved project database).

g. Household Allocation

4. Next Steps

a. Project Schedule

i. PLAC and ETC LUM Workshop feedback and input desired by October 17th regarding the Study Design and Model Allocation.

ii. Present revised Land Use Model to ETC on November 6th and to the TPB for approval on November 20th.

5. New Business

8. Adjourn

The meeting was adjourned at 11:55am.

NOTE: The meeting minutes are a summary of the meeting. If you would like to review the tape recording of the entire meeting you may do so by scheduling an appointment with Peter Jenkins, Transportation Planner at (901) 576-7156.