

THE CAMBRIDGE STATISTICS DISCUSSION GROUP

Tuesday 5th February 2008 7:15 for 7:45

Department of Applied Mathematics and Theoretical Physics,
Centre for Mathematical Sciences,
Wilberforce Road,
Cambridge

Road transport data and their uses

Richard Gibbens
Computer Laboratory

Abstract: There is an increasing quantity of road transport data that is becoming available. Both historical archives, in some cases consisting of decades worth of data, as well as new types and sources of data are being made available. In the future we can expect these new forms of data to be available in near real-time. What uses can be made of this data?

In this talk we shall illustrate how road traffic data is helping modellers grapple with the nature of traffic flows and congestion. New forms of data are also an opportunity for service providers to assist travellers and transport operators. We shall consider a specific application where historical data can be combined in a statistical model with real-time traffic data to make better predictions of journey times. Surprisingly, our findings suggest that good prediction tools can be constructed that have rather modest online requirements.

Speaker: Richard Gibbens is a Senior Lecturer in the Computer Laboratory at the University of Cambridge. He transferred from the Statistical Laboratory, Cambridge in 2001. His interests are in the mathematical modelling of networks and has wide experience with analysis and control in packet networks. Recently, he has worked on a range of data intensive applications with road transport networks. He read Mathematics at Cambridge and obtained a BA in 1983, a Diploma in Mathematical Statistics in 1984 and a PhD in 1988. From 1993 to 2001 he held a Royal Society University Research Fellowship.

Directions: The main entrance is reached from Clarkson Road by going along the footpath to the right of the Newton Institute, and turning left through the gatehouse towards the main building (Pavilion A), which has a glass front and a curved grassed roof. The main entrance is in the middle of the glass front. Free Parking is available after 5pm on Clarkson and Wilberforce Roads and by entering the site off Wilberforce Road. Admittance may be difficult after 7:45.

Provisional Next Meetings:

3rd March – Krys Kelly (MRC Biostatistics) on ‘Biology in the post-genomic era: statistical issues’.

1st April – Paul Garcia (Hertfordshire County Council).

29th April – Stephen Sharp (MRC Epidemiology).

Supper: Some members eat regularly in the University Centre before each meeting at **5-45pm**. Feel free to join them.

Subscriptions: of 1 pound are now due for attending the 2007-2008 session.

Secretary: Peter Watson, MRC Cognition and Brain Sciences Unit, 15 Chaucer Road, Cambridge CB2 7EF; telephone 01223 355294 Extension 801; E-mail peter.watson@mrc-cbu.cam.ac.uk

Take a look at our website: <http://www.mrc-cbu.cam.ac.uk/~peterw/csdg.htm>

Approved Minutes of Annual General Meeting 2005-2006

The Annual General Meeting for the year 2005-2006 was held at the MRC Cognition & Brain Sciences Unit on 3rd October 2006. Present: Ted Harding (in chair), Lia Arraiano, Margaret Corbett, Nick Galwey, Sarah Griffiths, Pamela Morris, Haidee Philpott, Krys Kelly, Matthew Ritchie, Brian Shand, Helen Tate, Peter Treasure, Peter Watson, Jinghua Zhao. **Apologies:** Mary Garratt, Ian Nimmo-Smith.

The **minutes** of the previous A.G.M. were circulated and approved.

Reports: The group finances showed a healthy balance of £250 due to reduced costs. It was agreed subscriptions should, therefore, be reduced to £1 for 2006-2007.

Election of officers and committee: Helen Tate became treasurer replacing Margaret Ely who had left with our good wishes to work in the Gambia. Pamela Morris was elected as an ordinary member. Committee for 2006-2007: *chair* Ted Harding; *secretary* Peter Watson; *treasurer* Helen Tate ; *officio* Dave Andrews; *ordinary* Margaret Corbett, Pamela Morris, Haidee Philpott.

Any Other Business: None

Draft Minutes of Annual General Meeting 2006-2007

The Annual General Meeting for the year 2006-2007 was held at the Statistical Laboratory on 28th November 2007. Present: Ted Harding (in chair), Rebecca Cox, David Edwards, Graham Healey, Jayantha Ratnayake, Helen Parracho, Haidee Philpott, Susan Pitts, Helen Tate, Peter Watson. **Apologies:** Margaret Corbett, Paul Garcia, Mary Garratt, Pamela Morris. The **minutes** of the previous A.G.M. were circulated and approved.

Treasurer's report: The CSDG started the year in October 2006 with £243.72 cash. The previous treasurer had moved to work abroad and so there was no treasurer's report for 2005-6.

Expenditure	2006-2007	Income	2006-2007
Speakers' expenses	£23.80	Balance at Oct 2006	£243.72
		Subscriptions	£26.00

Balance at October 2007 £245.92.

At a committee meeting held on 6th February 2007 it was agreed that the CSDG open a Community account at the Cambridge Building Society. This was eventually opened; the account holders are Ted Harding (current chairman), Peter Watson (current secretary) and Helen Tate (current treasurer). These names can be changed on application. The principle holder is the treasurer. Any of the three account holders can deposit and withdraw money. £200 was deposited in the Cambridge building Society, leaving a cash balance of £45.92. The secretary reported attendance in the last session (meeting median of 12.5) was in line with previous years and drew attention to the new group website. Any volunteers interested in hosting or speaking at meetings are welcome as are enquiries from anyone interested in joining the committee.

Election of officers and committee: Committee (unchanged) for 2007-2008: *chair* Ted Harding; *secretary* Peter Watson; *treasurer* Helen Tate ; *officio* Dave Andrews; *ordinary* Margaret Corbett, Pamela Morris, Haidee Philpott.

Any Other Business: None