



Department for Transport

Update from the Department Transport Appraisal and Strategic Modelling

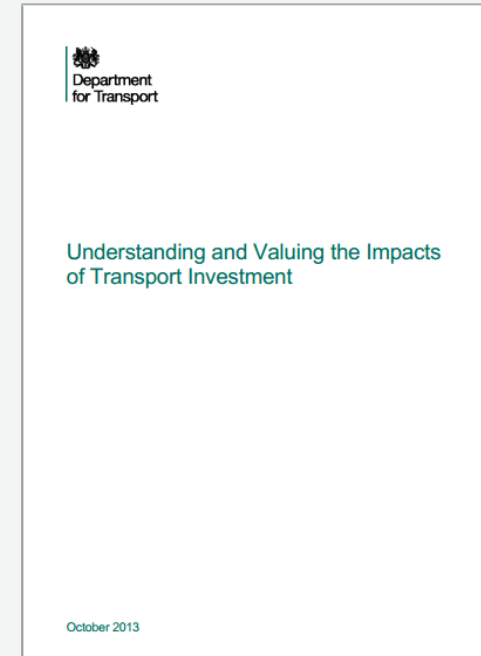
Dharmender Tathgur

Thursday, 27th of November 2014

- **Analytical Strategy**
- **Revisiting the new WebTAG**
- **National Trip End Model update**
- **Trip Rates Research Review**
- **NTM Futures**
- **Uncertainty**



- Set out in “Understanding and Valuing the Impact of Transport Investment”
- How TASM are taking forward analysis, largely in response to Laidlaw
- Split across seven work streams :
 - Economic Growth
 - Uncertainty and Risk
 - Forecasting Trends
 - Valuing Journey Improvements
 - Evaluation
 - Big Data
 - Environment



Analytical Strategy – Work streams

Description	Objectives
Economic Growth	Provide a richer picture of the economic impacts of transport investments
Uncertainty and Risk	Developing a consistent approach across various transport scenarios and present uncertainty to allow better decision making
Forecasting Trends	Exploring patterns, updating forecasts and guidance about trips people make
Valuing Journey Improvements	Focusing on new, willingness-to-pay-based values of time for business and non-work travel
Evaluation	Linking up appraisal and evaluation
Big Data	We have access to massive volumes of structures & unstructured data
Environment	Work with other government departments to maintain our environmental toolkit.

Revisiting the new WebTAG

- **1,800+ pages to 900 pages**
- **Higher-level guidance for promoters and managers**
- **Split into modelling and appraisal units for the practitioner**
- **Much fewer units – structured into topic manuals**
- **Data Book hosts all values in TAG in a spreadsheet**
- **Some updates made in November 2014**

Transport analysis guidance - WebTAG

WebTAG provides information on the role of transport modelling and appraisal.

