

Subject	Technical update to the Transport Agency’s Economic evaluation manual
Circulation	All registered holders of the Economic evaluation manual Local Authorities Local Government New Zealand ACENZ
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Purpose

To issue amendment No 2 to the *Economic Evaluation manual*, (first edition 30 October 2013), effective from 1 July 2018.

This technical update to the manual is to be used for new activities seeking funding approval and requiring economic evaluation assessment for the remainder of the 2015–18 National Land Transport Programme (NLTP) and future NLTPs.

Content changes of the updated manual and supporting documentation

The updated EEM document is available via the [Transport Agency website](#), and includes the following changes:

Focus area	Detail of amendment	Specific sections updated
Safety	<ul style="list-style-type: none"> Added new urban and rural priority T intersection models and updated crash prediction model for high volume and high speed four-lane divided roads, based on a review of crash rates of motorways and four lane divided roads across NZ. Added new crash severity factors by crash type and One Network Road Classification (ONRC). Clarified “do minimum” definition for speed management activities 	<p>–Crash Estimation Compendium (CEC): Sections 5.0, 7.3, 7.5</p> <p>–EEM: Appendix A6.8</p> <p>–EEM: 2.7</p>

Travel time base values	<ul style="list-style-type: none"> Highlighted purpose of Table A4.1(b) is to provide base values by trip for calculating travel times benefits and is consistent with 2013 EEM update providing equal values of travel time across modes for monetising the total value of travel time benefits. Highlighted the purpose of Table A4.1(a) is for modelling behaviour not benefit calculation. 	-EEM: Appendix A4.1
Public Transport	<ul style="list-style-type: none"> Introduced new values of elasticities applicable for public transport (PT) travel based on recent research initiated and completed for the Agency Includes PT direct (own mode) elasticities, i.e. the effects on PT system demand of changes in PT attributes Includes cross modal demand effects (“diversion rates”) resulting from changes in system attributes for non-PT modes e.g. changes in demand resulting from fuel price or parking charges Includes cross modal demand effects (“diversion rates”) resulting from changes in PT system attributes e.g. changes in demand resulting from changes in PT frequency. 	-EEM: Appendix A14
Environment	<ul style="list-style-type: none"> Update to vehicle emission tables based on latest emissions data using NZTA’s Vehicle Emission Prediction Model (VEPM). Tables provide default emissions factors for all speeds up to 110km/hr, light and heavy duty vehicles and different gradients. Valuation of carbon emissions has been updated in response to international research. 	-EEM: Appendix A9
Resilience:	<ul style="list-style-type: none"> Highlighting existing procedures that can be used to evaluate resilience activities which align to our strategic risk based approach for this activity. Reference to NZTA research report added including resilience working definition. Guidance on the quantification of resilience benefits provided and cross referenced to A13.12 example of risk analysis of a bridge subject to earthquake risk. 	-EEM: Appendix A10.8
Intelligent Transport Systems (ITS)	<ul style="list-style-type: none"> Highlighting existing procedures that can be used to evaluate ITS activities. Types of benefits arising from ITS identified. Reference to NZTA research on identifying ITS benefits. Transport Demand Management evaluation procedures and Travel Change Behaviours identified as potential evaluation procedures applicable to quantifying ITS benefits. 	-EEM 2.2, 2.13, 4.3, 4.6
Simplified Procedure workbook templates	<ul style="list-style-type: none"> Added navigation pages and guidance notes to make key, commonly used Simplified Procedures easier to use. (Refer to the table below for more detail). 	-SPs: 1, 2, 3, 5, 11
Correction of errors	<ul style="list-style-type: none"> From advice provided by practitioners, corrected wording or minor errors related to existing procedures as necessary. 	-Various

For more detail on the above changes please refer to the accompanying updated [FAQ sheet](#).

Updated Simplified Procedures and Online worksheet changes

As part of this release, key improvements to the **Simplified Procedure assessment** spreadsheets include:

Focus area	Detail of amendment	Specific sections updated
Navigation page	<ul style="list-style-type: none"> A front end navigation page to help steer practitioners has been introduced across commonly used simplified procedures 	<p>–SPs: 1, 2, 3, 5, 11 ("overview & guide" worksheet)</p>
Additional help text	<ul style="list-style-type: none"> Guidance notes to make commonly used Simplified Procedures easier to use 	<p>–SPs: 1, 2, 3, 5, 11 (across each worksheet)</p>
Correction of errors	<ul style="list-style-type: none"> Minor corrections and enhancements identified by our technicians and users of the manual 	<p>–Various (across SPs and their worksheets)</p>

Updates of the remaining SPs to include navigation pages and additional guidance notes will be released after feedback from practitioners on the enhancements outlined in the table above.

Previous recent enhancements of note now encapsulated into the procedures include:

- Sensitivity testing using 4% and 8% discount rates;
- Calculation of the First Year Rate of Return.

Links for these Excel template spreadsheets are available on the EEM page of the Transport Agency [website](#).

Important: All applications applying simplified procedures and seeking funding approval from the Transport Agency must do so through using these spreadsheets. Please ensure this is adhered to for all applications applying simplified procedure assessment.

For full procedure assessment, both standard worksheets (available in Word format) and the TIO full procedure summary sheet (Excel format), are again accessible via the Transport Agency website.

Worked Examples

Worked examples using the simplified procedures will be published on the EEM webpage from time to time as they become available.

Update factors (update effective immediately)

Update factors – Factors for updating costs and benefits to the current financial year are calculated annually and are based on officially published consumer price indices, producer price indices, value of statistical life and social costs of road crashes. The update factors to July 2017 values are now available via our website and are to be used for any analysis having a base date of 1 July 2017. Update factors for 2018 are expected to be published by the end of the 2018 year.

A table reflecting these changes can again be found here via our [website](#).

Review of Public Transport parameter values

PT parameter values – A new procedure for deriving Public Transport parameter values has been developed as part of the current EEM review. This is based on recent research that assessed changes to vehicle and stop/station quality using passenger satisfaction ratings. Due to the change in approach to assessing parameter values the procedure will first be trialled with a small number of regional councils in parallel with the existing procedure. Feedback will be considered and the new approach implemented if it is found to be an improvement on the current procedure.

How to apply the updated EEM

The updated manual (i.e. this technical update release; amendment 2 to the first edition, released 30 October 2013 and first amended 1 January 2016), its accompanying documentation and revised worksheets should be used for all improvement activities seeking funding support, with 1 July 2018 being the effective date for adoption.

As the changes in this update are not significant or policy related, if an economic evaluation assessment has already been initiated beyond an indicative assessment we advise to simply update your assessment as appropriate with the revised procedures and/ or update factors.

Should the above advice prove problematic for an evaluation already underway, please discuss further with your local Transport Agency representative a recommended approach to determine how best to advance your application.

Enquiries

We welcome feedback on this technical update to the manual, especially on the simplified procedures to ensure the enhancements to the remaining simplified procedures will meet your needs.

For more information on changes to the EEM please refer to our [frequently asked questions](#), which has been revised to include changes coming from this technical update. All information related to this update, previous editions and supporting material can be found on the Transport Agency [website](#).

For direct engagement with regards to these changes and implementing them into your programme you can contact your Systems Design and Delivery representative for further information or assistance.

Alternatively, you can send any questions or feedback about the update directly to the EEM review project team by emailing the review team at eem@nzta.govt.nz



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