Response to Joe Mehra's Comments

Existing Conditions

Comment: The Wells Report dated May 24, 2006 states that the street peak hours are 8:00 to 9:00 AM and 5:15 to 6:15 PM. The October 2006 revision states that peak hours are 8:30 to 9:30 AM and 5:30 to 6:30 PM. The selection of the peak hour is critical to this study as well as the companion GWU Campus Traffic Study. No reasons are presented for the change in peak hour determination. The peak hour is supposed to represent the worst hour of the morning or afternoon peak periods. Selection of the hour, other than the peak, will result in better levels of service than the actual peak hour.

Response: Actually, Page 8 of the October 2006 Square 54 Transportation Impact Study (TIS) states that the AM peak hour occurred from ***8:30 AM to 9:30 AM*** and the PM peak hour occurred from ***5:15 PM to 6:15 PM***, not 5:30 PM to 6:30 PM as Mr. Mehra indicated. As noted in the October 2006 TIS (p. 8), updated traffic counts were taken in October 2006 for the revised study. Counts were conducted from 7:00 AM to 10:00 AM and from 4:00 PM to 7:00 PM. The AM and PM peak hours were determined by using the combined traffic counts at all intersections. That is, when reviewing the data collected between 7:00 AM and 10:00 AM, the highest volume in the study area occurred between 8:30 AM and 9:30 AM. Likewise, when reviewing the data collected between 4:00 PM and 7:00 PM, the highest volume in the study area occurred between 5:15 PM and 6:15 PM.

Background Conditions

Comment: The future conditions are calculated for the year 2010. Wells applied an assumption of 0.5% per year growth to the existing traffic, excluding George Washington University traffic, to obtain background conditions. The DDOT study for the Lower West End Traffic Study, that included part of this study area, was released in July of this year. The DDOT study assumed a 1% per year growth for background conditions and included GW traffic also in the 1% per year growth. Due to the differences in growth rates (0.5% versus 1.0% and exclusive of GWU traffic), the total trips forecasted for the background conditions are significantly less in the Wells Report than the used of the DDOT study growth rate. For example, the northbound traffic on Washington Circle at Pennsylvania Avenue is estimated to increase by 46 vehicles during the AM peak hour by Wells. The increase will be 93 vehicles using DDOT's growth rate. This, in turn, will worsen the levels of service.

Response: A comparison of counts conducted on the GW Foggy Bottom Campus in 1998 and 1999 to counts conducted on the GW Campus in 2005 revealed that traffic volumes have remained relatively constant on campus over the six to seven year period. Therefore, the 0.5% percent per year was thought to be conservative. It also should be noted that this growth rate was used to account for development outside the immediate study area that was not explicitly accounted for in the future traffic forecasts. In addition to this growth rate, five pipeline

developments (2425 L Street, USIP, Allstate Hotel, School without Walls, **and the proposed GW Campus Plan**) were included explicitly in the future traffic forecasts. As a result of the combined effect of both the growth rate and the traffic associated with the pipeline developments, the increase in traffic at individual intersections approaches 1% per year at several intersections and, in fact, exceeds 1% per year at a few intersections.

It also should be noted that the Lower West End Traffic Study only accounted for two pipeline developments in its traffic forecasts compared to the five that were used in the Square 54 TIS.

Comment: Wells conducted a travel survey of students and faculty/staff to obtain the trip rates and mode of travel to and from the university. Despite the number of studies that Wells has filed on traffic issues, there remain significant unexplained discrepancies in vehicle trip rates for the GWU expansion.

The August 24, 2006 GWU Traffic Study used the following trip rates and trips for the students and staff during the AM peak hour:

Students: 0.023 trip per student or 28 trips for 1,198 students
Staff: 0.178 trips per staff or 178 trips for 1,000 staff

The October 2006 traffic study by Wells has used the following trip rates during the AM peak hour:

Students: 0.013 trip per student or 16 trips for 1,198 students
Staff: 0.13 trips per staff or 131 trips for 1,000 staff

Similar discrepancies are present for the Pm peak hour data also:

August 24, 2006 Study – Students: 0.033 trip per student or 40 trips for 1,198 students

October 2006 Study- Students: 0.0203 trip per student or 25 trips for 1,198 students

These discrepancies have not been explained. Lower trip rates result in less vehicle trip generation and subsequently a better level of service. It should be noted that this is a critical discrepancy because the commission has requested the Applicant to conduct the traffic analysis assuming the faculty and staff population as being 12,529 or an increase of 6,475 over the current levels.

Response: Subsequent to the submission of the August 24, 2006 report, an error was found in the calculation of the trip generation rates. This error was corrected in the supplemental analysis submitted to the Commission on September 28, 2006 and to DDOT on October 4, 2006. The information and analyses presented in the October 2006 Transportation Impact Study is consistent with the September 28th and October 4th supplemental analyses. Furthermore, the revised trip generation analysis addresses Mr. Mehra's previous comments contained in his September 28, 2006 testimony regarding the GW Campus Plan.

The trip generation rates for the GW Campus Plan used in the October 2006 TIS were developed based on survey data obtained from a University-wide survey conducted in October 2005. Each respondent was asked to indicate their arrival and departure times, their mode of transportation, and carpooling characteristics. The vehicle-trip generation rates were developed for each peak hour based on the number of arrivals and departures, mode splits, and average vehicle occupancies for students and faculty/staff. Accordingly, 0.0134 trips per student (or approximately one trip for every 75 students) and 0.131 trips per faculty/staff (or approximately one trip for every eight faculty/staff) would be generated during the AM peak hour. During the PM peak hour, 0.0209 trips per student (or approximately one trip for every 48 students) and 0.119 trips per faculty/staff (or approximately one trip for every eight faculty/staff) would be generated.

The revised trip generation analysis, as presented in the October TIS, yields approximately 26 percent fewer trips than the original, as presented in the August TIS for the GW Campus Plan, during the AM peak hour. However, during the PM peak hour, the revised trip generation analysis used in the October TIS is approximately three times ***higher*** than that presented in the August TIS for the GW Campus Plan. This revised trip generation analysis has been reviewed and found to be acceptable by DDOT.

Comment: The existing conditions analysis, based on the Wells Report (October 2006), showed that 5 out of 20 intersections analyzed have some approaches failing (they are currently operating at LOS E or LOS F). With the background traffic and Square 54 traffic, the future conditions analysis showed that 7 out of 20 intersections will have some approaches that will fail based on the Wells Report. After mitigation, proposed by Wells, 6 out of 20 intersections (such as Washington Circle and K Street Eastbound, 23rd and Eye Street, 23rd Street, F Street and Virginia Avenue, etc.) still fail. The proposed mitigation will result in only one intersection improving from failing levels of service to acceptable conditions.

Response: ***In order to determine the impact attributable to just Square 54, future conditions with Square 54 should be compared to future conditions without Square 54, not to existing conditions.*** Under conditions with Square 54 and the recommended transportation improvements, no lane group at any intersection would operate at a level of service E or F that would not operate at a LOS E or F under future conditions without Square 54.

By comparing future conditions with Square 54 to existing conditions, Mr. Mehra is attributing the impact of normal growth, which would occur even without Square 54, to the Square 54 development.