

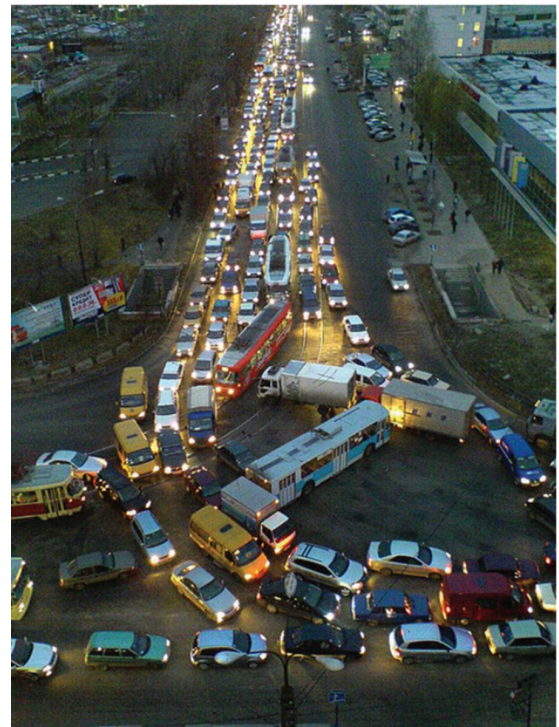
PACE

Proxy Autonomous Cooperation Engine

Customizable hardware and software system allowing participating vehicles to work together to improve traffic flow, efficiencies (both scheduling and routing) and overall safety.

Principal system elements:

- Consists of local networks of proximate vehicles sharing information and intentions
- Each vehicle broadcasts its intent information to neighboring vehicles
- PACE system utilizes intent information to determine planned path adjustments
- Prevents collision with other vehicles
- Provides advanced notice of other vehicle's intent to allow for gradual path adjustments and reduces the need for emergency avoidance maneuvers. Each vehicle can react at a longer range to avoid other vehicles
- Provides an additional safety mechanism that operates as an additional "driver" continually verifying safe operation
- Failure of collision avoidance sensors can be mitigated through the PACE system's use of broadcast data
- PACE eases congestion by adjusting vehicle spacing and speed in addition to suggesting alternate routes



Improving traffic flow through PACE

NHTSA

US Patent No. 8,788,121; US Patent No. 8,874,360