

Scrutiny Inquiry Day: Integrated Transport Options for the East of Bath

What do we mean by an integrated strategy?

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bettertogether

Integrated transport policy

1. Serves the economy
2. Respects the environment
3. Connects the whole community, including the rural areas

1. Serves the economy...

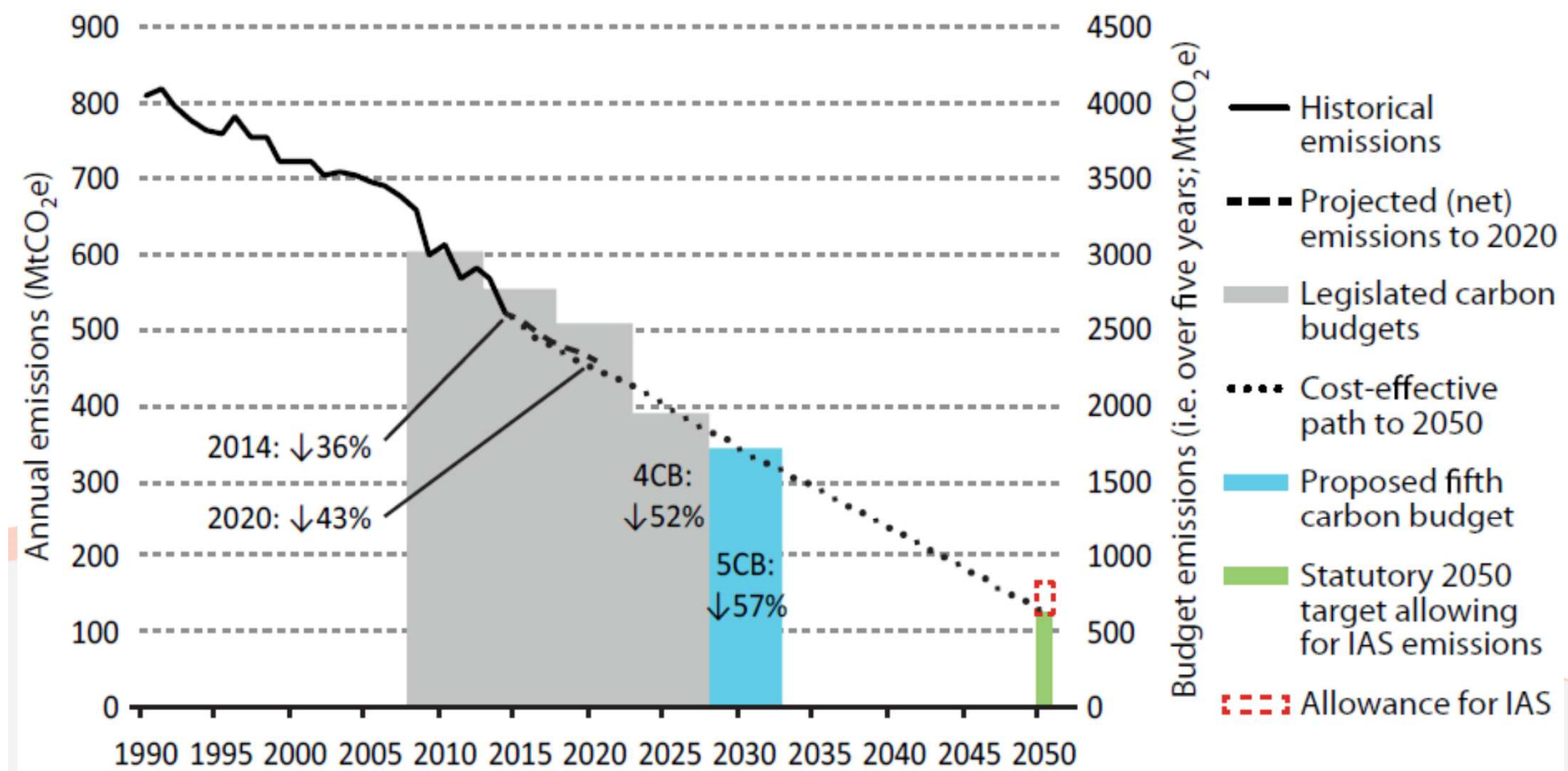
- Need to consider the long-term resilience of a car-dependent economy
 - How car-mobile will a future ageing population be?
 - How long will fuel prices stay low?
 - We cannot burn the fossil fuel stocks that are available
 - A low or zero-carbon car fleet is decades away

