

Preferred citation style

Axhausen, K.W. (2013) Singapore's travel demand management in a dead end ?, presentation at Rotary Singapore-West , Singapore, August 2013.

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Singapore's travel demand management in a dead end ?

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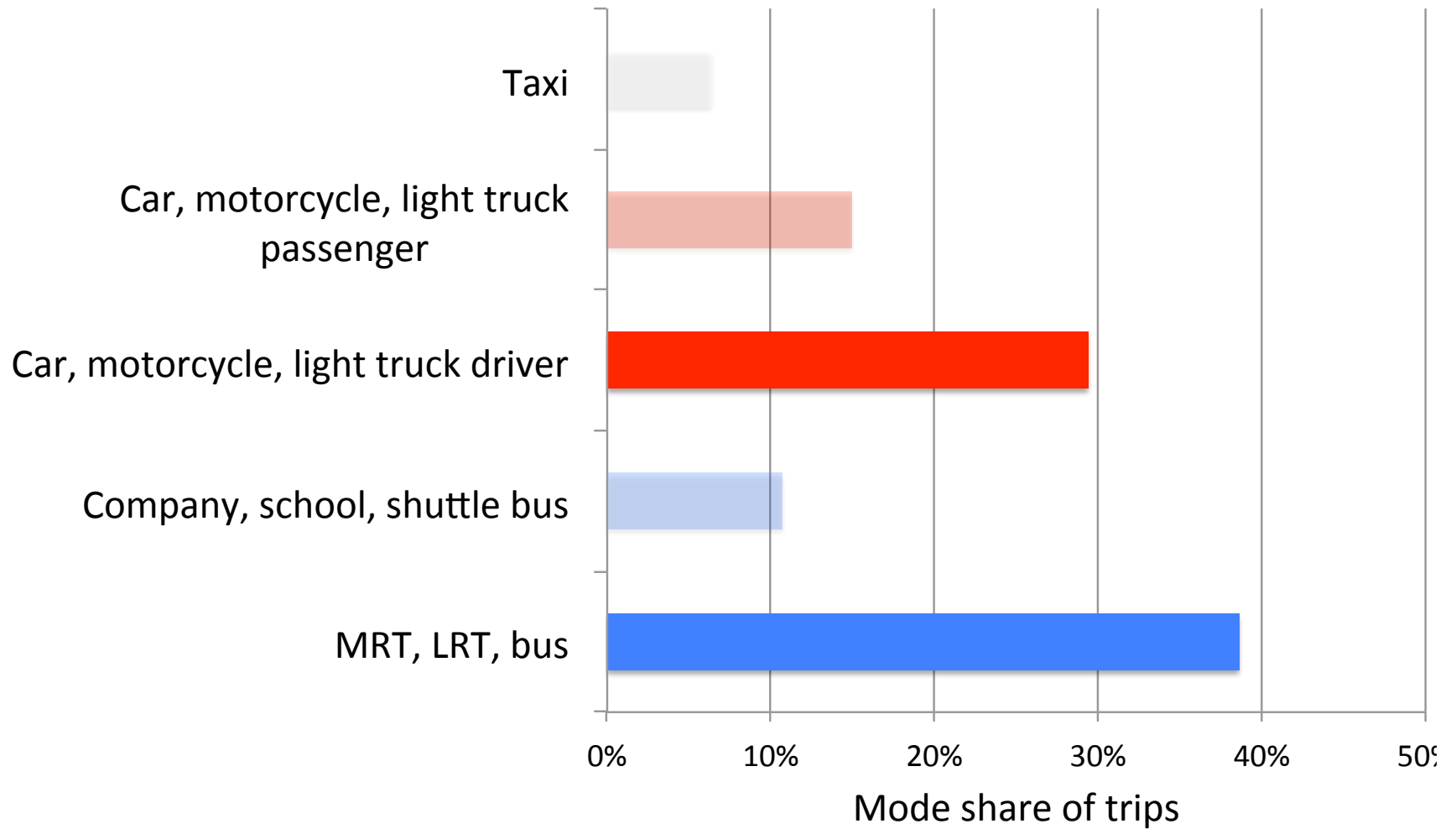
A model of Singapore's travel demand and traffic