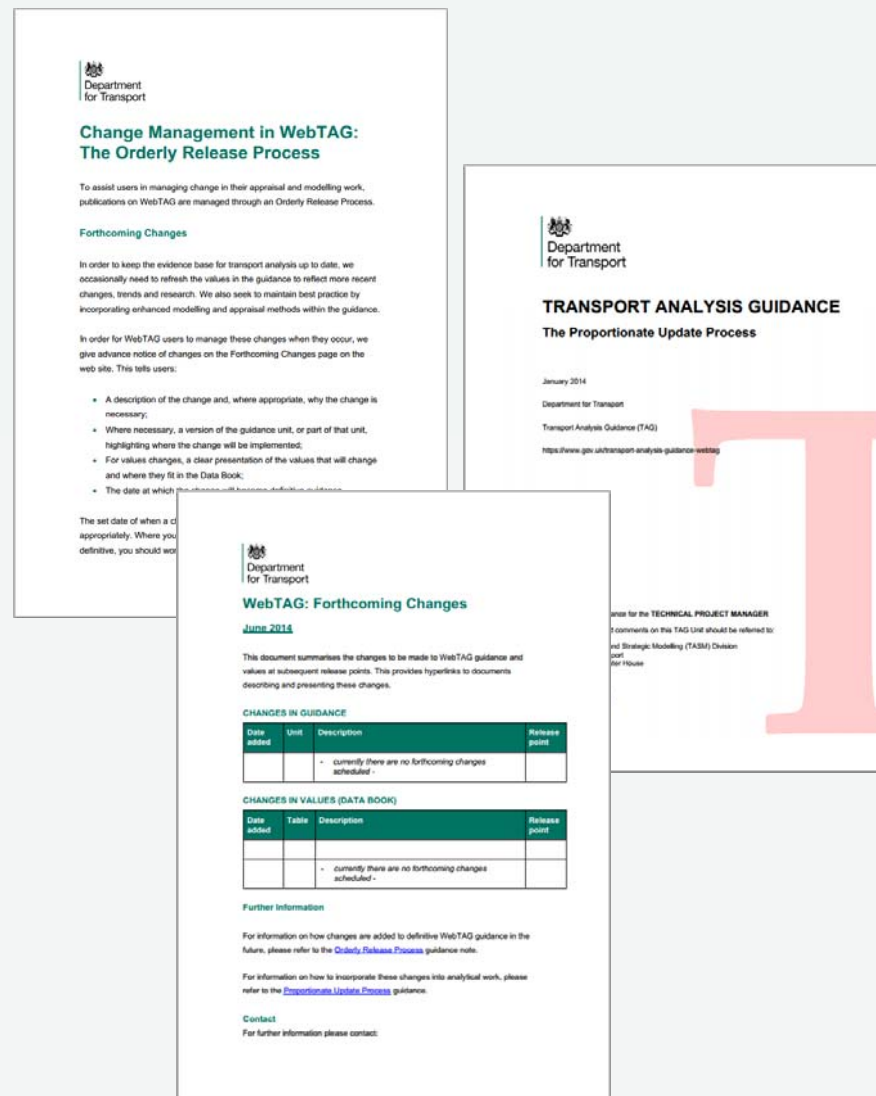


Transport Analysis Guidance (TAG): data book

MS Excel Spreadsheet, 7.47MB

This file may not be suitable for users of assistive technology. Request a different format.

- We've changed the way we update the guidance
- Proportionality – clearer advice on when and why to update after TAG changes
- Publish changes to which we are committed well in advance so people can prepare
- Consultation documents now separate from the release process
- Two releases per year – Spring and Autumn
- Mostly positive feedback



Change Management in WebTAG: The Orderly Release Process

To assist users in managing change in their appraisal and modelling work, publications on WebTAG are managed through an Orderly Release Process.

Forthcoming Changes

In order to keep the evidence base for transport analysis up to date, we occasionally need to refresh the values in the guidance to reflect more recent changes, trends and research. We also seek to maintain best practice by incorporating enhanced modelling and appraisal methods within the guidance.

In order for WebTAG users to manage these changes when they occur, we give advance notice of changes on the Forthcoming Changes page on the web site. This tells users:

- A description of the change and, where appropriate, why the change is necessary;
- Where necessary, a version of the guidance unit, or part of that unit, highlighting where the change will be implemented;
- For values changes, a clear presentation of the values that will change and where they fit in the Data Book;
- The date at which the changes will become definitive in guidance.

The set date of when a change becomes definitive, where you should work accordingly.

TRANSPORT ANALYSIS GUIDANCE
The Proportionate Update Process

January 2014
Department for Transport
Transport Analysis Guidance (TAG)
<https://www.gov.uk/transport-analysis-guidance-writing>

WebTAG: Forthcoming Changes
June 2014

This document summarises the changes to be made to WebTAG guidance and values at subsequent release points. This provides hyperlinks to documents describing and presenting these changes.

CHANGES IN GUIDANCE

Date added	Unit	Description	Release point
		- currently there are no forthcoming changes scheduled -	

CHANGES IN VALUES (DATA BOOK)

Date added	Table	Description	Release point
		- currently there are no forthcoming changes scheduled -	

Further information

For information on how changes are added to definitive WebTAG guidance in the future, please refer to the [Orderly Release Process](#) guidance note.

