

MEMORANDUM

TO: Jon Woodland, Research Analyst
New Mexico Department of Transportation's Research Bureau

FROM: Luz Elena Y. Mimbela, Project Manager
Institute for Energy and Environment, NMSU

SUBJECT: Vehicle Detector Clearinghouse Final Quarterly Status Report

DATE: March 25, 2008

Following is an update on the status of the VDC:

- Worked with Glenda Fuller and Raelene Viste of Idaho Transportation Department (ITD), Larry Klein, VDC Consultant, and Gaby Cisneros on the data analysis for the traffic data collected during the evaluation of the ASTM standard titled, "Test Methods for Evaluating Performance of Traffic Monitoring Devices." The evaluation was carried out on October 3, 2007 at Boise Idaho's Black's Creek rest area located on I-84 about 4.5 miles southeast of the Boise city limits. The results of the analysis using approximately one hour of data show a total of 572 vehicles from two lanes of I-84 detected using the video recorder. Furthermore, using the video observations as ground truth to conduct a vehicle-by-vehicle comparison a total of 511 (89%) records were correctly detected by the permanent Automatic Traffic Recorder (ATR), 21 (4%) records were missed by the ATR and a total of 40 (7%) records were falsely detected by the ATR. Based on this analysis if the ATR's performance was based on a tolerance of 5%, the ATR would not have passed the performance evaluation. However, since the set up of the video was not done according to the TMD test method specifications due to site, budgetary and time constraints, the video ground truth data is probably not accurate enough to make this determination. Normally, this type of testing would be carried out at a testing facility equipped with a state of the art video traffic recorder installation. Plans are to compile the data in a report with recommendations regarding improvements to the E2532-06 as well as recommendations to other State DOT for how to use this standard in their TMD testing programs.
- Continue to provide technical assistance to traffic monitoring professionals via telephone and email.
- Continue to update the VDC web page including the equipment databases of state and vendor information.
- Submitted a proposal for a pooled fund study to Ralph Gillman of FHWA to continue the standards development efforts of the current VDC program through the ASTM standards development organization. Ralph suggested the proposal be sent to Bryan Danielson of NM DOT's Traffic Data Collection section. The proposal was sent to Mr. Danielson on January 17, 2008 and followed with a telephone call on January 24,

2008 to verify receipt. Mr. Danielson was extremely busy at the time and said he would look at the proposal as soon as he was able. The plans were to obtain support for the proposal and have NMDOT submit it to FHWA as a request for pooled funds.

- Preparing a presentation to NMDOT on the closeout of the current VDC project. The presentation will be given by Ms. Luz-Elena Mimbela, VDC Project Manager, at NMDOT headquarters in Santa Fe, NM on April 24, 2008 at 10:00 am.
- The end date for the current VDC contract is April 8, 2008, thus a final update of the VDC web page will be carried out prior to this date to insure the most current information is available.