Bath Enterprise Area

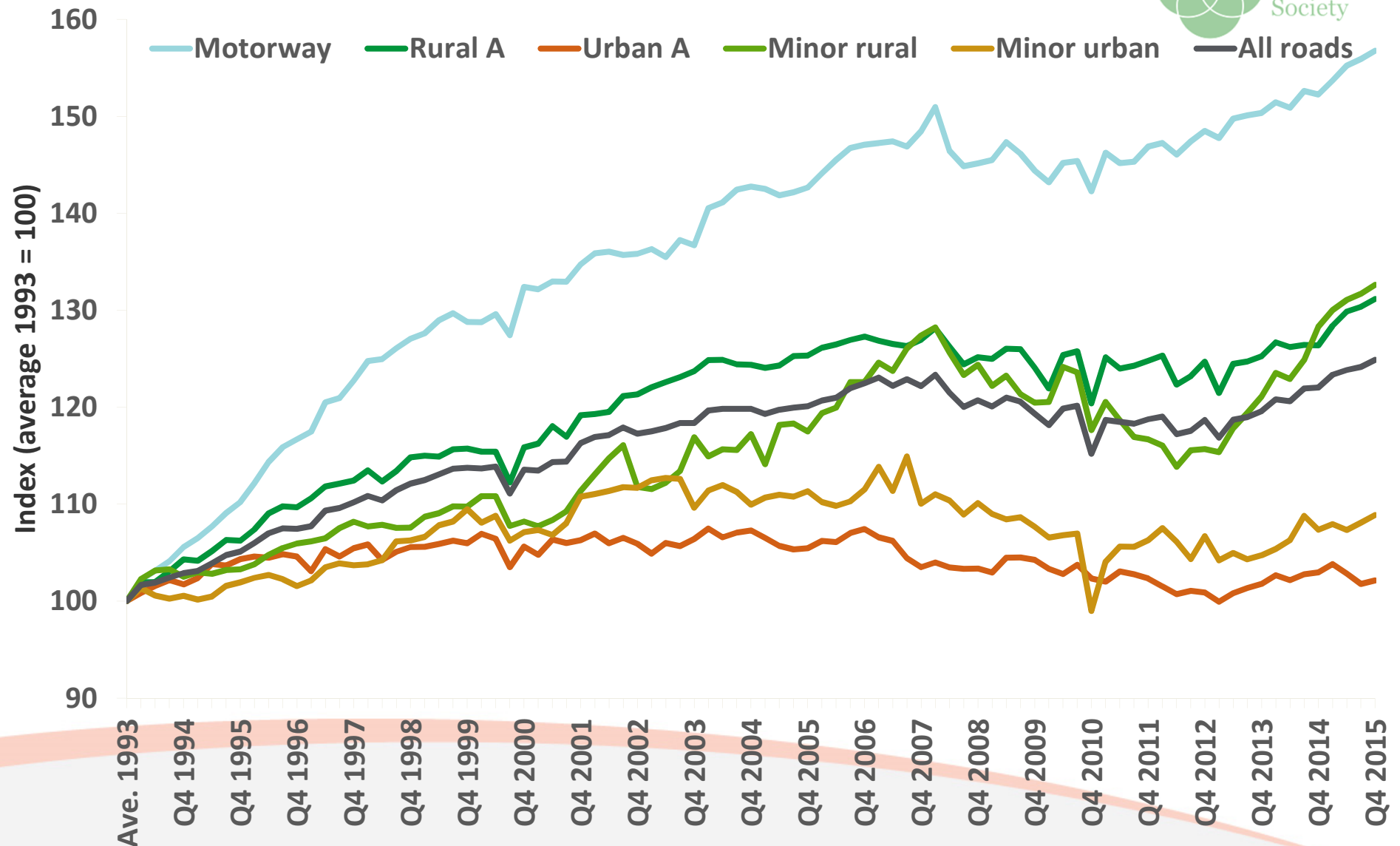
- 12,000 trips 07.00-10.00 to/from EA
- 1,000 assumed to be trips from P&R sites
- 2% of trips to EA from East P&R if provided

2. Respects the environment...

UK committed to a reduction in emissions by 2050 equivalent to 80% of 1990 level or lower

