

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

## What do we mean by an integrated strategy?

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# Integrated transport policy

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

# 1. Serves the economy...

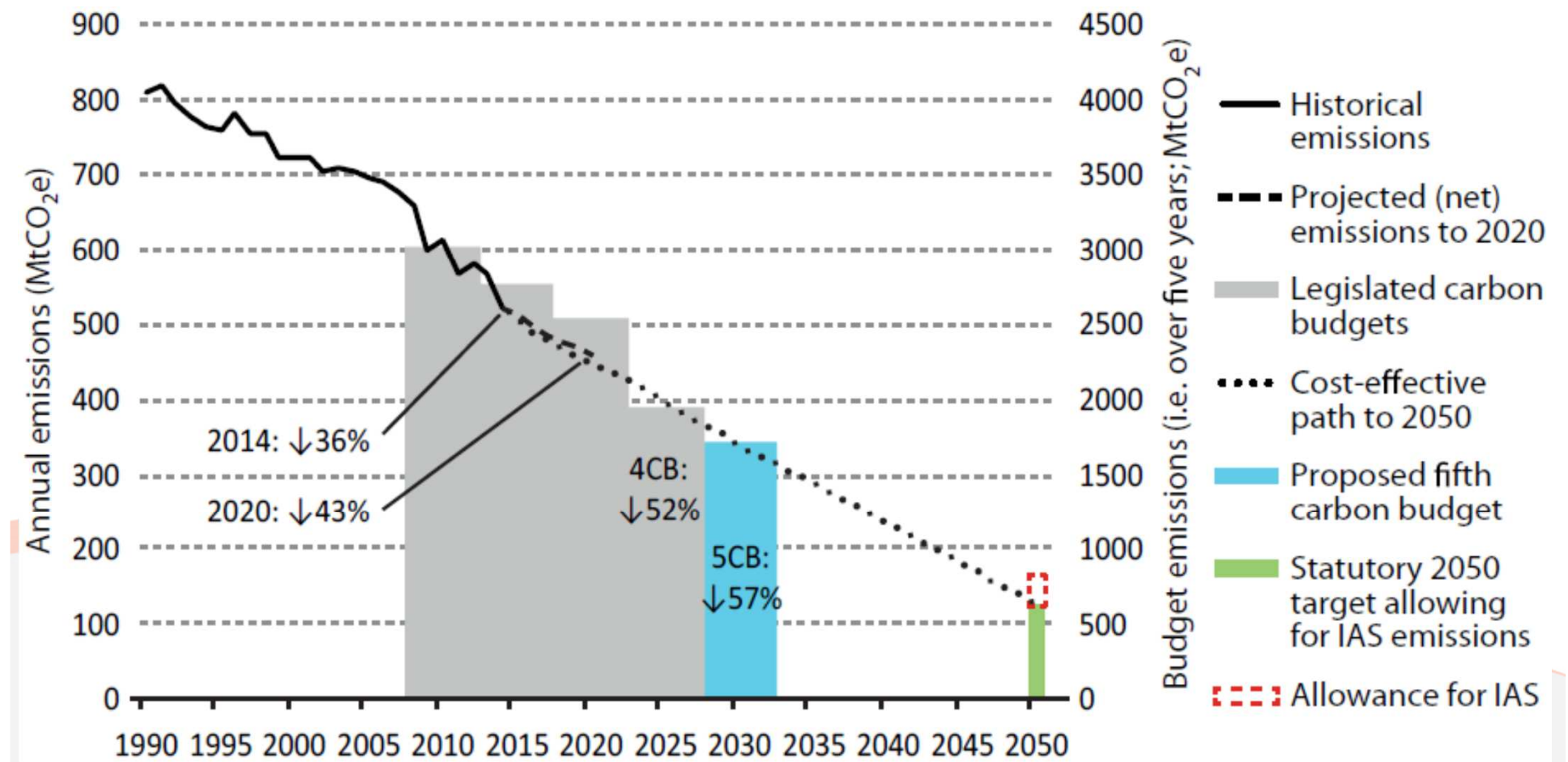
- Need to consider the long-term resilience of a car-dependent economy
  - How car-mobile will a future ageing population be?
  - How long will fuel prices stay low?
  - We cannot burn the fossil fuel stocks that are available
  - A low or zero-carbon car fleet is decades away

