

APPENDIX C

INSTRUCTIONS FOR PCMCIA DATA COLLECTION

This appendix presents the instructions provided to Federal Express and GDOT points of contact and vehicle operators for collecting data using the PCMCIA cards

The vehicles receiving ADAS were clustered in small groups in each participating agency. A point of contact (POC) for each cluster was assigned by the owning agency. When each cluster was selected for data collection by the evaluators, several cards were forwarded to the POC for distribution to selected vehicles during the collection period. An instruction sheet was provided to the POC describing the tasks required of him/her including:

- distribution of the operator instructions and cards,
- return instructions after data collection was complete,
- the data collection period,
- the date the cards were requested to be returned, and
- the vehicle numbers selected for the collection.

Typically, 5 to 10 cards were sent to a POC for two days of data collection.

Instructions for data collection and for installing and removing the cards was provided in the package for the vehicle operator. The operator was requested to install the card at the beginning of the day's operations on the first day and to remove the card at the end of the day's operation on the last day. Further, the operator was requested to send two-way messages at approximately 15 minute intervals without interfering with their normal duties. As always, the operator was asked to complete a comment form and return it with the card.

POINT OF CONTACT INSTRUCTIONS
FOR
PCMCIA CARD DISTRIBUTION AND COLLECTION

These instructions should be followed by the Point-of-Contact (POC) for distributing and retrieving the PCMCIA cards. POCs were designated by each agency as the individual who would:

- receive the PCMCIA Card packages from the evaluator,
- distribute the vehicle operator packages,
- collect the packages after the data collection period, and
- assemble the packages and return by Federal Express to the evaluator.

The evaluator is:

I. Wade Gamto
Georgia Tech Research Institute
7220 Richardson Road
Smyrna, GA 30080
Telephone: (770) 528-7079
Fax: (770) 528-3271
E-mail: wade.garnto@gtri.gatech.edu or Wgarnto@aol.com

The _____ (number) enclosed operator packages should be distributed for data collection to begin on _____(date) at the first vehicle operation for the day and collected after the last vehicle operation on _____(date). Please return the cards by overnight shipment so that I receive them on _____(date)
Please record the vehicle numbers below that the cards are installed in for this data collection period and return this sheet to me with the cards.

VEHICLE OPERATOR INSTRUCTIONS
FOR
PCMCIA CARD DATA COLLECTION

Vehicles are selected by the evaluator to collect data on the ADAS system based on the expected routes the vehicle will take. To improve data collection coverage throughout the metropolitan Atlanta area, different vehicles will be identified from period to period. In order to collect data in the vehicle, a PCMCIA Card must be installed in the DPIU, which is one of the boxes on the in-vehicle mounting plate (see Installing and Removing PCMCIA Cards).

Please follow these instructions when you receive a package.

1. A package will be provided to you through the point of contact selected by your agency. When the package is received, please check to ensure you have a
 - PCMCIA Card in a protective envelope,
 - copy of the installation and removal instructions, and a
 - blank comment form.
2. On the bottom of these instructions you will find the data collection period.
3. Please install the PCMCIA card in the slot in the DPIU before beginning operation of the vehicle on the first day of the data collection period. Save the protective envelope.
4. While you are operating the vehicle with the card installed, please use the in-vehicle display to send test messages approximately each 15 minutes. It is understood that you will not interrupt your duties to send the test message. The 15 minute interval is not as important as is the need to send approximately 4 messages per hour. However, sending more than one message each 5 minutes with the vehicle moving, or more than one message from the same position while the vehicle is stopped will not improve the data collected.
5. At the end of the data collection period, carefully remove the PCMCIA card following the installation and removal instructions. Place the card in the protective envelope, but do not seal the envelope.
6. If a problem arose during the data collection period or if you want provide any comment to the evaluators, please complete the blank comment form.
7. Return the completed package (PCMCIA card in the protective envelope and comment form in the pocket folder) to the point of contact.