Rotary West

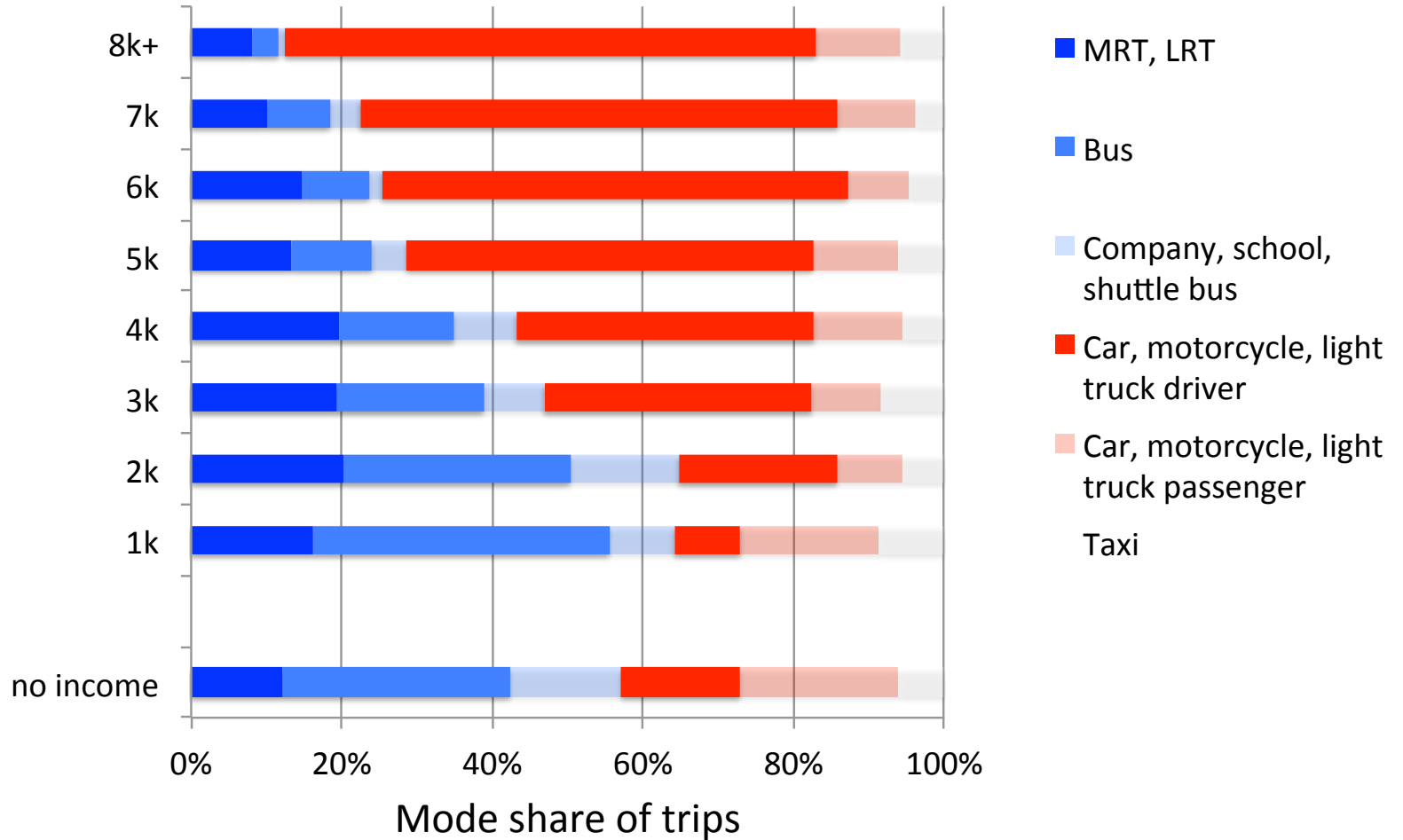
Some numbers first

Some numbers: Mode choice



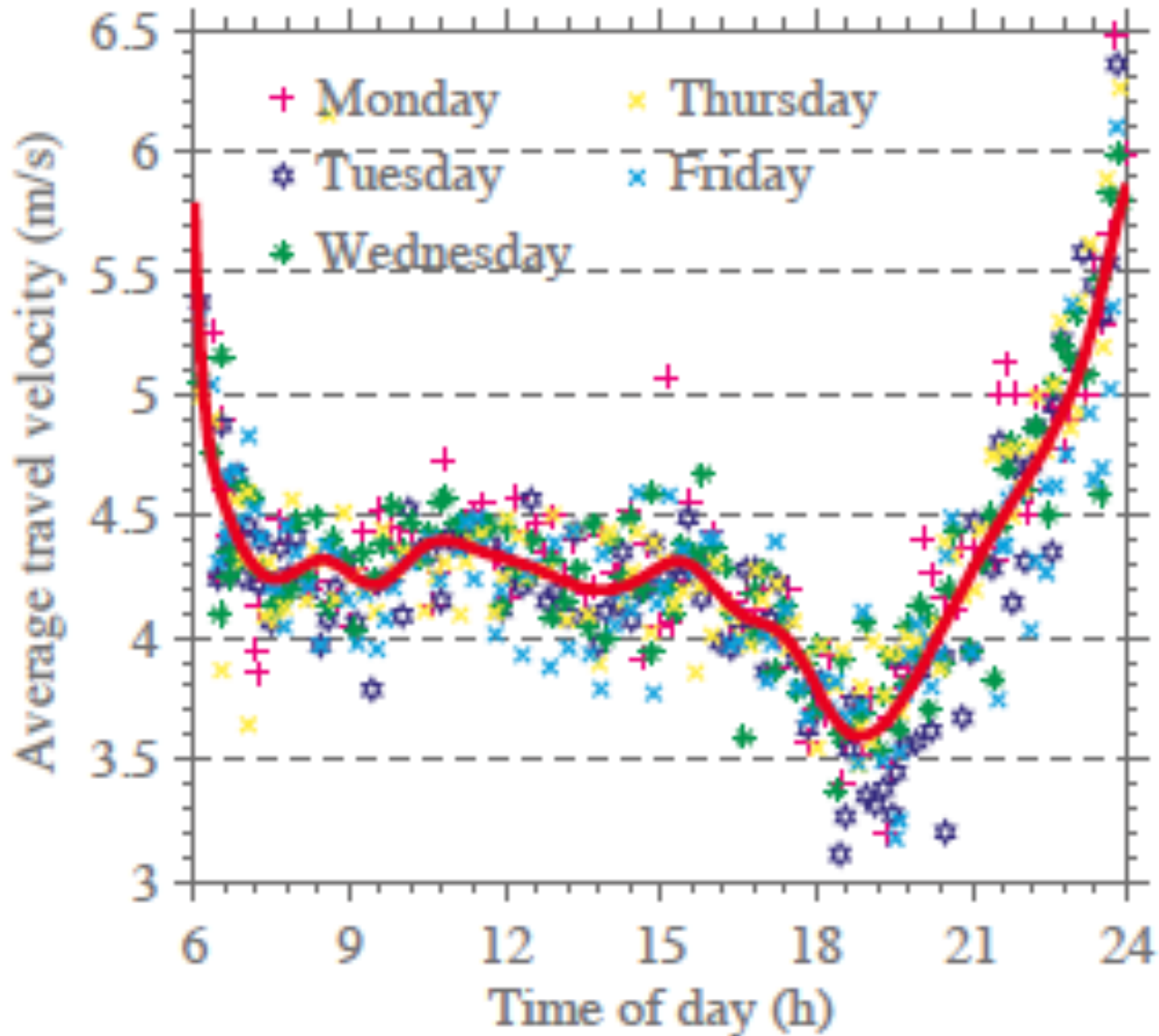
Some numbers: Mode shares by income 2008

Income [kSG]

