

## CITYLINK, MELBOURNE, AUSTRALIA

### OVERVIEW

**LOCATION:** MELBOURNE, AUSTRALIA  
**SCOPE:** INTRA-URBAN  
**TRANSPORT MODE:** ROAD  
**PRINCIPAL CONSTRUCTION:**  
 GRADE/TUNNEL/ELEVATED  
**NEW LINK:** PARTIALLY

### PRINCIPAL OBJECTIVES

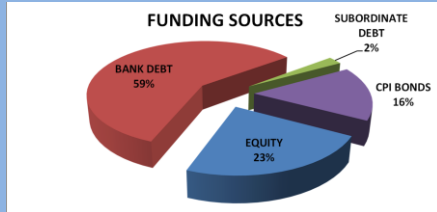
**CONGESTION RELIEF**  
**LOCAL & STRATEGIC TRANSPORT LINK**  
**ACCESSIBILITY**  
**LOCAL AREA IMPROVEMENTS**

### PLANNING AND IMPLEMENTATION

**PLANNING START DATE:** 03/1992  
**CONSTRUCTION START DATE:** 05/1996  
**OPERATION START DATE:** 12/2000  
**MONTHS IN PLANNING:** 38  
**MONTHS IN CONSTRUCTION:** 55  
**PROJECT COMPLETED:** IN 8 SECTIONS,  
 ON AVERAGE 2.5 MONTHS BEHIND  
 SCHEDULE (MAXIMUM 12 MONTHS)

### COSTS (IN 2010 USD)

**PREDICTED COST:** 2.80BN  
**ACTUAL COST:** 2.46BN  
**PROJECT COMPLETED:** 12% UNDER  
 BUDGET  
**FUNDING:** 100% PRIVATE



### INFRASTRUCTURE QUANTITIES

**LENGTH:** 22KM  
**NUMBER OF JUNCTIONS:** 10  
**BRIDGE:** 4.2KM  
**TUNNELS:** 5KM  
**ROAD IMPROVED:** 8KM  
**ELEVATED ROAD IMPROVED:** 5KM  
**COST PER KM (IN 2010 USD):** 0.11BN

### PATRONAGE

**FORECAST TRAFFIC (1996)**  
 662,000 VPD IN 2001  
 731,000 VPD IN 2011  
**ACTUAL TRAFFIC**  
 621,019 VPD IN 2001  
 751,494 VPD IN 2008



### INTRODUCTION

CityLink is a 22km road scheme in two sections. The Western Link upgrades an existing freeway to eight lanes and adds a six-lane elevated road and bridge crossing over the River Yarra. The Southern Link upgrades an arterial roadway to five and six lanes, and provides two three-lane tunnels (of 3.4km and 1.6 km in length) under the Yarra. It opened in 2000. Toll charges are collected through an electronic system developed as part of the project.

The project is associated with the redevelopment of unused docklands between the central business district and the Yarra, and the expansion of container traffic through the port.

### BACKGROUND

The primary objective of the project was to relieve congestion in the city centre, by linking the existing radial highways and bypassing the centre's urban and residential streets. This in turn would improve the urban environment and provide better access for industry to port, rail and airport facilities.

The project was supported by a variety of national and state government policy statements relating to transport and urban development between 1987 and 1992. The decision to seek private sector involvement was announced in 1992, based on guidelines issued by the State government in 1991.

The scheme was initially developed by the state road agency, VicRoads, but in 1995 the core team from VicRoads was transferred to the newly established Melbourne City Link Authority.

Public consultation took place in 1992, highlighting issues about potential economic, social and environmental impacts, and leading to the publication of an environmental effects statement in 1994.

