

Sustainable urban mobility: prioritizing non-motorized transportation and public transport

São Paulo Mobility Week: How to untie the knots of mobility

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Un-sustainable mobility

1. Endangers the survival of humans
2. Reduces life expectancy or other basic health indicators
3. Causes species extinction or violates human rights
4. Reduces quality of life

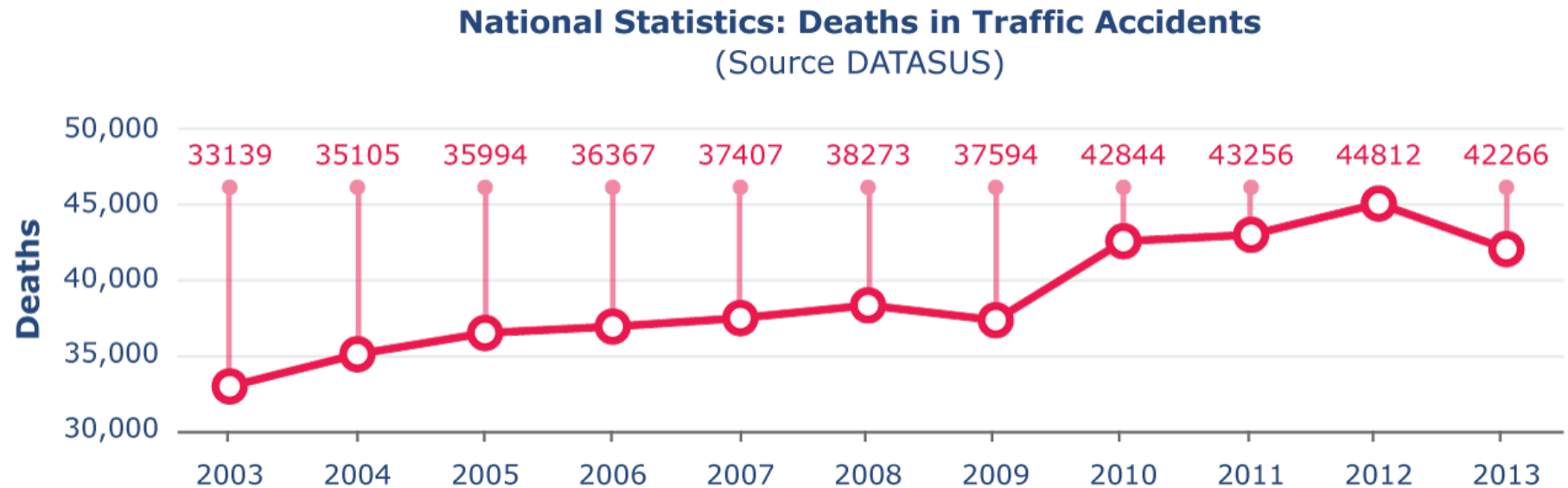
Marshall and Toffel's Sustainability Hierarchy

Congestion



Accessibility





4.8 deaths per hour in Brasil

Up to 9 deaths per day in São Paulo

Air pollution





London vs São Paulo



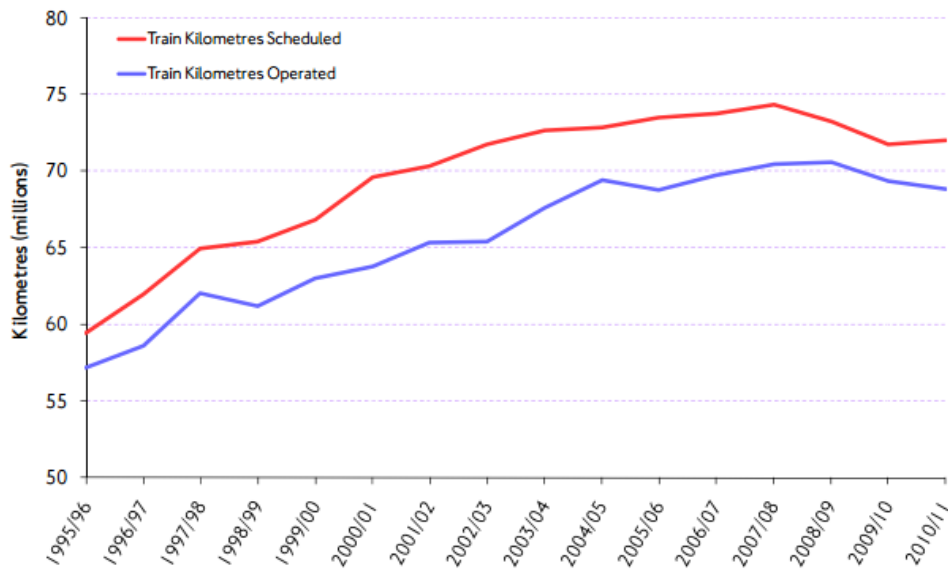
	London	São Paulo
Founded	43	1554
Population	8,600,000	12,000,000
Area (km ²)	1,572	1,521
Density	5,471	7,890
Cars	2,600,000	5,000,000
Cars per person	0.30	0.42
Length of metro lines (km)	402	78.4

