Using NPMRDS: Lessons Learned

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The US Federal Highway Administration (FHWA) has made available the National Performance Measures Research Data Set (NPMRDS) to all state Departments of Transportation (DOT) and Metropolitan Planning Organizations (MPO). The NPMRDS data set is derived from probe data, a technology in which a portion of the vehicles self-report on their position and speed at varying intervals, the results of which are aggregated to a common traffic picture. Upon release, the authors undertook the validation of the NPMRDS, using established and tested methods of probe data validation. However, this process exposed various attributes of the NPMRDS that had to be addressed before it could be effectively used with existing processing techniques. This presentation illustrates lessons learned during the adaptation process. It describes the reporting format of the NPMRDS, highlights the varying methods that can be used to transform NPMRDS data into the desired format, and examines the analysis potential to support performance measures reporting required by Map-21.