

**Abstract:** “Following the development of autonomous vehicles (AVs) and GPS systems, fleets will gain prominence over private vehicles. We analyze the welfare effects of the transition from a fully decentralized regime, in which all travelers are atomistic and do not internalize the congestion externality, to a centralized regime, where all travelers are supplied by a fleet of AVs controlled by a monopolist. In our model, heterogeneous individuals differing in the disutility from congestion may travel on one of two lanes, which may endogenously differ in the level of congestion, or they may not travel. We show that the monopolist sorts travelers across the two lanes differently than the decentralized regime. Moreover, depending on the severity of congestion costs, it may also exclude some travelers. We find that centralization is always welfare detrimental when the monopolist does not ration travel. If instead rationing occurs, centralization may be welfare beneficial, provided that congestion costs are sufficiently high. We then analyze how to restore first best with road taxes. While congestion charges are optimal under decentralization, taxes differ markedly in a centralized regime, where restoring first best may require subsidizing the monopolist.