Millers Road and Williamstown Road Corridor Study

Response to Minister for Planning's Environmental Effects Statement Assessment





Executive Summary

The West Gate Tunnel Project (WGTP)will change how freight moves around the inner west. The WGTP's Environmental Effects Statement (EES) process requested VicRoads, now part of the Department of Transport (DoT) complete a corridor study along Millers Road, with Williamstown Road included following additional consideration of the WGTP's effects and community feedback.

The investigation is now complete, and the findings are highlighted in this report. The focus of the study was on Millers Road and Williamstown Road – between Geelong Road and West Gate Freeway – as traffic analysis as part of the WGTP EES suggested these two roads would see increased freight volumes by 2031.

To facilitate the study, DoT adopted the following approach:

- establishment of Millers Road Williamstown Road Corridor Study Working Group (Working Group) with community, industry and government agency representation
- a focus on local residential improvements, freight and network improvements and road safety improvements
- adoption of a Prioritisation Framework consisting of high-level constructability assessment and a multi-criteria analysis to determine the feasibility of ideas put forward by the Working Group.

Based on the requirements of the Minister's EES response, this study identifies initiatives with the potential to mitigate the impact of the projected increase in traffic volumes on the safety, accessibility and amenity of the abutting local residential community prior to the completion of the WGTP. To progress any of the initiatives identified in this report would require funding for the development, design and construction. It is expected the initiatives will be subject to different timescales as further work is required to determine cost and network implications and will be subject to Government funding processes.

DoT considers that its WGTP EES obligations have been met through the facilitation of the study and the delivery of this report.

Introduction

Melbourne's inner west is a thriving community and economic hub with a long history of industrial activity and diverse, changing residential communities. These communities live near major industry and are concerned that trucks travelling through residential areas might have impacts on local health and wellbeing.

The WGTP has been identified as a significant, less impactful infrastructure solution that will provide a safer, more direct pathway to and from the Port of Melbourne. Its extra capacity would also reduce reliance on the West Gate Bridge to cross the Maribyrnong and Yarra Rivers from the west.

Once the WGTP is completed, there will be 24-hour truck bans in place on several roads within the inner west (namely Moore Street, Buckley Street, Somerville Road, and Francis Street in Footscray and Yarraville). The modelling undertaken as part of the EES showed an expected increase in truck volumes along the nearby corridors of Millers Road and Williamstown Road, including an increase of 4,000 trucks along Millers Road by 2031 when compared to the 'no project' case.

As part of the WGTP's EES process, the Minister for Planning committed to 27 initiatives that would further investigate specific issues and impacts of the WGTP, many of which span across the inner west area.

The Millers Road and Williamstown Road corridor study is to determine traffic and transport management works along the Millers Road and Williamstown Road corridors, between the West Gate Freeway and Geelong Road. This is in line with the EES recommendation to:

- "undertake a corridor study along Millers Road [and Williamstown Road, included following additional consideration of project effects and community feedback] between the West Gate Freeway and Geelong Road to determine traffic and transport management works required to cater for the projected traffic volumes in 2031, including consideration of the safety, accessibility and amenity of the abutting local residential community".
- "engage affected residents, business and Hobsons Bay City Council" and "undertake [the study] as early as possible to allow mitigation works to be implemented prior to the completion of project construction".

In addition, the EES includes the following requirements under DoT's remit of delivery:

- to develop and fund an air quality mitigation response
- a "smoky vehicle enforcement program"
- "investigate [an] alternative mechanism for truck ban monitoring"
- establish a separate study (now known as the Hobsons Bay Transport Planning Study) led by DoT and Hobsons Bay City Council to "consider the full impacts of the West Gate Tunnel Project (WGTP) and Level Crossing Removal Projects on the residents of Hobsons Bay".

The process adopted to facilitate and complete the study was to establish a Millers Road and Williamstown Road Corridor Study Working Group with community, industry and government agency representation through a series of workshops in 2018 and 2019.

To address local amenity, safety and accessibility, the study focusses on local residential improvements, freight and network improvements and road safety improvements. A Prioritisation Framework was adopted for this study to determine the feasibility of the ideas put forward by the Working Group and develop initiatives.

Study Process

Millers Road and Williamstown Road Corridor Study Working Group

In mid-2018 a Working group was formed with representatives from Hobsons Bay City Council, Maribyrnong City Council, Brimbank City Council, Victorian Transport Association and local community groups (including Don't Destroy Millers Road, Maribyrnong Transport Action Group and Save Willy Road).

