

SPECIAL REPORT

Economic Bulletin



January 2009

Railway cost driver analysis

Franklin + Andrews has developed a unique set of indices to reflect both cost and tender price movement of railway construction.

Analysis and discussion with leading specialists within the sector established a need for the indices. The indices are offered as an alternative to the existing use of the Retail Price Index (RPI) to inflate and deflate projects budgets. A regular review and updating of the indices with forecasts for future cost and tender movements will be published on a regular basis.

Cost Components

The following were established as being typical of cost significant components of railway projects:

- Management and design
- Land value
- Signalling
- Telecommunications
- Electrification
- Permanent way
- Stations and civil engineering

Through use of weighting existing public domain indices for historical movements and trending and survey for predictions, cost indices have been created for each of the cost components from a base year of 1995. These indices have been weighted to replicate a typical major infrastructure project in order to generate a Railway Project Cost Index.

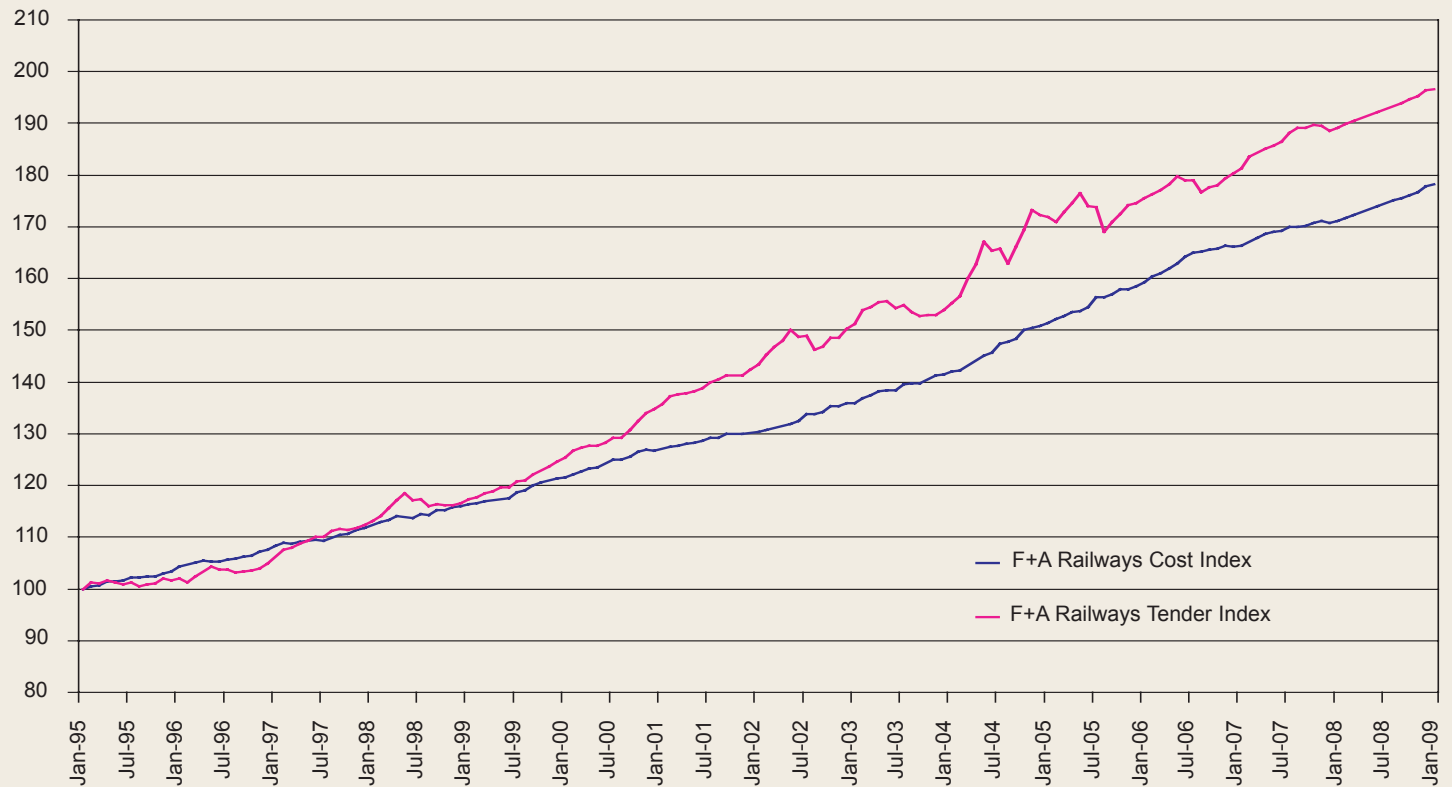
As a number of the cost components are subject to market forces, a series of tender indices have also been included. These tender indices have been weighted to produce a Railways Project Tender Index.

