

Errata (4 December 2023)

Chapter 7

Page 138-139

Original text:

This phenomenon is quite common in day-to-day motorway traffic operations. Figure 7.10 shows an example of the A15 motorway in the Netherlands. The picture clearly shows the frequent occurrence of these spontaneous transitions from synchronized to jammed flow, resulting in numerous upstream moving wide moving jams. Note that as wide moving jams have an outflow rate which is about 30% lower than the free flow capacity, these jams are actually quite undesirable from a traffic efficiency perspective. Furthermore, they imply additional braking and acceleration, yielding increased fuel consumption and emission levels.

Should be:

This phenomenon is quite common in day-to-day traffic operations. Figure 7.10 shows an example of the A4 motorway in the Netherlands. A bottleneck can be identified around km 35. Note that the traffic direction is in the decreasing direction of road distance (i.e., the indicated kiloposts), hence from km 40 to km 32; in this figure the traffic direction is bottom-up. One can find stop-and-go waves propagating backwards (upstream) at approximately 18 km/h. Note that as stop-and-go waves have an outflow which is about 30% lower than the free flow capacity, these jams are actually undesirable from a traffic efficiency perspective. Furthermore, they imply additional braking and acceleration, yielding increased fuel consumption and emission levels.

Chapter 13

The reference to Kaldor in the main text should be 1939, not 1993.

In the reference list this should be:

Kaldor, N. (1939), 'Welfare propositions of economics and interpersonal comparisons of utility', *Economic Journal*, 49 (195), 549–552.

Missing references:

Naess, P., (2020), 'Project appraisal methods: Tools for optimizing or for informed political debate?', in: N. Mouter (eds), *Advances in Transport Policy and Planning. Standard Transport Appraisal Methods*, London: Elsevier

Rietveld, P., J. Rouwendal and A.J. van der Vlist (2007), 'Equity issues in the evaluation of transport policies and transport infrastructure projects', in M. van Geenhuizen, A. Reggiani and P. Rietveld (eds), *Policy Analysis of Transport Networks*, Aldershot: Ashgate, pp. 19–36.

Thomopoulos, N., S. Grant-Muller and M.R. Tight (2009), 'Incorporating equity considerations in transport infrastructure evaluation: current practice and a proposed methodology', *Evaluation and Program Planning*, 32 (4), 351–359.

Chapter 14

Figure 14.4 contains indicators O1 and O2 three times. However, this should be changed into O1' and O2' for the reference case and O1'' and O2'' for the policy case (as described in the text).

Chapter 15

On page 315, 3rd paragraph, the consumer surplus for the new users is twice referenced as DCS1, while it should be DCS2

On page 316, 2nd paragraph, the formula for discounting future benefits and costs should be squared in the denominator but is now written as multiplication with 2.

Figures 15.1 and 15.2 are swapped / have mismatch in their captions, leading also to wrong references (page 314, last paragraph)

Chapter 16

In the hard copy version of the book Formula 16.1 should be

$$x - \text{elasticity of } y: E = \frac{\partial y/y}{\partial x/x}$$