## 962-C1-515 Elyn Rykken\* (elrykken@muhlenberg.edu), 2400 W. Chew St., Allentown, PA 18104, and Maureen T Carroll. Stuck in Traffic in Chicago: A World Wide Web Project.

With the World Wide Web, educators have real-world data at their fingertips which can be incorporated into their classes. Our project uses live traffic data which is updated each minute by the Illinois DOT (Department of Transportation) Traffic Systems Center (TSC). The TSC receives its data from loop detectors embedded in expressways in the Chicagoland area. This allows the TSC to determine the average speed of traffic at each detector. Simple formulas have been developed to convert this data into travel time and congestion estimates. (A more extensive explanation for how the system works can be found at http://www.ai.eecs.uic.edu/GCM/GCM.html.) We have incorporated this data into a writing project suitable for first year calculus students studying Riemann sums. The project is written in the form of a mystery. To exonerate the prime suspect, students must calculate approximate travel times for a given set of data. They are also required to present and explain their solution to someone with a limited mathematical background (in this case a lawyer). Our talk will present the project as well as sample data sets from this web site and sample student solutions. (Received September 15, 2000)