

Comments on CE361 2002 Project 1

Most reports were well done and documented the team's activities and strategies well.

1. **Are buses affecting traffic efficiency and safety?**
 - A. Efficiency. Look for ways to measure changes in flow rate when buses are present, or see if delay can be used as a measure of efficiency. Measures of traffic away from the site of bus-auto interactions may not be valid.
 - B. Safety. In the absence of actual collisions, some form of conflict analysis is appropriate. Try to develop definitions for events that indicate possible hazards and be aware that degrees of severity may exist. Do not confuse delay with safety issues, unless there is a clear connection between driver impatience (after a certain wait) and risky behavior.
Amazing: Reports that used "busses" as the misspelling directly under the correct spelling "buses" in the problem statement.
2. **Signal timing form.** Do signalized intersections really have only one all-red clearance interval per cycle, not two?
3. **Time Space Diagram.**
 - A. The Diagram. Some reports ignored CNotes Figure 8.14 and drew limiting trajectories incorrectly. Some were not clearly or carefully drawn – a problem with a graphical technique.
 - B. Some data reflected careless drawings in Part A. Where does the measured distance between intersections begin and end? How were distances between intersections determined by teams?
 - C. Range of speeds. This means the fastest and slowest possible speeds that will catch the "green wave". Some reports gave only one speed value. Some did not comment on high calculated speeds that exceeded speed limits (which seldom were cited).
4. **Traffic Signal Logic.** A difficult task. Most teams gave it a good effort, and documented it well.
5. **Average Stopped Delay.** Some teams did extra work by collecting data for each turning movement on each approach. Some teams misunderstood the task by collecting data for only one lane on each approach. One team apparently mislabeled the directions of its flows – "West" approach = westbound or eastbound?