INFORMATION PACKAGE for VOLUNTEER DRIVERS

CONGESTION MONITORING PROGRAM
WASHINGTON D.C., MARYLAND, and VIRGINIA METROPOLITAN AREA

PILOT PROGRAM
GPS-Based TRAVELTIME DATA COLLECTION on HIGHWAYS

This package contains: Program Overview, Contact Information, Travel Safety Requirement for Participation, Instructions for Installation and Use of GPS Equipment in a Volunteer's Vehicle, Liability Waiver Agreement, and Daily Trip Dairy Sheets

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD
(COG / TPB)

May 2007

I. PROGRAM OVERVIEW

The National Capital Region Transportation Planning Board is a metropolitan planning organization that performs the federally-required long range transportation planning function for the National Capital region. It is housed within the Metropolitan Washington Council of Governments (MWCOG), a regional association of local governments in the region. One of our activities involves congestion monitoring of the highways in the region. The monitoring program has been in existence for over 20 years on a limited scale. As part of this effort we monitor and prepare a congestion report on the national highway system arterial highways. However, this is only a small part of the entire highway system and we want to expand the coverage of our monitoring program.

We want to achieve this expansion by using volunteer drivers (commuters) who drive to work on a daily basis in the region. Those who volunteer will place in their vehicle a simple global positioning system (GPS)-enabled, personal digital assistant (PDA) and power it through their cigarette lighter. The system will collect speed/travel time information on the roads that are driven by the volunteers, enabling us to identify congested locations. We seek to obtain congestion information during peak period as well as off-peak periods (mid-day, late evening) hours. Information collected will permit transportation planning decisions that will be to the specific benefit of volunteer commuters as well as drivers in the community as a whole. No personal or sensitive information will be collected.
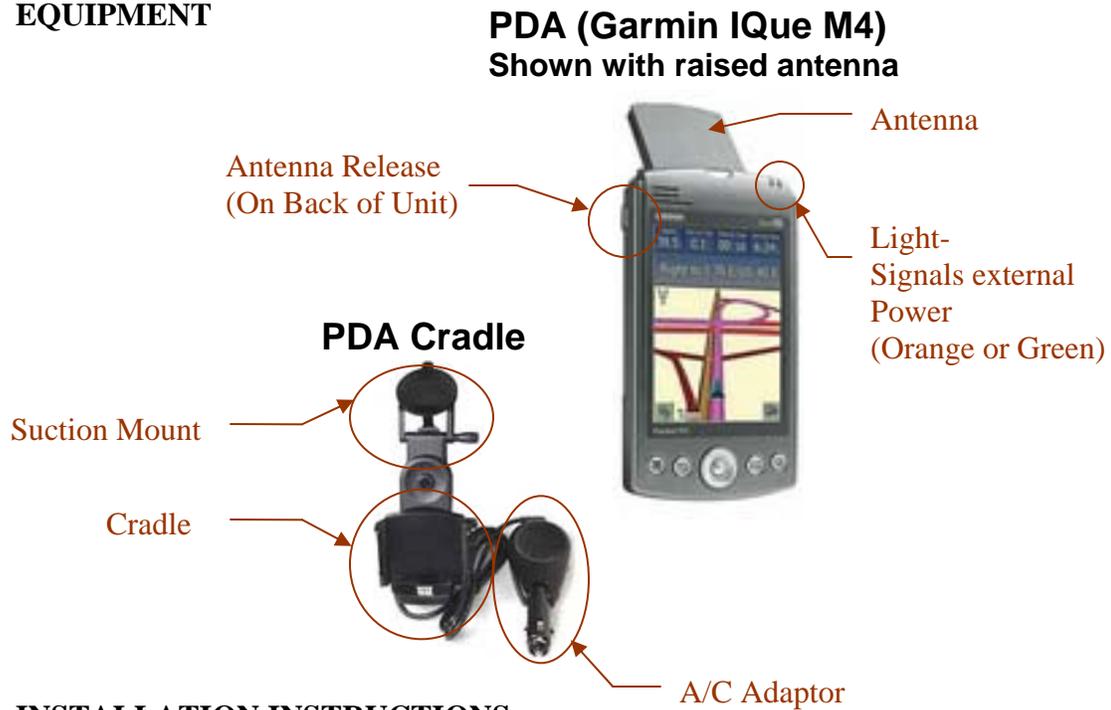
II. CONTACT INFORMATION

COG/TPB Website……………….. www.mwcog.org/transportation/

Program Operational Details……... Erin Morrow -   202-962-3793 (phone) or Emorrow@mwcog.org
Brian Cassidy - 202-962-3255 (phone) or Bcassidy@mwcog.org

Program Management……………. Daivamani Sivasailam (Siva)
202-962-3226 Siva@mwcog.org

III. TRAVEL SAFETY REQUIREMENT FOR PARTICIPATION

This program seeks to take advantage of the presence of vehicles already in the traffic stream to collect routine travel time information (instead of contracting for the services of additional vehicles to join the traffic stream). COG / TPB seek to ensure that this program is undertaken with the highest regard at all times for safe vehicle operation. Under no circumstances should use of the GPS unit compromise traffic safety with respect to the volunteer's vehicle or to other vehicles in the traffic stream. If any concerns exist as to the ability of the prospective volunteer to safely execute the travel time data collection, participation in the program should not be undertaken.