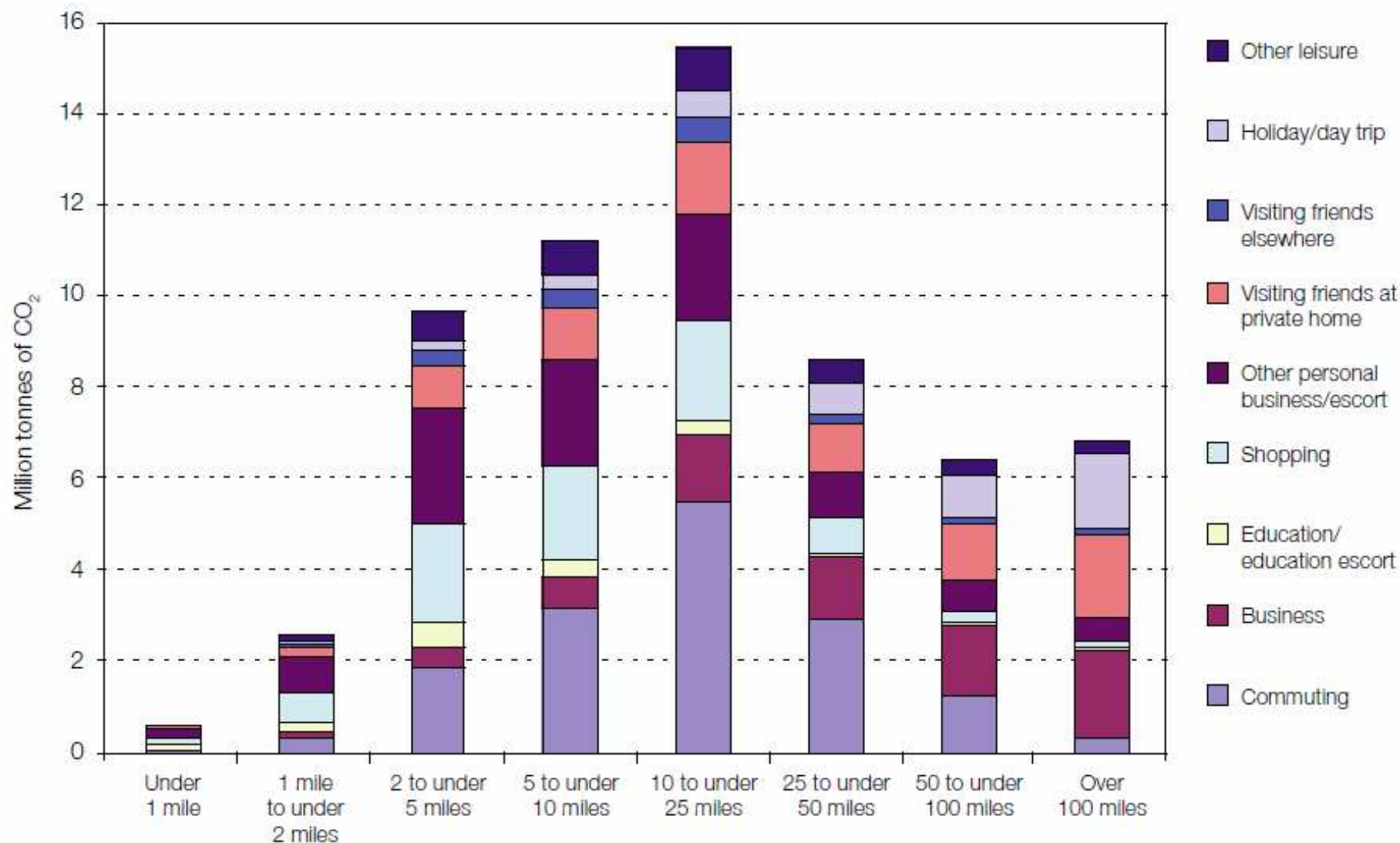


Traffic still growing outside urban areas



DfT (2016) Road traffic (vehicle kilometres) by road class in Great Britain, seasonally adjusted indices, quarterly, 1993 average = 100

Medium-range car journeys Responsible for most carbon emissions



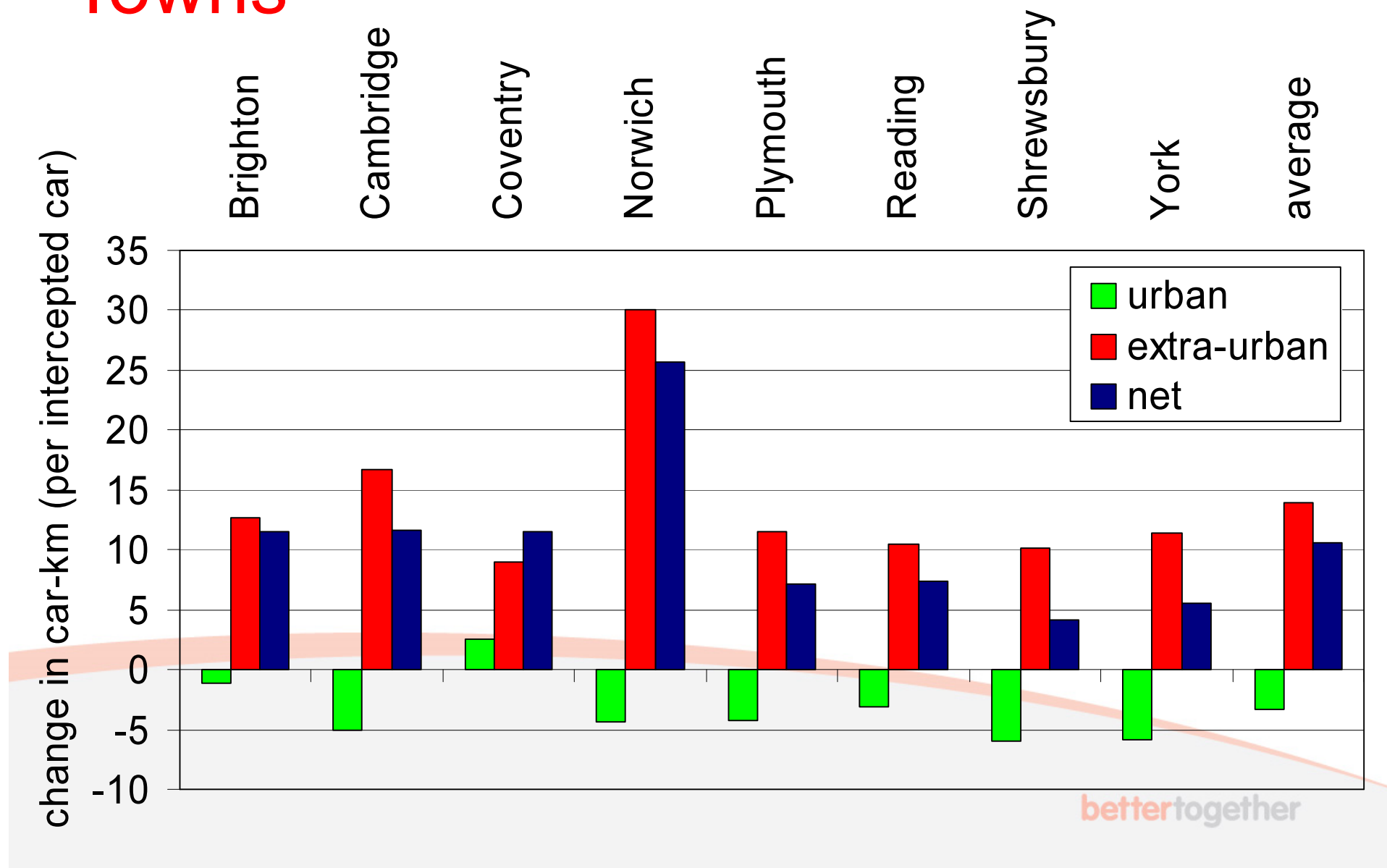
Source: Department for Transport (2009) Delivering Sustainable Low Carbon Travel. Figure 2.1
Total carbon emissions by car journey length and purpose

