# Metadata Schema

<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th>DRIVER PERFORMANCE AND BEHAVIOR IN ADVERSE WEATHER CONDITIONS: AN INVESTIGATION USING THE SHRP2 NATURALISTIC DRIVING STUDY DATA—PHASE 2</th>
</tr>
</thead>
</table>
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| **Publication Date(s)** | March, 2018 |
| **Description/Abstract** | The impact of adverse weather conditions on transportation operation and safety is the focus of many studies; however, comprehensive research detailing the differences in driving behavior and performance during adverse conditions is limited. Many previous studies utilized aggregate traffic and weather data (e.g., average speed, headway, and global weather information) to formulate conclusions about the weather impact on network operation and safety; therefore, research into specific factors associated with driver performance and behavior are notably absent. A novel approach, presented in this report, can fill the gap in previous studies by considering disaggregate trajectory-level data available through the SHRP2 Naturalistic Driving Study and Roadway Information Database. Parametric and non-parametric models were utilized to better understand different behavioral factors including speed selection, car following and lane keeping in adverse weather conditions. The purpose of this study was to gather insights into driver behavior and performance in different weather conditions, such that efficient logic can be implemented to introduce a realistic Variable Speed Limit system, aimed at maximizing speed compliance and reducing speed variations. This study provides valuable information related to drivers’ interaction with real-time changes in roadway and weather conditions, leading to a better understanding of the effectiveness of operational countermeasures. |
| **Subject and Keywords** | Driver Behavior and Performance, Variable Speed Limit, Adverse Weather Conditions Speed Selection, Lane Keeping, Naturalistic Driving Study, Ordinal Logistic Regression, Classification Tree, CART, SHRP2, Wyoming |
| **Identifier** and/or source | Phase I: doi:10.15787/VTT1/CDUJU5  
Phase II: doi:10.15787/VTT1/90BH6X |
| **Collection and Related Documents** | Weather Data for three years (2010-2013) was collected from the national climatic data center NCDC  
Source: [https://www.ncdc.noaa.gov/](https://www.ncdc.noaa.gov/) |

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1 To include alternate title; conference title; and journal title, if they are different.
2 To include record numbers; report numbers; NTIS number; TRIS Accession Number; OCLC Number; ISBN; ISSN; contract number; and DOI if available.
**Edition** | 4/11/2017
---|---
5. [https://insight.shrp2nds.us/login/auth](https://insight.shrp2nds.us/login/auth)
**Coverage** | Florida, Indiana, New York, North Carolina, Pennsylvania, and Washington; 2010-2013
**Language** | English
**Publisher/Distributor** | FHWA and Wyoming Department of Transportation
**Funding agency** | FHWA and Wyoming Department of Transportation
**Access Restrictions** | Please refer to the attached DUL
**Intellectual Property and Other Rights** | Please refer to the attached DUL
**License** | Please refer to the attached DUL
**Code and software needs** | SAS Enterprise Miner, R, SAS desktop, Wyoming NDS Visualization and Reduction Software
**Format** | PDF, CSV, Video files
**Choice of Repository** | All the data are stored on secured UW computers and hard drives in keyed graduate student offices. The data are encrypted while at rest.

**NOTE:** Each separate report, dataset, collection, existing collection, and software developed must have its own table. All fields in this Schema must be completed at the time of the final report.
NOTE: This Metadata Schema is created as a derivative from the Common Core required fields which can be found at https://project-open-data.cio.gov/schema/.

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