Lessons from London

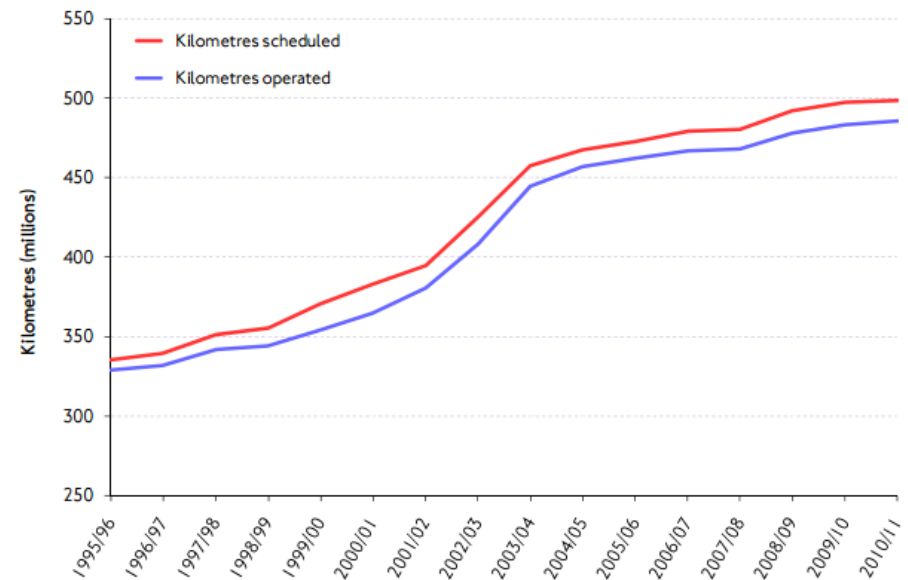
- Options for walking, cycling, buses and rail transport **must** be available otherwise people will not leave their cars
- In London, we have a congestion charge to encourage people not to drive into the city centre (~US\$15, R\$50) + parking costs
- It is cheaper, faster and easier to take public transport

