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November 17, 2008

MEMORANDUM

TO: Mr. Stuart C. Corder, P.E.

FROM: Darrell W. Borchardt, P.E.

SUBJECT: I-10 Katy Freeway Updated Travel Time Study

Per your request, the Texas Transportation Institute has completed a review of travel times and speeds along the I-10 Katy Freeway to provide an initial analysis of the benefits of the recently completed expansion project. The study results indicate that morning commuters save between 3 and 26 minutes per trip between SH 99 and the I-610 West Loop when comparing June and November traffic conditions. Evening commuters for the same 19.90 mile trip save an estimated 6 to 17 minutes per trip. These results are based upon floating car travel time studies completed by TTI for June 3-5 compared with the one-day update study completed on November 13.

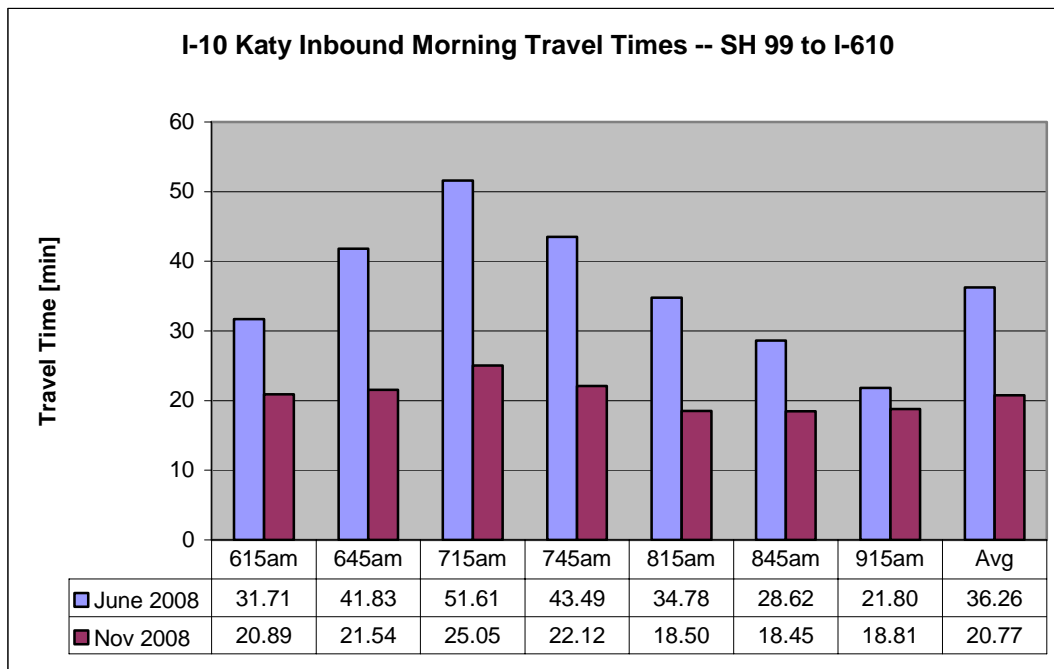
TTI is presently completing a more detailed analysis of the floating car studies and the historical AVI data and will present a more comprehensive technical report in the next few weeks. Please contact me at 713-686-2971 if there are any questions or if additional information is required.

