

Brussels: going into orbit?

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Stockholm Environment Institute

25th June 2012

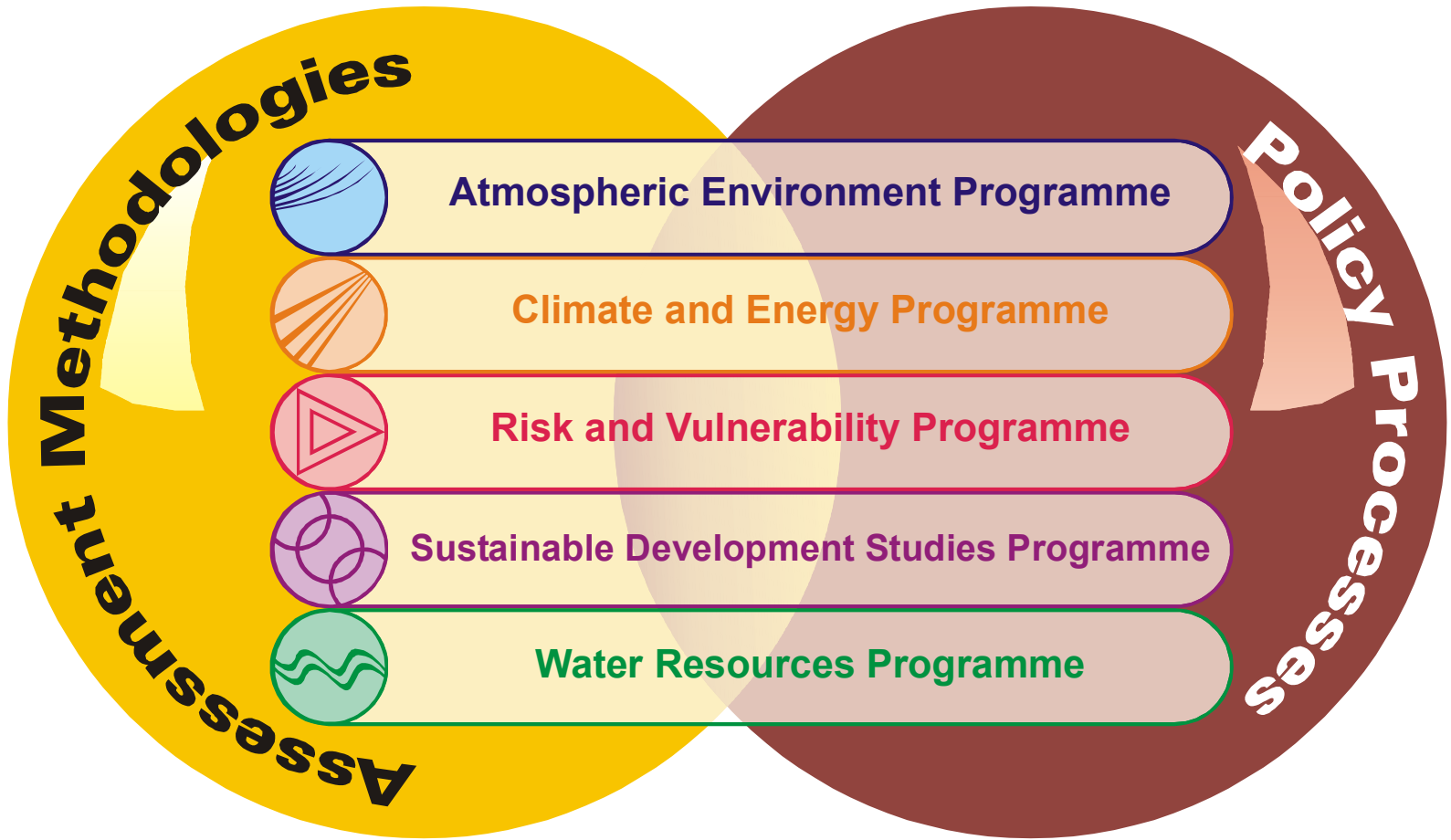
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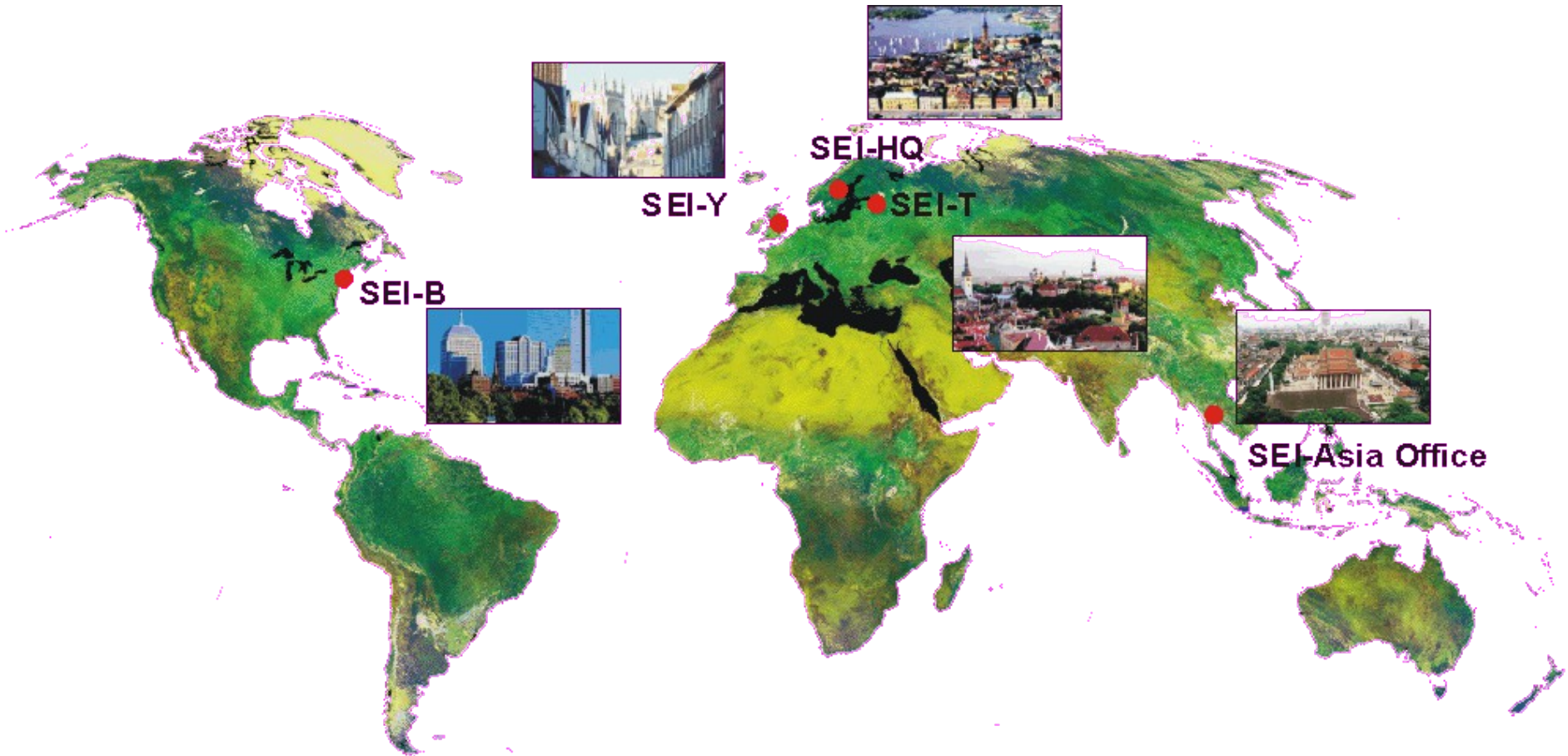