1. Make public transport more accessible

London Underground train km



London bus km

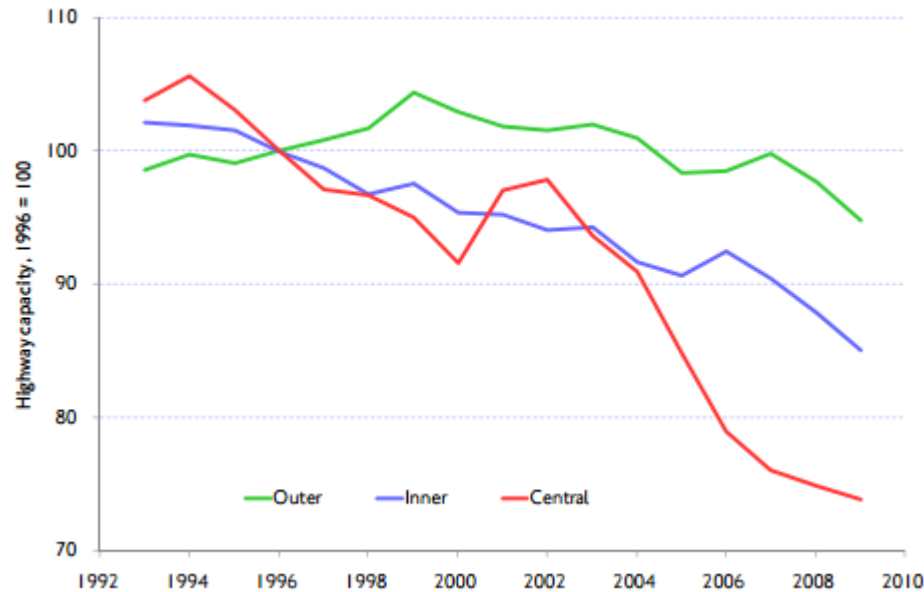


Capacity, frequency, speed, accessibility

2. Provide road space to buses and cycles

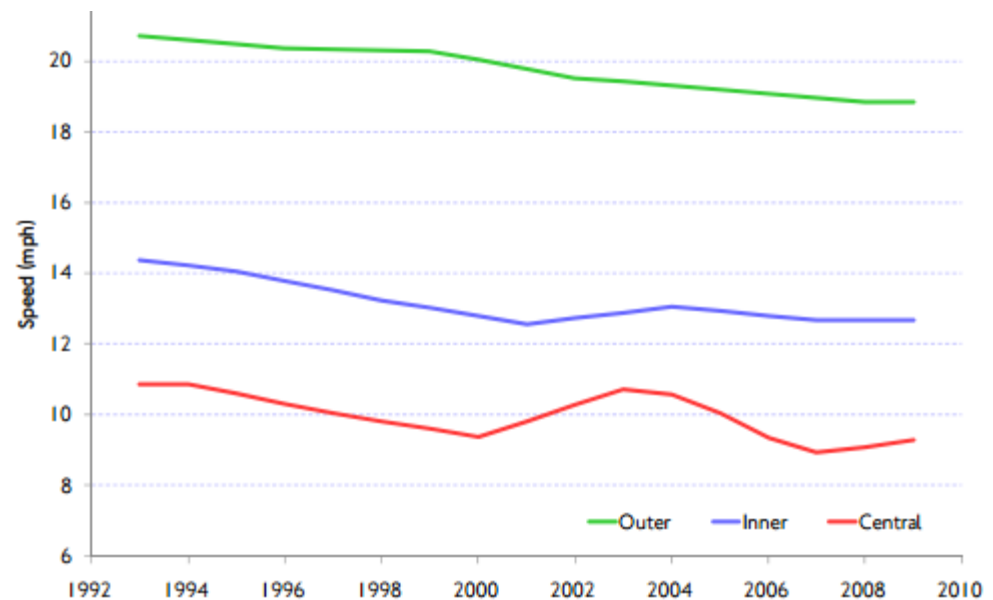


3. Slow down the cars

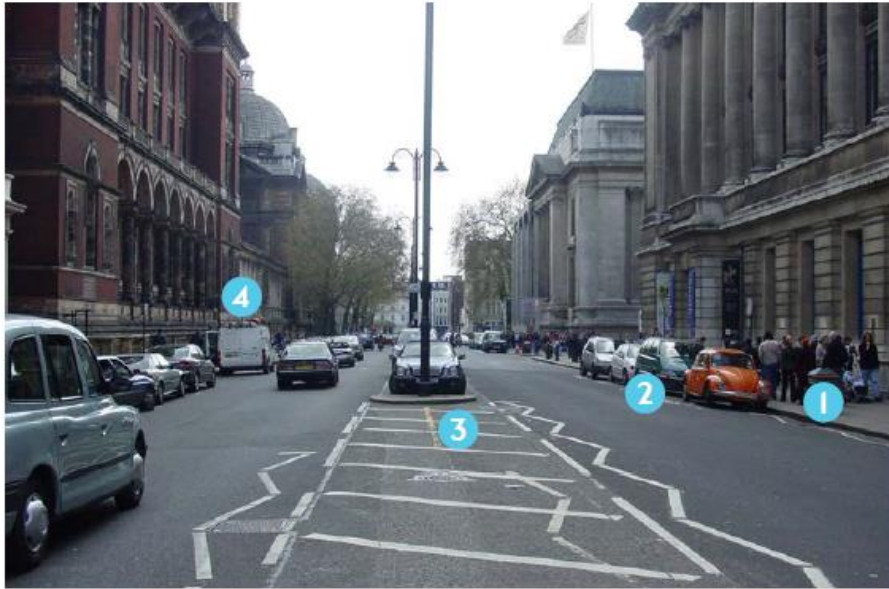