Evidence from several English P&R schemes since 1976:

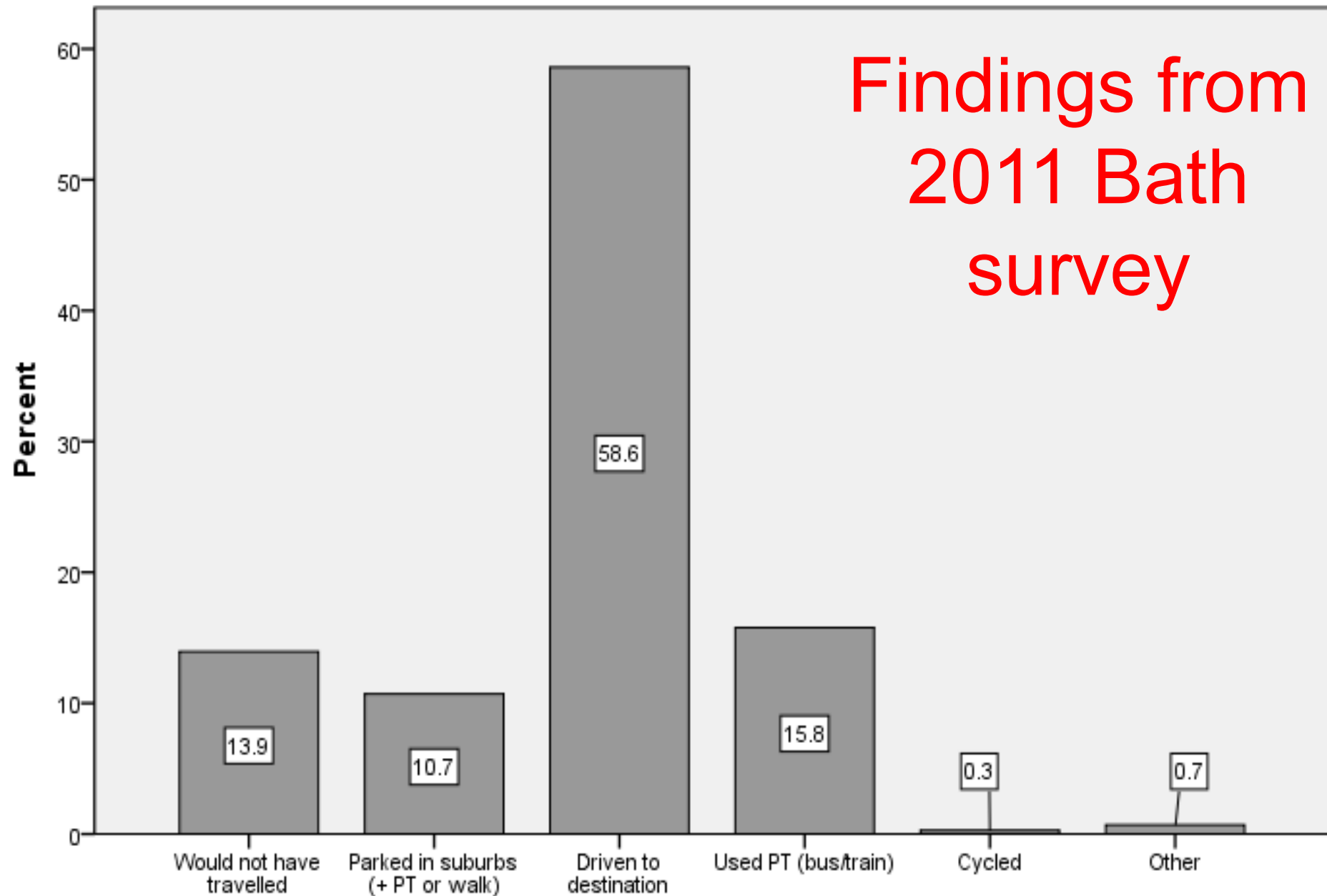


- Parkhurst (1996) **5-40%** of P&R trip-makers had actually used public transport before switching to P&R
- Meek et al. (2011) **9-41%** of P&R trip-makers perceived public transport as alternative