# Bath Enterprise Area

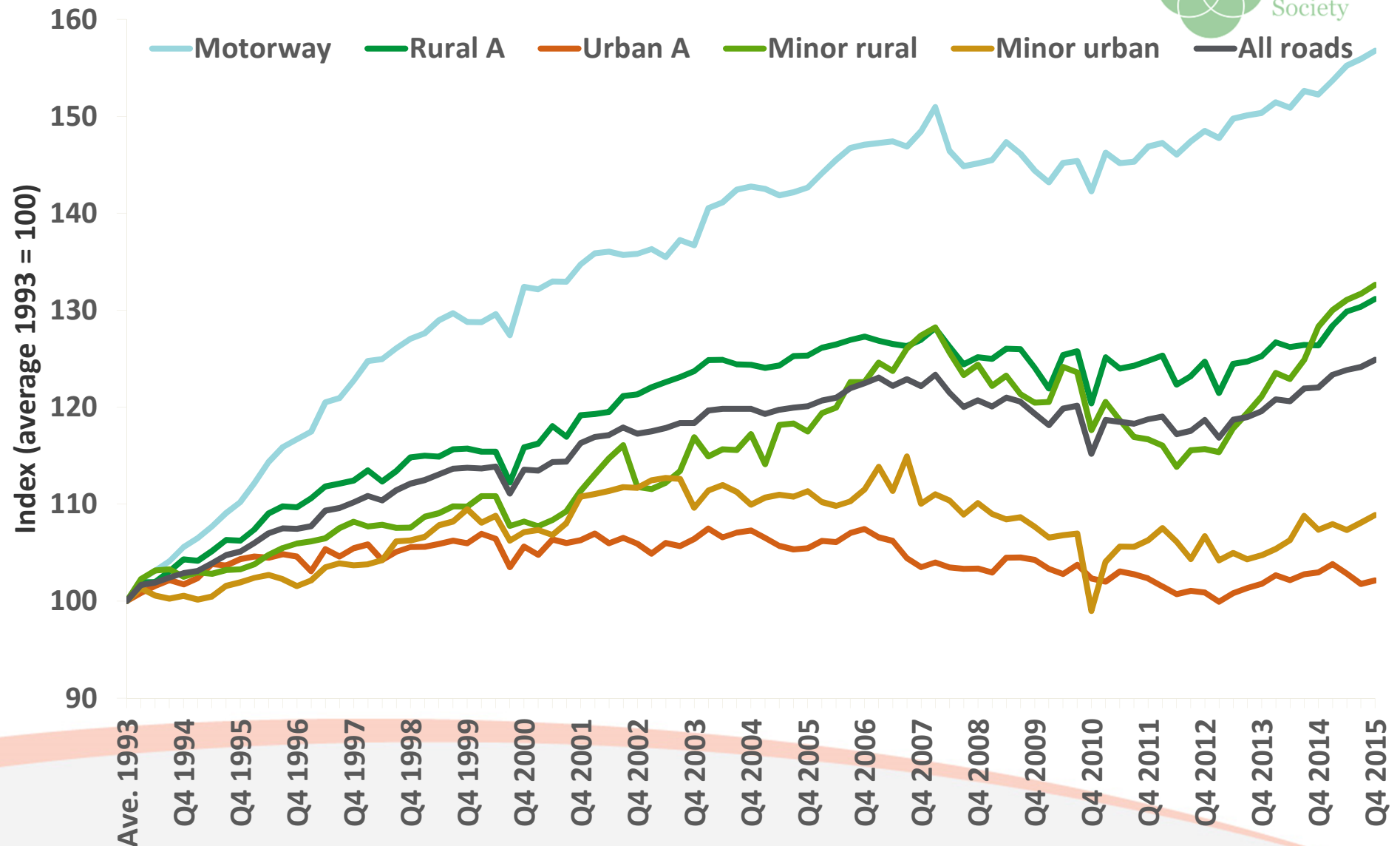
- 12,000 trips 07.00-10.00 to/from EA
- 1,000 assumed to be trips from P&R sites
- 2% of trips to EA from East P&R if provided