Road capacity has reduced

Less space for cars leads to slower speeds



4. Make streets more friendly



Before

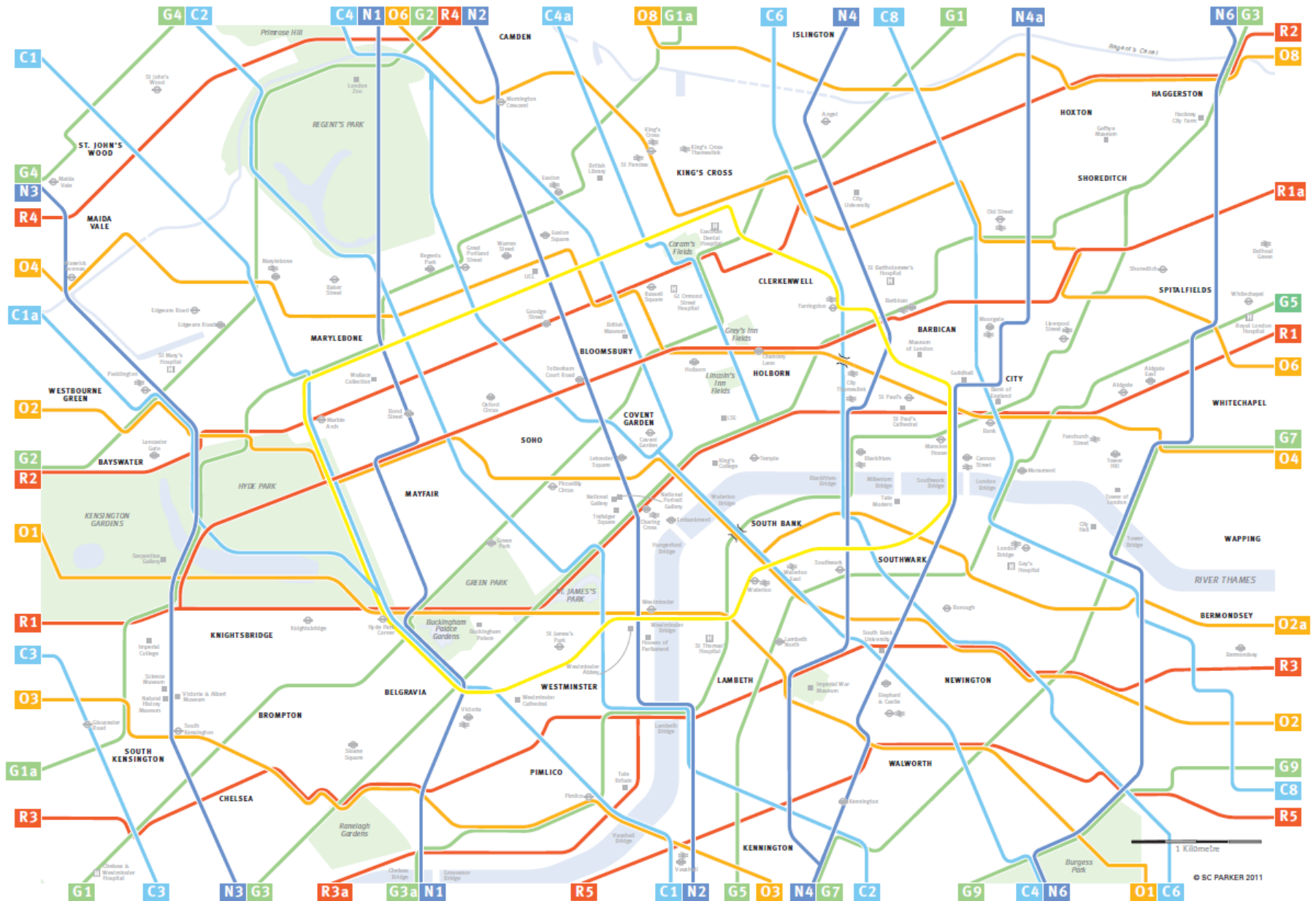
1. Street furniture obstructs narrow footway
2. Car parking impedes crossings
3. Road markings create visual clutter
4. Material choice and design creates poor setting for historic buildings



