Department for Transport Appraisal Software

Presentation to the 2014 SATURN User Group Meeting

Thursday 27th November 2014

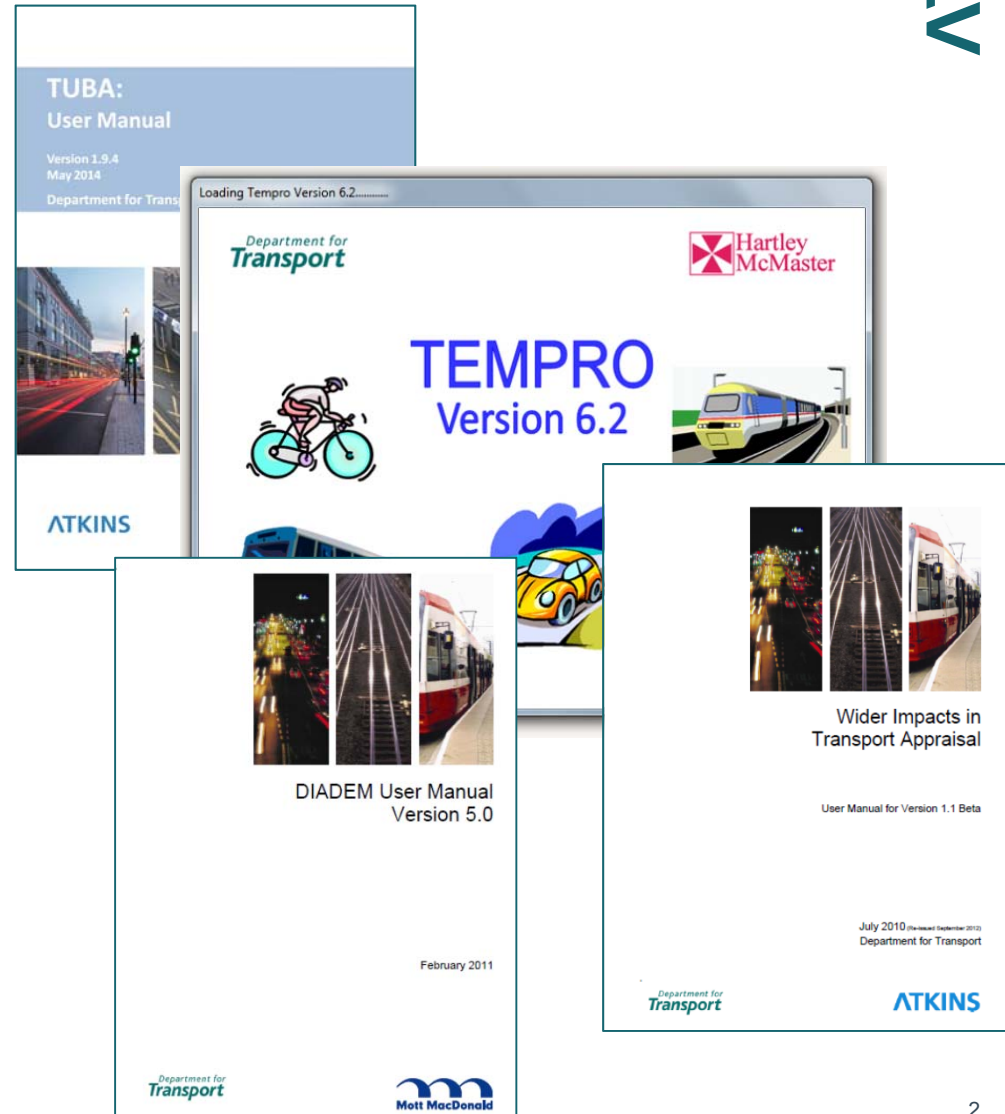**Ian Wright**

Atkins Limited

Plan Design Enable

ATKINS

TTWD Software: Overview

- Provision of support, maintenance and development for the DfT's appraisal software
- New 3-year contract until June 2017
- Software applications:
  - TUBA
  - TEMPRO
  - WITA
  - DIADEM
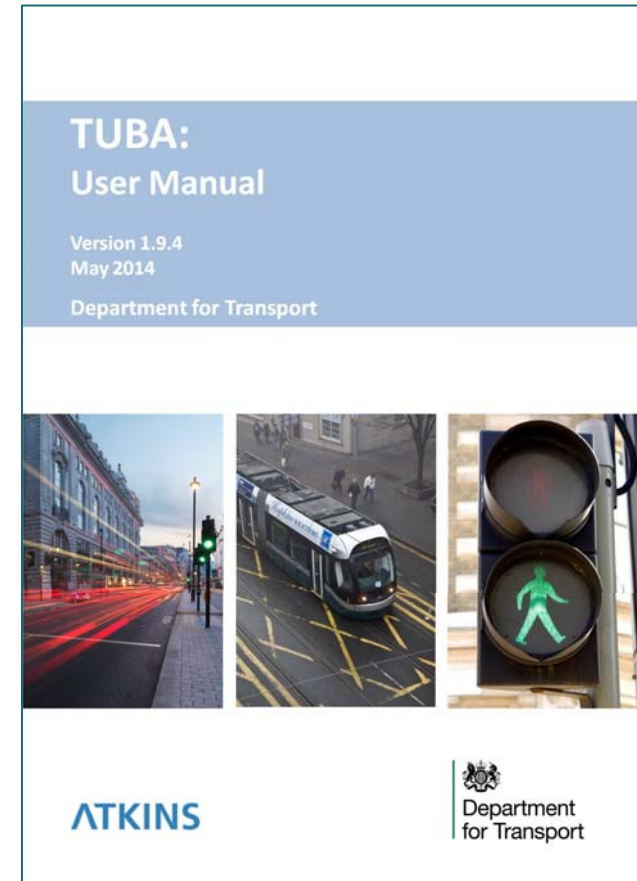- Undertaken by Atkins, and Hartley McMaster Ltd, on behalf of the Department

ATKINS

TTWD Software: Current Status

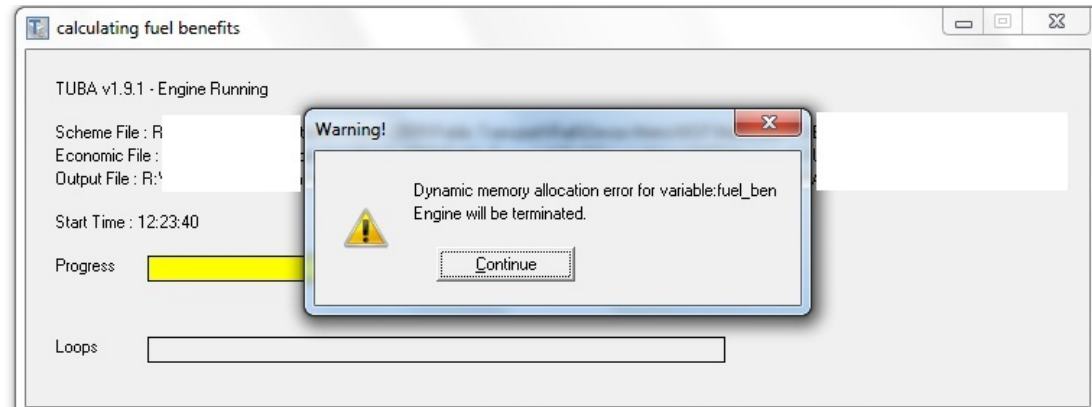| Software	TUBA	TEMPRO	WITA	DIADEM
Current Version:	1.9.4	6.2	1.1 Beta	5.0
Date of Last Release:	Jun' 14	Dec '09 Datasets: Apr'11	Not formally released	Feb' 11
Recent changes:	See overleaf	None	64-bit OS compatibility (Sep'13)	New DIADEM 64-bit (Mar'13)
Future developments:	**TUBA V1.9.5**	NTEM dataset update	Under discussions with DfT	Maintenance only
Contact details:	tuba @atkinsglobal.com tempro @atkinsglobal.com wita @atkinsglobal.com diadem @atkinsglobal.com			

TTWD Software: TUBA Updates (ii)

Latest TUBA Revisions

- Version 1.9.3 Release (Jan'14)
  - Revised VOT growth rate & applied discount rate
  - Minor bug fixes
  - Updated economics parameter file