IV. INSTALLATION and USE of GPS EQUIPMENT in VEHICLE

A. EQUIPMENT

PDA (Garmin IQue M4)
Shown with raised antenna

Antenna

Antenna Release
(On Back of Unit)

Light-
Signals external
Power
(Orange or Green)

PDA Cradle

Suction Mount

Cradle

A/C Adaptor

B. INSTALLATION INSTRUCTIONS

Mount the PDA Cradle on front windshield using suction mount; Cradle should be as far out of the driver's field of vision as possible

Plug in the A/C adapter of the PDA Cradle to the cigarette lighter port

C. INSTRUCTIONS for USE OF GPS in DATA COLLECTION

- **Flip antenna to open** position using release button on back of PDA
- **Insert PDA into cradle**
- Once the engine is started **check for either orange or green light** to illuminate on top right corner of PDA; this signals that external power is reaching the unit. **If neither light is illuminated**:
    - Check connection between A/C adaptor and cigarette lighter
    - Check connection between PDA and cradle
- When the trip is completed and vehicle ignition is turned off:
    - **Close antenna and remove PDA from sight** when leaving the vehicle unattended, or
    - **Close antenna and remove PDA from vehicle** if vehicle will be unattended for an extended length of time (this is particularly important in winter and summer, as to not expose the unit to excessive temperatures)

V. LIABILITY WAIVER AGREEMENT

The following statements detail issues of safety regarding the use of the Global Positioning System (GPS) capabilities within the provided Personal Digital Assistant (PDA) for the purpose of transportation data collection.

Failure to avoid the following potentially hazardous situations could result in an accident or collision resulting in death or serious injury. The undersigned volunteer hereby assumes any risk of property damage or personal injury as a result of participation in this program. Further, the undersigned volunteer hereby agrees to indemnify, the Metropolitan Washington Council of Governments, the National Capital Region Transportation, their officers and agents for any liability flowing from the negligent or purposeful actions of the undersigned.

When installing the Personal Digital Assistant (PDA) in a vehicle, follow instructions on the preceding page, and place the unit securely so that it does not interfere with vehicle operating controls or obstruct the driver's view of the road.

- Do not mount where driver's field of vision is blocked.
- Do not place unsecured on the vehicle dash.
- Do not mount in front of an airbag field of deployment.

Always operate the vehicle in a safe manner. Do not become distracted by the PDA while driving, and always be fully aware of all driving conditions.

Between trips store PDA in an area not subject to excessive heat or cold.

Prior to participation in this study please take the time to either:
(1) Sign below, and mail this page to: Brian Cassidy
                                           777 North Capital Street, N.E.
                                           Suite 300
                                           Washington, DC 20002-4239

(2) Visit http://www.mwcog.org/??? and agree to Liability Wavier Agreement
(Note: The website is currently under development)

I have read the above statements and agree to both heed these statements as well as return the issued equipment in the pre-paid mailer with only minor wear-and-tear.

Volunteer Signature	Volunteer Name Printed	Date

DAILY TRIP DIARY

Dear Study Participant,

Please take a moment each day to describe your commute. If your commute time was shorter or longer than average, please provide anything you noticed that may have contributed (example: my commute was shorter because it was a federal holiday, or my commute was longer because an accident at a certain intersection, or heavy rain, or fog, etc.). *If you take other trips during the day, please make notes about those trips as well.* Thank you for your time and effort.

Examples:

<u>**Day of the Week**</u>	<u>**Date**</u>	Notes:
Wed.	5/23/07	Morning – traffic was terrible for no apparent reason

My commute time was:

	Morning	Evening	
Longer than average	[**X**]	[ ]	Evening trips – typical traffic
About average	[ ]	[**X**]	
Shorter than average	[ ]	[ ]	

<u>**Day of the Week**</u>	<u>**Date**</u>	Notes:
Thurs.	5/24/07	Evening – broken down car on Georgia Ave. at University Blvd.

My commute time was:

	Morning	Evening	
Longer than average	[ ]	[**X**]	Lunchtime trip – typical traffic
About average	[**X**]	[ ]	
Shorter than average	[ ]	[ ]	

Day of the Week	Date	Notes:
Fri.	5/25/07	Morning – Friday before Memorial Day weekend – traffic very light! No evening commute – left early for the holiday.

My commute time was:

	Morning	Evening
Longer than average	[ ]	[ ]
About average	[ ]	[ ]
Shorter than average	[X]	[ ]

Day 1:

Day of the Week	Date	Notes:

My commute time was:

	Morning	Evening
Longer than average	[ ]	[ ]
About average	[ ]	[ ]
Shorter than average	[ ]	[ ]

Day 2:

Day of the Week	Date	Notes:

My commute time was:

	Morning	Evening
Longer than average	[ ]	[ ]
About average	[ ]	[ ]
Shorter than average	[ ]	[ ]

Day 3:

Day of the Week	Date	Notes:

My commute time was:

	Morning	Evening
Longer than average	[ ]	[ ]
About average	[ ]	[ ]
Shorter than average	[ ]	[ ]

Day 4:

Day of the Week	Date	Notes:

My commute time was:

	Morning	Evening
Longer than average	[ ]	[ ]
About average	[ ]	[ ]
Shorter than average	[ ]	[ ]

Day 5:

Day of the Week	Date	Notes:

My commute time was:

	Morning	Evening
Longer than average	[ ]	[ ]
About average	[ ]	[ ]
Shorter than average	[ ]	[ ]