



<b>Subject</b>	Technical amendment of the NZ Transport Agency's <i>Economic evaluation manual (Volume 1), First Edition, Amendment 0</i> and the <i>Economic evaluation manual (Volume 2), First Edition, Amendment 0</i>
<b>Circulation</b>	All registered holders of the <i>Economic evaluation manual – Volume 1</i> All registered holders of the <i>Economic evaluation manual – Volume 2</i>
<b>Circulated by</b>	Ian Melsom – National Manager Investment and Revenue Strategy
<b>Effective date</b>	1 January 2010
<b>Date of issue</b>	10 May 2010

---

## Purpose

To advise all approved organisations of the technical amendment to the New Zealand Transport Agency's *Economic evaluation manual – Volume 1* (EEM1) and the *Economic evaluation manual – Volume 2* (EEM2), that are effective from 1 January 2010, and are to be used for activities submitted for funding consideration to the 2009/12 National Land Transport Programme (NLTP) and future programmes.

## Release of technical amendment of EEM1 and EEM2

Electronic copies of the amended manual can be accessed electronically on the NZTA website:

<http://www.nzta.govt.nz/resources/economic-evaluation-manual/volume-1/index.html>

<http://www.nzta.govt.nz/resources/economic-evaluation-manual/volume-2/index.html>

Hard copies can either be printed from the NZTA website or obtained at a cost of \$150 each by placing an order using the form downloaded from: <http://www.nzta.govt.nz/resources/order/index.html?id=1059>

## Economic evaluation software

The economic evaluation software is currently being updated and the new version should be available by late June 2010. In the meantime, the existing EEM software (Version 5.2.6 corresponding to EEM amendment 2) can be used provided the update factors in appendix A12.3 of the EEM1 are applied.

## Enquiries

If you have any enquiries about the content of the manual, please direct your correspondence to [eem@nzta.govt.nz](mailto:eem@nzta.govt.nz)

# Changes

Page	Description
EEM1, EEM2 Contents	Pages re-numbered
EEM1, EEM2 Tables	Formatted borders to straighten edges
EEM1, SP2 to SP5	BCR and incremental analysis worksheets- Cost benefit analysis point number 1 corrected
EEM1 & EEM2, SP2 to SP12	Capital letters (ie X, Y Z) referring to total costs and benefits were corrected and bolded
EEM1 Page SP1-5	Removed text "Brief description of location" and corrected spacing
EEM1 Page SP3-3	Corrected text for applying an update factor to the PV for accident cost savings
EEM1 Pages SP3-8 to SP3-9	Numbering corrected
EEM1 Page SP4-7	'PV of periodic maintenance costs following completion of the work calculation' multiplier corrected
EEM1 Page SP4-9	Corrected equation in point 7
EEM1 Page SP5-5	Corrected point 5 label and corrected equation.
EEM1 Page SP5-7	'PV total cost of preferred option' equation corrected
EEM1 Page SP5-11	Corrected lines 1, 2 and 4
EEM1 Page 5-7	Shaded cells in table
EEM1 Page 5-17	Corrected the 'Incremental BCR' equation and values
EEM1 Page 5-71	Corrected heading in point 6
EEM1 Page 5-75	Corrected heading in point 7
EEM1 Page 5-83	Corrected label for point 19
EEM1 Pages 5-98 to 5-101	Repaired missing parts of worksheets and explanations
EEM1 Pages 5-110 to 5-111	Repaired missing parts of worksheet and explanation
EEM1 Page 5-115	Corrected formatting in table
EEM1 Page 5-123	Removed text from bottom of the table
EEM1 Page 5-131	Corrected values and shading in column (12)
EEM1 Page A1-10	Corrected table name
EEM1 Page A2-1	Corrected chapter index
EEM1 Page A2-14	Corrected hidden page
EEM1 Page A3-5	Corrected procedure instructions
EEM1 Page A4-2	Corrected Vehicle types in Table A4.2
EEM1 Page A4-20	Corrected example heading
EEM1 Page A4-21	Corrected example heading and diagram labels
EEM1 Page A5-3	Corrected values in Table A5.0(a)
EEM1 Page A6-20	Corrected formatting in the 'Available models and equations' section
EEM1 Page A6-26	Corrected formatting in section 5
EEM1 Pages A6-28 to A6-31	Corrected space and hyphen formatting
EEM1 Page A6-41	Corrected space and hyphen formatting
EEM1 Pages A6-42 to A6-44	Corrected section headings
EEM1 Page A6-51 in table A6.21(a)	Total cost per accident value for 'Overtaking' and 'All vehicles' was corrected
EEM1 Page A7-11	Corrected symbol bolding
EEM1 Page A9-4	Corrected spacing in point 4