Overall Traffic Effects for Eight Towns



P&R user most likely alternate access to destination



Air Quality: Uncertain Influence



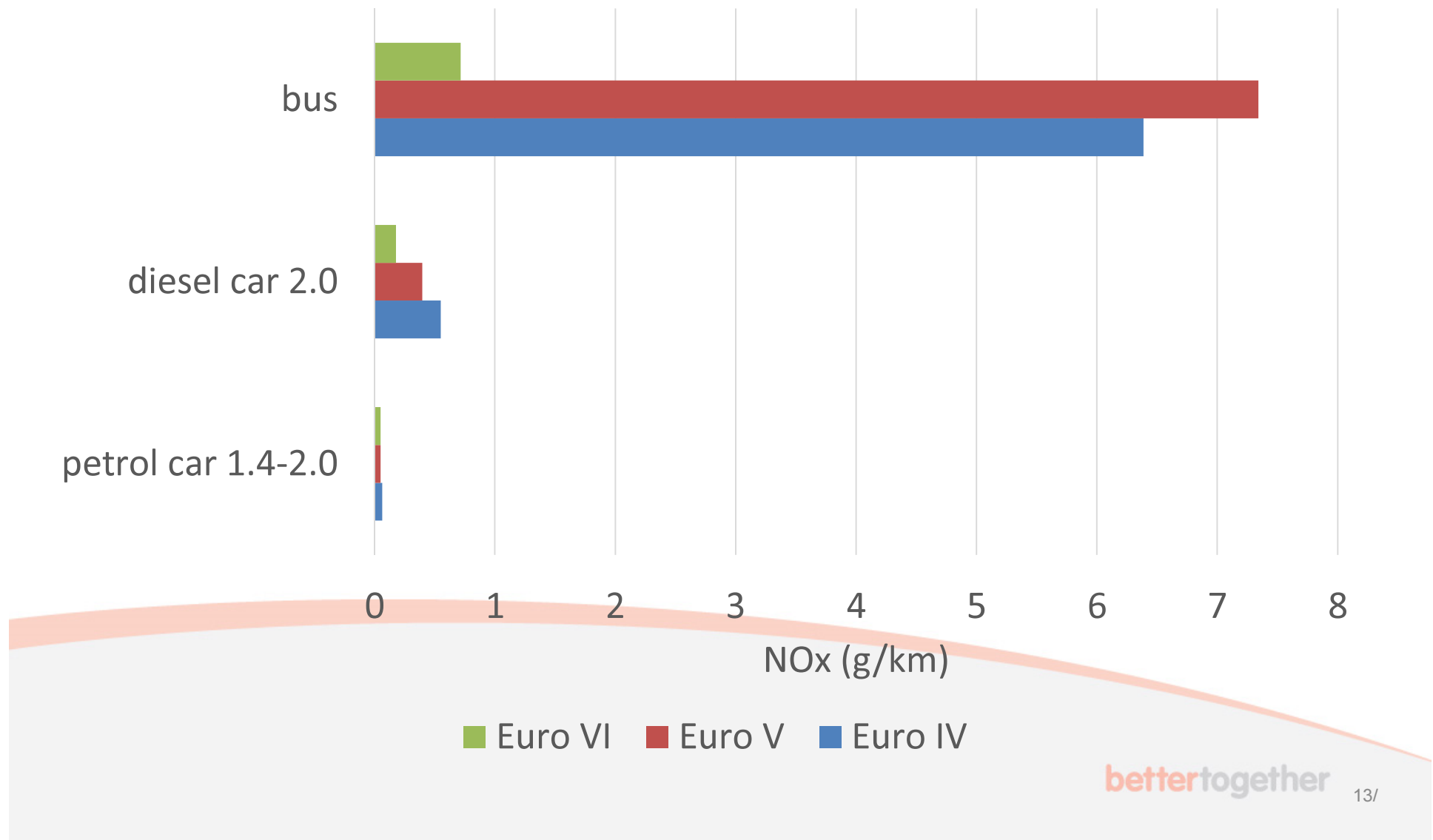
Potential Inbound Car Trips Avoided

Park at East P&R 07.00-10.00	250	500	750	1,000
Intercepted from London Rd (assumed 75%)	188	375	563	750
Cars per minute avoided on London Rd (07.00-10.00)	1	2	3	4

