

Roadway cost examples



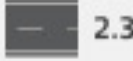




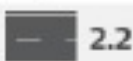






INTERACTIVE 

Capital cost

Cost per km

Four-lane equivalent

Project metrics

Project	See footnote	Effective all-up capital cost (\$ billion*)
Pacific Highway @ upgrade cost	[1]	 16.2
Hunter Expressway (Newcastle)	[2]	 1.7
Westlink M7 (Sydney)	[3]	 2.3
Sydney West Airport Roads package	[4]	 3.4
- Bringelly Rd upgrade	[5]	 0.5
- Proposed Northern Rd upgrade	[5]	 1.6
- Elizabeth Dr upgrade	[5]	 1.25
Melbourne City Link (2 sections)	[6]	 2.2
North Connex (Sydney)	[7]	 3.0
CLEM7 (Brisbane)	[8]	 3.0
Cross City Tunnel (Sydney)	[9]	 1.0
Airport Link M7 (Brisbane)	[10]	 5.6
WEST CONNEX (Sydney)	[11]	 15.6
EAST WEST LINK (Melbourne)	[12]	 18.0

Roadway cost examples

INTERACTIVE 

Capital cost

Cost per km

Four-lane equivalent

Project metrics

Project	See footnote	Estimated capital cost per km (\$ million)
Pacific Highway @ upgrade cost	[1]	25
Hunter Expressway (Newcastle)	[2]	43
Westlink M7 (Sydney)	[3]	58
Sydney West Airport Roads package	[4]	61
- Bringelly Rd upgrade	[5]	50
- Proposed Northern Rd upgrade	[5]	52
- Elizabeth Dr upgrade	[5]	89
Melbourne City Link (2 sections)	[6]	100
North Connex (Sydney)	[7]	333
CLEM7 (Brisbane)	[8]	441
Cross City Tunnel (Sydney)	[9]	476
Airport Link M7 (Brisbane)	[10]	747
WEST CONNEX (Sydney)	[11]	473
EAST WEST LINK (Melbourne)	[12]	1000

Roadway cost examples









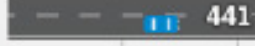


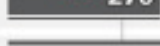

INTERACTIVE 

Capital cost

Cost per km

Four-lane equivalent

Project metrics

Project	See footnote	Adjusted to equivalent for four lanes (\$ million)				
Pacific Highway @ upgrade cost	[1]		25			
Hunter Expressway (Newcastle)	[2]		43			
Westlink M7 (Sydney)	[3]		58			
Sydney West Airport Roads package	[4]		61			
- Bringelly Rd upgrade	[5]		50			
- Proposed Northern Rd upgrade	[5]		52			
- Elizabeth Dr upgrade	[5]		89			
Melbourne City Link (2 sections)	[6]		n/a			
North Connex (Sydney)	[7]		222			
CLEM7 (Brisbane)	[8]		441			
Cross City Tunnel (Sydney)	[9]		476			
Airport Link M7 (Brisbane)	[10]		580			
WEST CONNEX (Sydney)	[11]		270			
EAST WEST LINK (Melbourne)	[12]		667			

Roadway cost examples

INTERACTIVE 

Capital cost

Cost per km

Four-lane equivalent

Project metrics



Project	See footnote	Full length of road assumed in kms	No. of lanes counting both directions
Pacific Highway @ upgrade cost	[1]	653.5	4
Hunter Expressway (Newcastle)	[2]	40.0	4
Westlink M7 (Sydney)	[3]	39.5	4
Sydney West Airport Roads package	[4]	Components below --	
- Bringelly Rd upgrade	[5]	10.0	4
- Proposed Northern Rd upgrade	[5]	31.0	4
- Elizabeth Dr upgrade	[5]	14.0	4
Melbourne City Link (2 sections)	[6]	22.0	Varying lane numbers eg: 8 & 6
North Connex (Sydney)	[7]	9.0	4 (but future 6)
CLEM7 (Brisbane)	[8]	6.8	4
Cross City Tunnel (Sydney)	[9]	2.1	4
Airport Link M7 (Brisbane)	[10]	7.5	Average 5.15
WEST CONNEX (Sydney)	[11]	33.0	Average 7
EAST WEST LINK (Melbourne)	[12]	18.0	6 lanes for Eastern section

Above are Historical and Projected Costs from official & published sources, distances from our sources, lane numbers are 2x2 - way for most of these roads, so costs per km have been standardised to 4 lane equivalent figures in the final column for better comparison purposes. Exact lane lengths were not available, so had to be estimated. NB: Costs not standardised to \$2014 terms.

The adjusted figures use a simple weighted average number of lanes, where more than 2x2, so as to estimate equivalence, eg: Brisbane Airport Link is 6 Lanes for 4.3kms, 4 lanes remainder, and length includes an eastern section beyond the tolled tunnel funded as part of the PPP deal. The cost for projects also includes estimates of contractor losses, which were large for this project. West Connex has 6 lane and 8 lane segments, and includes about 18 kms of tunnels.

[1] Spent, committed & projected out-turn costs, for Pacific Highway upgrade project, in recent years and from forward budgets

[2] Using recent published cost for Hunter Expressway project

[3] Historical cost for M7 PPP deal, including construction finance, from 2007, obtained from infrastructure industry publications

[4] Averaged over the 3 Roads highlighted in Abbott PR re Badgerys Ck, excludes upgrades to Narellan Rd & Camden Valley Way

[5] From Abbott 'roads boost package' PR, released in association with 2014 Federal Budget commitments

[6] Includes 5 kms in 2 tunnels, historical cost from Uni of Melb research & transurban statements

[7] Being built for 6 lanes but initially configured as 4; Cost comparison perhaps not a reliable guide as project benefits from deal with NSW Govt. re tolls on other Motorways, so part of NSW contribution is hidden and future conversion costs are unknown

[8] Failed project entity: RiverCity Motorway group; subject to class action re traffic forecasts; now owned by a Transurban-led consortium as part of acquisition of formerly Government-owned Queensland Motorways Limited

[9] Failed project entity: CrossCity Motorway group; project now owned by Transurban

[10] Failed project entity: Brisconnections group; project to be sold by Receivers and Managers; each of this, CCT & CLEM7 became subject to class actions regarding unachieved traffic forecasts, results of which are not yet known

[11] Data from draft Macquarie Capital report, sourced via NSW Legislative Council attempt to access suppressed information; appears to be project inputs over 9 years with real terms costs (current values) more like \$12bns; road design currently under re-consideration for 2nd time; lane lengths, design of exit points & connections presently uncertain but proposed scheme benefits from existing Govt-owned sections being incorporated into project at nil value [Our estimate of lane kms: new 134, existing 97]

[12] Business Case not released to public by Vic. Govt.; some information emerged from inquiry regarding Eastern section; project go-ahead decisions being challenged in Court by local Melbourne Councils; data re Western section sparse at present

GENERAL COMMENT

Of the six high value \$ per lane Km projects shown, following on from Melbourne CityLink, which all involve tunnelling, the three completed to date have failed as PPP investments, as did Lane Cove Tunnel (not shown). The substantial jump in capital costs for tunnelled projects has direct implications for toll levels, or Government budgets, or both.

* Rounded figures