

The logo graphic consists of three overlapping parallelogram shapes pointing to the right. The top shape is light green, the middle is light blue, and the bottom is a darker blue.

CAMBRIDGE
SYSTEMATICS

Think  Forward

FY 2017 Short Term Model Improvements Task Order

Status Update

presented to

Travel Forecasting Subcommittee

presented by

Cambridge Systematics, Inc.

Jay Evans and Feng Liu

November 18, 2016

Task Order 17.2

Short-Term Model Improvements

- Non-Motorized Model Enhancements
- Mode Choice Model Enhancements
- Managed Lanes Components

Task Order 17.2: Non-Motorized Model Work Plan

➤ Key Program Elements

- » Model estimation data assembly/preparation
- » Model specification & estimation
 - Binomial logit model
 - Refined measurement of independent variables
- » Implementation & validation

Task Order 17.2: Non-Motorized Model Work Plan

➤ Key Dates

- » Dec 1 – Data delivered to consultant
- » Jan 15 – Data processing complete
- » Mar 1 – Model estimation complete
- » Apr 1 – Model implemented in Cube

Task Order 17.2

Mode Choice Model Work Plan

➤ Key Program Elements

- » Model estimation data assembly
- » Update transit skimming/assignment procedures
- » Model specification & estimation
 - Simpler and shallow structure
 - Traditional and non-traditional transit attributes
- » Model calibration/validation

Task Order 17.2

Mode Choice Model Work Plan

➤ Key Program Dates

- » Dec 1 – Data delivered to consultant
- » Feb 1 – Data processing & skimming complete
- » Mar 1 – Model estimation complete

Task Order 17.2

Managed Lanes Work Plan

➤ Key Program Elements

- » Trip segmentation by value of time (VOT) segment (three categories)
- » Update highway skimming/assignment procedures
- » Revise volume delay functions
- » Highway assignment validation

Task Order 17.2

Managed Lanes Work Plan

➤ Key Program Dates

- » Dec 10 – VOT segmentation procedures complete
- » Feb 18 – Highway skimming/assignment procedures complete

Task Order 17.2

Next Steps

- Receive the requested input data that TPB staff has been working to assemble
- Begin work on the utility function development for non-motorized model and mode choice model
- Define VOT segments and begin implementation of trip table segmentation for managed lanes
- Continue close coordination with TPB staff on progress against program milestones

Questions?

➤ John (Jay) Evans, P.E., AICP, Principal

➤ Feng Liu, Ph.D., Principal

4800 Hampden Lane, Suite 800
Bethesda, Maryland 20814

+1.301.347.0100

www.camsys.com

➤ Acknowledgments: Jason Lemp and Thomas Rossi