

Management of Major Road Projects

Presenter:
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Background

- Increasing road traffic has affected the performance of Victoria's road system.
- Accommodating further growth is a major challenge.
- Effective major road projects will play an important part in meeting this challenge.
- Scope of audit – six 'major' projects managed by VicRoads; Peninsula Link project managed by LMA.

Project	Capital (\$ mil)	Status	Procurement
VicRoads			
Goulburn Valley Highway duplication—Arcadia section	41	Completed	Design and construct
Taylor’s Road duplication	46	Completed	Design and construct
Western Highway Realignment Melton to Bacchus Marsh (Anthony’s Cutting)	200	In progress	Alliance
Calder Freeway—Faraday to Ravenswood	220	Completed	Design and construct
Deer Park Bypass	362	Completed	Design and construct
Western Ring Road upgrade	1 200	In progress	Alliance / design and construct
Linking Melbourne Authority			
Peninsula Link	750	In progress	Public private partnership

Audit objective:

- Assess how effectively major road projects have been managed—developed, delivered and evaluated.

Overall conclusion:

- VicRoads and LMA have not been fully effective in developing road projects.
- Once decisions had been reached, VicRoads and LMA effectively delivered the major road projects we examined.
- Neither organisation had measured all the intended project outcomes but are working to do this.

Findings—Informing project decisions

VicRoads and LMA apply rigorous engineering assessments to project options.



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Major weaknesses in forecasting traffic and estimating benefits—overestimate the benefits.



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pages 19-20

Recommendations 1, 2, 3 and 6:

- improve traffic forecasts and benefit estimates (VicRoads)
- better inform decision-makers about traffic and benefits (VicRoads)
- improve quality assurance applied to forecasting traffic and estimating the benefits (LMA).



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The ways people and businesses could respond to a road improvement

Changing route—drivers make the same journeys but use the improved route.

Changing destination—drivers decide to travel to more distant destinations because the improvement makes the journey time acceptable.

Changing mode—public transport passengers switch to car because the improvement makes road travel more attractive than rail.

Changing time of travel—drivers decide to travel in the commuting peak period because the improvement reduces journey times to an acceptable level.

Making additional journeys—people are willing to make additional car journeys because of the improvement.

Relocated trip—people and businesses relocate to take advantage of the improvement and so make journeys that are new to the area.

Pakenham and Hallam bypasses—south-east Melbourne growth corridor

The Pakenham bypass opened in 2007 and the Hallam bypass in 2003. Both raised capacity on the M1 motorway connecting suburbs in the south-east of Melbourne with the Central Business District and Melbourne's middle and inner suburbs.

The traffic forecasts were significant underestimates:

- over most of Pakenham Bypass's length, daily traffic in 2010 exceeded the 2011 forecasts by over 50 per cent and was close to the volumes expected in 2031
- Hallam Bypass's daily traffic in 2010 overshot the 2011 forecasts from 15 to 29 per cent for different sections.

The consequences are serious. The decision to fund these schemes was based on an assumption that they would give sufficient capacity for the next 20 to 25 years. By 2010 this capacity had been used up.

Findings—Informing procurement decisions

VAGO not assured about the reliability and completeness of the costs that informed decisions:

- to procure using a public private partnership (PPP)
- to accept the preferred bidder.



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Recommendations 7 and 8:

- improve the quality of the cost estimates for state delivery
- better inform decision-makers about the sensitivity of the PPP costs to changes in the discount rate.



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Event	Decision or milestone
19 Feb 2009	Government decided to procure through a PPP
17 Jun 2009	Government endorsed the release of requests for proposals
20 Oct 2009	Tenderers submitted initial PPP bids
7 Dec 2009	Tenderers submitted final PPP bids
14 Dec 2009	LMA executive panel endorsed a PPP bid selection report
15 Dec 2009	LMA board signed off on the preferred PPP bid
22 Dec 2009	LMA amended the selection report revising the discount rate
22 Dec 2009	Government approved changes to the PSC
14 Jan 2010	Government endorsed the preferred bidder

Findings—Measuring and improving performance

VicRoads had not adequately measured outcomes but is acting to do this.



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LMA is developing a plan to monitor outcomes for Peninsula Link but needs to document this earlier



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Recommendations 4, 5 and 9:

- VicRoads should review lessons and measure outcomes for all major projects.
- LMA to document a plan to measure project outcomes as part of the project development.



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