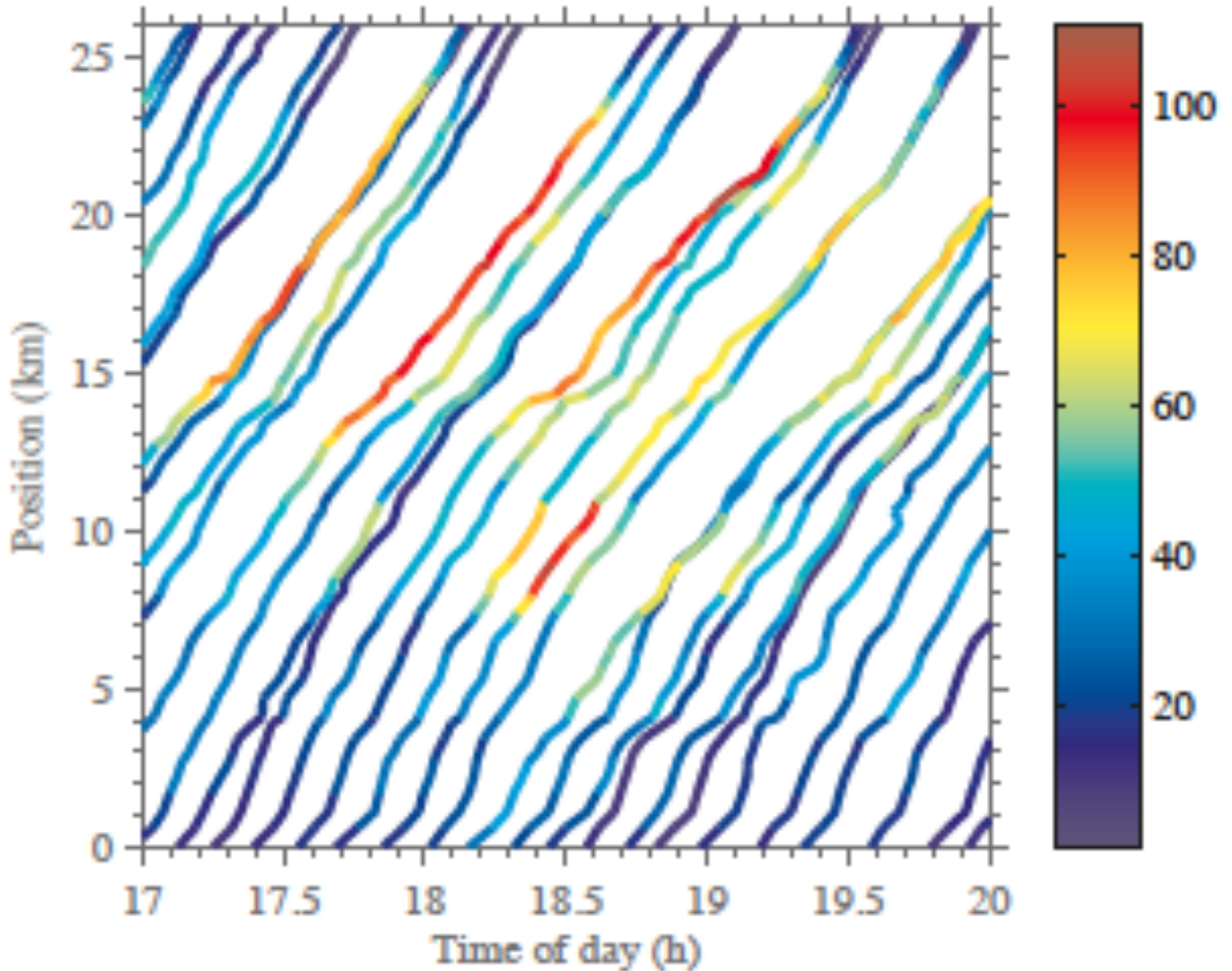


Current problems

Bus speeds in Singapore by time of day

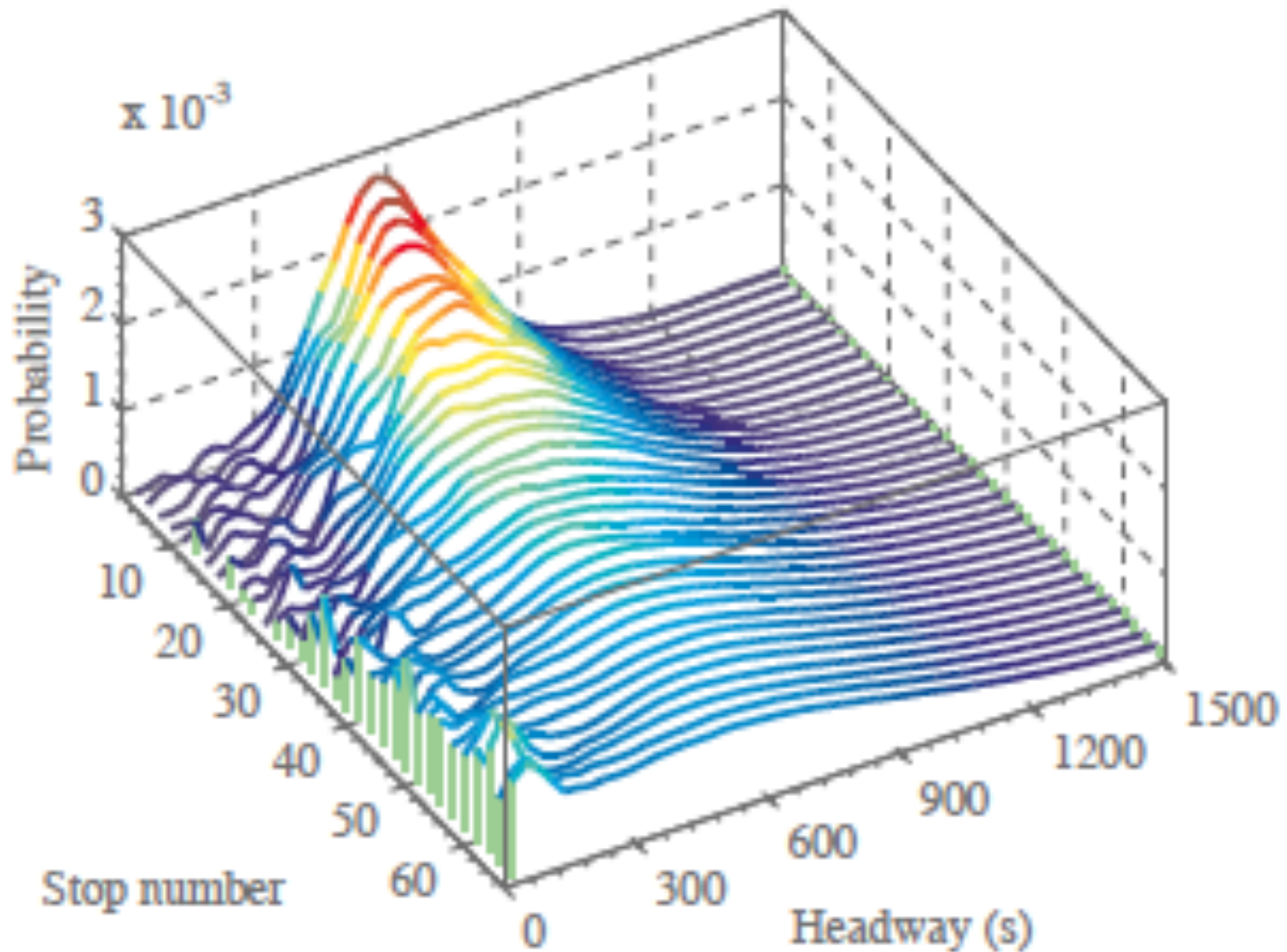


Bus occupancy and bus bunching during the evening peak

