



# Beating Traffic

It's not your imagination; traffic **is** getting worse. In the last 30 years while the number of vehicle-miles traveled has more than doubled, physical road space has increased only six percent. Yet building new roads is no guarantee of relief: A counterintuitive result in traffic science is that a new road could actually increase the congestion in a network. Areas of mathematics like queuing theory and partial differential equations contribute to understanding traffic, which is a *backwards propagating wave*—cars move forward but the jam moves backward.

**For More Information:** *What's Happening in the Mathematical Sciences*, Vol. 5, Barry Cipra



Image courtesy of Puget Sound Regional Council



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