

2014-2015 Assessment Brief

Recommended rating:	Subject to further consideration
Current rating on Infrastructure Priority List:	New submission
Initiative Name:	Main Road, St Albans Level Crossing Removal Project
Geography:	Melbourne, Victoria
Proponent:	VicRoads
Project description:	
<p>The Victorian Government is seeking to remove a level crossing in St Albans. The St Albans project involves lowering the rail line below Main Road.</p> <p>Consistent with its Statement of Expectations, issued by the Australian Government, (which directs Infrastructure Australia to evaluate the assessments of project proposals where Commonwealth funding of more than \$100 million is sought) Infrastructure Australia has undertaken an evaluation of this project.</p> <p>Project objectives include:</p> <ul style="list-style-type: none"> • A more efficient transport network; • Improved pedestrian and traffic safety in the vicinity of the crossing; and • Uplift in the economic viability of the St Albans major activity area. <p>Problems the project seeks to address are:</p> <ul style="list-style-type: none"> • Rapid growth in population and rail services is leading to prolonged traffic delays preventing effective operation of the road network; • Congestion around the crossing, high safety risks and inefficient public transport; and • Limited accessibility for all modes of travel around the area is reducing economic performance, local amenity and access to services. <p>Project solution:</p> <p>The preferred option is the grade separation of the road and rail networks by lowering the rail line and rail station below Main Road with the concourse, station and platforms being located to the south of Main Road.</p>	
Capital Cost of Initiative by Proponent (\$ millions, nominal, undiscounted):	\$222.9 million (outturn cost) (P50) \$231.5 million (outturn cost) (P90)
Contribution sought by Proponent including requests for project development funding (\$ millions, nominal, undiscounted):	Australian Government agreed to provide \$151 million on 20 April 2014
Other funding (source/amount/cash flow) (\$ millions, nominal, undiscounted):	Victorian State Government \$71.9 million
High level development and implementation program (month/year):	Commence construction: June 2015 Practical completion of the project: December 2016 Final completion of the project: December 2018
BCR stated by proponent:	0.8:1

Strategic alignment summary

Alignment with Infrastructure Australia's Strategic Priorities:

This project demonstrates alignment with Infrastructure Australia's strategic priority of 'developing our cities and regions' and theme of 'transforming our cities' by improving transport connections across the city, increasing public transport capacity and making better use of existing transport infrastructure.

The level crossing has significant impacts on traffic flows in the St Albans locality. The project is not located on the National Land Transport Network.

Alignment with State Strategic Priorities:

The St Albans level crossing removal project is outlined as one of 50 level crossings to be removed. Funding was provided in the Victorian State Budget in May 2013 for early works for five level crossing removals, including Main Road, St Albans. Additional funding was allocated in the Victoria State Budget in May 2014 for the construction of the Main Road St Albans level crossing removal project.

Problem assessment summary

The submission identifies the following three problems:

- Rapid growth in population and rail services is leading to prolonged traffic delays preventing effective operation of the road network. Rail services receive priority at the level crossing;
- Congestion around the crossing, high safety risks and inefficient public transport operations. (There are two bus terminals either side of the level crossing); and
- Limited accessibility for all modes of travel around the area is reducing economic performance, local amenity and access to services.

The factors underlying these problems are population growth and increased demand for travel on road and rail networks during peak periods.

Currently, closure of the level crossing leads to vehicle queues ranging from 100 to 150 metres long and may extend to up to 400 metres. Rail services are prioritised on the level crossing. As rail service frequency increases, this leads to more frequent closure of the level crossing. The proponent estimates that in 2012, the level crossing was closed for road traffic for 30% of the time in the AM peak hour and 29% of the time in the PM peak hour. By 2021, the corresponding figures are estimated to be 68% in the AM peak hour and 67% in the PM peak hour. In 2027, there is an anticipated decrease in Sunbury line rail services, following the completion of Stage 3 Melton Line Electrification, which would lead to a reduction in the share of the time the level crossing is closed to road traffic to 52% in the AM peak hour and 48% in the PM peak hour.

The congestion around the crossing also raises safety concerns. The Australian Level Crossing Assessment Model (ALCAM) identifies Main Road as the highest risk level crossing in Victoria. There has been one pedestrian fatality since 2008 and 41 near misses between pedestrians and trains. The high amount of pedestrian incidents reflects high pedestrian traffic levels moving between the rail station and two bus terminals in St Albans.