## 2. Respects the environment...

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

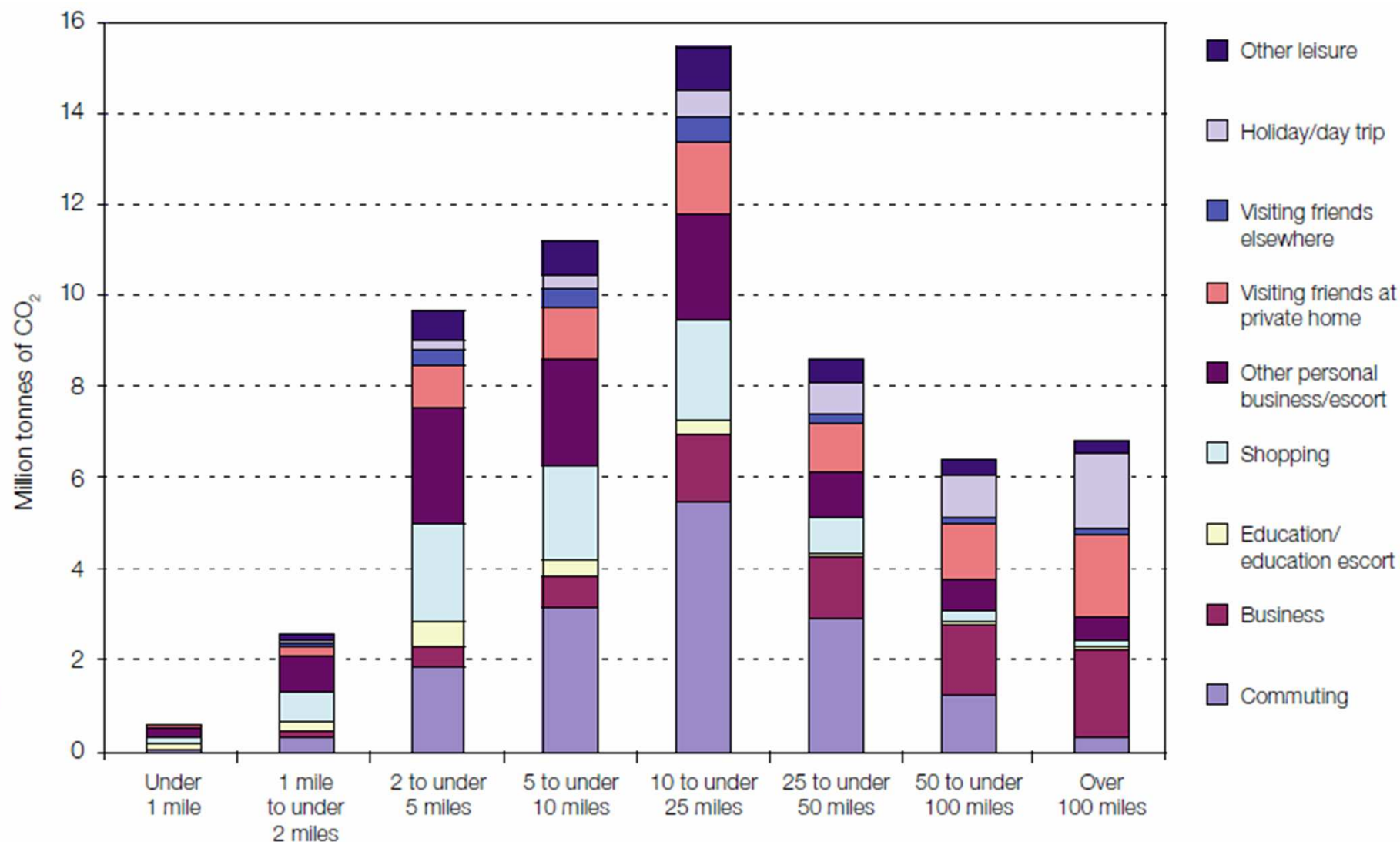


# Traffic still growing outside urban areas



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

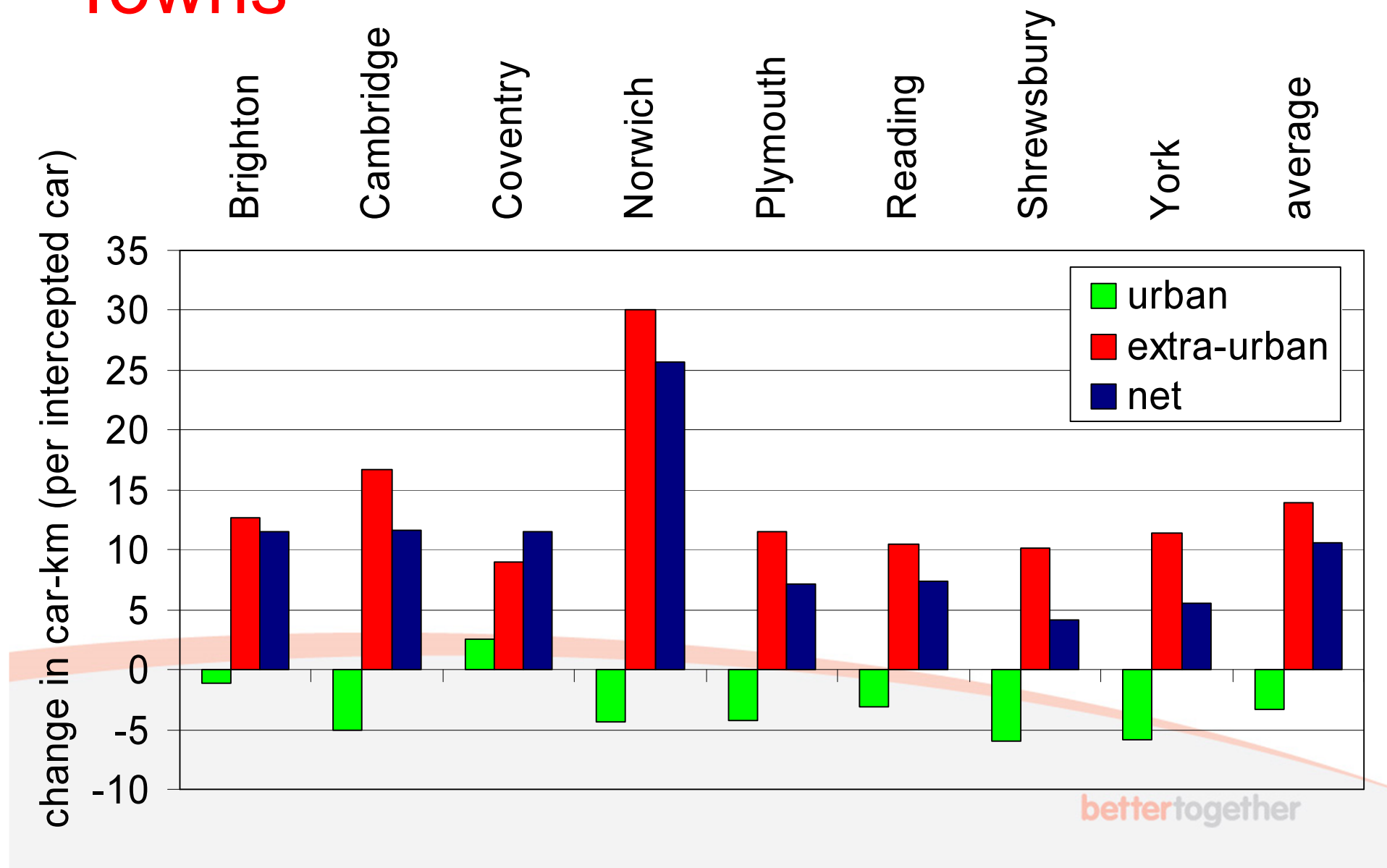
# Evidence from several English P&R schemes since 1976:



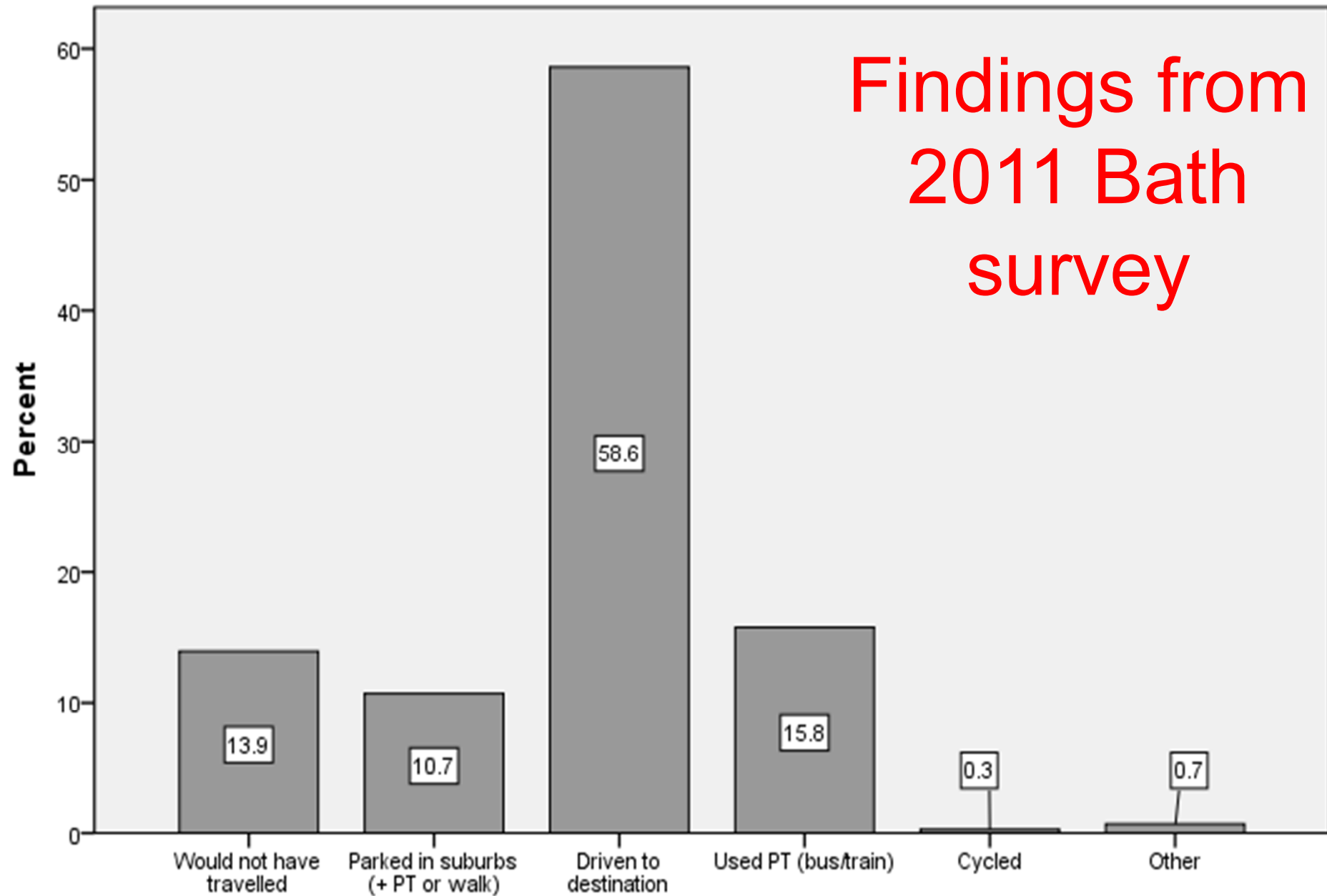
- Parkhurst (1996) **5-40%** of P&R trip-makers had actually used public transport before switching to P&R
- Meek et al. (2011) **9-41%** of P&R trip-makers perceived public transport as alternative