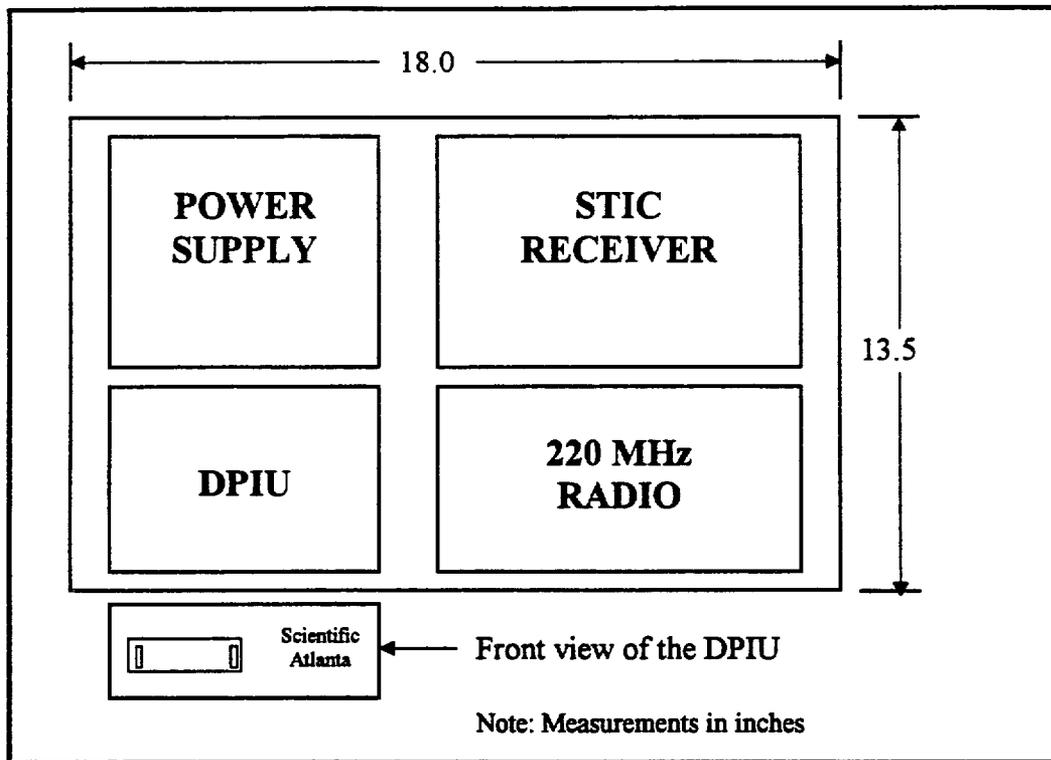
If you have any questions, please call Wade Garnto at (770) 528-7079 during business hours or at (770) 427-1462 after business hours.

Thanks for your assistance!

Data Collection Period: Start _____ End _____

Vehicle _____

INSTALLING AND REMOVING PCMCIA CARDS



Layout of Components on the In Vehicle System Plate

Instructions for installing the PCMCIA Cards are as follows (ensure ignition is off).

1. Locate the DPIU which is mounted on a plate with the Power Supply, STIC Receiver, and 220 MHz Radio as shown on the drawing above. If the vehicle is a sedan, the plate is in the trunk. If the vehicle is a pickup, the plate is behind the seat. If the vehicle is a GDOT van, the plate is underneath the rear passenger seat. If the vehicle is a FED EX van, the plate is mounted on the right bulkhead in the cargo compartment. For other vehicles, if the plate cannot be located, call Wade Garnto at (770) 528-7079.
2. Locate the end of the PCMCIA Card containing the connector with the 68 tiny holes. This end is to be inserted into the DPIU first. The side of the card with the red "5" should be up and the small red triangle should be pointing toward the slot.
3. On the front of the DPIU, locate a slot with two rectangular buttons, one on each side of the slot.
4. Insert the PCMCIA Card into the bottom slot, connector first, until it stops and the button on the right side of the slot pops out. Do not force the card into the slot. If you feel a hard stop, you may have the card inverted (not able to see the red triangle), or you may not have the card aligned with the card tracks which hold it in place. Do not force.
5. The PCMCIA Card is now installed and ready to begin automatically recording data when the system is operated.

Instructions for removing the PCMCIA Cards are as follows (ensure ignition is off):

1. Repeat step 2 above to locate the DPIU.
2. Repeat step 3 above to locate the slot containing the PCMCIA Card.
3. Depress the rectangular button on the right side of the slot. The PCMCIA Card will be released and can be removed by hand from the slot by grasping it by the edges and sliding it out of the slot.

CAUTION: PLEASE HANDLE PCMCIA CARDS CAREFULLY

ATLANTA DRIVER ADVISORY SYSTEM

COMMENT FORM

Instructions The Atlanta Driver Advisory System is a developmental system designed to provide traffic, weather, services, and special events information to vehicle operators. As a developmental system, it is anticipated that problems will exist which need correcting. Vehicle operators can help greatly in improving the system by helping to identify problems with the system.

Please complete one of these forms for each problem that you encounter, whether the problem is due to difficulty in interfacing with the display, understanding the information provided on the display, or receiving incorrect information on the display. Incorrect information could be one of the following (or other problems I have not thought of):

- the display shows accidents, construction, etc. which do not exist
- the display does not show accidents, construction, etc. which do exist
- weather shown on the display is .
- congestion levels shown on the display are incorrect
- signing on I-85 is not correct or is not timely
- services on I-85 are not correct or not timely

Please call Wade Garnto at (770) 528-7079 if you have questions or comments.

*When the form has been filled in, please return the completed forms to:

- Wade Garnto, GTRI, 7220 Richardson Road, Smyrna, GA 30080,
- Your dispatcher or point of contact on ADAS for forwarding to Wade Gamto, or
- For GDOT, send to Bayne Smith, Plasters Avenue, through the GDOT mail.

ADAS Vehicle Number _____ Date of Report _____

Time of Day _____

Location and Direction of Travel _____

Problem Observed (continue on back if necessary):