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The SEI Centres



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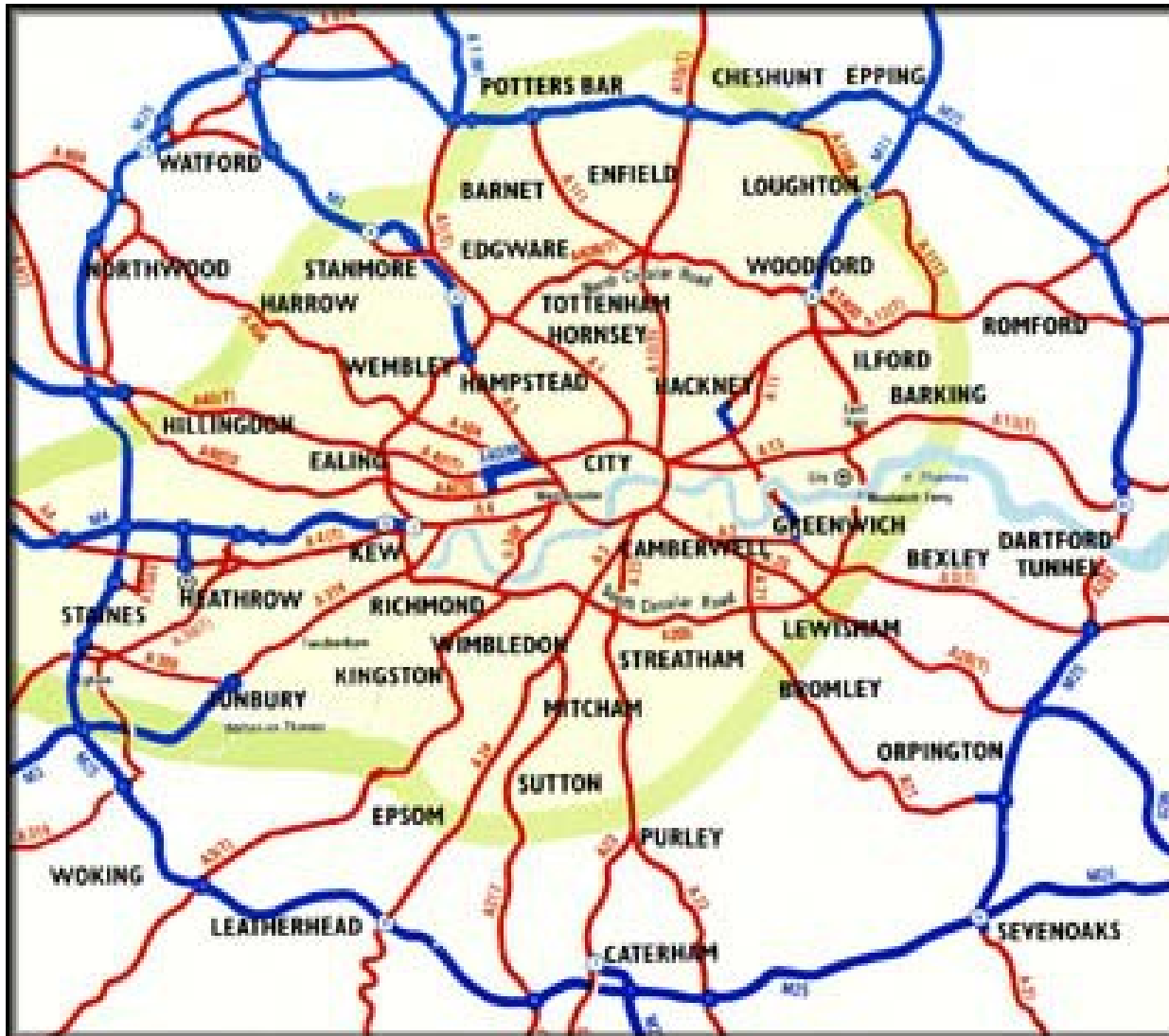
SEI-Asia Office

