# Transport and Sustainability in the Central City







By totalling all the passenger-kilometres travelled into, around and out of the central city, we get an excellent snapshot of people's regular way of travelling:

54% Cars (2015)

24% Trains













1% Non Motorised

# **Occupancy matters**

The energy used by cars drops significantly when more people ride in one car (Megajoules per passenger-kilometre):

1.66

1.11

0.83

**HOWEVER** 

Different forms of transport use different amounts of energy:





This means that while they account for 54% of passenger-kilometres, cars use 87% of all transport energy

Transport Energy Efficiency: The Lower, the Better (Megajoules per passenger-kilometre):

1.8 **PETROL CAR** 

**HYBRID CAR** 1.2

**BUS (Golden Arrow)** 

**BUS (MyCiTi)** 

**MINIBUS TAXIS** 

**TRAINS** 





Single occupancy petrol car



# 20 percent

The increased percentage of CO<sub>2</sub> released during shorter trips



250 kJ

Total energy found in 1 egg

500 kJ Walking

Cycling

To travel 2.5 kilometres by bicycle only uses 250 kJ of energy... while a car uses 30 times more energy to do the same



The estimated amount of energy required for transportation in 2030 to keep up our current use

We can reduce our future transport energy demand to the following levels:

7655 TJ

#### 8263 TJ

If we use Own If we use more Steam transport public transport like walking and like trains as well as buses cycling

# 7338 TJ

If we avoid transport by living closer to work or working from home

# 6670 TJ

If we Travel Smart by ride sharing and carpooling