These indices are designed to give trended guidance rather than precise and accurate information on pricing fluctuations. Cost drivers on specific projects can be different to the assumptions made for this generic solution and could therefore fall outside of the ranges provided. Forecasting is conducted using information available at the time and by its nature is therefore volatile. We recommend that the recipient applies the necessary caution especially in consideration of the current economic climate. Our specialist Economic Research Unit can give further advice on how to improve the accuracy of these statistics.

Cost indices	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09
Management and design index	170.4	170.9	171.5	172.1	172.7	173.2	173.8	174.4	174.9	175.5	176.1	177.2	177.8
Land value	162.8	162.0	161.2	160.4	159.6	158.8	158.0	157.2	156.4	155.6	154.8	153.2	152.4
RPI	143.7	144.8	145.3	146.6	147.3	148.5	148.3	148.8	149.6	150.4	150.7	151.0	151.3
Signalling	170.3	171.0	171.7	172.4	173.2	173.9	174.6	175.3	176.0	176.7	177.5	178.9	179.6
Telecoms	171.3	172.0	172.7	173.5	174.2	174.9	175.6	176.3	177.1	177.8	178.5	179.9	180.6
Electrification	171.4	172.1	172.9	173.6	174.3	175.1	175.8	176.5	177.2	178.0	178.7	180.1	180.9
Permanent way	184.6	185.3	186.1	186.9	187.7	188.5	189.3	190.0	190.8	191.6	192.4	193.9	194.7
Stations and civils	175.9	176.6	177.3	178.1	178.8	179.5	180.2	180.9	181.6	182.3	183.0	184.4	185.0
F+A railways project cost index	171.2	171.8	172.3	172.9	173.5	174.0	174.5	175.1	175.6	176.2	176.7	177.8	178.3

Tender indices	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09
Signalling	189.6	190.3	190.9	191.6	190.9	191.6	192.2	192.8	193.5	194.1	194.7	195.4	196.0
Telecoms	190.9	191.6	192.3	193.0	192.3	193.0	193.7	194.5	195.2	195.9	196.6	197.4	198.1
Electrification	190.9	191.5	192.1	192.7	192.1	192.7	193.3	193.9	194.5	195.1	195.8	196.4	197.0
Permanent way	205.7	206.5	207.3	208.1	207.3	208.1	208.9	209.7	210.5	211.4	212.2	213.0	213.8
Stations and civils	196.0	196.7	197.4	198.0	197.4	198.0	198.7	199.4	200.1	200.7	201.4	202.1	202.7
F+A railways project tender index	189.2	189.8	190.4	191.0	190.4	191.0	191.6	192.2	192.8	193.4	194.0	194.6	195.2

Railway cost driver analysis



Cost indices annual inflation						
	2007	2008	2009	2010	2011	2012
Management and design index	4.20%	4.36%	4.31%	3.65%	2.80%	3.64%
Land value	-10.8%	-6.39%	-6.40%	1.79%	2.73%	3.96%
RPI	4.06%	4.89%	2.24%	2.19%	2.14%	2.10%
Signalling	3.61%	5.49%	5.29%	5.09%	4.39%	4.31%
Telecoms	3.99%	5.47%	5.05%	5.28%	5.39%	4.31%
Electrification	3.92%	5.52%	5.22%	5.32%	5.50%	4.35%
Permanent way	6.50%	5.51%	4.96%	4.64%	4.09%	4.03%
Stations and civils	5.39%	5.18%	4.28%	4.41%	4.41%	3.41%
F+A railways project annual cost inflation	2.83%	4.14%	3.82%	4.41%	4.17%	3.96%

Tender indices annual inflation						
	2007	2008	2009	2010	2011	2012
Signalling	4.42%	4.27%	2.01%	2.35%	3.56%	3.74%
Telecoms	4.83%	4.84%	2.70%	2.71%	3.43%	4.07%
Electrification	4.72%	4.07%	1.96%	2.11%	3.13%	3.74%
Permanent way	7.36%	5.02%	1.92%	2.75%	3.47%	4.12%
Stations and civils	6.23%	4.36%	1.30%	2.43%	3.23%	3.76%
F+A railways project annual tender inflation	4.50%	4.02%	1.86%	2.54%	3.28%	3.82%

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