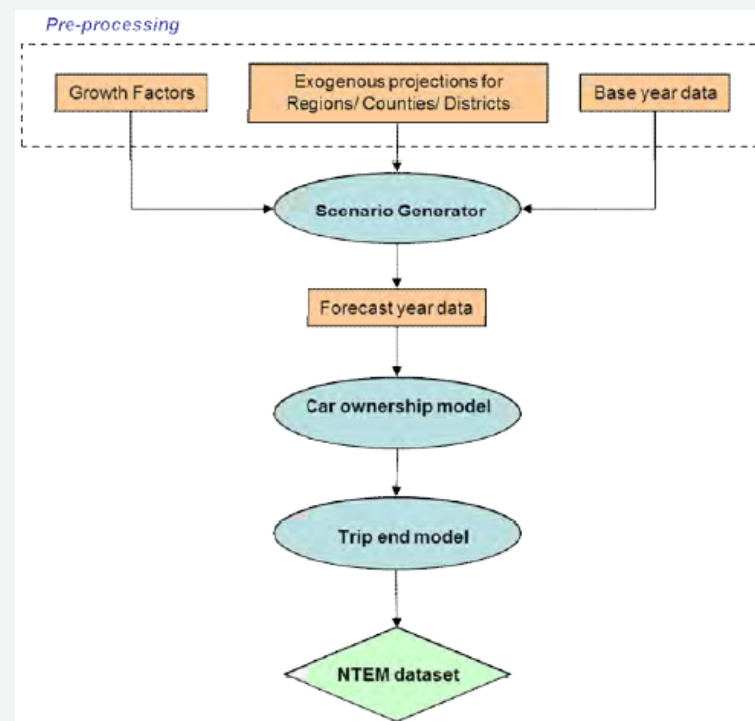
For information on how to incorporate these changes into analytical work, please refer to the [Proportionate Update Process](#) guidance.

Contact
For further information please contact:

For the TECHNICAL PROJECT MANAGER
Comments on this TAG Unit should be referred to:
Lead Strategic Modelling (TASM) Division
and
for House

National Trip End Dataset Update

- The next update to TEMPRO is on the way, probably for Autumn 2015
- Data update to include 2011 Census and new forecasting data
- A thorough review of the current methodology and enhancement of the whole modelling system expected
- Interfaces with the NTM; zoning likely to become more detailed
- The system will continue to be free of charge for all to use.



National Trip End Model Update - Timeline

Specification and Appointment

Handover and Inception

Review of Methodology and Models

Input Data and Projections

Scenario Generator

Car Ownership Model

Trip End Model

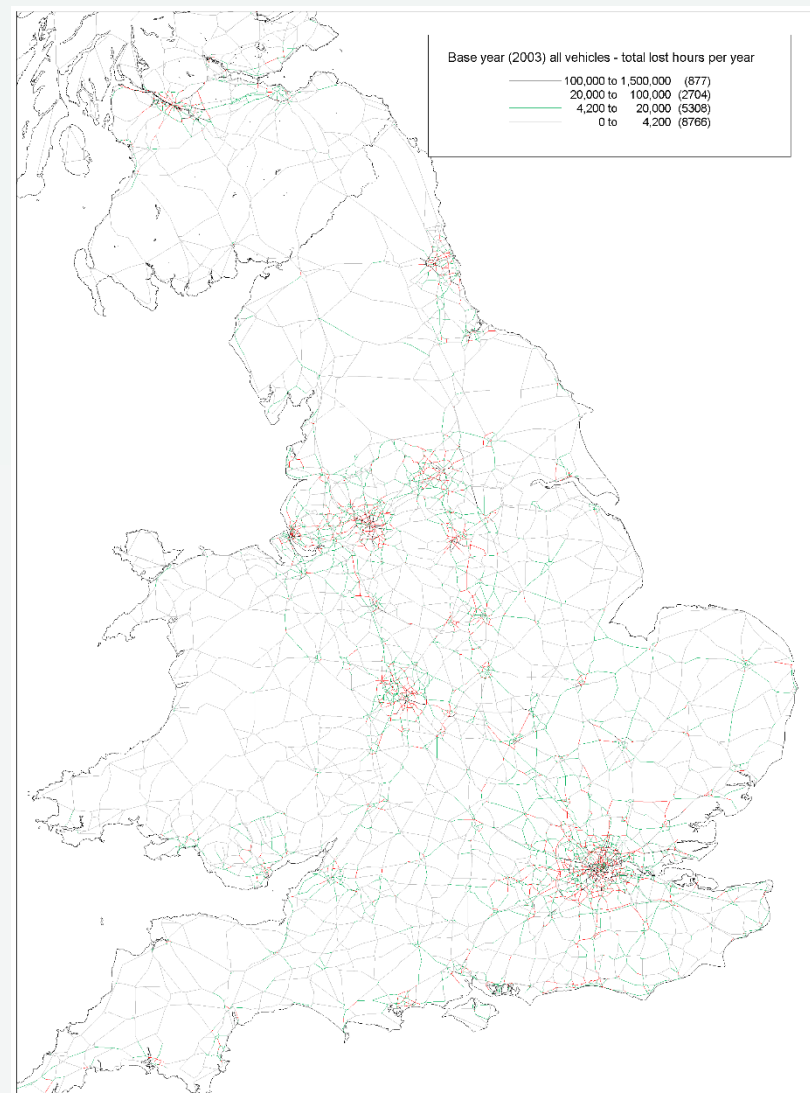
Completion & Delivery

*Modelling stages to include Planning,
Development, Execution, Testing and QA.*

- **This project will update our evidence about the number and pattern of trips that individuals make**
- **Phase 1 : Re-estimate trip rates using more recent National Travel Survey data (1998-2010)**
- **Phase 2 : Using the trends from first phase, identify the drivers of recent travel trends and potentially develop a model with capability of forecasting these trends for future years**
- **Outputs from both phases to feed into development of the NTEM.**