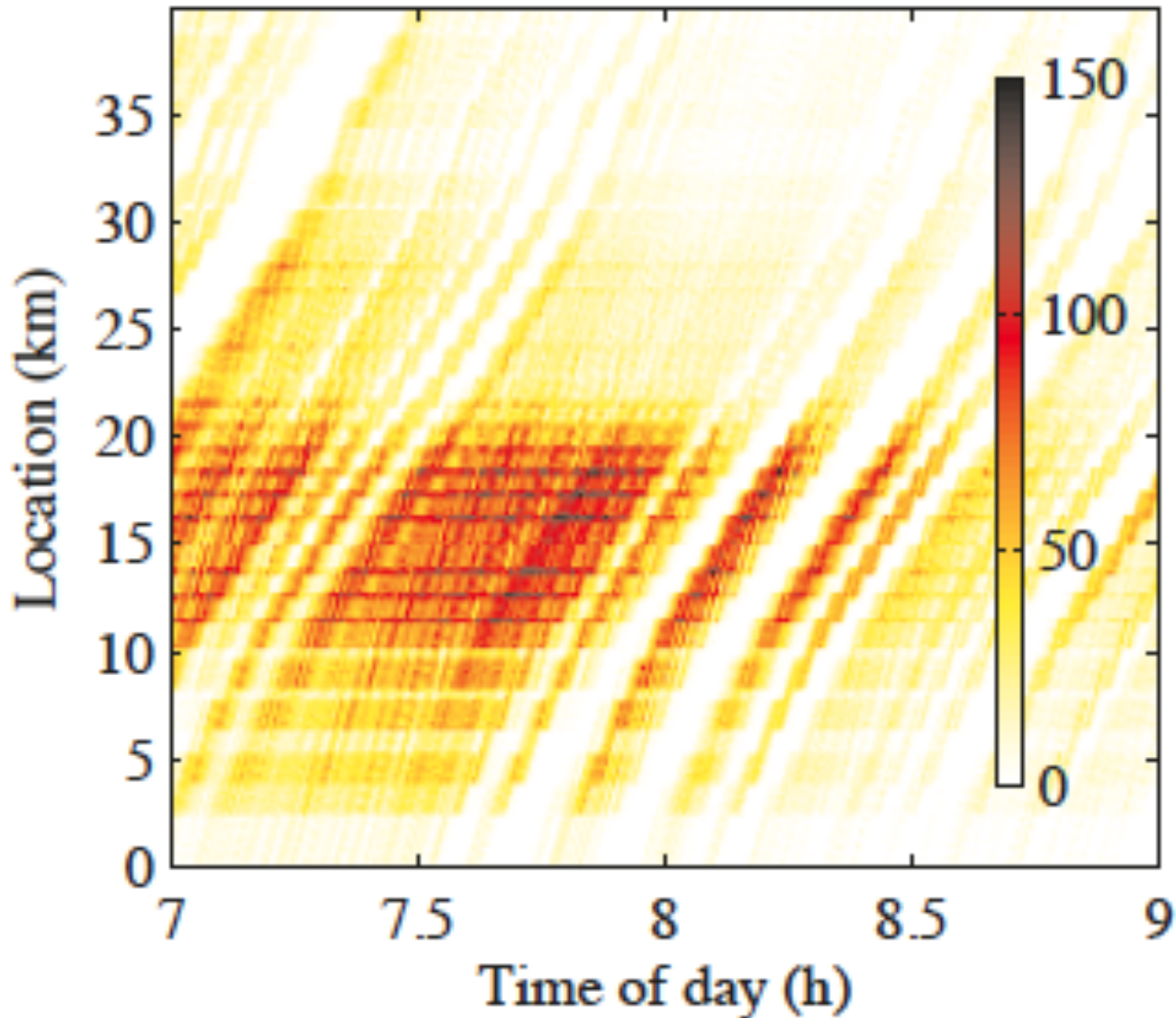


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Headways along a bus line in Singapore



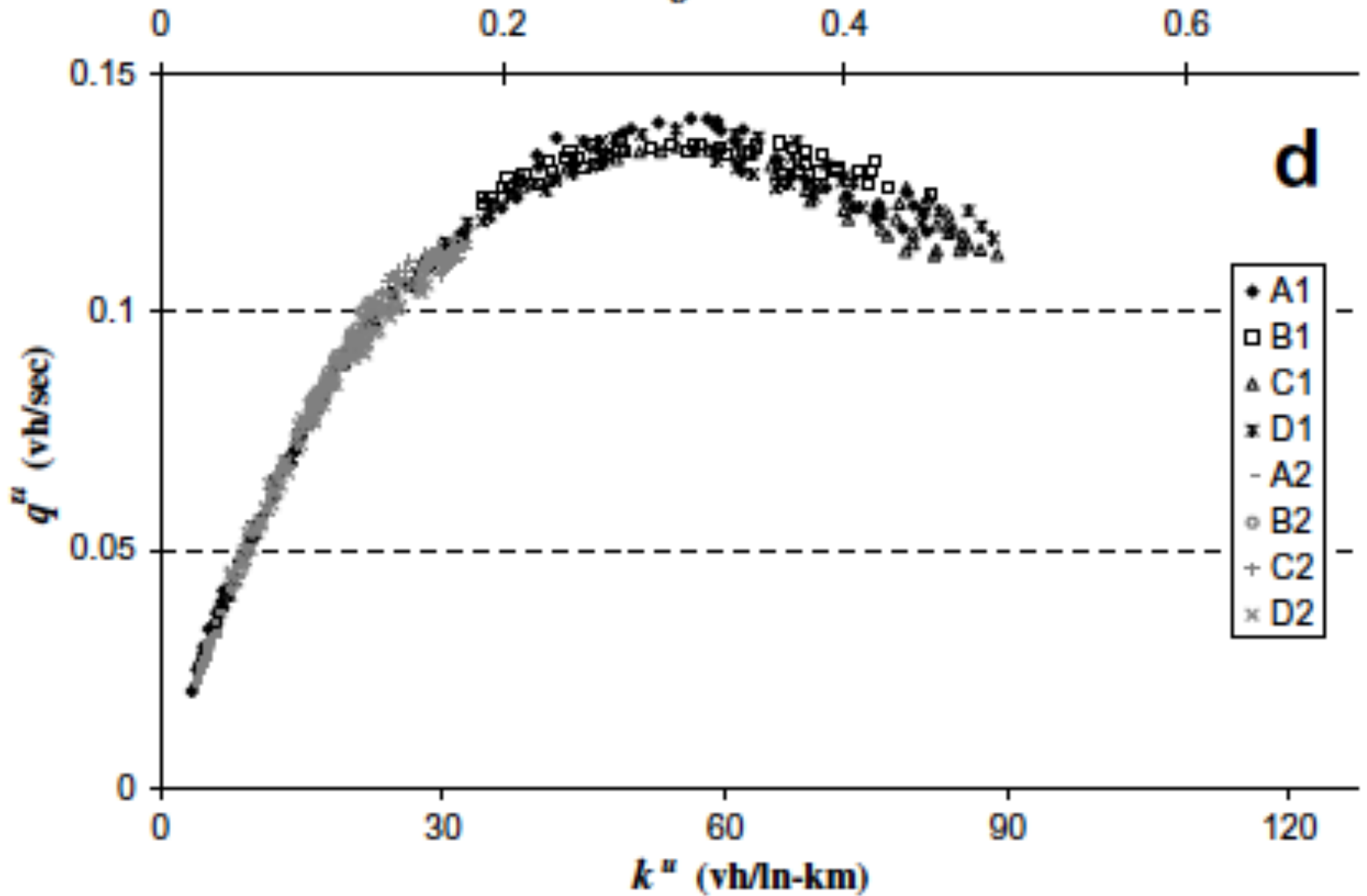
Occupancy and MRT bunching during the morning peak