The Working Group's objective was to discuss and engage on options that could be developed and recommended in response to the future changes brought about the WGTP.

With regards to Millers Road, initial priorities were centred around investigating access, safety and freight movement. The focus on Williamstown Road was to investigate its optimal use, noting the interface issues with the abutting sensitive land uses.

A total of five workshops were held between September 2018 and July 2019. The Working Group identified 57 ideas and DoT utilised the Prioritisation Framework to develop the ideas into initiatives and potential program of work packages.



Figure 1 – Working Group Workshop Timeline

Prioritisation Framework

The 57 ideas identified by the Working Group were subject to a three-stage feasibility assessment to develop the ideas into initiatives and potential program of work packages, requiringfurther detailed investigation.

Stage 1: High level assessment of the constructability

Ideas were considered in the context of design complexity, implementation costs and delivery timeframe

The first stage involved a high-level assessment of each proposed idea considering its constructability, time and cost required for delivery and design complexity. At this stage, 24 ideas were not progressed further because they were:

already scheduled to be delivered by DoT

- · addressed by the WGTP
- responsibility of local Council
- appropriate for development in the longer term after the completion of the WGTP
- unfeasible.

Stage 2: Multi-criteria analysis.

Ideas were subject to qualitative assessment against Key Result Areas (KRAs) to ensure they aligned with Working Group's purpose and overall network objectives. Ideas which did not strongly align to the KRAs were considered unfeasible.

Building from stage one, the second stage assessed the remaining ideas against five KRAs (refer to Table 1). The results of this qualitative assessment were then reviewed against a Benefits Rating (refer to Table 2) to determine the potential benefits of the ideas proposed by the Working Group. The aim of this review was to arrive at a set of initiatives which ultimately:

- resolved concerns relating to local amenity, safety and accessibility
- balanced the needs of residents, industry and freight
- deliverable by the completion of the WGTP.

Ideas which received multiple 'poor' ratings or a 'very poor' ratings in the Benefit Ratings review were not progressed to the next stage as they did not align with the study's scope.

Table 1 – Key Result Areas

Key Result Area	Description
Constructability	A qualitative assessment of the upfront investment, one-off costs, complexity of design and required completion time.
Road Safety	The potential safety risk as a result of increased modal conflicts at key access points.
Accessibility	The opportunity of access to and around the road network, considering the importance of moving both people and freight around the network to support a balance between community and industry needs. This includes consideration of the effect of travel time involved across all transport modes, the effect on movement, service reliability and the effect on access to sustainable transport modes.
Amenity	The pleasantness or attractiveness of a place.
Network Impact	Considering transport and the network as one system (not individual projects or modes) which aligns with the Movement and Place strategy, local strategic network plans and broader network policy and plans. This includes considering both local and network-wide issues and impacts.

Table 2 - Benefit Ratings

POTENTIAL PROJECT BENEFITS	RATING		POTENTIAL PROJECT DISBENEFITS
Superior benefit to safety or accessibility or amenity. Consistency with network strategy, providing superior positive network impact. Able to commence delivery immediately with no hurdles to design and highly cost-effective.	VERY WELL		

Strong benefits to safety or accessibility or amenity. Consistent with network strategy, providing significant positive network impact. Able to commence construction and delivery in the short-term with minor hurdles to design, costeffective.	WELL		
Moderate benefits to safety or accessibility or amenity. Moderate alignment with network strategy, providing moderate positive network impact. Likely delivery in the short-term with consideration given to design, timeliness and investment.	MODERATELY WELL		
Minor benefits to safety or access or amenity. Minor alignment with network strategy, providing minor positive network impact. Average prospects of constructability in the short-term.	PARTIAL		
Minimal benefit at any level Potential short-term delivery achievable.	NEGLIGI	BLE	Minimal disbenefit at any level Potential short-term delivery achievable
		LOW	Low disbenefit to safety or access or amenity. Little prospects of constructability in the short-term, strong prospects in the medium-term. Misalignment with network strategy.
		MODERATELY POOR	Moderate disbenefit to safety or access or amenity. Moderate misalignment with network strategy. Little prospect of constructability in the short-term, moderate prospects in the medium-term.
		POOR	Significant disbenefit to safety or access or amenity. Significant misalignment with network strategy. No constructability in the short-term, little medium-term prospects.
		VERY POOR	Severe disbenefit to safety or access or amenity. Severe misalignment with network strategy. Implementation limited to long-term, strategic outlook.