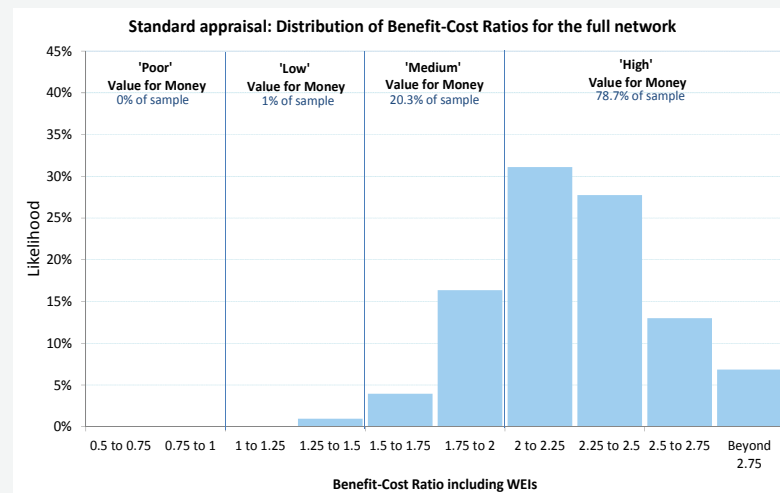
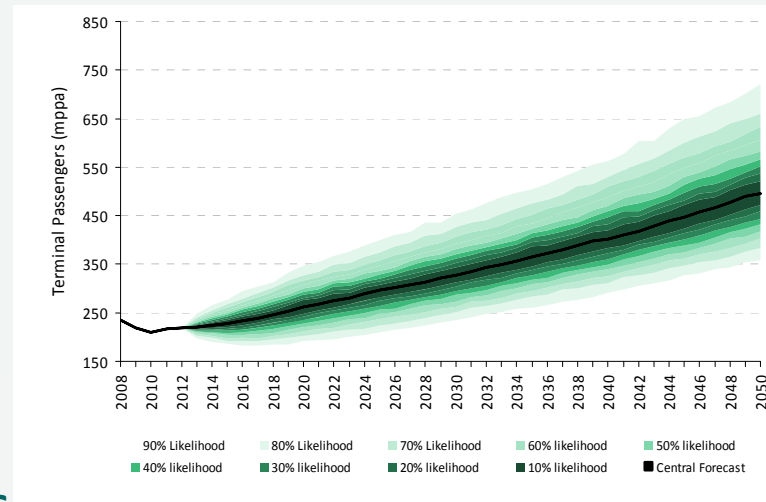
- Currently planning a new version of the NTM
- Needs:
 - National forecasts
 - Policy testing
 - Limitations:
 - Computing power
 - Resources
 - The NTM needs to be a model we can:
 - continue to run and develop over the next 10 years
 - adapt to a wide range of policy / network changes...
 - maintain in a fast paced environment



- **At present, everything on the table:**
 - **Model structure**
 - **Spatial detail for demand and supply**
 - **Segmentation requirements**
 - **Validation standards**
 - **Input data (eg mobile phone)**
 - **“Quick” versus “Long” run-time versions**
 - **Innovative methods (e.g. adaptive zone sampling techniques)**
 - **Representation of rail, bus and active modes**



- Thought and research into how to treat uncertainty in modelling and appraisal
- Wide project scope so far
- Use of ranges when presenting results
- Benefits extrapolation and interpolation
- Understanding uncertainty around core inputs
- Scenario building - strengthen guidance
- Presentational options – fancy charts
- Innovations – e.g. Monte Carlo techniques



What else?

- **Incorporating DMRB guidance into WebTAG**
- **Developing matrix building guidance**
- **Incorporate guidance on appraisal in the case of large cost changes and new modes**
- **Please provide feedback – tasm@dft.gsi.gov.uk**
- **Dharmender.Tathgur@dft.gsi.gov.uk**