The St Albans area is designated as a Major Activity Area. Within Melbourne there is one Central Activity District (the CBD), 26 Principal Activity Centres and more than 80 Major Activity Areas. At the time of the latest Census, there were 35,000 people living in St Albans (North and South) and 6,000 people employed there. This was respectively 0.7% of Victoria's population and 0.2% of Victoria's employment.

In summary, the project submission shows that there are significant problems (including safety risks) arising from this level crossing and that these are likely to worsen.

Infrastructure Australia considers that including this stand-alone project in a broader programme of level crossings, that improves the overall efficiency and safety of Melbourne's arterial road network, might lead to a greater range of economic and safety benefits that would increase the national significance of the project and potentially improve the BCR.

Solution assessment summary

The proponent's preferred project solution is to lower the Sunbury Rail line in a 1.8 kilometre long, approximately 6 metre deep cutting below Main Road. The works would include:

- construction of a new premium rail station below Main Road;
- relocation of the existing bus interchange at Alfreida Street to the station precinct;
- construction of a pedestrian bridge to connect the new bus interchanges at the station precinct;
- relocation of car parks; and
- construction of a pedestrian overpass to replace the existing at grade pedestrian crossing of railway lines at Ruth Street.

The preferred option has been selected through an initial process of developing six strategic options (and doing nothing). These have been largely ranked according to the extent to which they will deliver benefits, without regard to their costs. Detailed information on how benefits have been assessed for strategic options has not been made available to Infrastructure Australia. Proponent analysis concluded that grade separation of road and rail was considered to deliver the greatest benefits.

Four sub-options were considered for grade separation, involving lowering or raising the road and lowering or raising the rail. Raising or lowering the road was considered infeasible because this would sever side roads. Cost benefit analysis was undertaken on raising or lowering the rail. The rail over option has been assessed as being marginally preferable on the basis of net benefits (\$16 million greater) and the multi-criteria assessment. Following a community engagement process, the rail under option was chosen as the preferred option.

Detailed traffic modelling has been undertaken on eight variations of rail under and over grade separation options. This confirms considerable local traffic delays arising from the level crossing and leading to traffic moving to alternative routes.

Economic appraisal summary

The stated Benefit Cost Ratio (BCR) for the project is 0.8:1 discounted at 7% and using P90 costs.

There are both upside and downside risks to the BCR estimate:

- The proponent has indicated that market-tested prices are below the costs used in the cost benefit analysis. There may also be scope to bundle this level crossing removal with other level crossing removals being funded entirely by the Victorian Government to achieve economies of scale and lower costs. This could provide some upside to the stated BCR; and
- The estimates of the value of reliability changes arising from the project are about one third of benefits. This is larger than most projects, but reflects the impacts of the level crossing on the variability of travel time; and
- A broader CBA analysis for the programme of 50 level crossings may deliver lower costs reductions as identified above, as well as further network benefits (to those already identified) such as:
 - Increased network reliability; and
 - Wide economic benefits.

Deliverability summary

The deliverability of the project has not been assessed in detail.

It is Infrastructure Australia's understanding that the market is currently being tested in terms of the costs of the project.

Overall Assessment

There are significant problems arising from this level crossing, which are presented and assessed as local in their nature, with the project not being located on the National Land Transport Network, and on this stand-alone basis not considered to be nationally significant.

The project will deliver important safety and local traffic decongestion benefits, and the current rail under road grade separation option would deliver a BCR of 0.8:1 (7% discount rate).

The Victorian Government has recently announced support for a broader programme of level crossing removals. Considering the St Albans project within the context of a broader programme of level crossings removals has a number of potential benefits that could improve consideration of the project including:

- broader transport network benefits of improving Melbourne's arterial road network;
- wider economic impacts from businesses interaction and bringing workers closer to jobs;
- Capturing cost savings by taking advantage of synergies of packaging different projects together as part of a broader programme; and
- further demonstration of safety improvements across the Melbourne rail network, providing a step change safety improvement.

Infrastructure Australia Priority List Decision

Based on the information available on this stand-alone project, Infrastructure Australia has not included the St Albans level crossing removal on the Infrastructure Priority List at this time. Infrastructure Australia would be pleased to work with the Victorian Government to progress an evaluation of a broader level crossing programme.

This brief was approved by the IA Board in May 2015.

The capital cost estimate provided in the brief to the IA Board was at the P50 level. Consistent with other IA assessment briefs, the capital cost at the P90 level has been added to the brief.