Stage 3: Identifying short term initiatives deliverable prior to the opening of the WGTP.

Ideas are considered to have merit for further detailed investigation.

At the third stage, the ideas were reviewed in the context of other initiatives being proposed in other Government studies/investigations. The strategic alignment provided an integrated transport response to support future funding considerations. Based on this assessment, 13 of the remaining 29 ideas warranted detailed investigation. The 13 ideas which progressed were then grouped based on location and network context.

Table 3 – Summary of work packages arising from Prioritisation Framework

	Resident Improvement Package	Freight and Network Efficiency Improvement Package	Road Safety Package
Treatment	*Signalised access for Brooklyn residents from Millers Road Williamstown Road pedestrian improvements Millers Road resurfacing Millers Road tree planting *Federation Trail grade separation	 Signal network optimisation to channel freight through industrial roads Improve Grieve Parade to incentivise truck use Millers Road/Geelong Road /Francis Street intersection upgrade *Millers Road upgrade Extend left turn lane for Geelong bound freeway ramp on Millers Road Millers Road signal synchronisation 	 Williamstown Road/Thomas Street signalisation Williamstown Road/Somerville Road fully controlled right turn

Truck curfews on Williamstown Road and Millers Road were also put forward by the working group as part of the consultation process but were not considered further by DoT due to the limited north south freight accessibility in the area.

It is expected these initiatives will be subject to different timescales of delivery as significant work is required to determine cost and network implications. In particular, initiatives marked (*) are considered to be very unlikely to be able to be delivered in the foreseeable future as construction will significantly disrupt the transportnetwork and will result in major traffic delays with potential for subsequent safety and amenity impacts. The inner west is a highly constrained transport network with limited alternative routes available and these works on key sections on the Millers Road and Williamstown Road will significantly impact a critical north-south connection route.

Considerations of the initiatives

The Prioritisation Framework, particularly through its Stage 2 multi criteria approach, was used to consider the initiatives as follows. The table below provides a preliminary assessment against the Key Results Area. As noted, significant further work will be required to determine cost and network implications and as such, the assessment below is subject to change.

Residential Improvement Package

Initiative	Constructability	Road Safety	Accessibility	Amenity	Network Impact
Signalised access for Brooklyn residents from Millers Road	Well Subject to further work to determine the full extent of impact of network disruptions.	Very Well The number of conflict points remain the same but signalised access provides full control for vehicle movements, significantly improving safety.	Well Improves access from local streets to arterial roads.	Negligible Negligible impacts from an amenity perspective. Further work may be required to understand the full noise implications.	Partial Supports local network connections to the arterial road.
Williamstown Road pedestrian improvements	Very Well Subject to available space for pedestrian protection barriers, it would be generally cost-effective.	Negligible Pedestrian fencing is only used to control access and has no other protective benefit.	Negligible Negligible impacts from an accessibility perspective.	Negligible Negligible impacts from an amenity perspective.	Partial Enhanced pedestrian facilities support W2 classification at Sommerville Road.

Millers Road resurfacing	Well Minimal complexity related to delivery but is subject to further work to determine the full extent of impact of network disruptions.	Partial Improvements will increase safety but further work may be required to fully understand reduction of noise pollution.	Negligible No change anticipated.	Partial Improvements to surface quality reduces noises levels, providing slight benefits to amenity.	Negligible No change anticipated.
Millers Road tree planting	Well Additional trees would likely be cost effective and have minimal barriers to design.	Moderately Poor Limited space in the nature strip to achieve appropriate clear widths.	Negligible Negligible impacts from an access perspective.	Well Trees will increase visual amenity and improve climate resilience.	Negligible No change.
Federation Trail grade separation	Low Significant investment required and design must consider structural, geotechnical and traffic increasing complexity of the initiative. Further investigation required to determine construction feasibility. Current limited network connections. Construction could also place significant network pressure on the limited alternative routes in the inner west if Millers Road is closed for prolonged periods.	Very Well Removes conflicts between pedestrians, cyclists and road users.	Well Reduces barriers to sustainable transport modes and provides excellent access to and from the Federation Trail.	Negligible Negligible impacts from an amenity perspective.	Very Well Supports strategic importance of Federation Trail as a key route in cycling network.