# Overall Traffic Effects for Eight Towns

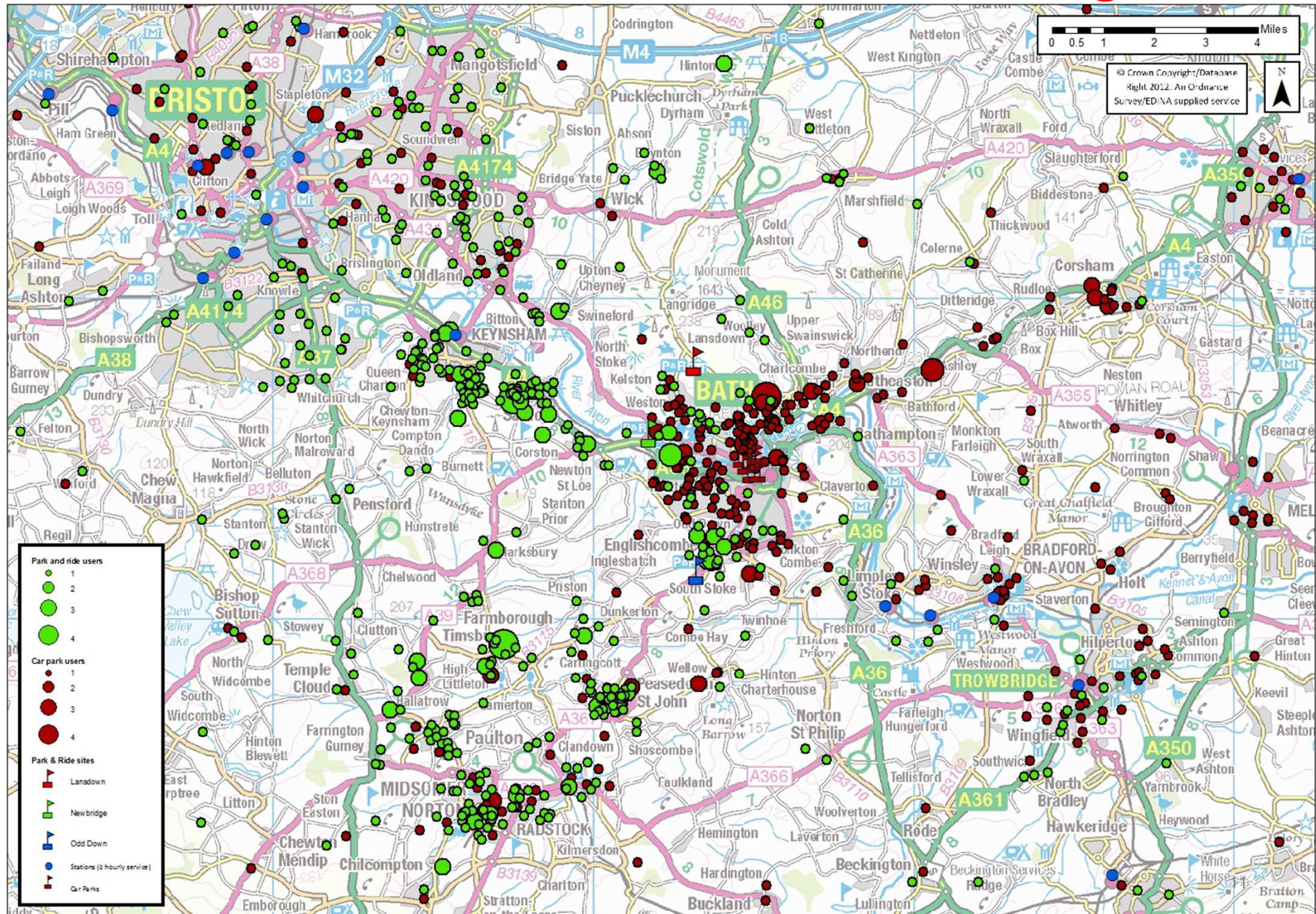


## P&R user most likely alternate access to destination





# Bath P&R and Car Park User Origins





# Air Quality: Uncertain Influence



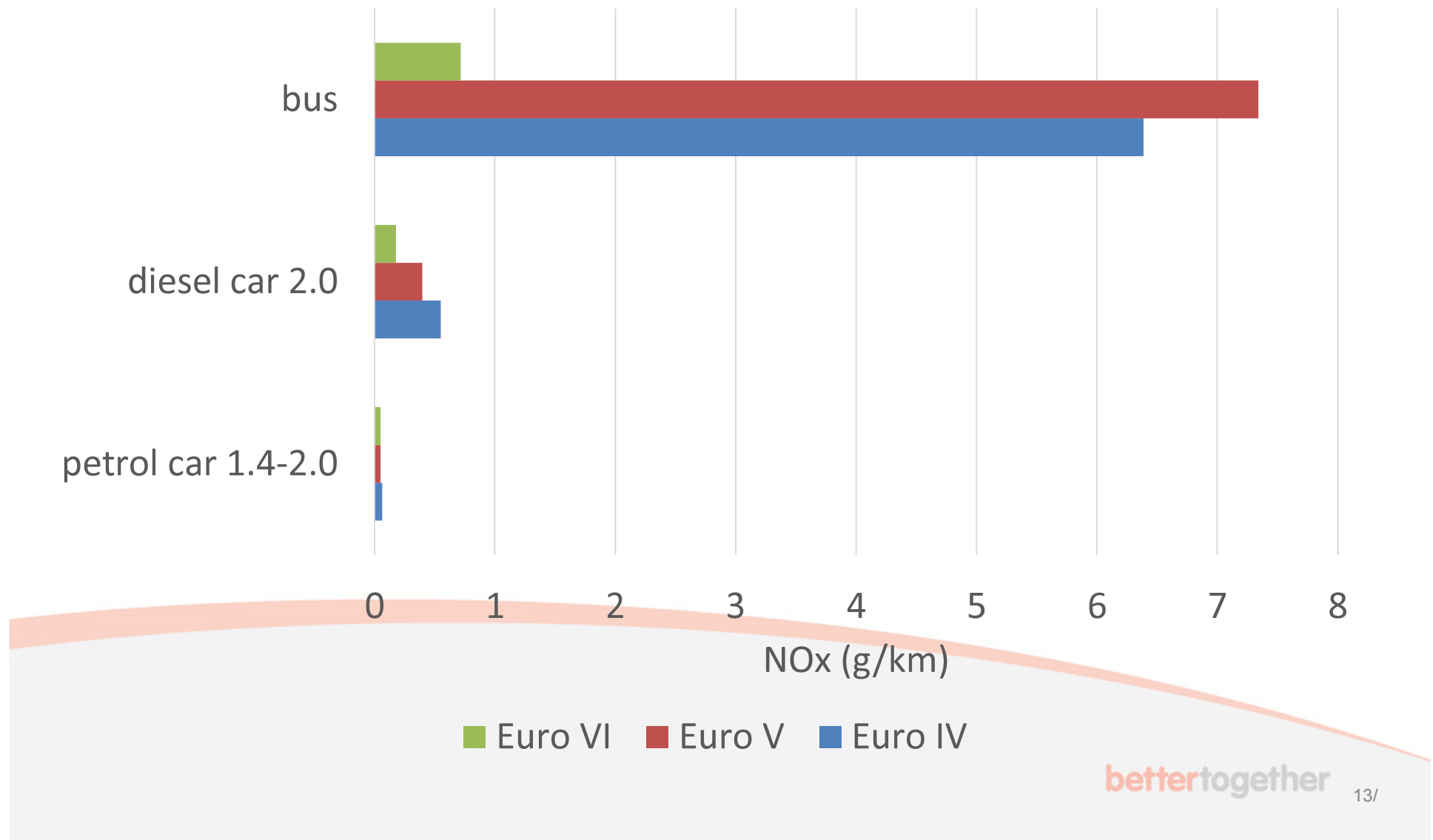