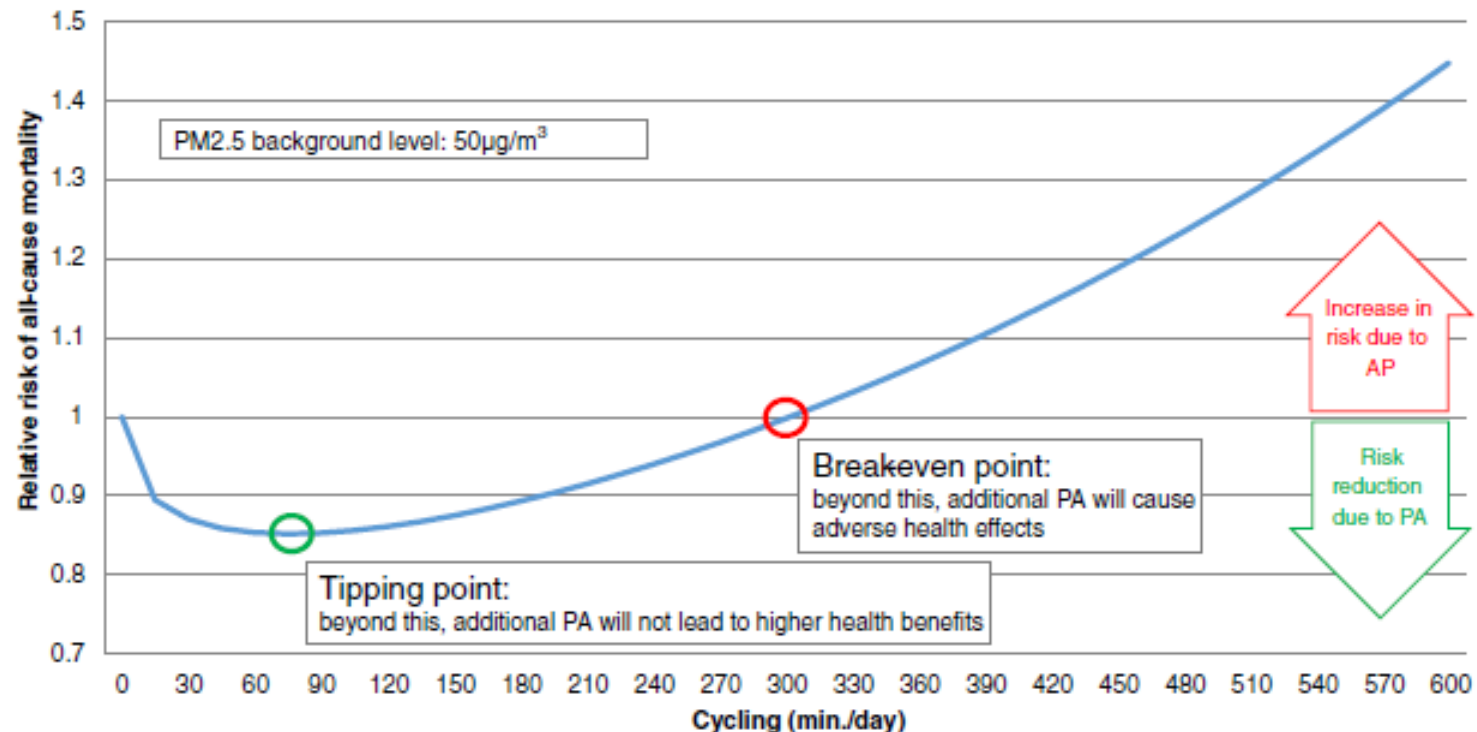
After

1. Granite paving setts applied in bold pattern across entire area to create shared surface
2. Drainage channel, corduroy paving and bollards define shared space
3. Inspection covers seamlessly integrate with paving
4. Art, seating and car parking provided in street furniture zone
5. Street furniture and equipment use consistent colours

