Gen3 Model Development Project Update

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RSG®

TPB Travel Forecasting Subcomm.

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Topics

- Phase 2 work completed since last update

- User guide

- Schedule update

Phase 2 work completed since last update

Calibrated the following models

- Auto ownership

- Work location choice

- Joint tour frequency and composition

- Trip mode choice

- Coordinated Daily Activity Pattern (to have fewer non-workers and senior staying home)

- Non-mandatory tour frequency

- Non-mandatory destination choice constants for attractions to DC

Also…

- Update implementation to use either MambaForge or Anaconda

  - Anaconda requires commercial license if organization is 200 persons or more

  - MambaForge is free

  - Model runtime is ~20 minutes longer on MambaForge

- Updated the model to output stop-to-stop tables for commuter rail

- Finished a few sets of documentation

- Working hard on validation

  - Model was over-estimating non-mandatory travel to DC

  - Transit ridership is mostly looking good.

Schedule Update

Schedule Update

- Phase 2 model system implemented

- Phase 2 models estimated

- Phase 2 models calibrated (mostly)

- Validation underway; highway and transit look similar to v2.4 model results.

- Documentation underway

Task	Description	CY 2022 Status	Jan	Feb	Mar	Apr	May	Jun
0	**Project Management**							
0.1	Meetings							
0.2	TFS Meetings							
0.3	Other							
2.8	Documentation (COG staff document 2.3->	In progress						
3	**Calibration and Validation**							
3.1	Calibrate re-estimated models	Complete						
3.2	Calibrate district constants	In-progress						
3.3	Calibrate mode choice	Complete						
3.4	Validation	In-progress						
3.5	Documentation	In-progress						
4	**Sensitivity Testing**							
4.1	Definition of Sensitivity Tests for Phase 2							
4.2	Sensitivity Test 1							
4.3	Sensitivity Test 2							
4.4	Add'l Sensitivity Tests - COG Staff Lead							
4.5	Documentation							
5	**Final Documentation & Training**							
5.1	Draft Model Development Report							
5.2	Final Model Development Report							
5.3	Draft Model Users Guide							
5.4	Final Model Users Guide							
5.5	Training Materials							
5.6	Training Delivery							

Model User Guide Outline

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