

GREEN ALTERNATIVES TO CONVENTIONAL TRANSPORT SYSTEMS

March 8th, 2017

Agenda

- What do we mean by 'Green'?
 - Why do we refer to 'Low Carbon'?
 - Is 'conventional wisdom' right?
- What does this mean for us?
 - On-Demand Transport
 - Vertically Integrated Public Transport Systems
 - City-wide Data and Traveller Information Systems
 - New Low-Carbon Vehicle Technologies

100

100

gms CO2 per passenger kilometre

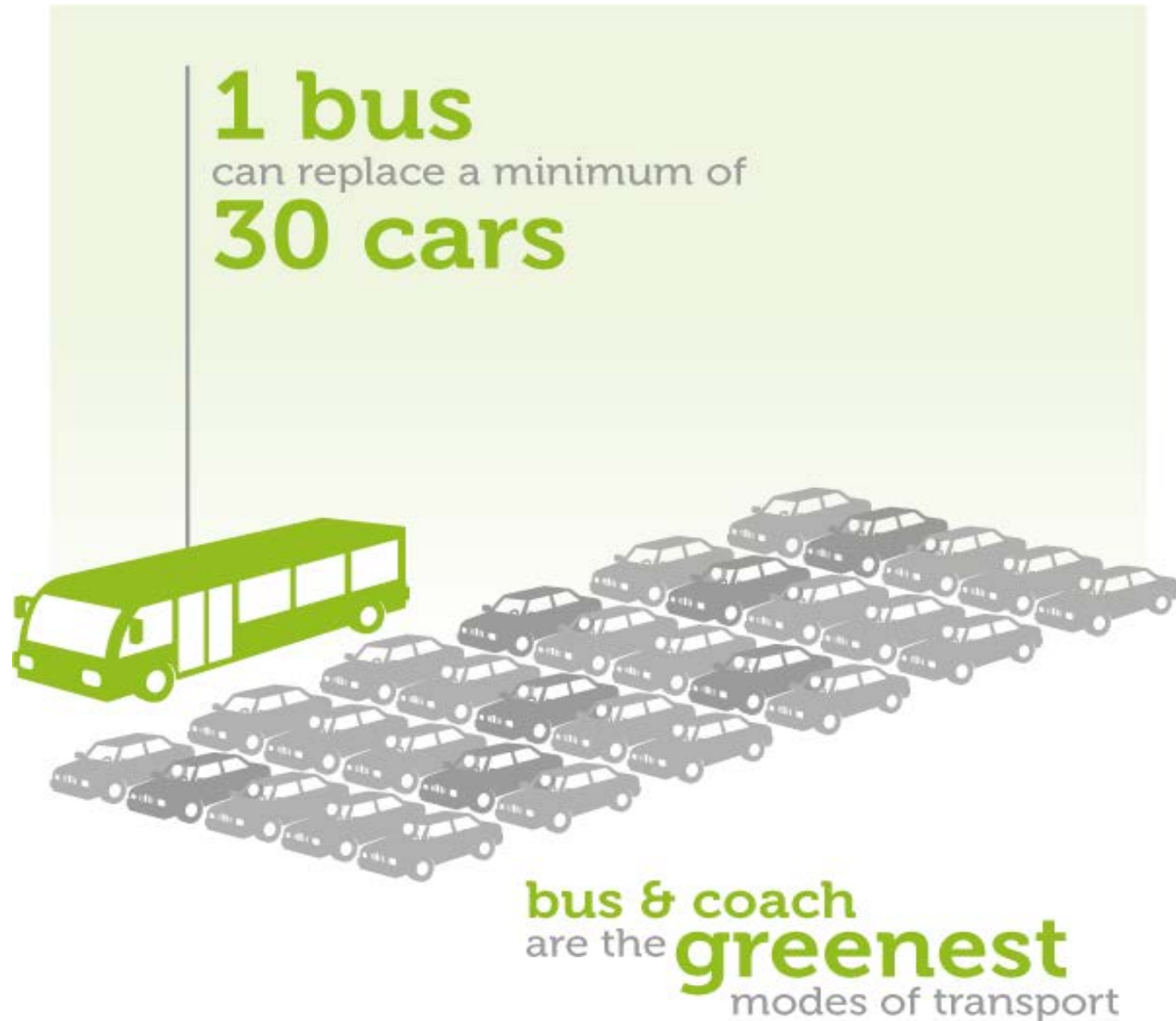
Why do we seek 'Low Carbon'?