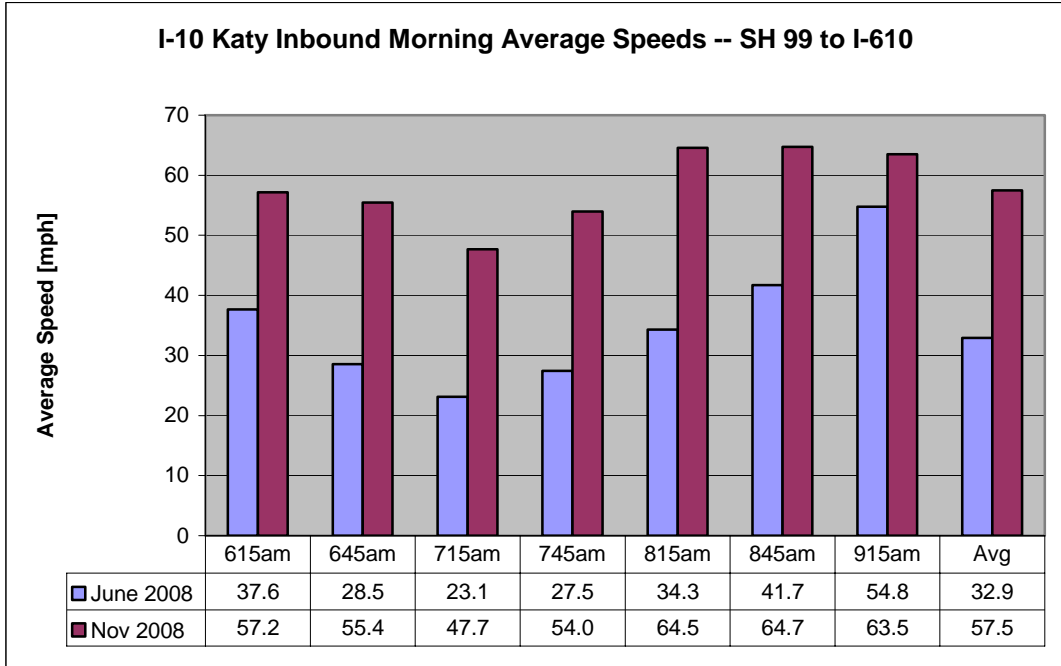
Attachment

I-10 Katy Freeway Updated Travel Time Study June to November 2008

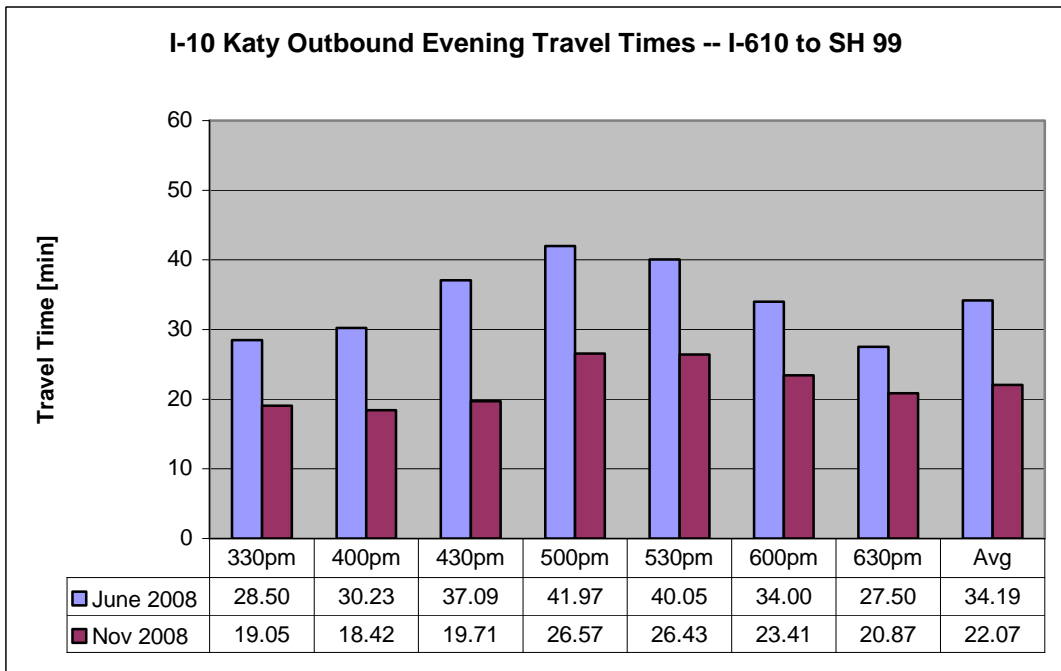
The Texas Transportation Institute (TTI) completed an extensive floating-car travel time study on the I-10 Katy and US 290 Northwest Freeways in June 2008. The objective of that study was to provide necessary data to determine if there were travel time savings for commuters of US 290 to consider using the proposed Segment E of the Grand Parkway and the I-10 Katy Freeway/Managed Lanes instead of the normal trip along US 290 (Memorandum submitted to Stuart Corder, P.E., June 27, 2008). While this effort does not re-visit the previous study, it does use the travel time data collected for that study as a basis for comparison of the June to November roadway operations. TTI personnel completed an updated travel time study for the I-10 Katy Freeway on November 13, 2008 to evaluate the current conditions on the freeway. For the second study, the freeway was essentially completed to the final geometric configuration within the study area and the managed lanes were open to all 2+ passenger vehicles between 5-11 am and 2-8pm on weekdays.