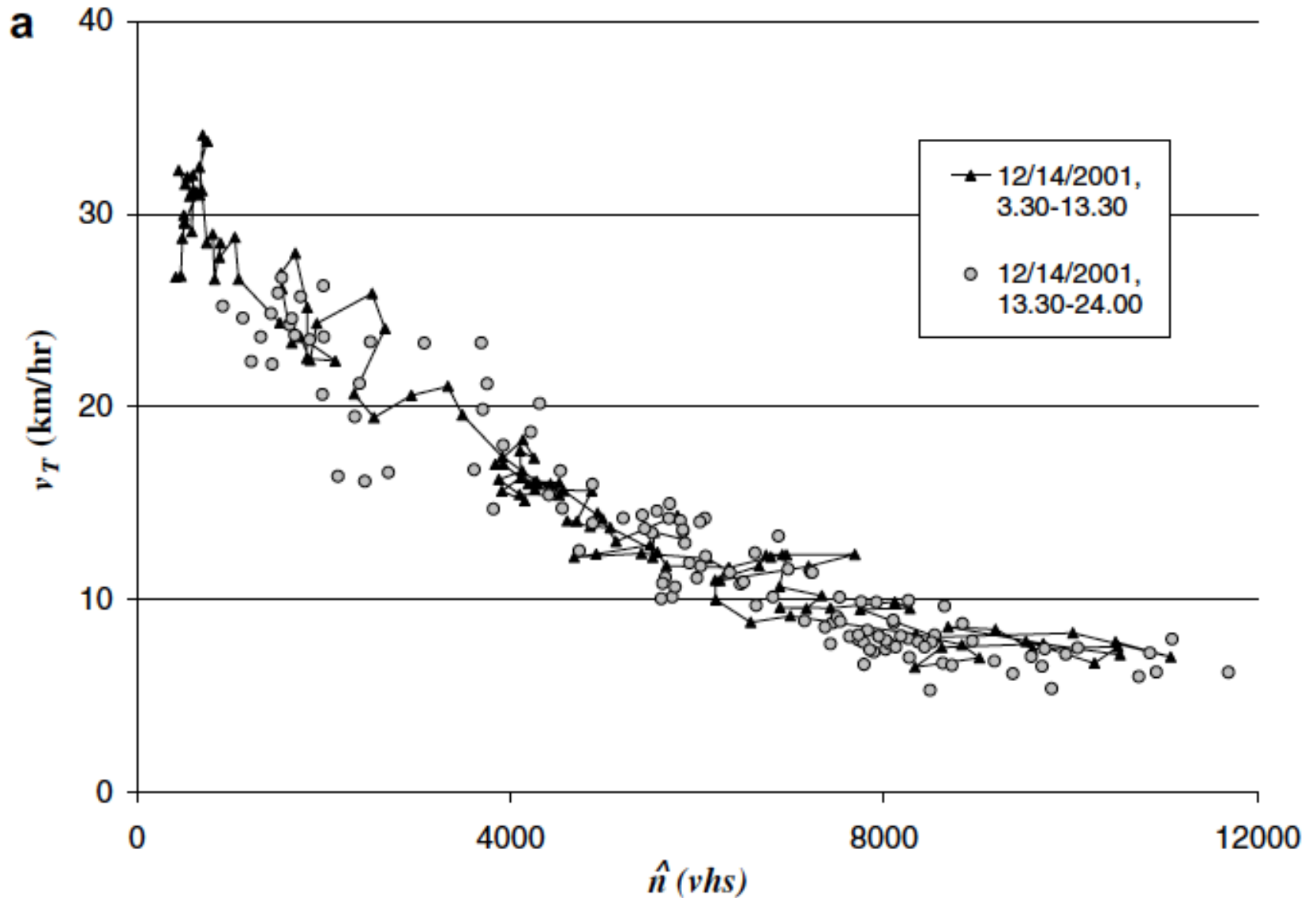
Sun, 2013

Constraints

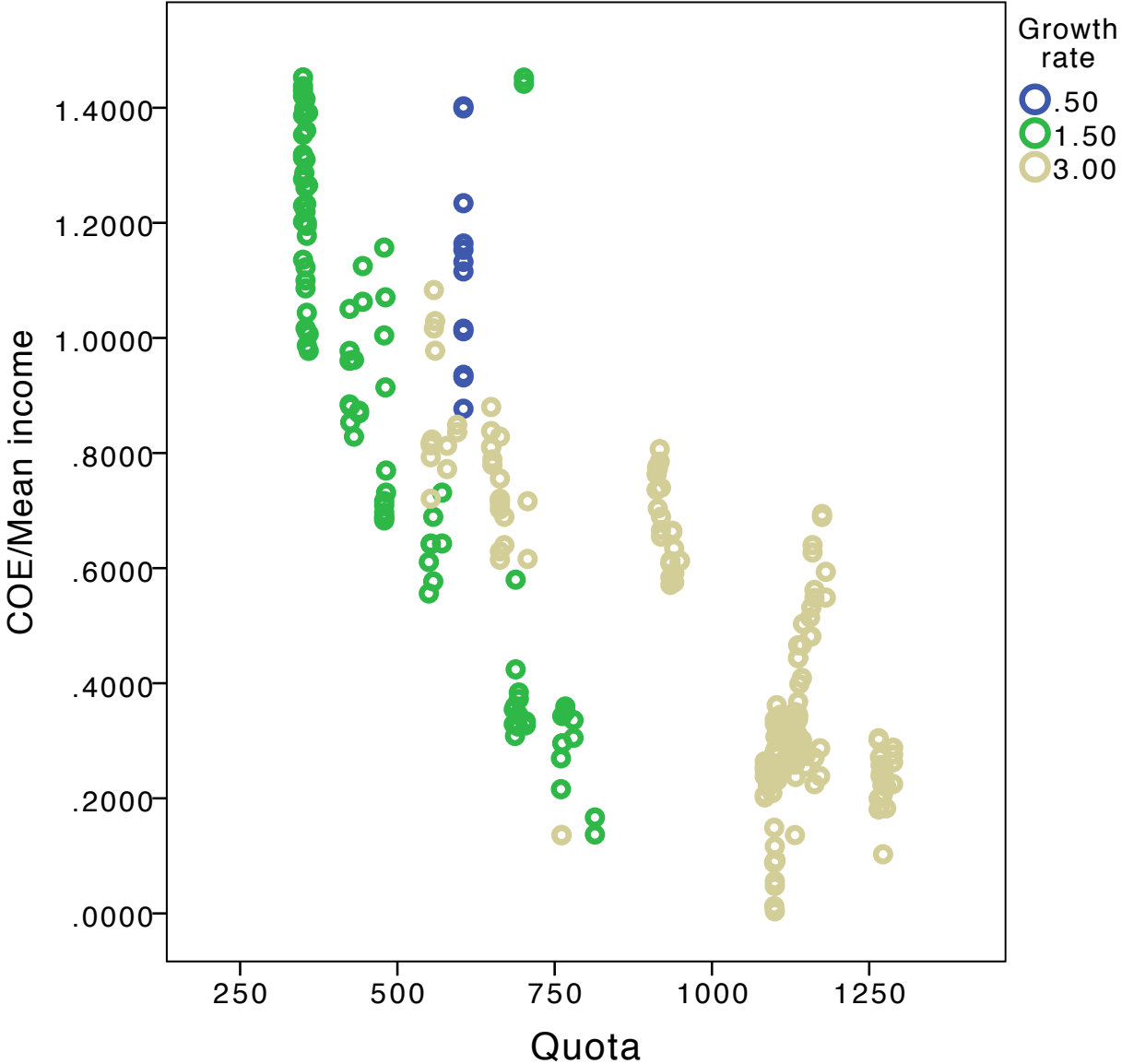
Macroscopic fundamental diagram (Yokohama; loops)