## Potential Inbound Car Trips Avoided

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

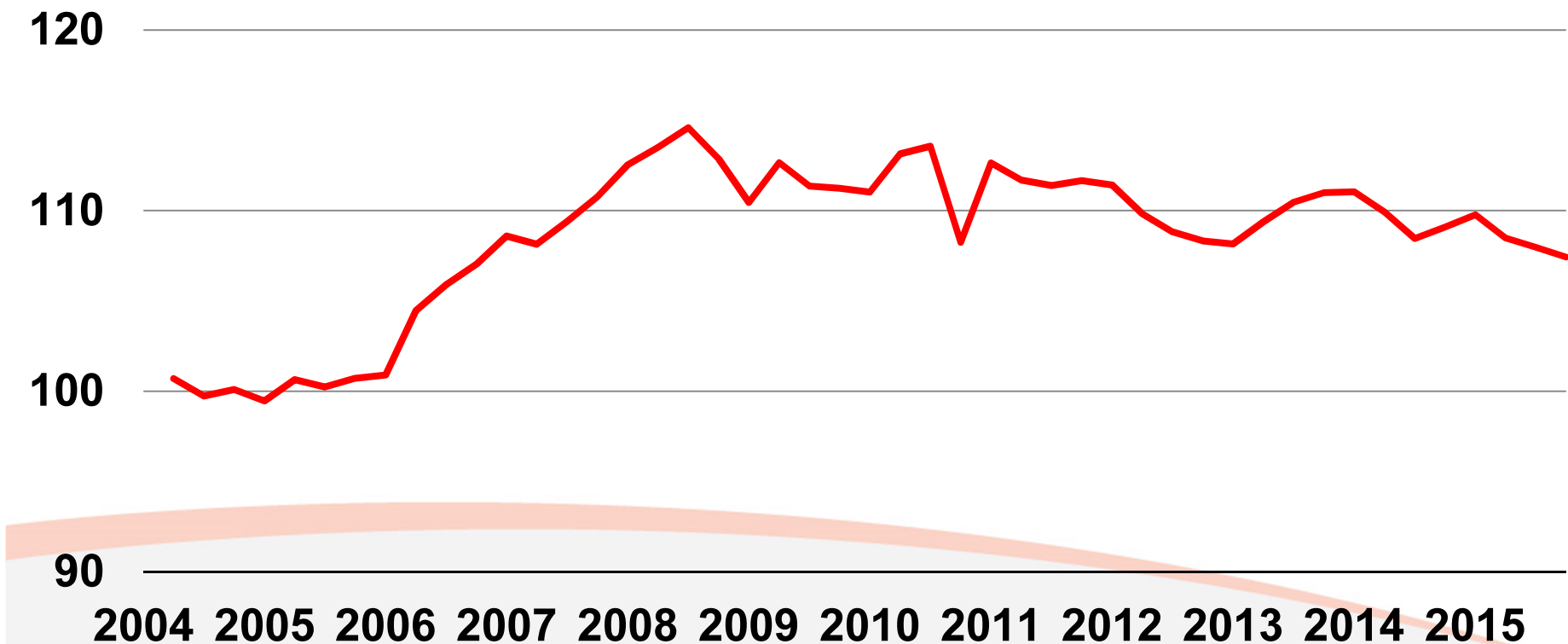
- 12-15 min. frequency
- 24-30 one-way 07.00-10.00
- 96-120 one-way in 12-hour period
- 1 bus every 6-8 minutes