Is conventional wisdom right?



Is conventional wisdom right?



Is conventional wisdom right?



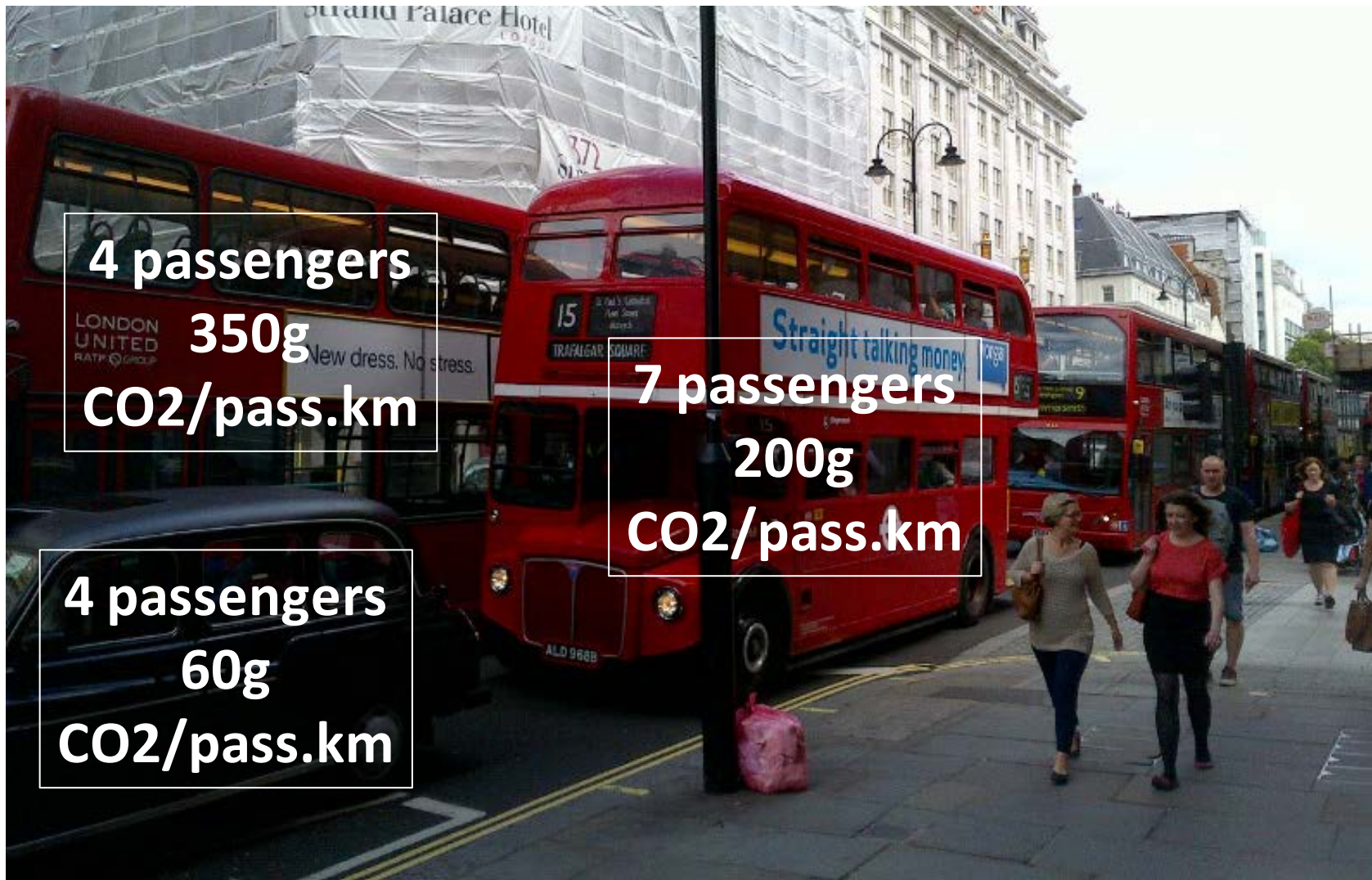
Is conventional wisdom right?