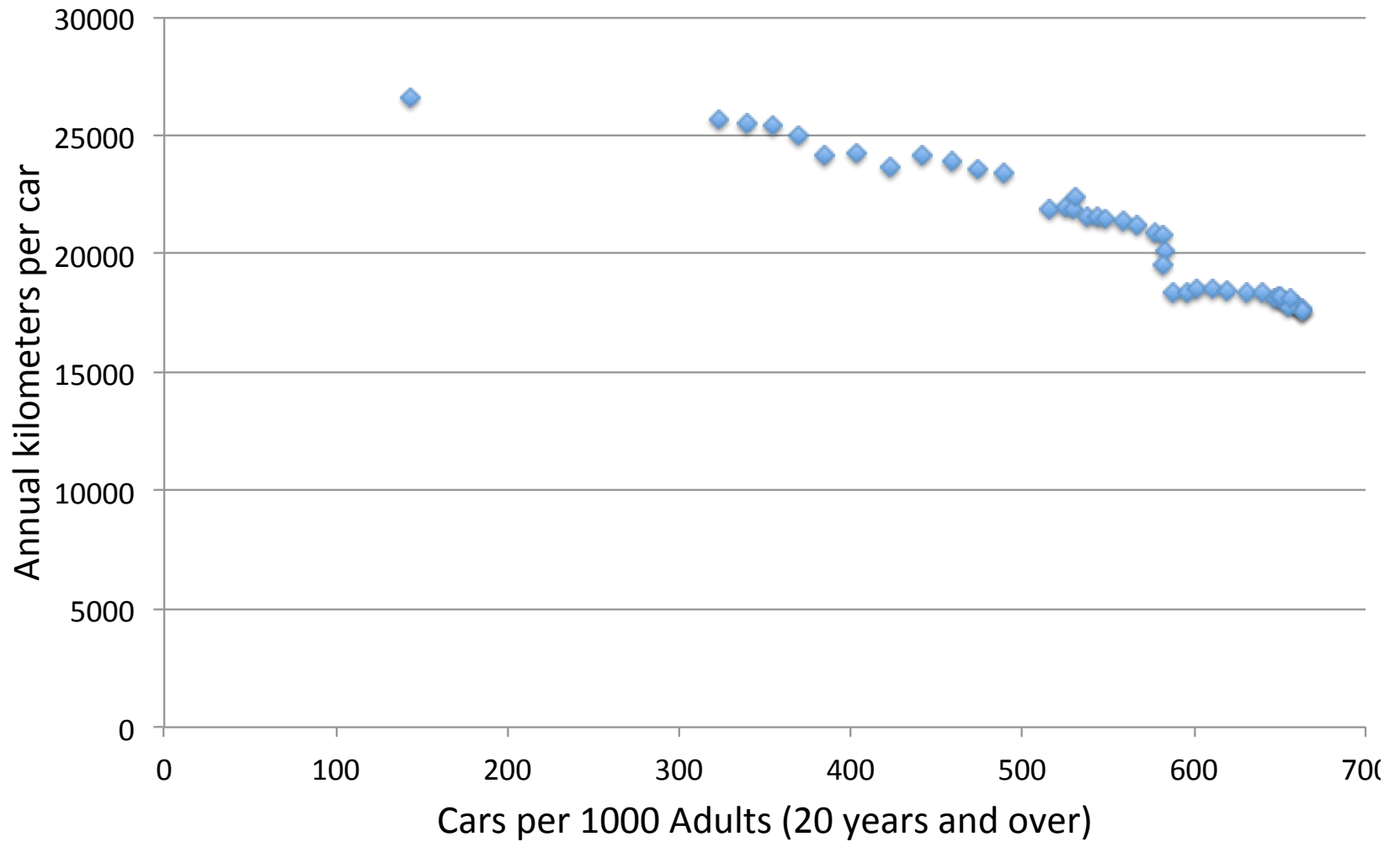
Macroscopic fundamental diagram (Yokohama; taxis)



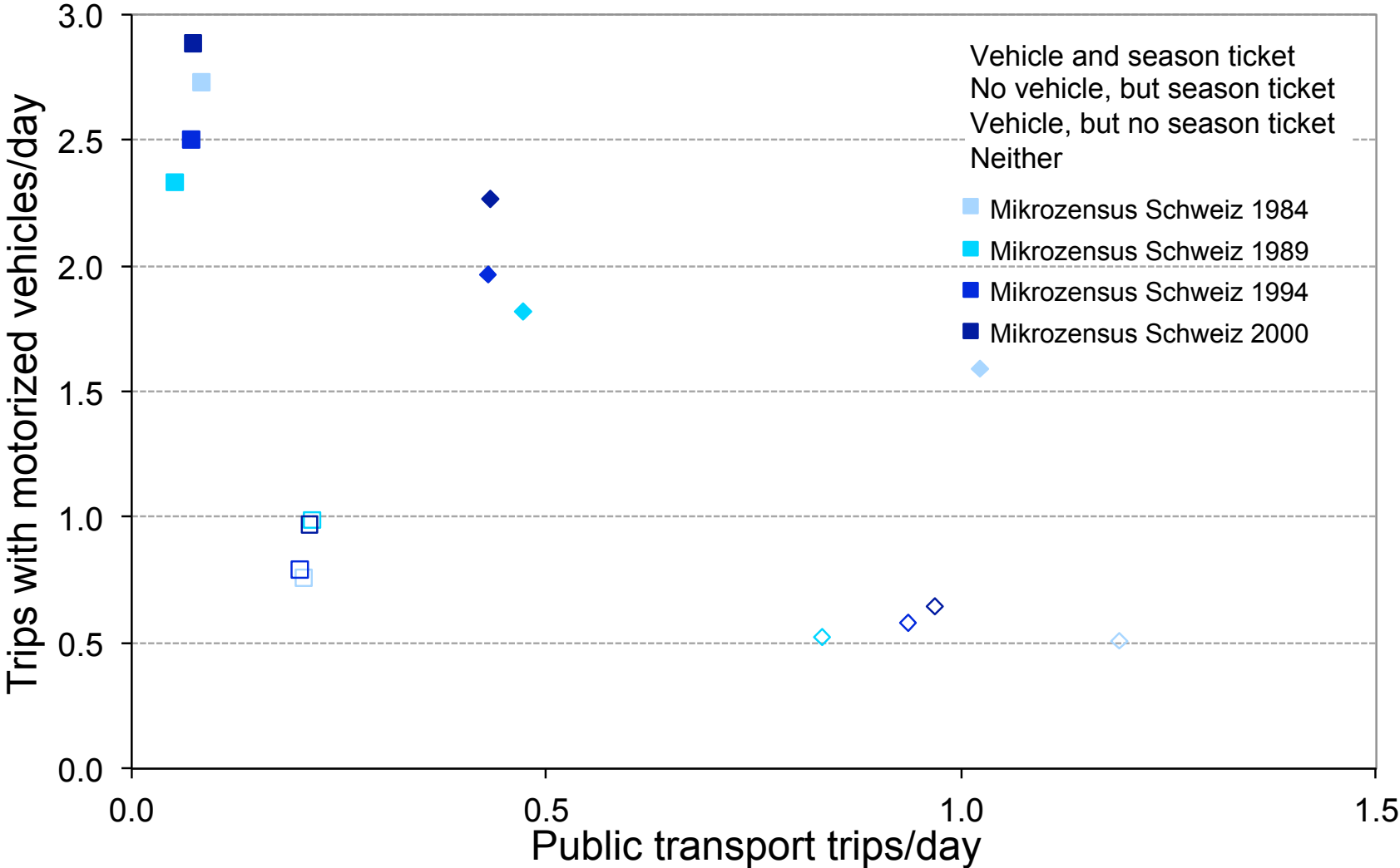
Analysis of the COE Category B prices since 2001



Development of km driven per car and year (CH, 1960-)

