

TRAFFIC FLOW – THEORY AND PRACTICE

- “FTE” = Fundamentals of Transportation Engineering, the textbook for CE361.
 - For every problem, identify the problem by its number and **name**, be clear, be concise, cite your sources, attach documentation (if appropriate), and let your methodology be known.
 - Note: Mythaca County staff will send you via e-mail a [file](#) (gar701) containing observations for 30 consecutive time periods on the 3 EB lanes of Interstate Highway 25, which is northeast of Mythaca. Use these data in Problems 2 and 4.
1. (10 points) **Traffic volumes and flow rates.** Problem 2.5 in FTE. Which of the two methods of calculating average headway presented in class on 30 August 2004 did you use?
 2. (10 points) **Speed distributions.** Problem 2.11 in FTE, but use the data in the spreadsheet emailed to you by Mythaca County.
 3. (10 points) **Measuring Lane Occupancy.** Problem 2.22 in FTE.
 4. (30 points) **Speed-density-flow relationships.** Problem 2.40 in FTE, but use the data in the spreadsheet emailed to you by Mythaca County.
 5. (10 points) **Poisson Processes.** Problem 2.50 in FTE.