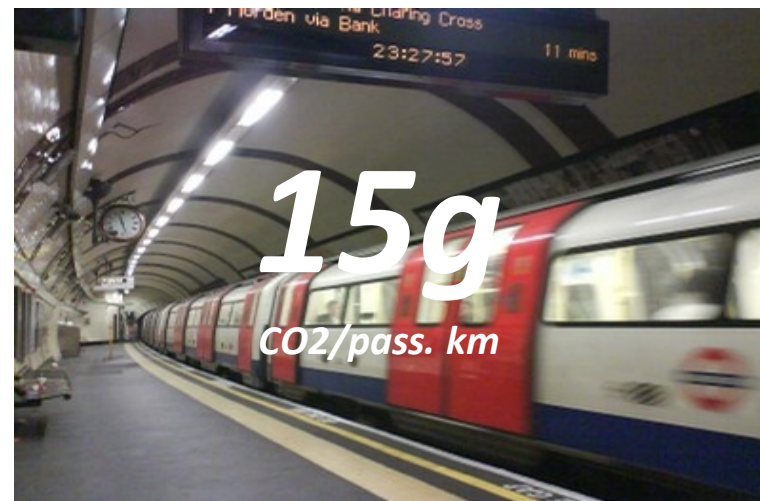
The cause of the problem



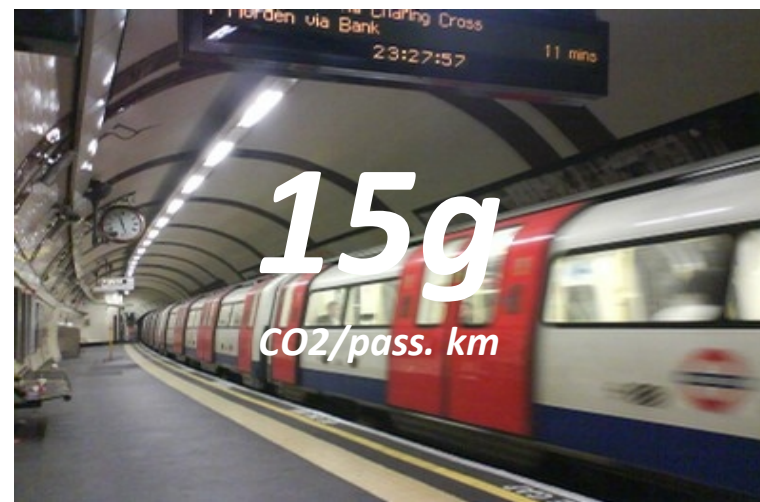
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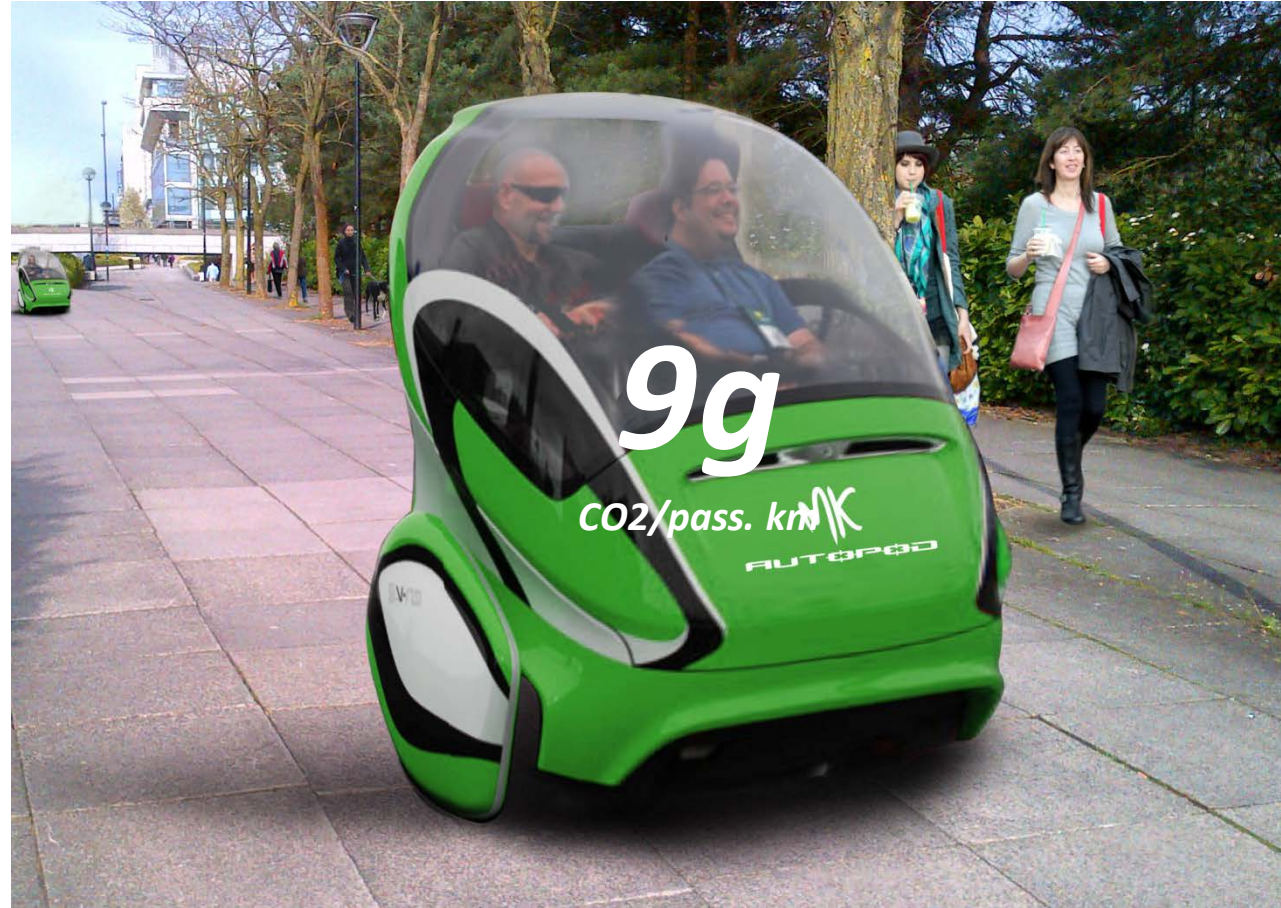
Full vehicles yield optimal performance