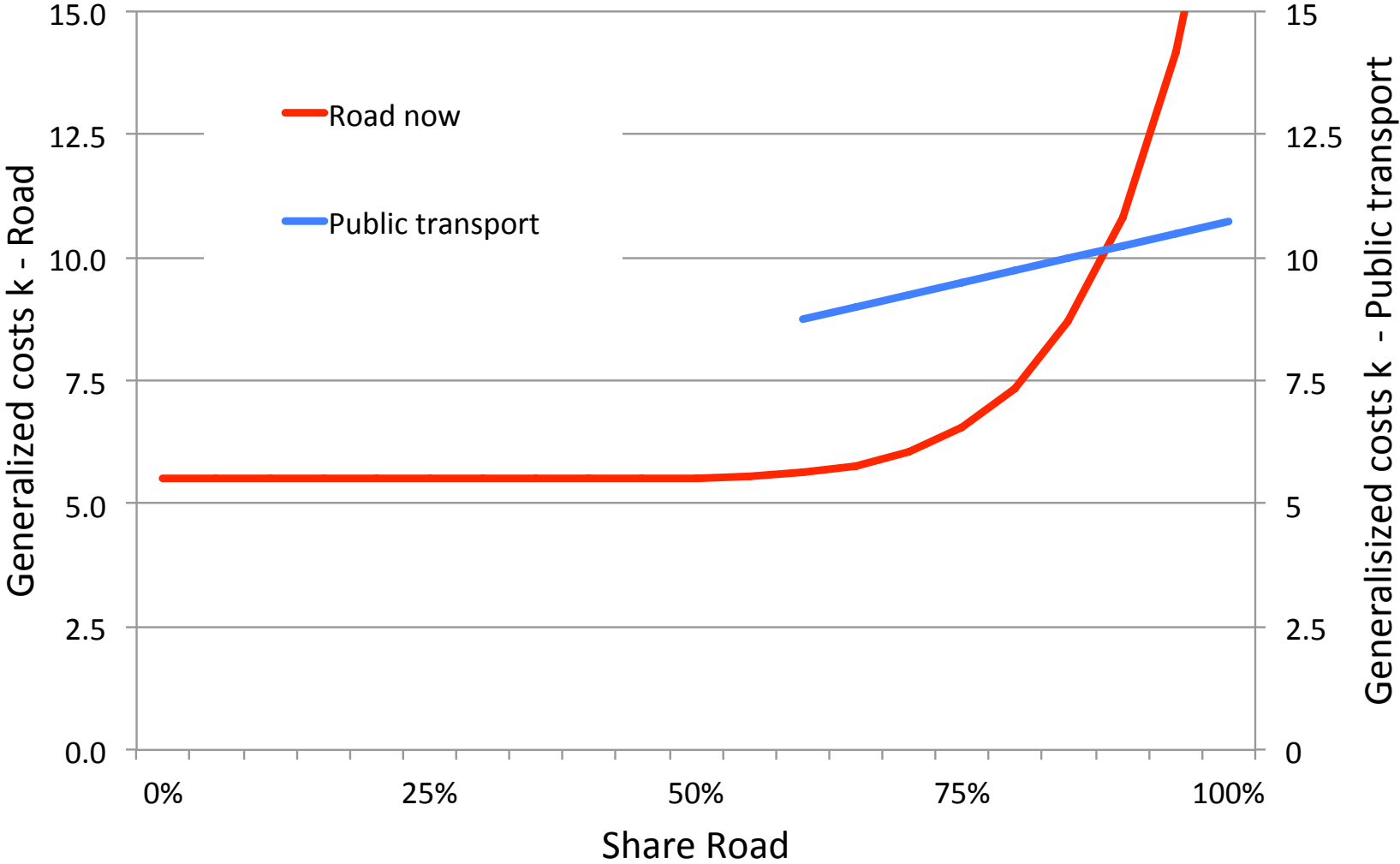


Travel, car and season-ticket ownership (CH, 1984-)

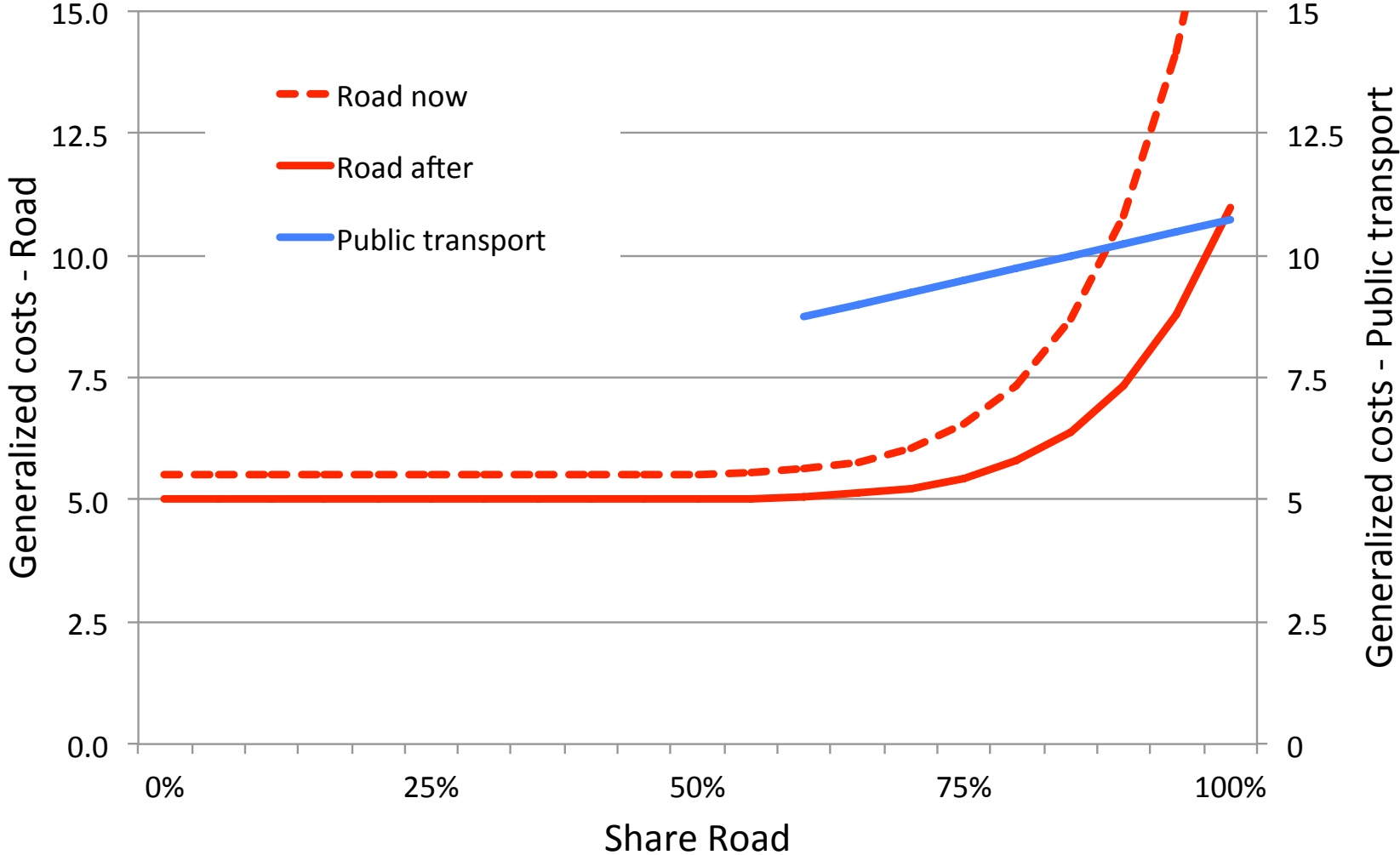


What can we do ?

