

## RESEARCH QUESTION

- Nonoptimal traffic signal control is causing traffic congestion
- Are individual intersections able to pick a traffic signal control strategy that optimises their own performance whilst maximising the performance of the whole neighbourhood?

## METHODS

- Normal form game that can be used to analyse the impact on local and global performance when optimising traffic signal control
- Intersections as players
- Signal control strategies can be picked by the players
- Local performance measured using average waiting time
- Global performance measured using total average waiting time
- Realistic traffic scenario simulation based on population statistics neighbourhood from The Bronx

## RESULTS

- Simulation showed it is sometimes possible to maximise global performance by optimising traffic signal control strategies for local performance
- Sup-optimal traffic control strategies can become optimal when exposed to certain traffic intensities
- Impact traffic control on performance becomes harder to measure when traffic is high

## FUTURE WORK

- Impact selfish traffic control on performance of neighbourhood is still open for more in-depth analysis
- Experimenting with more and different types of traffic signal control strategies
- Allowing players to choose mixed strategies
- Researching ways to keep vehicles and pedestrians happy when optimising traffic signal control strategies

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