## Changes, continued

Page	Description
EEM1 Page A9-8	Corrected 'Valuation of carbon dioxide emissions' paragraph
EEM1 Page A10-3	Values centred vertically
EEM1 Page A11-9	Corrected spacing in last paragraph
EEM1 Page A11-14	Corrected equation fonts in procedure
EEM1 Page A13-12	Corrected reference to worksheets in first paragraph
EEM1 Page A14-2	Corrected table shading
EEM1 Pages A14-49 to A14-50	Repaired missing parts of tables
EEM1 Pages A14-55 to A14-57	Repaired missing parts of Table A6.6(b) and corrected header bolding, spacing and hyphens in tables
EEM1 Page A14-65	Corrected values and shading for column (12)
EEM2 Page 1-2	Corrected header numbering
EEM2 Page 3-19	Corrected referencing to EEM1
EEM2 Page 3-25	Corrected table font
EEM2 Page 8-5	Reworded the demand estimate page to allow for other estimation methodologies to be used.
EEM2 Page 8-20	Corrected equation in point 9 in the explanation and worksheet, adjusted column dividers in worksheet and inserted '%' symbols where appropriate.
EEM2 Page SP8-3	Corrected update factor equations
EEM2 Pages SP8-4 to SP8-5	Corrected points 4 and 5 in explanation and on the worksheet
EEM2 Pages SP8-6 to SP6-7	Corrected explanation points 1, 13, 21, 23 and 24. Changed point 24 total name to "PV of the funding assistance". Inserted heading for calculation of Funding assistance on the worksheet
EEM2 Pages SP8-8 to SP8-9	Explanation points from 10 to 19 were corrected. Numbering on worksheet for point 9 corrected
EEM2 Pages SP8-10 to SP8-11	Amended explanation to define Road user charges (RUC). Corrected explanation points 1 and 2
EEM2 Pages SP8-14 to SP8-15	Bolded equations in worksheet for incremental analysis
EEM2 Pages SP9-2 to SP9-3	Update factor equations corrected
EEM2 Page SP9-5	Points 4 and 5 corrected
EEM2 Pages SP9-6 to SP9-7	Changed point 19 total name to "PV of the funding assistance" in explanation and worksheet
EEM2 Page SP9-8	Bolded text where appropriate
EEM2 Pages SP9-10	Bolded text where appropriate
EEM2 Pages SP10-2 to SP10-3	Reorganised points 11 and 12 in the explanation and worksheet. Added update factor equation for point 12
EEM2 Page SP10-5	Renamed calculation of point 5
EEM2 Pages SP10-6 to SP10-7	Changed point 22 total name to "PV of the funding assistance" in explanation and worksheet
EEM2 Page SP10-11	Bolded equation for incremental analysis
EEM2 Page SP11-6	Corrected equation for calculating PV total cost of option

## Changes, continued

Page	Description
EEM2 Pages SP11-14 to SP11-15	Corrected equation in point 9 in the explanation and worksheet, adjusted column dividers in worksheet and inserted '%' symbols where appropriate
EEM2 Pages SP11-16 to SP11-17	Modified BC and incremental analysis worksheet in line with SP2-SP
EEM2 Pages SP12-2 to SP12-3	Replaced word “problem” with “issues” in point 2 of worksheet. Corrected worksheet references in point 6 on worksheet, and in point 6 of the explanation
EEM2 Page SP12-4	Corrected PV cost of activities equation under point 1
EEM2 Page SP11-6	Corrected equation for calculating PV of total cost of option