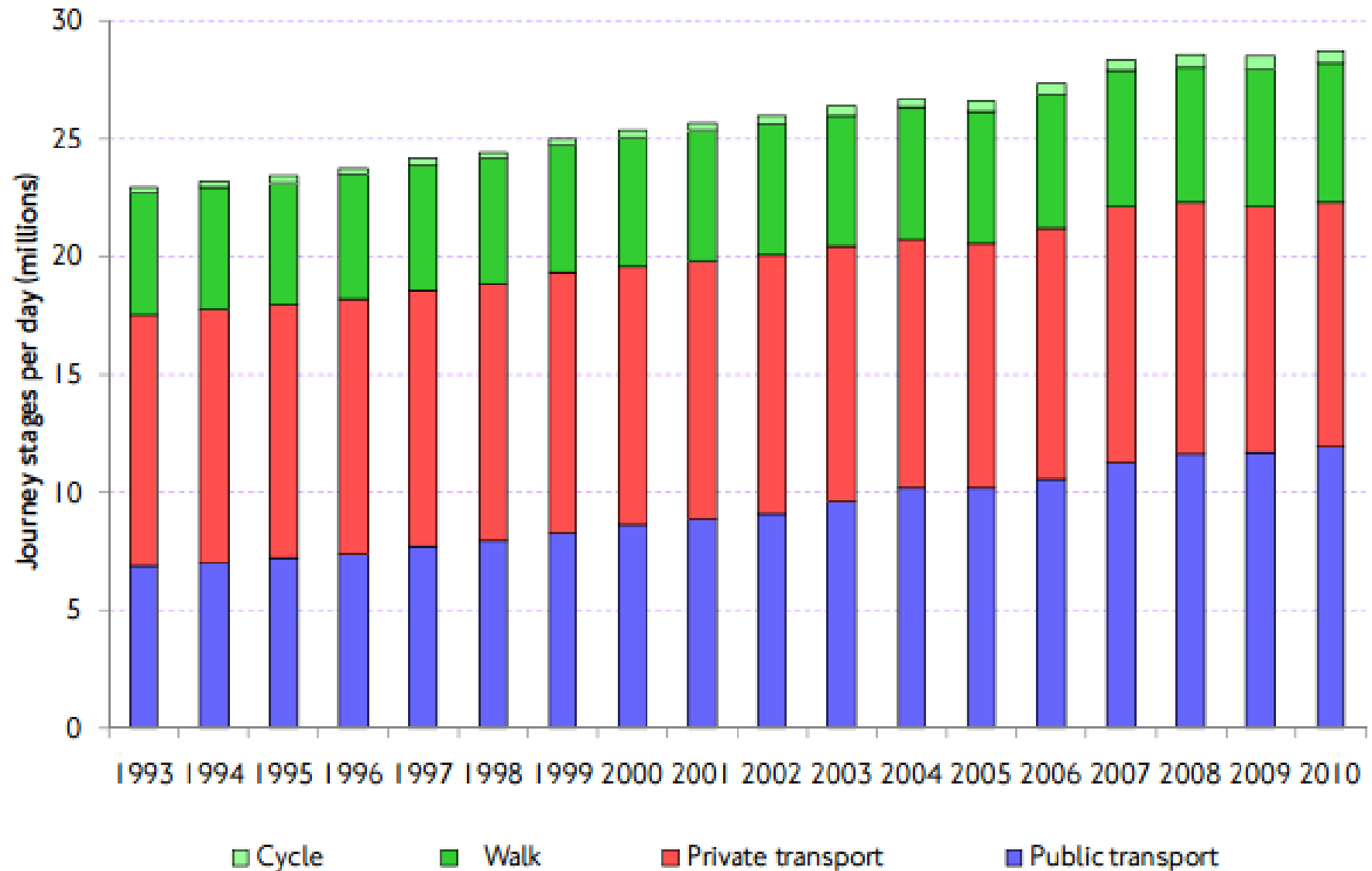
5. Provide information on cycle lanes