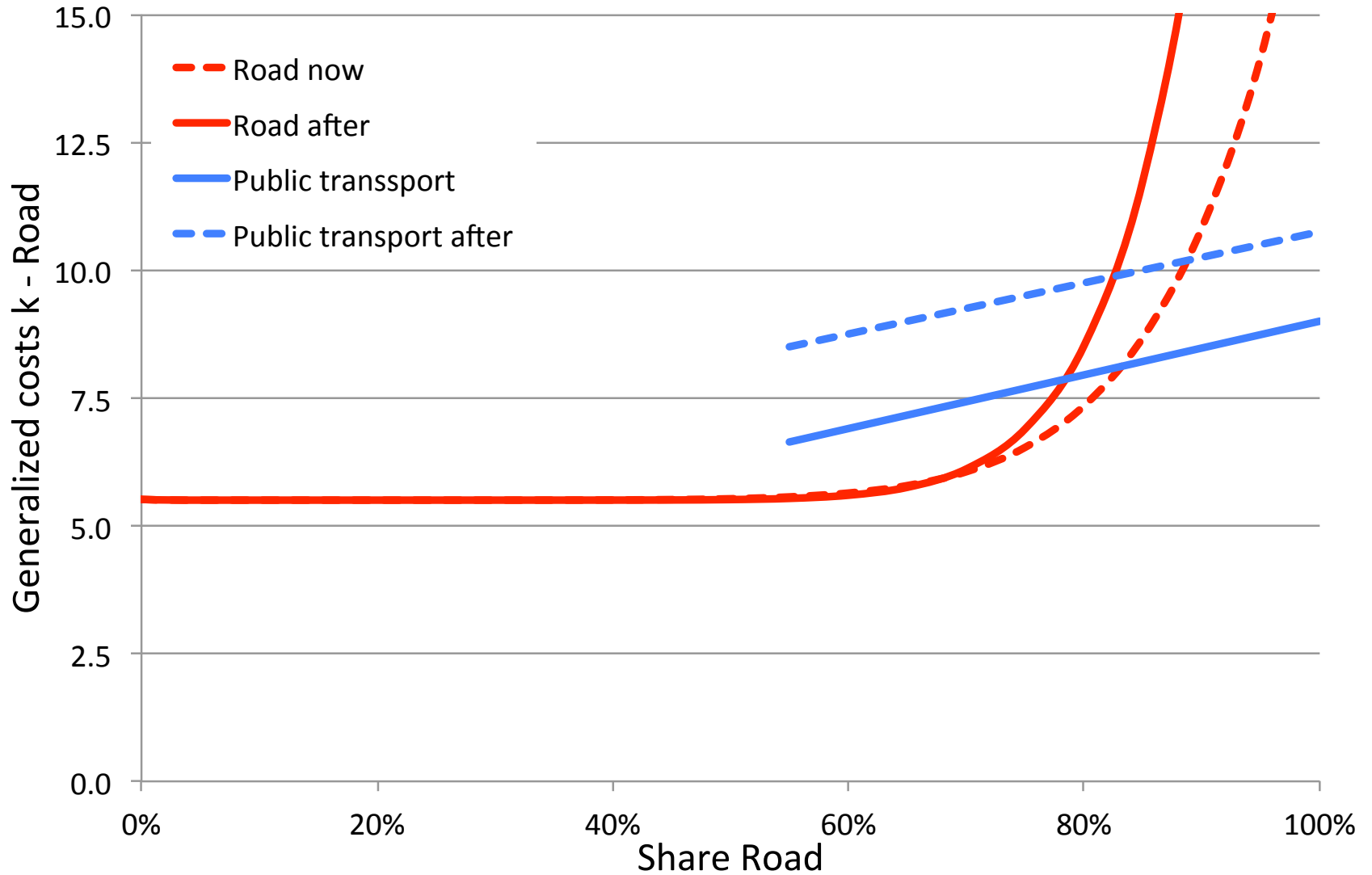
A simplified model of the transport market



After building more roads: Downs-Thompson Paradox



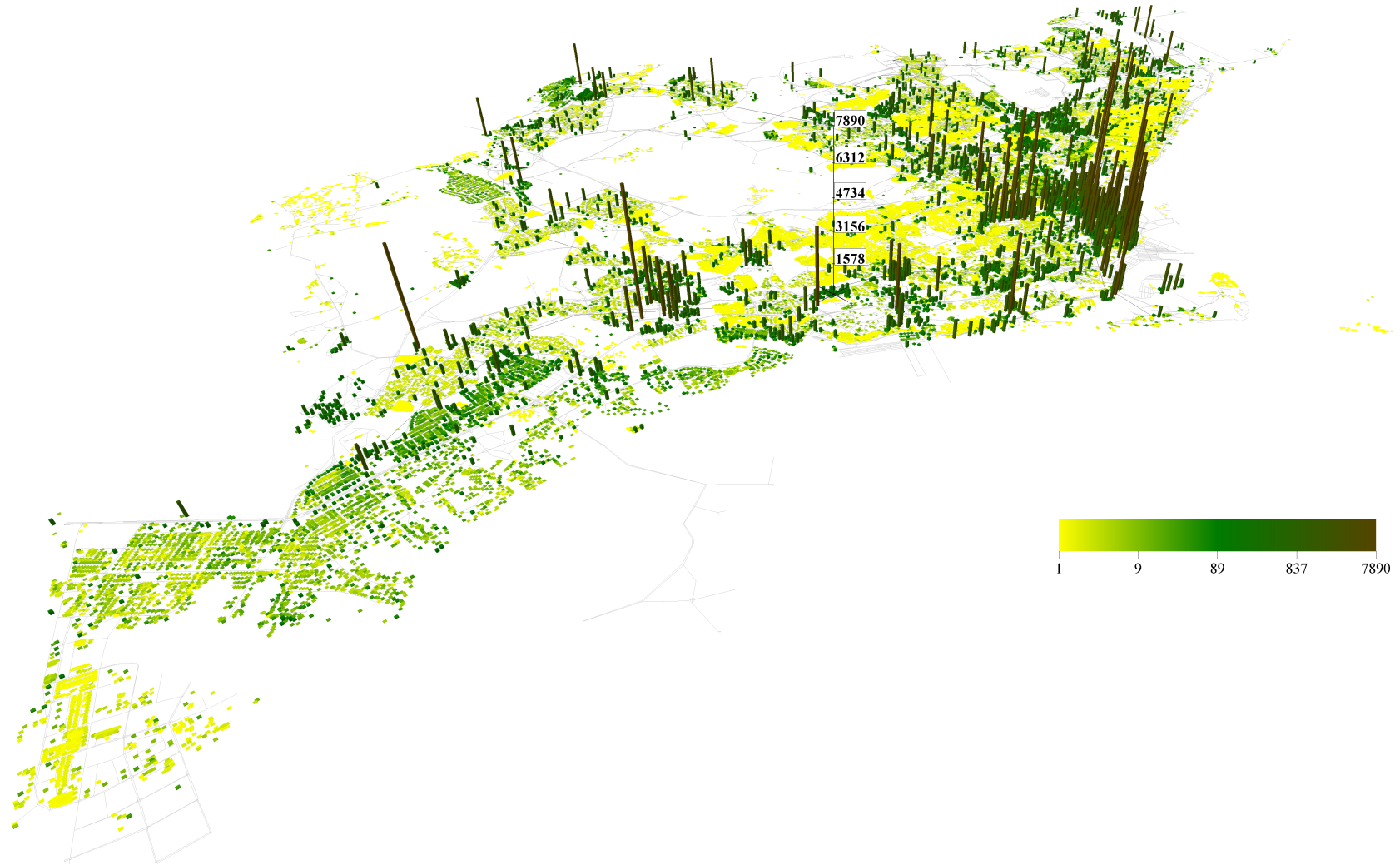
After improving public transport/removing road capacity



Land use: Estimated number of work places

Ordonez, S and A. Erath (2012) Estimating Dynamic Workplace Capacities using Public Transport Smart Card Data and a Household Travel Survey

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Questions ?

www.matsim.org

www.ivt.ethz.ch

www.futurecities.ethz.ch

www.senozon.ch