

Think >> Forward

#### SERPM 8 Model Status

presented to RTTAC-MS

presented by

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### Outline

- Model status and schedule
- → 2045 SE data update
- Model calibration update
- Traveler characteristics update

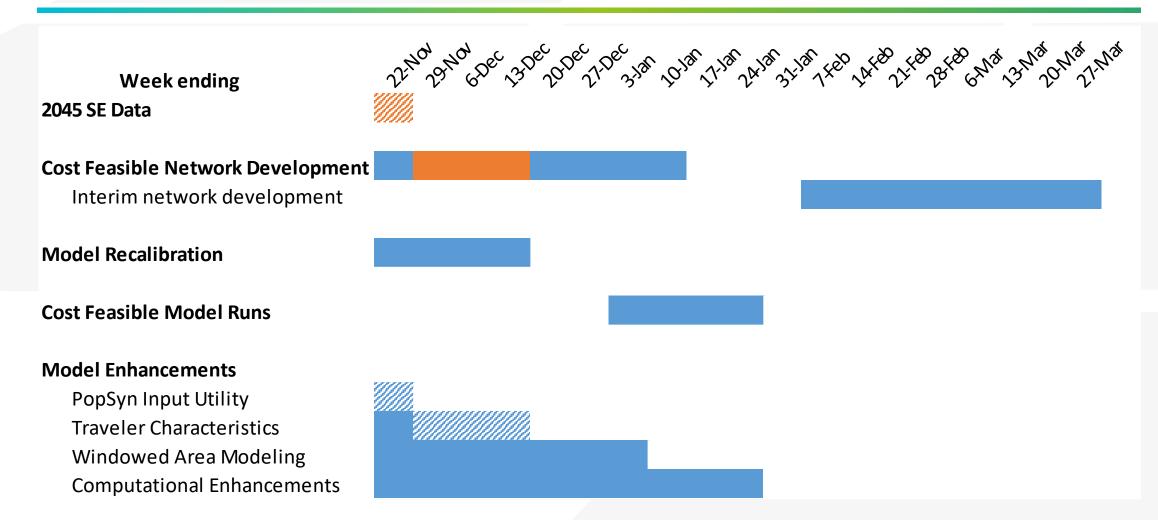


#### **Model Status**

- Latest model version released for use January 30, 2019
- Developer version enhancements completed
  - » Fixes: TNC repositioning trip mechanism, shadow pricing enhancements, select link volumes, MAZ to TAZ map corrected (TAZ 4404)
  - » Reports: SE Data; PopSyn; TNC & C/AV summaries; worker-job / student-enrollment consistency
  - **Utilities**: seed skim generation; free-flow network; voyager.exe check; PopSyn checker; site impact preparation
  - » Catalog: Default to utilize all threads in Cube Catalog, scenario key defaults; key names; shadow pricing inputs
  - » Inputs: highway network updated with D6 feedback and removed unused fields, clean up floating nodes?
  - » Documentation: PopSyn utility; Shadow Pricing guidance
- Pending enhancements
  - » Update JPPF (to utilize all processors on Windows 10 systems)
  - » Airport employment handled within model
  - » Run time enhancements
  - » Windowed area modeling
- Model release schedule:
  - » Draft Final Model to RTTAC-MS January 9, 2020
  - » Ready documentation January 27, 2020
  - » Target Adoption Availability: February 1, 2020
- Bi-weekly maintenance calls
  - » Next call Monday November 25, 3 3:45pm



### Model Work Schedule





# 2045 SE data update

## Summary – version 20191105

- Palm Beach: updates to household and population
- Broward: updates to CBD and FLL employment
- Miami-Dade: updates to employment

Question: are all known updates included and issues addressed in the current version of the land use data?

We are requesting approval of the land use inputs



# 2015 Calibration Update



#### **SERPM 8 Revalidation**

- Run model with changes since base year model accepted
  - » Updated socioeconomic data
  - » Various network fixes
  - » Changes to shadow price process
- Validation checks
  - » Demand component checks comparisons to previous results and to observed data
  - » Assignment checks
    - Aggregate checks (VMT by segment, screenlines, etc.)
    - Individual link checks, including links cited in previous comments
- Review comments on original validation report



## Demand Component Checks

- Nearly all component outputs match previous scenario results very closely (within 1%, usually much less)
- A few components show some segments with higher differences, but these are all small segments
- Bottom line: The trip tables are very similar to those from the previous base year scenario results—it is likely that no further adjustments needed on the demand side

#### Link Volume Checks

- Focused on links with previously identified issues
  - » But also checking other "outliers"
- Some issues may be addressed through network fixes
- But many will not, and demand side changes probably will not substantially change most modeled link volumes
- Focus on making sure that nothing has gotten worse



## Next steps

- Summarize demand component checks
- SERPM 8 implementation
  - » ABM software
  - » Cube catalog
- Revise report

Scheduled completion: <u>December 15</u>



# Traveler Characteristics Update



## Traveler Characteristics Utility

- Connect highway and transit assignment (aggregate) results to ABM disaggregate outputs
- Process
  - » Define select link
  - » Run assignment-only (or full model)
  - » Analyze trips on OD-pairs identified through Select Link
- Questions
  - » Report set reasonable?
  - » Transit select link operation and reporting



# Current Transit Path Logging Process

#### Configuration

» Catalog keys from SERPM 7 identify Transit-Access Point (TAP) origin and TAP destination for path logging

#### Produces

» TAP-TAP route information by time of day (AM, PM, OP) and premium-only / mixed mode

#### Question

» Usefulness by typical modeler? Move keys to later pages.



## **Current Transit Select Link Operation**

#### Configuration

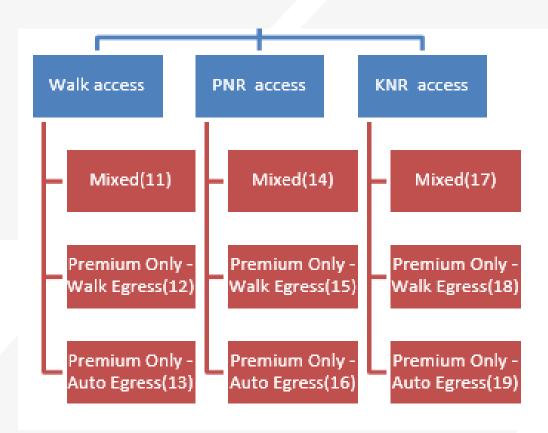
» Scripts are hard coded to generate select link on Tri-Rail (mode = 11)

#### Produces

TAP-TAP trip table by time of day (AM, PM, OP) and mode

#### Question

» Interest in setting transit select link in scenario keys?



## Select Link Options

#### Select Link Capabilities

- » Highway network identifier: Links (node sequence) or individual node
- » Transit attribute: mode, operator, line (route)
- » Movement: through trips, boarding, alighting, non-transit through trip
- » Combinations of above

#### Implementation Options

- » Free form text box full flexibility to specify selection
- » Semi-flexible, single approach: drop-down menu to choose type of selection; text box with entries
- » Simple predetermined selection (e.g. mode only)



## Next Steps

- Finalize report structure
- Develop transit select link capabilities
- Integrate R-scripts into Catalog to be run when Select Link is chosen