Bus Movements

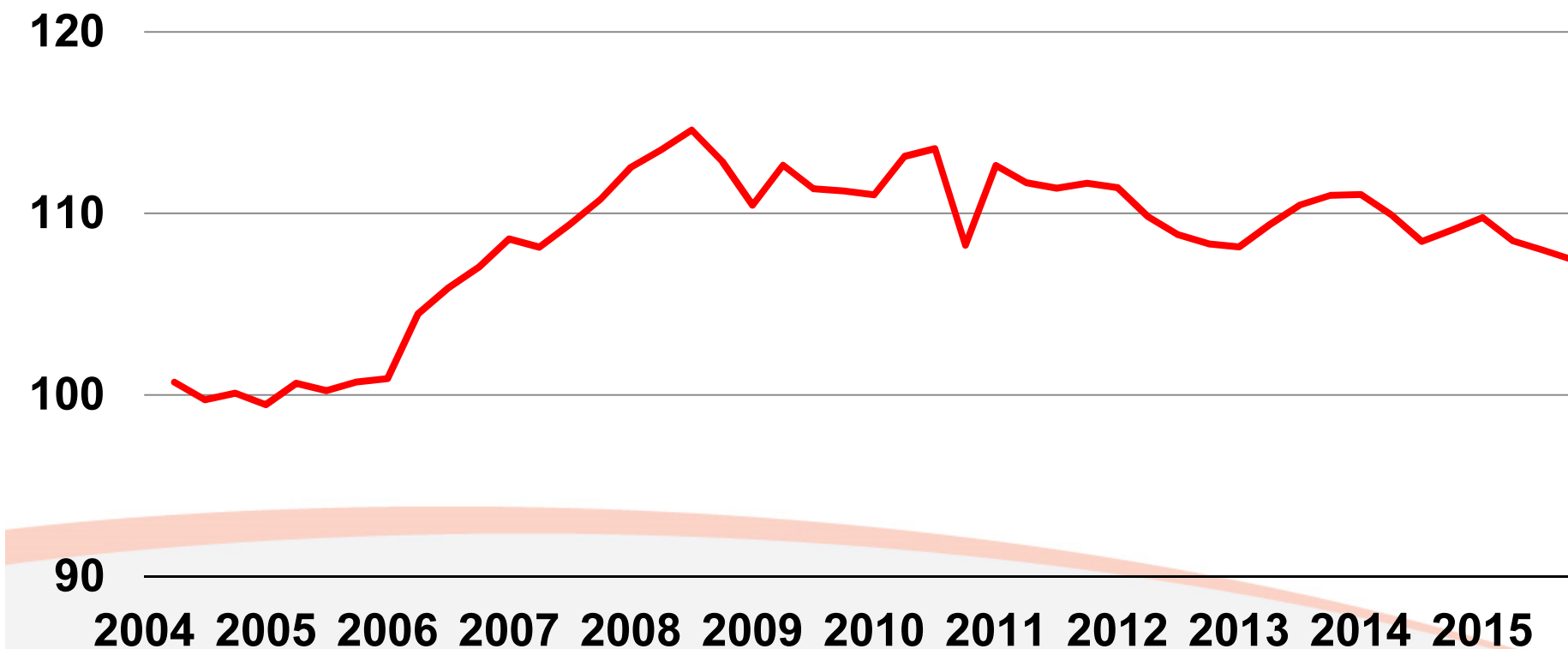
- 12-15 min. frequency
- 24-30 one-way 07.00-10.00
- 96-120 one-way in 12-hour period
- 1 bus every 6-8 minutes

Oxides of Nitrogen Emissions per Vehicle Type



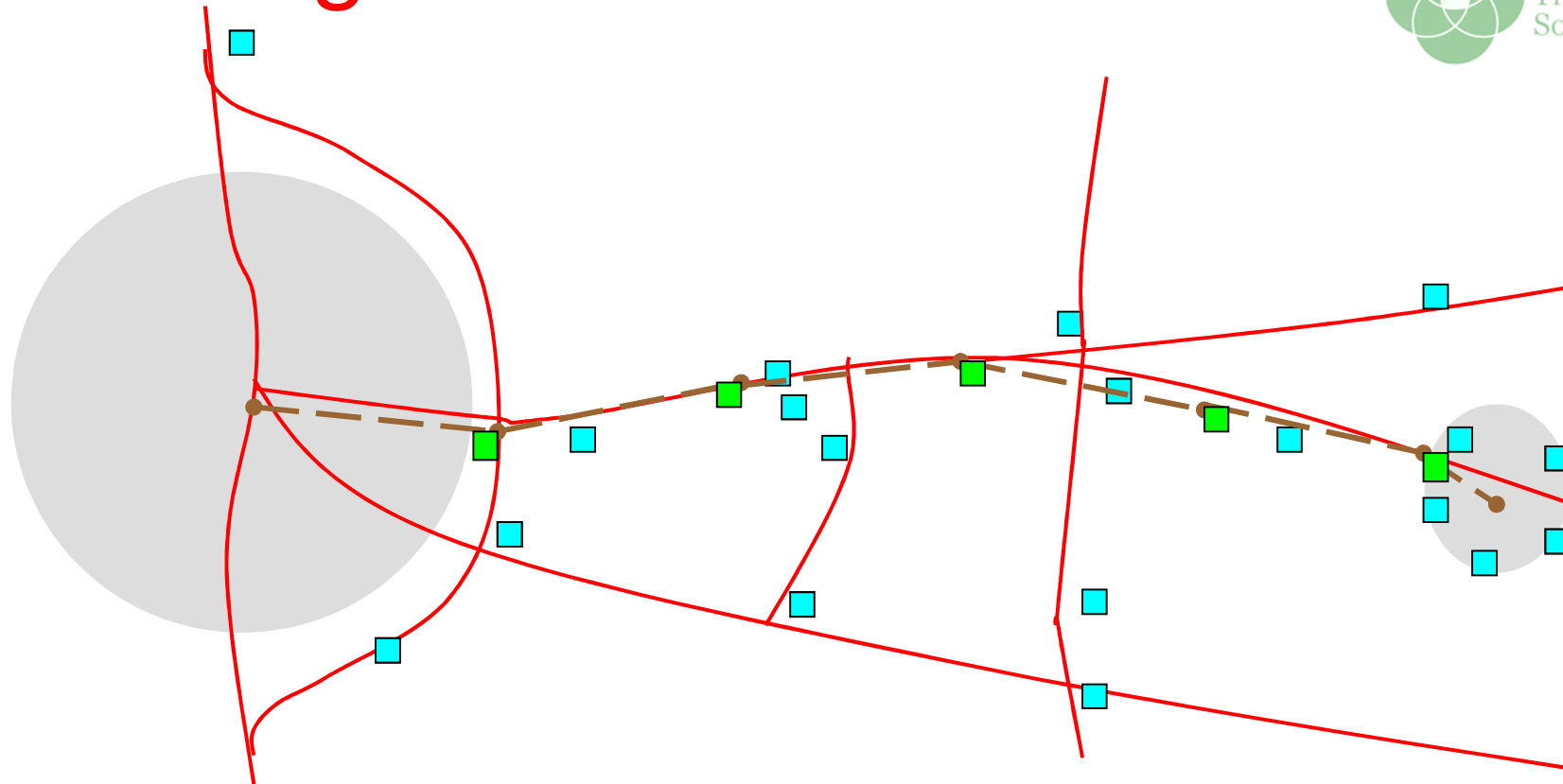
3. Connecting rural areas...

