

**AMENDMENT**

**TO THE CONTRACT**

**BY AND BETWEEN**

**THE ASSOCIATION OF METROPOLITAN PLANNING ORGANIZATIONS  
RESEARCH FOUNDATION**

**AND**

**SYNTHCITY, INC. LLC**

THIS AMENDMENT, made and entered in this 28<sup>th</sup> day of November, 2014 by and between the Association of Metropolitan Planning Organizations Research Foundation (hereinafter referred to as "AMPORF"), with its principal office located at 444 North Capitol Street, N.W., Suite 345, Washington, D.C. 20001, and Synthicity, Inc. with its office at 2470 Telegraph Avenue, Berkeley, California 94720 (hereinafter referred to as the "CONTRACTOR"),

**WITNESSETH:**

WHEREAS, AMPORF entered into an agreement with the CONTRACTOR, dated January 10, 2014 to develop a common transportation modeling platform (hereinafter referred to as the "Original Contract"); and

WHEREAS, AMPORF and the CONTRACTOR have mutually agreed to extend the period of performance of the Original Contract through July 15, 2015, with the additional tasks, deliverables, and compensation stated below.

NOW, THEREFORE, in consideration of the mutual promises, covenants and representations contained herein and in the Original Contract, as amended, the parties do mutually agree as follows:

**AMENDMENT 1. SECTION 1. STATEMENT OF WORK**

The CONTRACTOR shall provide technical support in accordance with the terms of the Original Contract. CONTRACTOR shall conduct the following additional tasks:

Phase 1 Implementation of ActivitySim - a first version of the model system, including all data structures and models for a simple model (see sequence below) using MTC Travel Model One data. Model system runs end to end on MTC data. Simple model specifications, which may include fixed distributions. Model results summaries: web maps/charts/tables.

**Simple model sequence:**

- Automobile ownership
- Usual work and school location (no shadow pricing, no mode choice logsums)
- Coordinated daily activity pattern
- Mandatory tour generation
- Non-mandatory tour generation (no joint tours)
- Non-mandatory tour location choice (no mode choice logsums)
- Mandatory tour scheduling
- Non-mandatory tour scheduling
- Tour mode choice
- Trip mode choice

**Deliverables:**

1. Software implementation of model set for phase 1 in GitHub repo with continuous integration using TravisCI and unit test coverage using Coveralls.
  - a. Automobile ownership (\$7,000)
  - b. Usual work and school location (no shadow pricing, no mode choice logsums) (\$7,000)
  - c. Coordinated daily activity pattern (\$7,000)
  - d. Mandatory tour generation (\$7,000)
  - e. Non-mandatory tour generation (no joint tours) (\$7,000)
  - f. Non-mandatory tour location choice (no mode choice logsums) (\$7,000)
  - g. Mandatory tour scheduling (\$7,000)
  - h. Non-mandatory tour scheduling (\$7,000)
  - i. Tour mode choice (\$7,000)
  - j. Trip mode choice (\$7,000)
2. Conda / PIP installer of ActivitySim version 0.1 with the models outlined above (\$15,000)
3. API Documentation (\$15,000)

**AMENDMENT 2. SECTION 2. COMPENSATION AND METHOD OF PAYMENT**

For the completion of the tasks listed above in Section 1, Statement of Work, the CONTRACTOR shall be paid in the amount of one hundred thousand dollars (\$100,000).

**AMENDMENT 3. SECTION 3. PERIOD OF PERFORMANCE**

The period of performance of this work shown above shall be from November 24, 2014 through July 15, 2015.

All other terms and conditions shown in the Original Contract shall remain the same.

THE PARTIES hereto, have executed this Amendment to the Original Contract, as of the month, date and year first above written.

**ASSOCIATION OF METROPOLITAN  
PLANNING ORGANIZATIONS  
RESEARCH FOUNDATION**

**SYNTHCITY, INC. LLC**

By: *DeLania Hardy*  
DeLania Hardy, Executive Director

By: *Paul Waddell*  
Title: *President*

Fed. ID: *46-1232535*