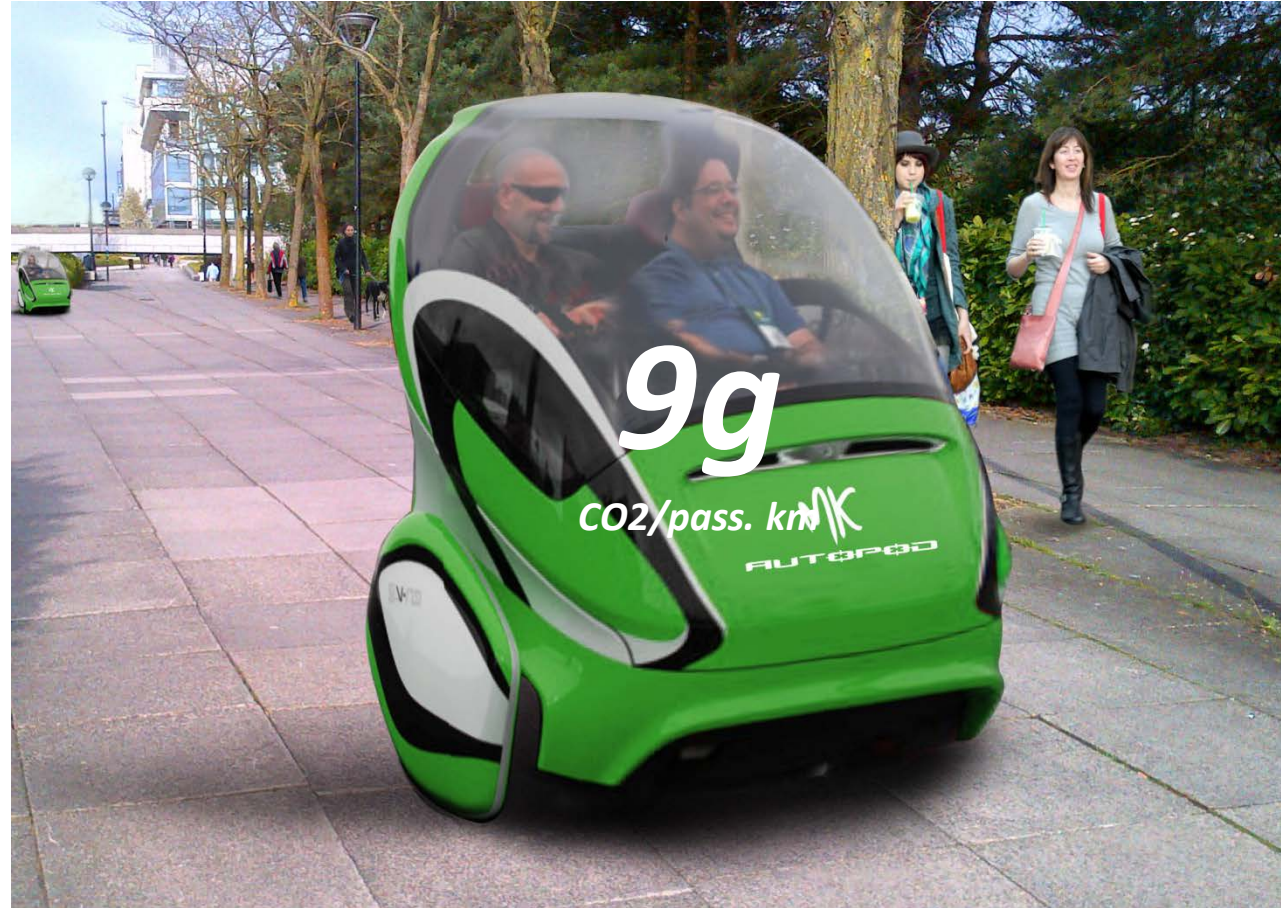
Full vehicles yield optimal performance



Search for the smallest practicable unit (i.e. minimise the 'parasitic mass')



Search for the smallest practicable unit



Low-Speed Autonomous Transport System (L-SATS)

