

West Gate Bridge Strengthening Project - Context and Project Objectives

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John Cunningham has been a VicRoads employee for more than 30 years. In 2006 John was appointed as VicRoads Project Director for the \$1.5 bn Monash-CityLink-West Gate (M1) Upgrade, including the strengthening of West Gate Bridge. Prior to this appointment John has held senior management positions within VicRoads in road safety, traffic engineering, design and project management, most recently as Project Director of the Tulla/Calder Interchange Project.

Summary

In 2006 the Victorian Government announced funding to carry out essential strengthening of the West Gate Bridge to ensure that it was able to continue to perform its critical function within the State's transport network. The strengthening project was to be planned and carried out over a 10 year period consistent with the approach adopted for the strengthening of similar bridges elsewhere in the world.

At the same time, and independent of the announcement regarding West Gate Bridge, the Government entered into a contract to complete a \$1.5bn upgrade of the Monash-CityLink-West Gate (M1) Freeway over a length of 75km either side of the West Gate Bridge. This much broader project was to be delivered within 5 years, including essential works across West Gate Bridge.

Consequently the strengthening project had to be compressed into a much shorter time frame than had been achieved anywhere else, with analysis, design and construction completed within three and a half years - while the Bridge continued to carry up to 160,000 vehicles each day.

This paper discusses the complex history of the West Gate Bridge, the objectives of the strengthening project and how they fitted into the overall context of the M1 Upgrade project, the formation of the West Bridge Strengthening Alliance to design and carry out the strengthening works, and what the outcome has been for the State of Victoria and the future of the Bridge.

Keywords: West Gate Bridge, public safety barriers, alliance, strengthening, M1 Upgrade

1. Introduction

From the time of its opening in 1978 the West Gate Bridge has been a critical element in the road network of Melbourne, the capital city of the State of Victoria. It provides the only major crossing of the lower section of the Yarra River that connects the Melbourne CBD, the Port of Melbourne and the eastern suburbs with the rapidly developing western suburbs, the regional city of Geelong and the popular tourist destinations along the western coast.

In 2006 the State Government of Victoria announced a major project to carry out essential strengthening of West Gate Bridge to ensure the long term sustainability of the structure and ensure