

# Researcher Dictionary for Time Stamp Data

Version 1.0

June 14, 2012

## REVISION HISTORY

[illegible]

# INTRODUCTION

The following data dictionary describes vehicle variables available in the naturalistic driving data for use by the research community. In addition to this introduction, the data dictionary includes four parts:

Revision History – This data dictionary should be considered a working document that will evolve over time. The revision history shown on the previous page provides a table which describes updates to the document.

Related Reading – A list of related subject areas and specific documents of value to users of the data set described in this data dictionary.

Data Description – This section describes what data is available and how the data are stored.

List of Variables – A list of the entries (variables) in the dictionary which can be used as a table of contents to locate specific variables in the document.

## RELATED READING

Individuals working with these data are encouraged to become familiar with them, the method in which they were collected, and literature in the area of secondary data analyses. The following references are provided as starting points to assist the researcher in his or her efforts.

### 100-Car Study Overview

The 100-Car Naturalistic Driving Study was an instrumented vehicle study conducted in the Northern Virginia / Washington, D.C. area over a two-year period. The primary purpose of the study was to collect large-scale naturalistic driving data. To this end the instrumentation was designed to be unobtrusive, study participants were given no special instructions, and experimenters were not present. Approximately 100 vehicles were instrumented with a suite of sensors including forward and rearward radar, lateral and longitudinal accelerometers, gyro, GPS, access to the vehicle CAN, and five channels of compressed digital video. Collection rates for the various sensors ranged from 1Hz to 10Hz. This collection effort resulted in approximately 2,000,000 vehicles miles and 43,000 hours of driving data.

### Methods

#### 100-Car Methods

The methods used for collecting the data are described in:

Dingus, T. A., Klauer, S. G., Neale, V. L., Petersen, A., Lee, S. E., Sudweeks, J., Perez, M. A., Hankey, J., Ramsey, D., Gupta, S., Bucher, C., Doerzaph, Z. R., Jermeland, J., and Knipling, R. R. (2006). The 100-Car Naturalistic Driving Study, Phase II - Results of the 100-Car Field Experiment DOT HS 810 593.

#### Secondary Data Analysis

Use of data collected by other organizations is becoming increasingly common in this digital age. In some fields, such as the social sciences or business, the use of previously collected data is more common than, for example, in psychology or product development. The primary benefit of this approach is cost savings. There are also risks that can threaten the validity of analyses conducted in this manner. The following references include discussion and recommendations for secondary analysts.

Akerstrom, M., Jacobsson, K., Wasterfors, D. (2004). "Reanalysis of previously collected material" in Clive Seale, Giampietro Gobo, Jaber Gubrium, and David Silverman (eds), *Qualitative Research Practice*, Thousand Oaks, CA. Sage Publications Ltd.

Corti, L. Thompson, P. (2004). "Secondary analysis of archived data", in Clive Seale, Giampietro Gobo, Jaber Gubrium, and David Silverman (eds), *Qualitative Research Practice*, Thousand Oaks, CA. Sage Publications Ltd.

Dale, A. Arber, S., and Procter, M. (1988). *Doing Secondary Analysis*, Unwin Hyman Ltd., London.

Hyman, H. (1972). *Secondary Analysis of Sample Surveys*, Wesleyan University Press, Middletown, Connecticut.

Kiecolt, K. and Nathan, L. (1985). *Secondary Analysis of Survey Data – Sage University Paper Series on Quantitative Applications in the Social Sciences*, 53. Sage Publications, Beverly Hills, CA.

## DATA DESCRIPTION

This dataset consists of a single comma delimited file containing information for 100 of the vehicles instrumented for the 100-Car Study.

## LIST OF VARIABLES

The following variables are included in the text files.

Variable Number	Variable Name	Variable Description	Example
1	Vehicle webid	A unique identification value for each vehicle in the study	
2	Model year	The model year of the instrumented vehicle.	
3	Make	The manufacturer of the instrumented vehicle.	
4	Model	The model of the instrumented vehicle.	