## Memorandum

**To:**     Travel Management Subcommittee

**From:**   Anant Choudhary
Transportation Engineer, MWCOG

**Date:**   March 21, 2006

**Subject:**   Highlights of the November 22, 2005 Travel Management Subcommittee meeting

This memorandum contains the discussion highlights from the November 22, 2005 Travel Management Subcommittee (TMS) meeting. The meeting started at 9.10 A.M. Mr. Sivasailam chaired the meeting and described the meeting agenda.

Item # 1. **Approval of Highlights of the November 22, 2005 Meeting**

Mr. Sivasailam opened the discussion and asked the members for any corrections in the highlights from the April 26, 2005 Meeting. The highlights were approved unanimously by the members.

Item# 2 **Fine Particles (PM2.5) Conformity Assessment of the 2005 Constrained Long Range Plan (CLRP) and FY 2006-2011 Transportation Improvement Program (TIP)**

Mr. Mike Clifford referred to his memo and described the results of the fine particles (PM2.5) conformity assessment of the 2005 CLRP & FY 2006-11 TIP handed out at the November TPB meeting. He described the timing of the grace period and final set of rules for PM conformity attainment. He told the members that the work scope was approved in July. He informed the members that the method for PM2.5 conformity analysis is similar to ozone conformity assessment and there will be seasonal assessments and emissions will be aggregated annually.

He explained the results and exhibits 1 through 8 from his memo to TPB. He noted that the PM emissions for 2030 are higher than emissions in 2020. He attributed this to VMT increase even though there is decrease in the emissions rates. He also noted that Stafford County was excluded from the analysis. On the question from Mr. Maurice Keys on input parameters, Mr. Clifford explained the inputs for mobile 6.2 PM such as sulfur, temperature are shown in exhibit 2. While explaining exhibits 7 & 8 he noted that for PM2.5 analysis the inputs components changes through time and by season. He informed the members that the results of the PM2.5 conformity are out for public comments and the TPB will approve conformity assessment during the December TPB meeting. In answer to the Mr. Kanti Srikanth's question, Mr. Clifford noted that the NOx for PM2.5 is different from NOx for ozone season due to variation in the fuel program and other input parameters. He noted that we use fuel program 4 instead of fuel program 25.

Mr. Srikanth asked what is causing decrease in NOx & PM and why the decrease is up to 2020 only. Mr. Clifford explained that this decrease is due to Tier II, HD engine Rule (which becomes effective in 2007), cleaner fuel impact in 2010 and due to the fleet turnover. Mr. Srikanth noted that the VMT increase catches up with the technology progress. During the discussion on the monthly versus seasonal variations, Mr. Sivasailam noted that we do not have complete information on the monthly versus seasonal variation. Mr. Srikanth noted that as VMT is in millions, a small difference in emissions factors may make a larger difference in emissions. Mr. Clifford noted that the EPA guidance suggests doing sensitivity analysis before choosing any approach. He noted that COG performed sensitivity analysis on traffic side. In response to a question from Mr. Srikanth on staff time for monthly analysis, Mr. Clifford noted that we will have to set up another program in UPWP if we have to go for monthly approach. Mr. Clifford further noted that the results from the national level studies by EPA for direct PM2.5 and NOX inventory and independent study by a consultant for the Washington area which were presented to TAC are remarkably similar with 1.2% difference in their estimates.

Item# 3    **Update on TERMs Tracking Sheet and Potential TERMs (PM 2.5 Emissions Estimation)**

Mr. Sivasailam opened the discussion on the topic. He explained the requirement of estimating PM emissions reductions from the adopted TERMs listed in the tracking sheet in the light of the PM conformity requirement. He noted that for TERMs for which VT and VMT are available, staff will use PM emissions factors to estimate emissions reductions. Mr. Sivasailam explained PM estimation using the seasonal and annual approach. The calculation shows hardly any difference in the seasonal and annual approach. It was recommended to adopt annual approach using a single emissions factor for PM emissions estimation. Mr. Srikanth asked for a memo on this with same exercise for the NOx precursor.

Item# 4    **Review of the TERM Section of the Draft Solicitation Document and Schedule for the Air Quality Conformity Assessment of the 2006 CLRP and FY 2007-2012 TIP**

Mr. Sivasailam initiated discussion on this topic. He informed the members that the previous solicitation document will now be called as 'Call for Project' document. He told the members that the upcoming 'Call for Project' document will now include the tables for the PM emissions factors and methodology for the PM emissions estimation for use in the TERM analysis. He also noted that for PM, instead of daily emissions annual emissions will be shown in the analysis.

Item#5    **Update on Vehicle Registration Data Research Task - VIN Decoder – Pilot Testing**

Mr. Sivasailam initiated the discussion and provided the background. He asked Mr. Michael Freeman to explain the test results from pilot test. Mr. Michael Freeman described test results for Montgomery and Fairfax counties and results for VMT mix by vehicle types. He informed the members that 95% of the records were decoded successfully. He noted that we do not have the complete set of Maryland records and about 5% of the records which were not decoded belong to the vehicles manufactured prior to 1980. On Mr. Srikanth's question on VMT %, Mr. Clifford told that model takes 2005 data and projects for outer years. On the issue of the VMT mix by vehicle type Sivasailam noted that we provide age distribution by 16 vehicle types and diesel sales

fractions for 14 vehicle types. Mr. Srikanth asked if we use mobile default or we have our own input. Sivasailam noted that mobile model takes default values and modifies to the local conditions.

Mr. Clifford asked about the influence of the other types of the errors like 'VIN too short' etc. Mr. Freeman explained that this may be due to typo or short VIN in use prior to1980. He noted that VIN was standardized in 1980. Sivasailam noted that it is possible to decode the 5% of VIN manually. The committee recommended not to pursue manual decoding,