Plug-In Hybrid Electric Vehicle (PHEV) Demonstration and Consumer Education, Outreach, and Market Research Program: Volumes I[1] and II[2]

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[1] University of California, Davis Institute of Transportation Studies Research Report ITS-RR-09-21
[2] University of California, Davis Institute of Transportation Studies Research Report ITS-RR-10-21

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This report is in two volumes. Volume I is the previously issued Final Report to the California Air Resources Board in fulfillment of Grant AFIP G06-AF04, dated 30 June 2009 and as ITS-Davis Research Report ITS-RR-09-21. Minor editorial changes have been made, mostly to assure consistent formats and to correct typographical and other minor mistakes. The identifier "Volume I" has been added to the title of the document. Volume I covers the first 34 households to complete their four to six week PHEV trial between August 2008 and February 2009.

Volume II is issued here as ITS-RR-10-21. It provides updated analysis and discussion covering the total of 67 respondents who had completed their participation in the Project as of February 2010, i.e., the 34 respondents from the first year who are discussed in Volume I plus the 33 respondents from the second year.

The research reported in Volumes I and II covers four distinct research areas:

1. Measurement of PHEV driving and recharging behavior and estimation of associated energy impacts;

2. Construction and analysis of a narrative of each household's encounter with a PHEV;

3. Implementation and testing of enhanced energy feedback to drivers; and,

4. Recording and evaluation of the effects of social interactions on households' assessments of PHEVs

Volume II provides extensions and elaborations of the theory, methods, conclusions, and discussions of areas 1, 2, and 4 presented in Volume I. With respect to area 3, Volume II contains a new theoretical discussion and preliminary analysis not found in Volume I. Readers with a particular interest in one of the four research areas may wish to read the corresponding chapters in each volume as a single "document."

Information in Volume I, Chapter 1 that is not repeated in Volume II includes the basic descriptions of PHEV operation, Project motivation, and research design. Also, the Appendices of Volume I contain interview protocols, questionnaires, household narratives, and other information that are not repeated in Volume II.