We need a scalable bus

(match the capacity to the demand)



..... but we don't want this!



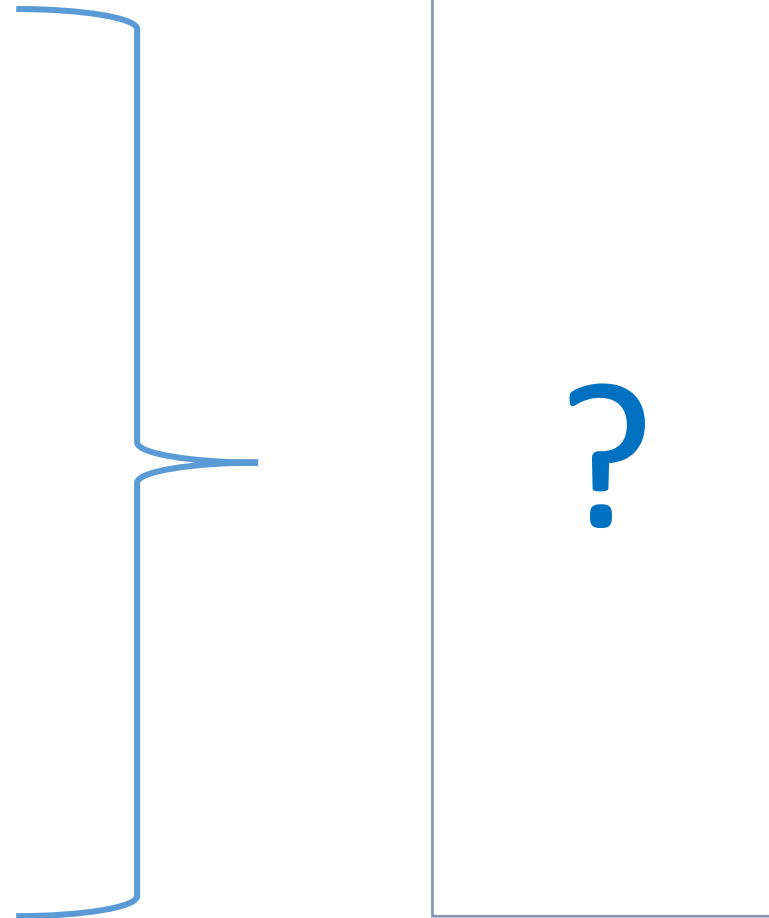
The Exam Question

How can we get
people out of their
cars for *personal* trips
into the city?