**TIMELINE**

**CONCEPTION: 1929: FIRST PROPOSAL FOR SOUTHERN BYPASS OF CBD**



**CONCEPTION: 1989: ENVIRONMENTAL EFFECTS STATEMENT (EES) FOR PART OF WESTERN BYPASS. SCHEME ABANDONED**

**CONTEXT: 1991: STATE GOVERNMENT GUIDELINES ON PRIVATE INVESTMENT IN INFRASTRUCTURE**

**CONCEPTION: 1992: NATIONAL GOVERNMENT POLICY SUPPORTS LINKING MELBOURNE'S FREEWAYS THROUGH PRIVATE FUNDING**

**INCEPTION: 1992: PRIVATE SECTOR INVITED TO SUBMIT EXPRESSIONS OF INTEREST. CONSULTATION ON EES**

**DELAY: 1992/93: NEW GOVERNMENT REVIEWS FINANCIAL ASPECTS OF SCHEME**

**INCEPTION: 1994: SHORTLISTED CONSORTIA INVITED TO SUBMIT BIDS. EES PRODUCED**

**INCEPTION: 1995: TRANSURBAN BID WINS, CONCESSION AGREEMENT SIGNED & RATIFIED BY PARLIAMENT**

**IMPLEMENTATION: 1995: VICROADS CORE TEAM TRANSFERS TO MELBOURNE CITY LINK AUTHORITY (MCLA)**

**IMPLEMENTATION: 1996: INDEPENDENT REVIEWER APPOINTED. CONSTRUCTION STARTS**

**DELIVERY: 1998: TOLL PRODUCTS AVAILABLE**

**DELIVERY: 1999: TOLL ACCOUNTS OPENED. WESTERN LINK OPENED, WITHOUT TOLLS. STATE LEGISLATION PROTECTS USERS AGAINST TOLLING ERRORS AND MISUSE OF PRIVATE INFORMATION**

**DELIVERY: 2000: CONSTRUCTION COMPLETE, FULL OPENING**

**DELIVERY: 2001: TRANSURBAN RESTRUCTURES FROM SINGLE PURPOSE ENTITY**

**DELIVERY: 2002: MCLA REPLACED BY OFFICE OF DIRECTOR AS PUBLIC SECTOR CONTRACT MANAGER**

**DELIVERY: 2004: OFFICE OF DIRECTOR DISBANDED**

**DELIVERY: 2034: CITYLINK REVERTS TO STATE OWNERSHIP**

**CHARACTERISTICS**

The cost was estimated at AUD 1.776bn (at 1993 prices) (USD 2.80bn at 2010 prices<sup>i</sup>) in Transurban's 1996 prospectus. The design and construct contract accounted for 65% of the estimated cost. The final project cost in 2006 was slightly lower, at AUD 2.2bn (USD 2.46bn at 2010 prices). The state government also incurred costs of AUD 0.34bn (twice the original estimate) for land acquisition and works to the connecting road network.

The Transurban Consortium (Transfield Holdings of Australia and Obayashi Corporation of Japan) was awarded the concession to design, build, finance, operate, levy tolls and maintain the infrastructure for 34 years, when it will transfer to the state.

A subsidiary of Transurban, the Transfield Obayashi Joint Venture, was responsible for design and construction. Melbourne City Link Authority acted as the client and performed various functions including land acquisition, liaison and negotiation with other public authorities (it has since been disbanded). Sinclair Knight Merz was appointed by the state as independent reviewer.

The development of an electronic toll system presented the greatest risk for Transurban, as no revenue could be collected unless it functioned to a high degree of accuracy.

**FUNDING**

Transurban is a sub-lessee of the unit trust, City Link Management Ltd, a wholly owned subsidiary of Macquarie Bank Ltd. Its prospectus was underwritten by JB Were, Macquarie Underwriting Ltd and SBC Warburg Australia Ltd.

The project was financed by 59% debt (provided by a syndicate of banks) and 23% equity (raised from a variety of sources including public and institutional bond issues). Additional funding came from CPI bonds underwritten by ANZ, Bankers Trust Australia, CBA, Macquarie Bank, MLC and Westpac, and subordinated debt underwritten by National Australia Bank.

Transurban pays concession fee payments to the state every year. The state can terminate the concession deed after 25 years in the event of high rates of return and repayment of the initial loan.

<sup>i</sup> Costs have been converted to USD at 2010 prices, using historic inflation rates and current exchange rates, to allow comparison between projects.