Traffic

Suppose you are trying to set up a traffic-light system on and around a large, busy roundabout. How would you go about modeling the system to make it efficient? You are free to mention anything you feel would be relevant, such as the modeling of the lights and traffic, the experiments you would run, the most important inputs into the system and how you would measure efficiency. [There is no need to go into details on any statistical tests, other than to mention where (and on what) you would use one.]