Freight and Network Efficiency Improvement Package

PROPOSAL	Constructability	Road Safety	Accessibility	Amenity	Network Impact
Signal network optimisation to channel freight through industrial roads	Well Route review to inform network movements is achievable and cost effective.	Well Optimising freight routes may lead to reduced congestion thereby reducing driver frustration.	Well Signal linkages improves travel time and accessibility to the roads.	Well Encouraging heavy vehicles to use the most appropriate route could reduce the number of trucks along Millers Road/Williamstown Road, thereby improving amenity.	Very Well Movement optimisation will improve the efficiency of the network.

Improve Grieve	Well	Negligible	Very Well	Negligible	Partial
Parade to incentivise truck use	Improved signal linkages are considered cost effective.	เหอปีแก้เกเล	Incentivising truck use along Grieve Parade promotes network permeability and supports movement of people and freight around the network.	Amenity-related impacts require further investigation however initiative may improve amenity along the Millers Road/Williamstown Road corridor.	Improving network efficiency in the right location (such as Grieve Parade) supports key freight routes.
Millers Road/Geelong	Partial	Partial	Very Well	Negligible	Very Well
Road/Francis Street intersection upgrade	Current limited network connections. Construction could place significant network pressure on limited alternative routes in the inner west if intersection is closed for prolonged periods.	No impact to the number of conflict points but upgrade will improve the ability for vehicles to negotiate turning movements.	Traffic modelling produced by the WGTP identifies long traffic queues at this intersection. Improvements will increase access and this location and improve avel time reliability.	Negligible impacts from an amenity perspective.	Consistent with network strategy which supports the strategic importance of Millers Road and Geelong Road as movement corridors.
Millers Road upgrade	Partial Current limited network connection. Construction could place significant network pressure on limited alternative routes in the inner west if intersection is closed for prolonged periods.	Partial Improvement to lane configuration will not affect the number of conflict points however will improve the ability for vehicles to negotiate turning movements.	Very Well Improvements will increase access and travel time reliability.	Negligible Negligible impacts from an amenity perspective.	Very Well Consistent with the network strategy which supports the strategic importance of Millers Road as a movement corridor.
Extend left turn lane for Geelong bound freeway ramp on Millers Road	Moderately Poor The WGTP is currently reconfiguring the interchange at this location. This presents issues in relation to timing, design and constructability.	Partial Improvements to lane configuration will not affect the number of conflicts points but will improve safety.	Well Additional lane from Duosa Road will improve capacity along Millers Road, increasing travel time reliability.	Negligible Negligible impacts from an amenity perspective.	Very Well Consistent with the network strategy which supports the strategic importance of Millers Road as a movement corridor.
Millers Road signal synchronisation	Very Well Initiative not dependent on the creation of additional infrastructure.	Partial Improved signal linkages will likely promote better driver behaviour via improved compliance with signalised intersections.	Well Signal linkages improves travel time, ability to access and travel along the road network	Negligible Minimal benefits in the local area context.	Well Signal linkages improves the level of service for the priority transport modes along this corridor. This aligns with Movement and Place which identifies this corridor important for freight and general traffic.

Road Safety Package

PROPOSAL	Constructabilit y	Road Safety	Accessibility	Amenity	Network Impact
Williamstown Road/Thomas Street signalisation	Moderately Well Signal relocation is achievable in the short term with underground services being the main obstacle.	Very Well There is a significant crash history in the area related to lack of signals. Initiative will improve road safety.	Very Well	Negligible Negligible impacts from an amenity perspective.	Negligible
Williamstown Road/Somerville Road fully controlled right turn	Well Signals are already present. Only new lanterns/remodel is required.	Very well Significant crash in this intersection. Initiative will improve road safety.	Low Requires further investigation. Right-turners already have partially controlled arrow. Initiative may impact on this movement and northbound traffic.	Negligible Negligible impacts from an amenity perspective.	Negligible Requires further investigation. This initiative may not support network-wide considerations if efficiencies are caused.

Overview of shortlisted initiatives

Initiatives for consideration in future development include:

Resident Improvement Package

❖ Signalised access for Brooklyn residents from Millers Road

This would involve traffic signals installed on Millers Road to give Brooklyn residents improved access to their suburb and the arterial road network. Evidence suggests these residents currently experience delays getting in and out of Brooklyn, and this is expected to extend over time, with 2031 modelling at Millers Road/Cypress Avenue indicating an average delay of 213 seconds.

Consideration needs to be given to impacts on arterial road traffic, as well as appropriate location(s). It is expected that the pedestrian operated signals north of Eames Avenue will be removed to complement the treatment.

As part of the design and development stage (subject to the Government funding process), a specific noise study may also be considered to understand the noise implications of this initiative and ensure the initiative does not contribute to any unacceptable noise creation.