- Version 1.9.4 Release (Jun'14)
  - GDP-based price deflator
  - Minor bug fixes
  - Updated economics parameter file

  - Separate 32-bit & 64-bit applications
  - Available to **all** users

TUBA:
User Manual

Version 1.9.4
May 2014

Department for Transport

ATKINS

Department for Transport

TUBA Memory Problems solved!!!

#1 Support issue

- Uses dynamic memory management to hold ALL data in memory
- No guarantee that sufficient free contiguous memory is available
- Large(-ish) models require >1Gb RAM

With TUBA v1.9.4 Release

- Separate 32-bit and 64-bit versions
- Maximum memory accessible = 192Gb (subject to PC hardware)
- Practical tests have reached ~100Gb
  - ELHAM = 2500 zones, 10 user classes, 3 time periods, 2 forecast years
- Now available to **all** users

TTWD Software: TUBA Updates (iii)

Next TUBA Release

- Version 1.9.5
  - Updated economics parameter file consistent with Autumn '14 WebTAG Databook including:
    - Vehicle operating costs
    - Carbon emission rates and values

  - Minor bug fixes
    - Overzealous checks on Zone -> Sector file
    - Fatal error for non-sequential user class names
    - Tidy-up of TUBA_G exporting of user-edits

  - Released earlier this week

TUBA:
User Manual

Version 1.9.4
May 2014

Department for Transport

ATKINS   Department for Transport