



Message-Passing Thought Exercise

Traffic Modelling

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- we want to predict traffic flow
 - to look for effects such as congestion
- build a computer model



- divide road into a series of cells
 - either occupied or unoccupied
- perform a number of steps
 - each step, cars move forward if space ahead is empty

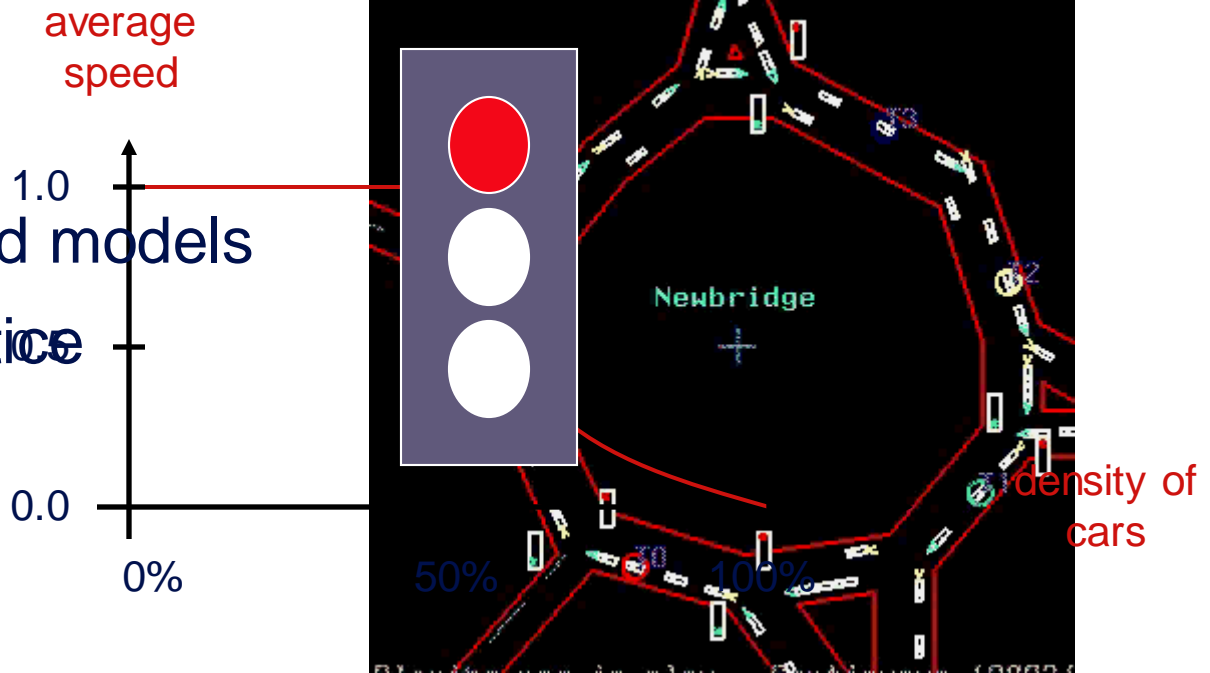


**could do this by moving
pawns on a chess board**

- model predicts a number of interesting features
- traffic lights



- congestion
- more complicated models are used in practice

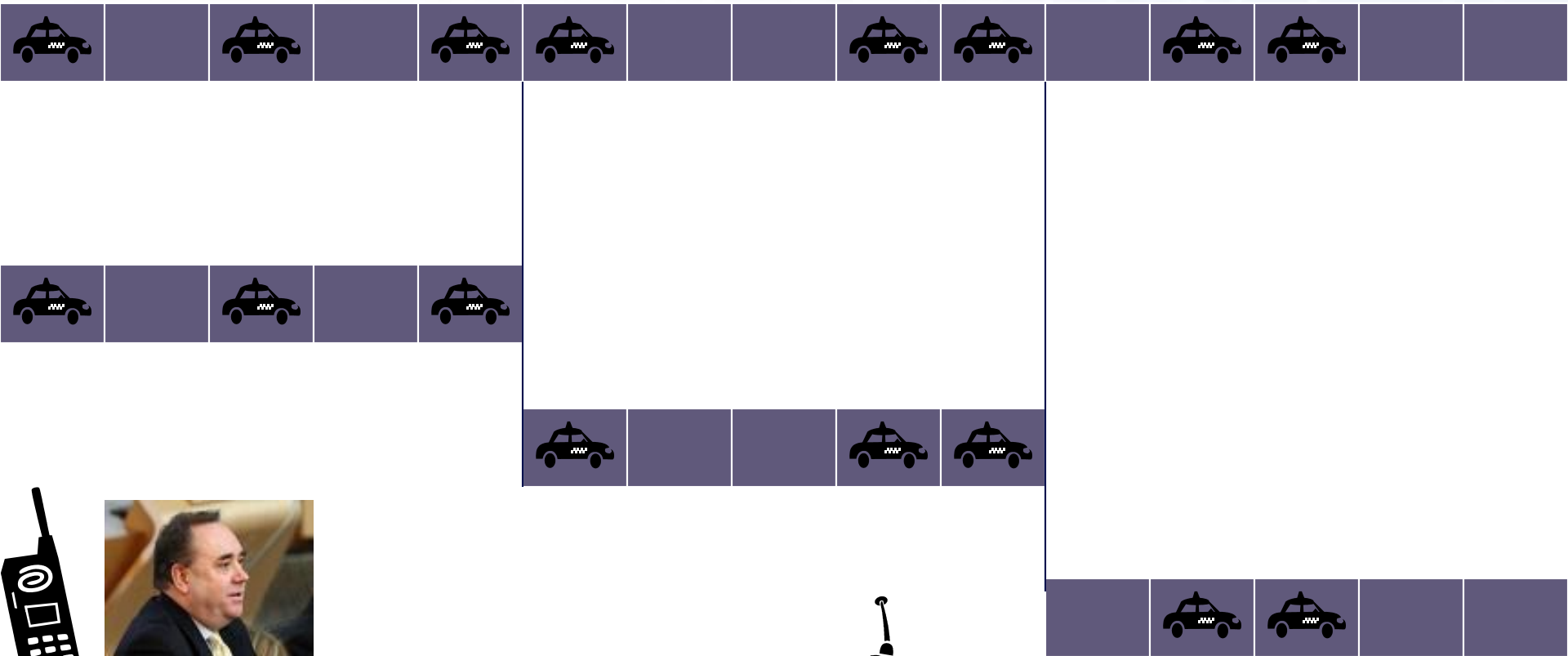


how fast can we run the model?

- measure speed in Car Operations Per second
 - how many COPs?
- around 2 COPs
- but what about three people?
 - can they do six COPs?



a parallel traffic model



A



B



C