# Oxides of Nitrogen Emissions per Vehicle Type



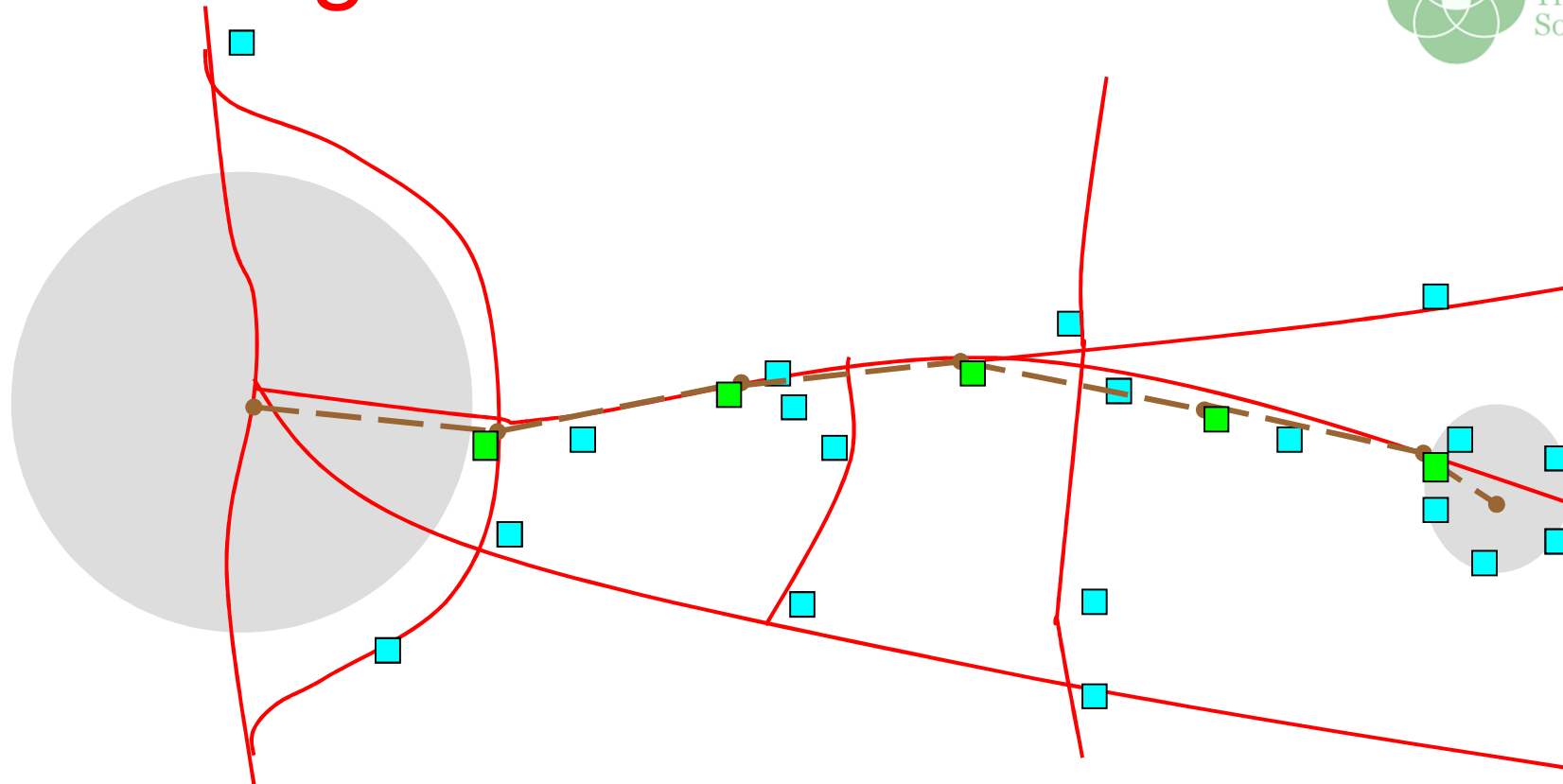
### 3. Connecting rural areas...