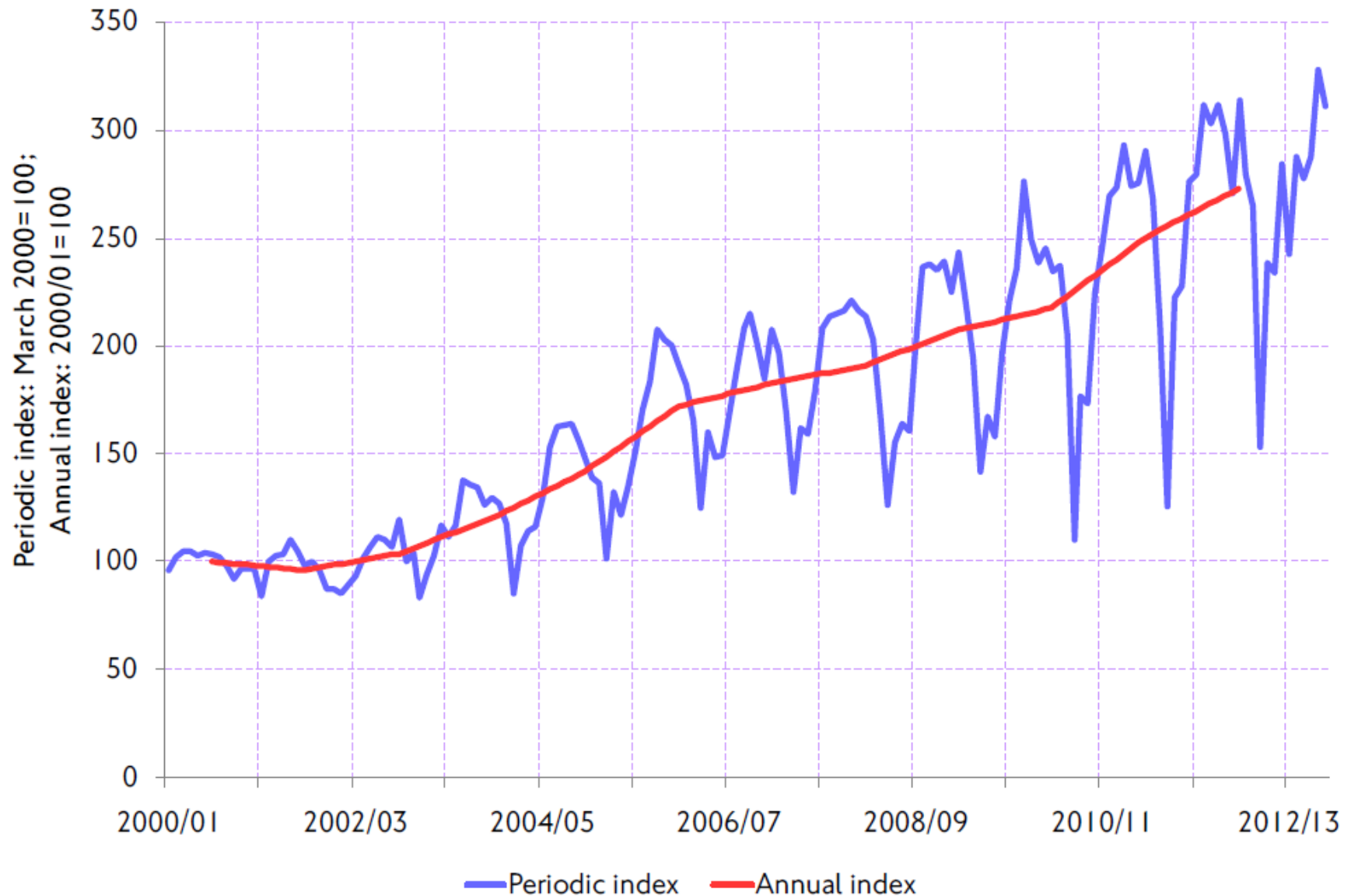
6. Educate about health benefits of activity



