Alliance for Sustainable Energy, LLC manager and operator of the National Renewable Energy Laboratory

Strategic Partnership Projects Technical Services Agreement—TSA-2X-xxxxx

Appendix A – Statement of Work

Prepared by the National Renewable Energy Laboratory date

I. Project Title: Customized deployment of the OpenPATH platform for the [study name] project.

II. Non-Proprietary Description of Project:

Deploy a customized version of the OpenPATH platform to support [study name] and archive the resulting data in NREL's Transportation Secure Data Center for longitudinal research.

III. Parties to this agreement:

Contractor: Alliance for Sustainable Energy, operator of the National Renewable Energy Laboratory under Prime Contract No. DE-AC36-08GO28308 for the U.S. Department of Energy (DOE). Contractor has a facility at 15013 Denver West Parkway, Golden, CO 80401.

Sponsor: [Partner name, partner type, location] – e.g. City of Denver, a municipal corporation, with a primary location at

- **IV. Background:** NREL's OpenPATH is an open-source, extensible, and customizable platform for instrumenting human travel behavior. This Statement of Work (SOW) is intended to create the framework for customizing the platform to support [study name], conducted by [partner name]. The collected data will be stored in NREL's Transportation Secure Data Center (TSDC), which relieves individual agencies and researchers from the burden of fielding numerous data-access requests.
- V. Statement of Work Task Descriptions, Deliverables, and Estimated Completion Dates:
 - a. Task Descriptions
 - Task 1. In conjunction with [partner name], create a file that represents the study specific selections for supported OpenPATH configuration
 - Task 2. Create a new enclave, consisting of webapp, dashboards and analysis pipeline, for the new study
 - Task 3. Create a study-specific web page with a study-specific description and a custom QR code that allows participants to join [study name].

b. Deliverables:

- Study specific web page with custom QR code
- Study specific public dashboard
- Study specific admin dashboard with authentication options for a maximum of three representatives from **[partner name]**.

c. Deliverables Estimated Completion Dates

VI. Schedule:

APPENDIX (study-specific information)

- 1. Name: (e.g. NREL Commuting Study)
- 2. Short textual description (~ 3 sentences): e.g. As commute schedules get increasingly complex in our "Future of Work", NREL would like to experiment with an automated trip tracking solution for understanding travel behavior. This commuting study ("Study") can allow NREL to understand variations in travel across centers, days of the week and months of the year without complex, time-consuming surveys.
- 3. Short textual purpose (~3 sentences): e.g. NREL can use this information to understand how people get to work, what their constraints are, and how to better provide alternative options to driving alone. This comprehensive information will aid NREL in its goal to reduce carbon emissions from transportation. Or

The data collected during the program will be used to understand how eBikes are used including when and how often as well as distance travelled.

4. Three-sentence summary for app (e.g.):

- The Colorado Energy Office aims to incentivize commuters to adopt energy-efficient, non-polluting modes of transportation and maximize air quality benefits.
- In this pilot program, it is providing e-bikes to low-income essential workers in communities around the state.
- If you are a program participant, this app can help you log your trips and compete against others to benefit our environment.
- 5. Point of contact listed in the app e.g.: For questions about the program, please contact AAA at the City of XXX (email:, phone:....).
- 6. List of users with access to the admin dashboard: No more than 3 names. Please contact NREL if there are any personnel changes that cause this list to change.
- 7. Examples of research questions that this data could be used to answer (optional, max 3 bullet points): e.g.
- Travel behavior modeling to support cost-benefit analyses of various potential commute programs.
- The impact of post-pandemic telework on transportation energy efficiency and GHG emissions

List of customizations:¹²

- Logo:
- Color:
- Incentive module:
- ...

List of metrics to be displayed by default in the public dashboard:

List of metrics to be displayed in the public dashboard dropdown:

¹ This does not cover any new customized modules or analysis. It only covers creating a study-specific config file by filling in values requested by the client and ensuring that it is formatted correctly.

² These should be filled in by NREL's tech support intern after an interview with the deployment team. Note that this list may change over time as we add more entries.