29th October 1986



M25

- 117 miles/188kms
- Dual 3-lane
- Exceeded design capacity within first 12 months
- 1993 traffic level was 200,000 vpd (88,000 design capacity)
- 1990 decision to widen to dual 4-lane
- 2005 dual 5-lane and dual 6 lane sections







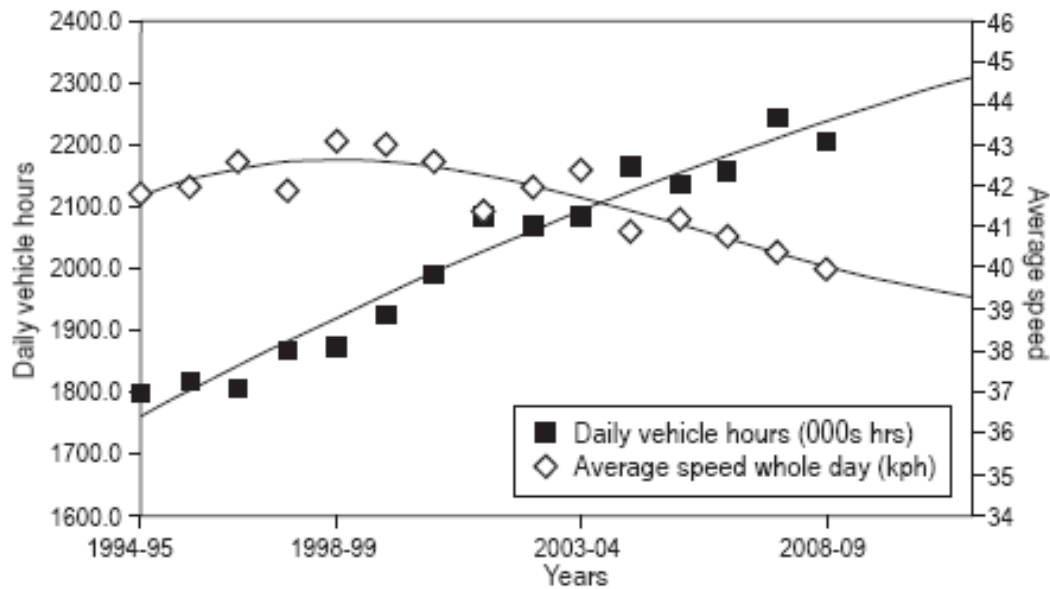


Melbourne Link Toll Roads

- Despite constant road building activity new road building around Melbourne traffic speeds have declined and time savings have not materialised
- Following the construction of CityLink there was no overall reduction in travel time..there was an increase

Low, N.P. and Odgers, J. (2012) 'Rethinking the cost of traffic congestion, lessons from Melbourne's City Link toll roads', *Urban Policy and Research*, 30/2: 189-205.

Melbourne Traffic (1)



Melbourne Traffic (2)

Variable	Base Case value forecast 2001	Actual value reported 2001 following opening of City Link
Average travel speed across urban road network (kms per hr) ^{1, 2}	43.3 ¹	42.0 ³
Total DVH on the urban road network: (thousand hours)	1963.8 ²	2039.5 ³

Newbury Bypass

- 14kms of dual 2-lane road
- Designed to remove through traffic from local roads
- Opened 1998
- Traffic on old route fell by 28% but then grew again
- Corridor traffic grew by 50% 1997-2003

What is going on?

- New roads generate new traffic (SACTRA, 1994)
- Law of constant travel time (Metz, 2008)
- Downs-Thompson Paradox (Mogridge, 1990)
- Long run outcome of expanding urban road systems is to make congestion worse (Downs, 2004)

THE LAW OF PEAK-HOUR EXPRESSWAY CONGESTION

Accession Number:

00818387

Availability:

Eno Transportation Foundation

1250 I Street, NW

Washington, DC 20005 USA

Find a library where document is available

Order URL: <http://worldcat.org/issn/00410713>

Peak hour traffic congestion will grow to meet maximum capacity

Some good news

- Traffic is not growing
- Cities have discovered the benefits of taking roads out rather than building new ones