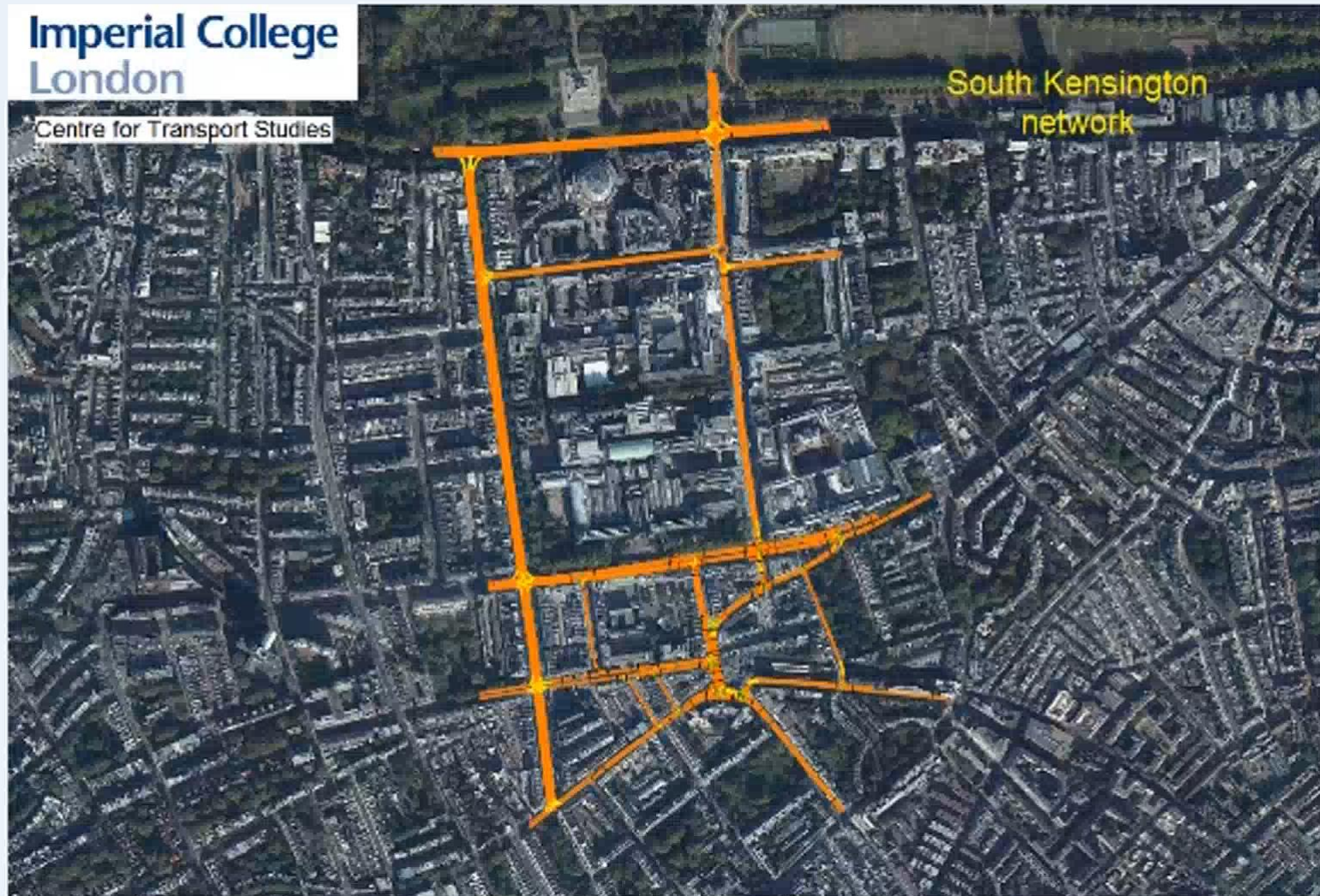
Result: Growth in mobility and reduced car use



Result: Cycling in London is increasing



The future of public transport?...



Summary

Make it cheaper, faster and easier to take public transport than drive a car

1. Make public transport more attractive
2. Provide road space to buses and cycles
3. Slow down the cars
4. Make streets more friendly
5. Provide information on cycle routes
6. Educate about health benefits of personal activity

Thank you for listening!

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