The Answer

Provide an alternative means of transport which is more attractive than using the car.



User-Centric Solutions



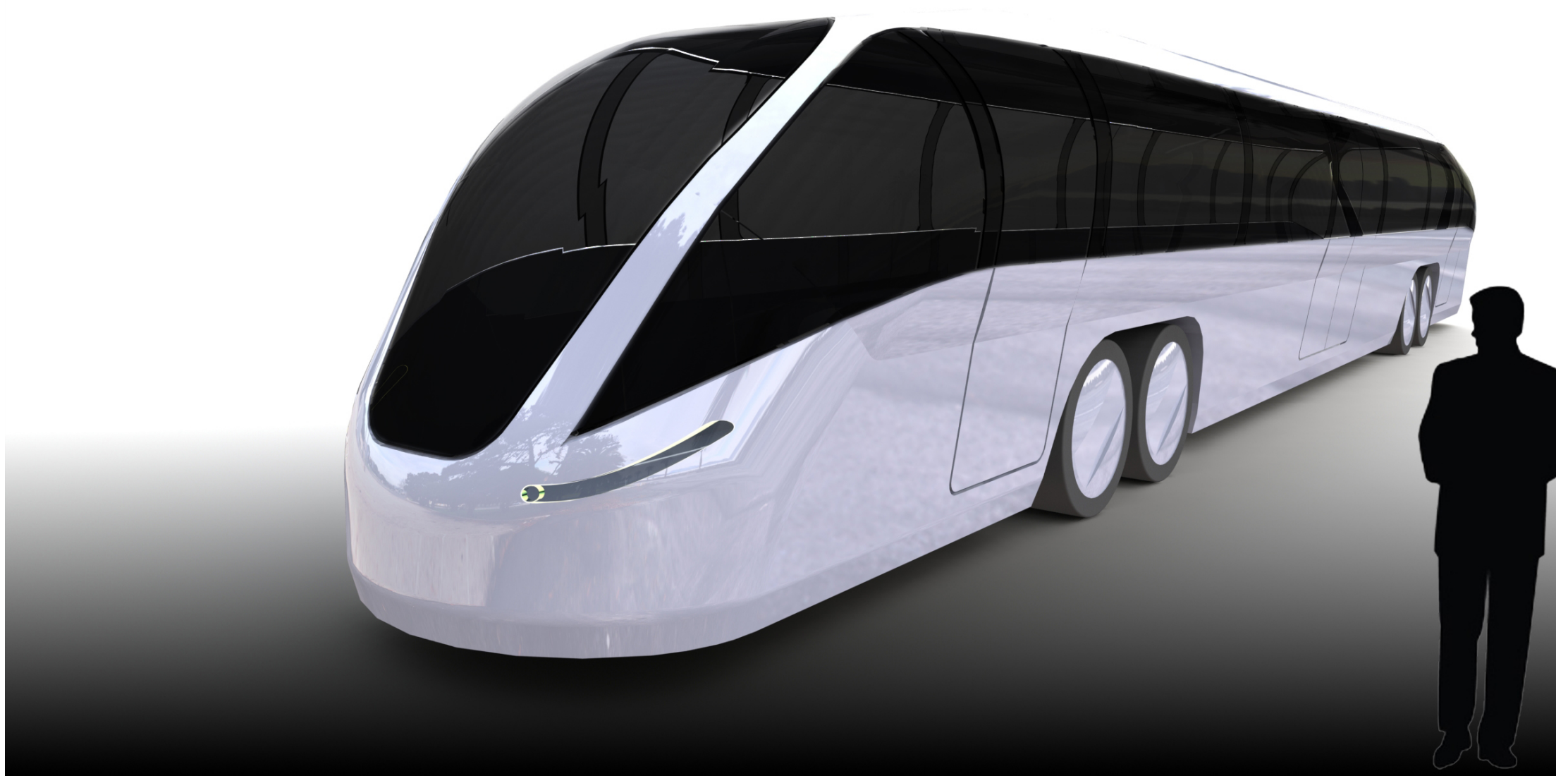
Vertically Integrated Public (VIP) Transport Systems (Capacity matching)



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Future Transport Systems - AVRT?





The definition of an advanced society is not that even the poor have cars it is that even the affluent use public transport



*Transport for everyone, everywhere
as accessible and affordable as running water*

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