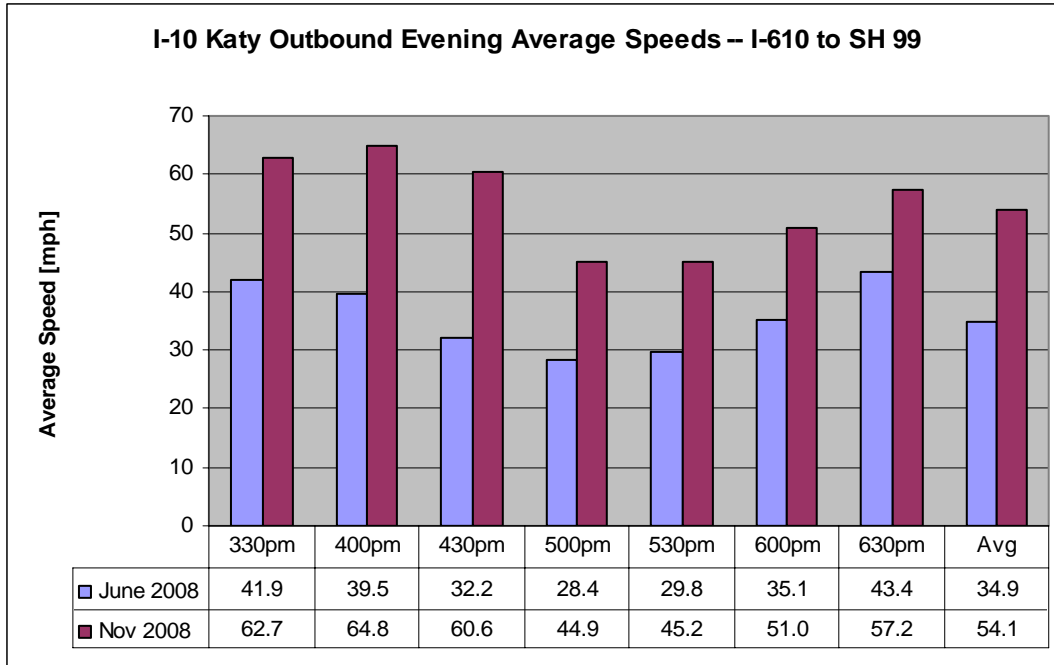
Travel times studies were completed at 30-minute headways from SH 99 to the I-610 West Loop starting between the hours of 6:15 - 9:15 am. Travel time savings were realized for each of the seven studies completed, with an average of 15.5 minutes saved for the 19.90 mile trip. The minimum savings of 3.0 minutes was estimated for the trip starting at 9:15 am while 26.5 minutes were saved for a trip starting at 7:15 am. The 7:15 am trip took about ½ as long in November as compared to the study in June. Average speeds for the entire morning peak have increased from 32.9 mph to 57.5 mph; this represents a 75% increase.





The travel time studies for the evening travel period were completed starting at I-10 at Taylor Street in 30-minute headways starting between the hours of 330 – 630 pm. The data for the 19.90 mile segment between the I-610 West Loop and SH 99 indicated an average travel time savings of 12.1 minutes per trip. Travel time savings of 6.6 minutes were observed for the trip starting at 6:30 pm while the maximum savings of 17.4 minutes were realized for the 4:30 pm trip. Average freeway speeds for the entire peak period have increased from 34.9 mph to 54.1 mph, representing a 55% increase between June and November.





The summarized results of this initial floating-car travel time study indicate that the operations along the I-10 Katy freeway have significantly improved when comparing the June to November 2008 time period. While this update represents overall travel time savings for an entire 19.90 mile commute from SH 99 to the I-610 West Loop, travel time savings for other trip lengths may be more or less than those identified in this document depending upon the segments of the freeway travelled and the time of the trip. A more detailed analysis of the floating-car studies and an extensive review of the AVI data will be completed in a subsequent document.