Figure 2.1 Patterns of traffic per person in Australia and other countries

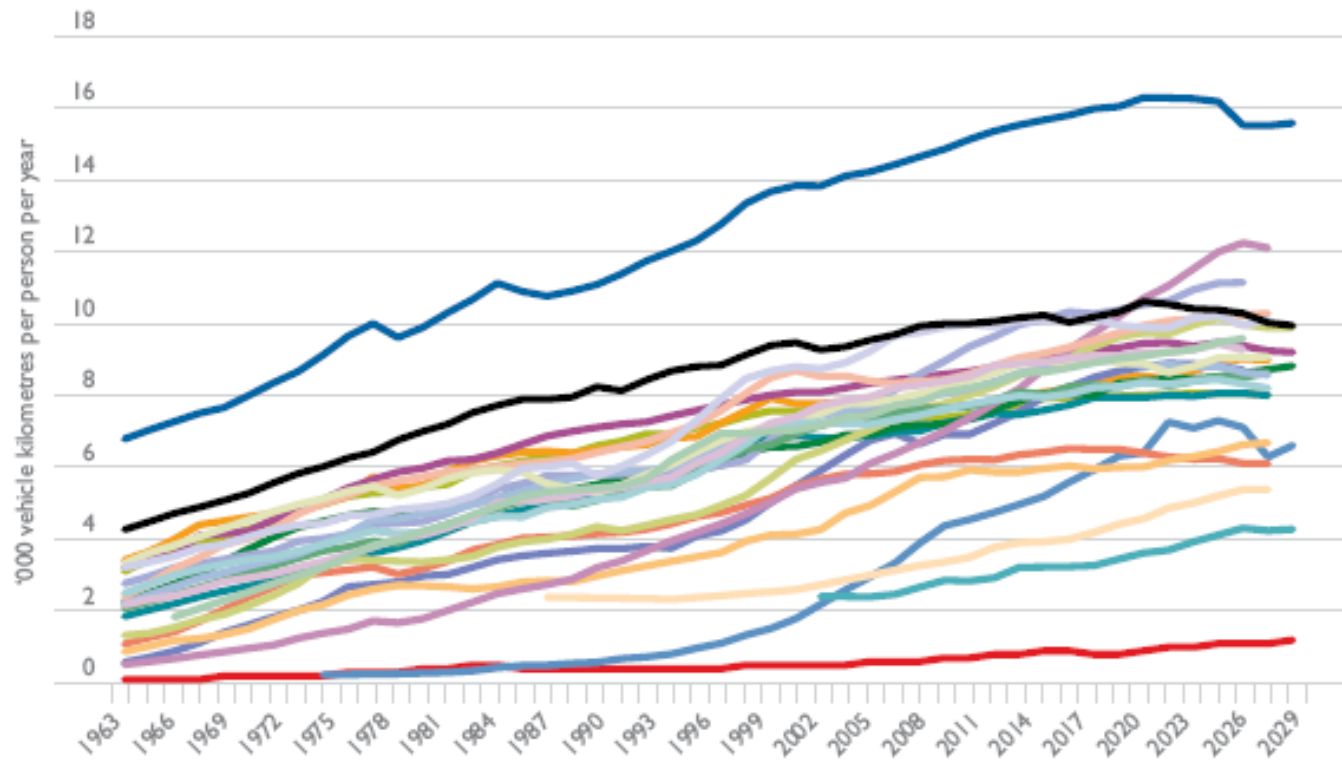
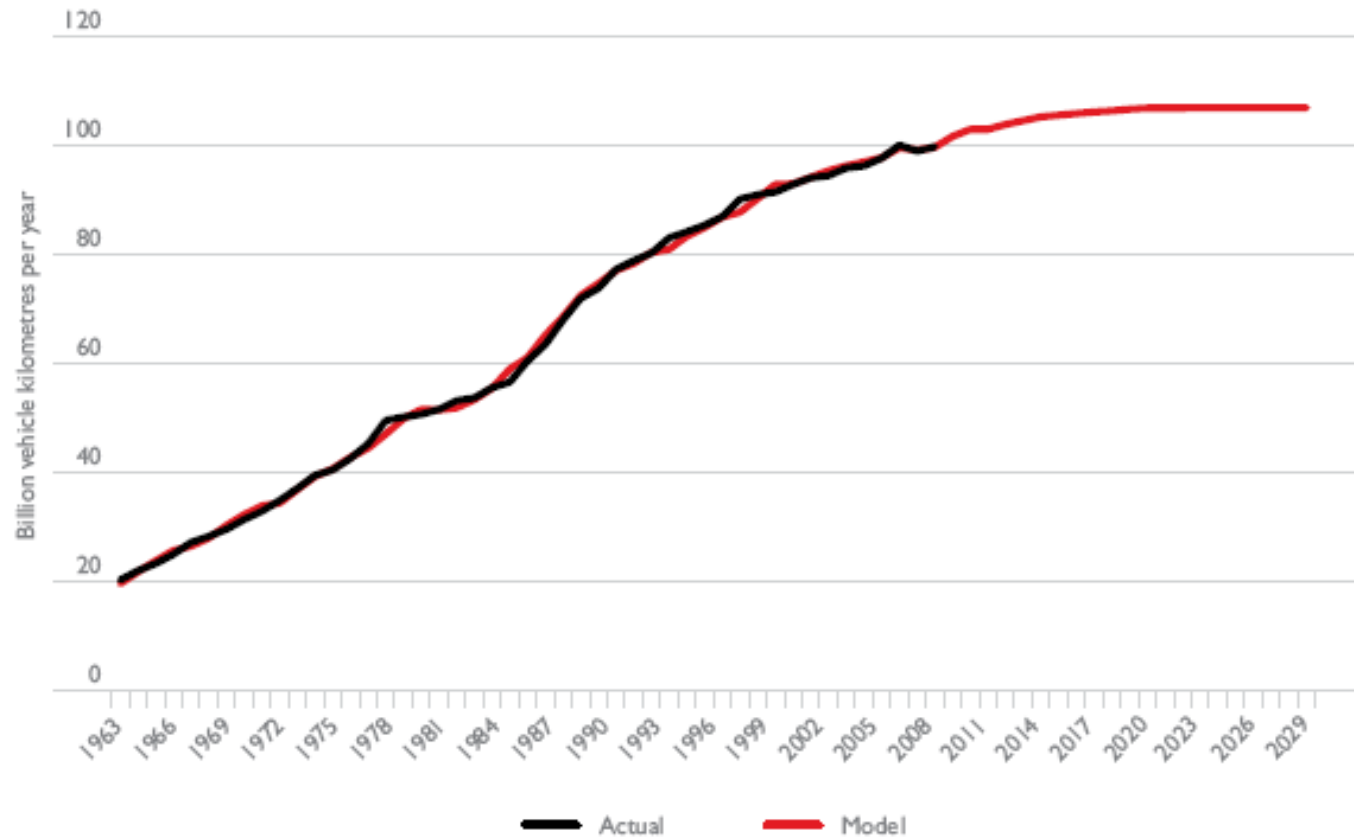


Figure 2.15 Actual/predicted aggregate traffic levels in Belgium



Seoul

Swopping freeway for people space -Restoration of ChenggyeCheon River



A strong element of nature through the heart of down-town Seoul.

Revives an important part of Korea's historical and natural heritage.

Expected to become Seoul's major tourist attraction.



Improving the environment for both living and business.



Before: Harbor Drive cut off the downtown waterfront from the rest of the city.
Image: City of Portland Archives, 1974



Today, downtown Portland is now linked to the waterfront, and a new park provides residents access to the Willamette River Waterfront.
Image: Bobbie Nicks

What next?

- Congestion charging
- World best public transport (e.g. Zurich)
- Spatial planning
- Cycling e.g. 15% of all trips every day in Berlin