After the boost from concessionary fares, bus journeys in the English shires trending downwards



DfT (2016) Bus Statistics. Table BUS0106b Passenger journeys on local bus services by metropolitan area status and country: Great Britain, quarterly from 2004/05

P&R integrated with bus services



4 km 5 km 5 km 5 km 5 km



park and ride site



urban area



road network

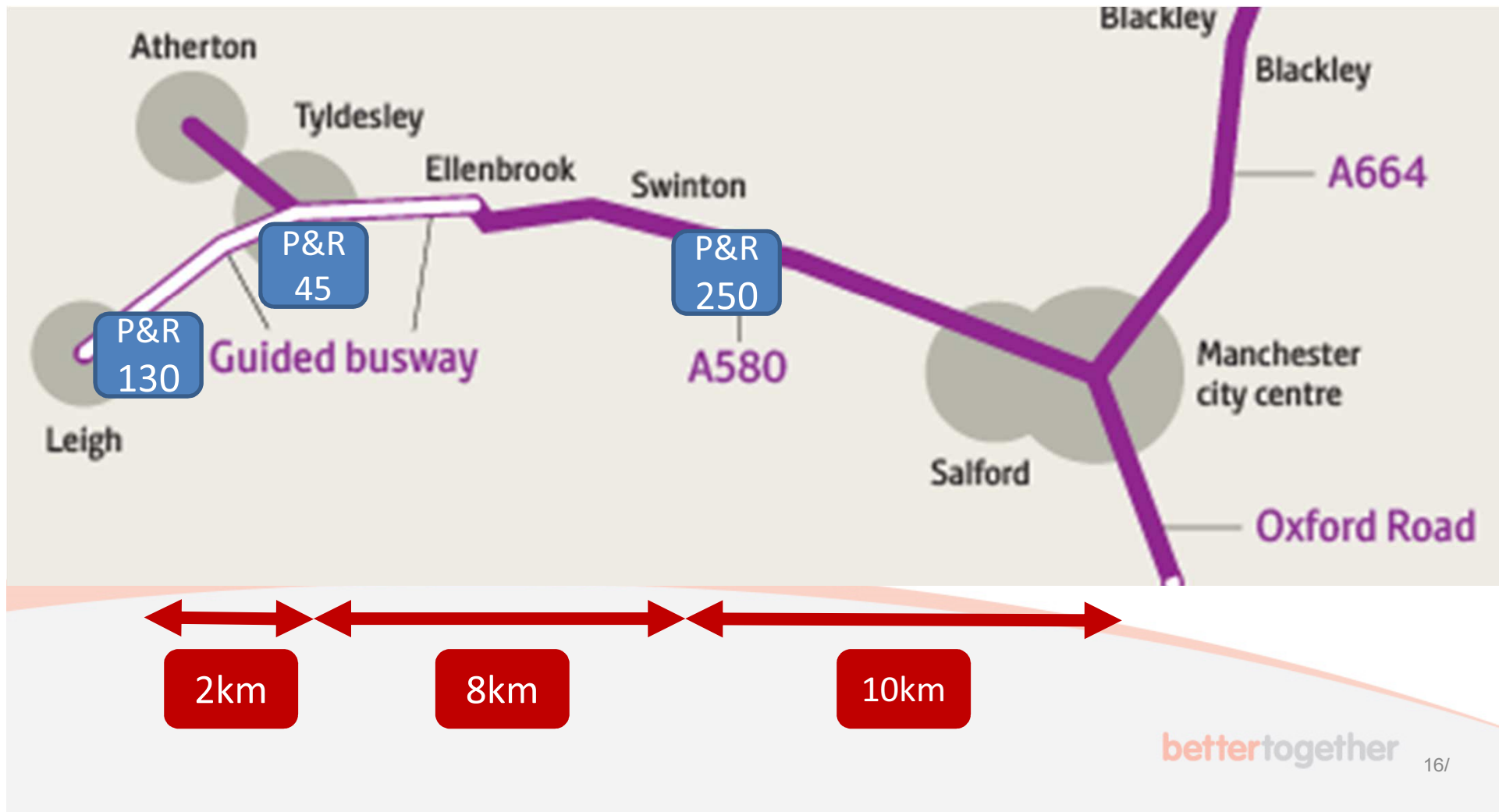


bus service

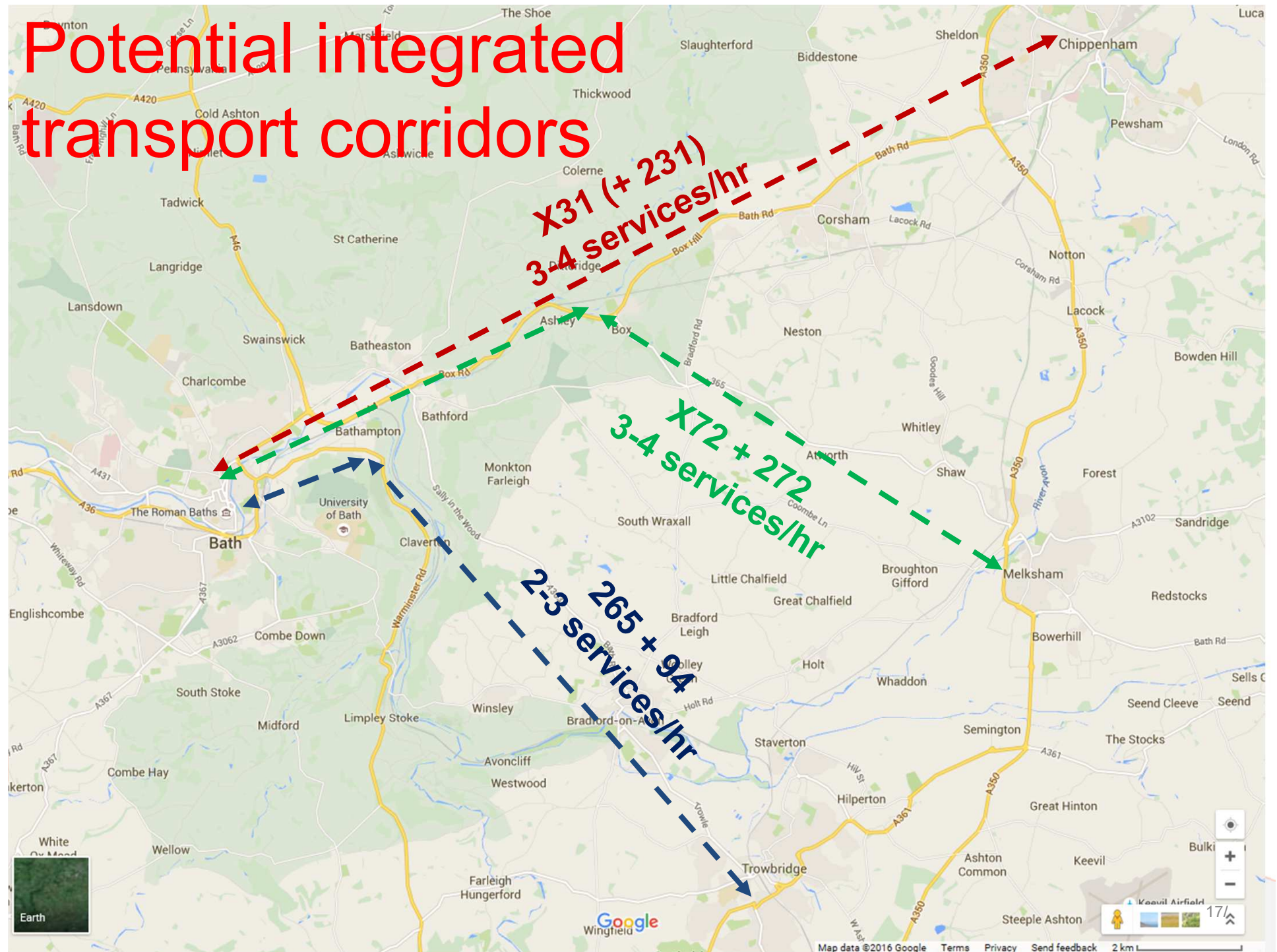


user-origin

Leigh-Manchester Busway



Potential integrated transport corridors



Conclusion: transfer from car to public transport early in the journey:



- Uses roadspace more efficiently
- Reduces carbon emissions from road transport
- Reduces household exposure to high transport costs
- Increases patronage for established or enhanced medium-range public transport

–Which benefits residents of rural areas and small towns without a car available