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



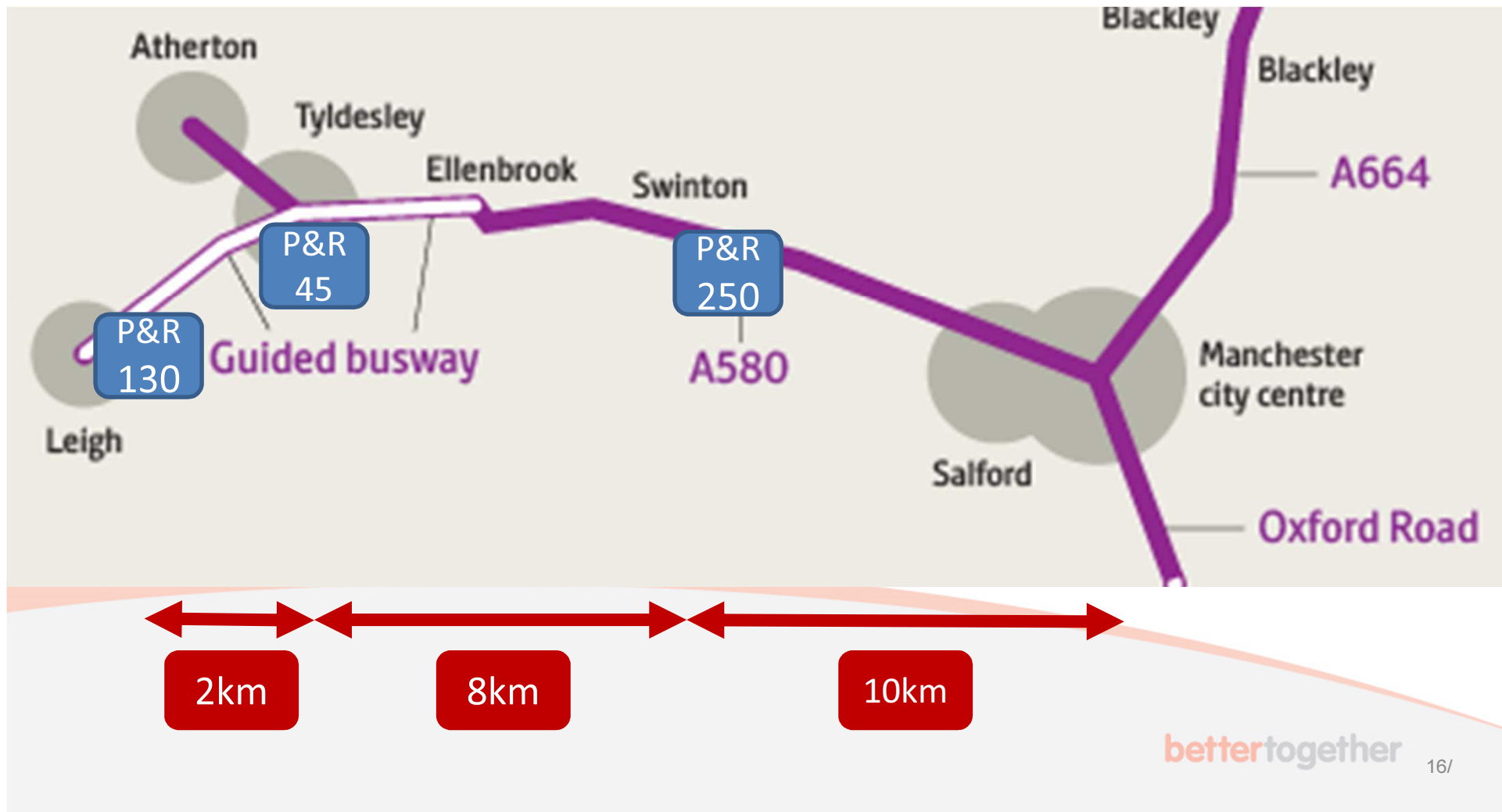
bus service



user-origin

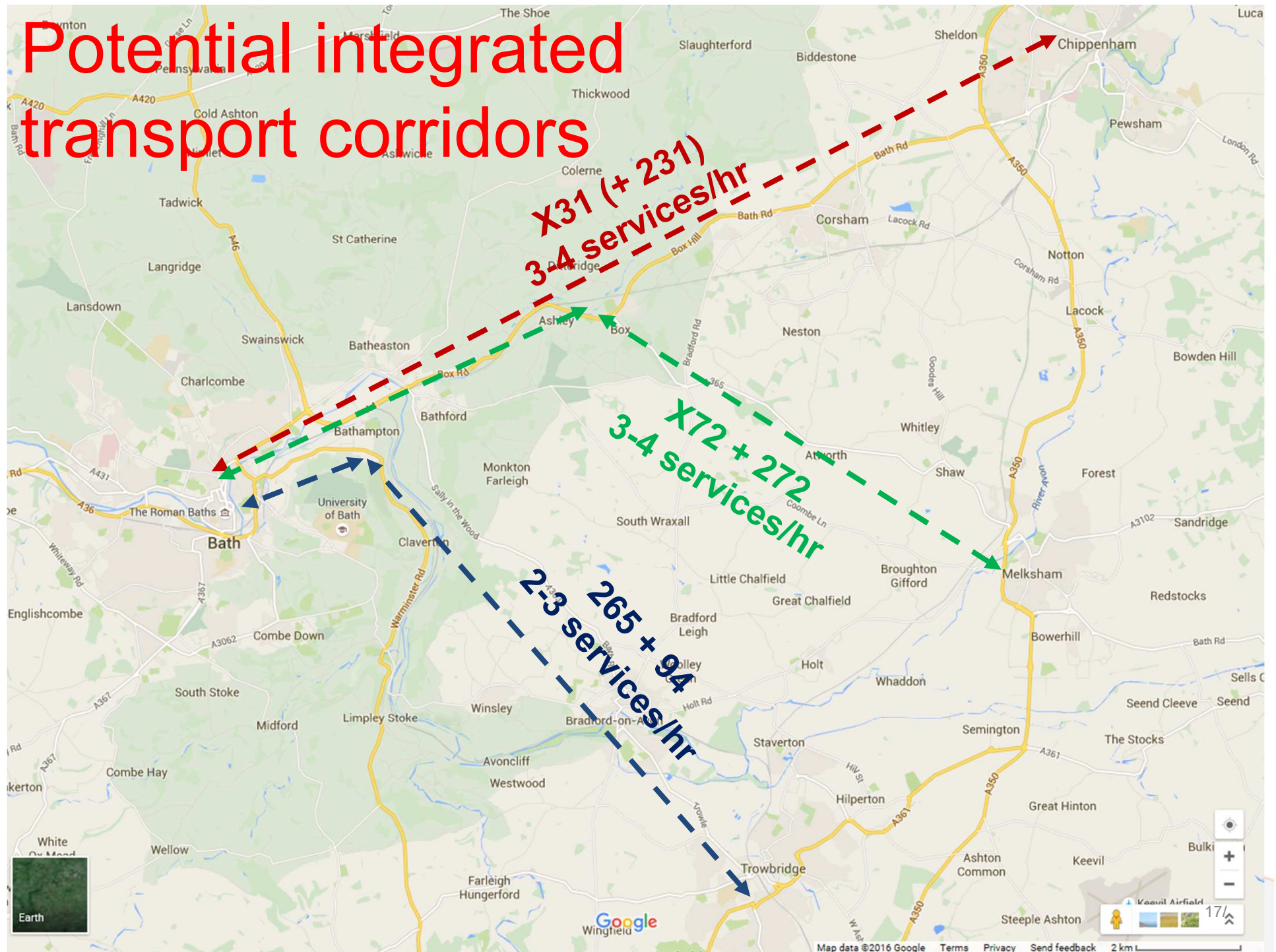
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# Leigh-Manchester Busway





# 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