

Measuring Traffic

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Abstract: A traffic performance measurement system currently functions as a repository for freeway traffic data gathered statewide in California by thousands of automatic sensors. It has integrated data collection, processing, and communications infrastructure with data storage and analytical tools. I will discuss statistical issues that have emerged as we attempt to process a data stream of two GB per day of wildly varying quality. In particular, I will discuss the problem of forecasting travel times on freeway networks. At the end of the talk I will briefly describe other statistical problems that arise in estimating velocity fields from low-resolution video recordings.