Williamstown Road pedestrian improvements

This would involve exploring a variety of treatment options to increase pedestrian safety and connectivity. This could include treatments such as pedestrian fencing and bollards at the intersection of Somerville Road and Anderson Street.

Millers Road resurfacing

This would involve superior noise mitigation through road surfacing and kerb and channel replacement between Geelong Road and West Gate Freeway.

Millers Road tree planting

This would involve planting vegetation along the western (residential) side of Millers Road, between Geelong Road and West Gate Freeway to improve amenity and provide a natural buffer between residents and traffic.

Federation Trail grade separation

This would involve constructing a shared path bridge over Millers Road and removing the existing signalised at-grade crossing to connect the Federation Trail. While this has the potential to remove conflictpoints and encourage more cyclists onto the trail, the constructability assessment is low and may be difficult to realise in practice.

Freight and Network Efficiency Improvement Package

Signal network optimisation to channel freight through industrial roads

This would involve reviewing signals and swept paths at 11 sites throughout the Brooklyn, Tottenham and Altona North industrial areas to promote appropriate freight movements on Grieve Parade and Millers Road.

❖ Improve Grieve Parade to incentivise truck use

This would involve exploring a variety of treatment options such as signal optimisation (Green Wave) that would encourage freight to travel along the Grieve Parade corridor.

Millers Road/Geelong Road/Francis Street intersection upgrade

The Millers Road/Geelong Road/Francis Street intersection is recognised as having a limited ability to accommodate larger vehicles, contrary to its status as a key freight route. This would involve altering the intersection's current configuration, addressing issues with turning movements, as well as access, through allowing appropriate vehicles to access the network.

Millers Road upgrade

This would involve upgrading Millers Road, between Geelong Road and West Gate Freeway to potentially cater to the forecast increase in traffic volumes and enhance access to the freeway. Ideally, this would move traffic away from properties and complement the signalised access for Brooklyn residents mentioned in the *Residents Improvement Package*.

Extend left turn lane for Geelong bound freeway on ramp at Millers Road

This would involve converting the existing service road on Millers Road between Duosa Road and Paringa Road into a left turn lane for freeway-bound vehicles. This proposal would make space for two new northbound lanes, increasing the volume of through traffic.

Millers Road signal synchronisation

This would involve optimised signal sequencing along the Millers Road corridor to decrease congestion and enhance priority for north-south movements.

Road Safety Package

Williamstown Road/Thomas Street signalisation

This would involve relocating the pedestrian operated signals north of Thomas Street to the intersection to addresses a significant crash history, while improving accessibility, particularly for the adjacent shopping centre.

❖ Williamstown Road/Somerville Road fully controlled right turn

This would involve converting the existing partially controlled right turn into Somerville Road (eastbound) to a fully controlled right turn to address a significant crash history. It would reduce the number of vehicles moving through each signal cycle, potentially delaying northbound traffic.

Recommendations

Based on the requirements of the Minister for Planning's EES response, the following projects have been identified as those with potential to mitigate the impact of the WGTP on safety, accessibility and amenity of the abutting local residential community before the project is completed. They are initiatives to be considered for future network development and further funding consideration will be required for development, design and construction.

It is expected the initiatives are subject to different timescales as work is required to determine cost and network implications. In particular, those initiatives marked (*) are very unlikely to be delivered in the foreseeable future as discussed in the body of the report.

These initiatives are:

- Signalised access for Brooklyn resident from Millers Road Residential Improvement Package
- Federation Trail grade separation Residential Improvement Package
- Millers Road upgrade Freight and Network Efficiency Improvement Package.

Table 5 - Proposed Improvement Packages

	Resident Improvement Package	Freight and Network Efficiency Improvement Package	Road Safety Package
Treatment	 *Signalised access for Brooklyn residents from Millers Road Williamstown Road pedestrian improvements Millers Road resurfacing Millers Road tree planting *Federation Trail Grade Separation 	 Signal network optimisation to channel freight through industrial roads Improve Grieve Parade to incentivise truck use Millers Road/Geelong Road/Francis Street intersection upgrade *Millers Road upgrade Extend left turn lane for Geelong bound freeway ramp on Millers Road Millers Road signal synchronisation 	Williamstown Road/Thomas Street signalisation Williamstown Road/Somerville Road fully controlled right turn
Overall Benefit	Most of these initiatives provide amenity improvements for the Brooklyn community in the short to medium term through reduction in noise levels. Better accessibility to Millers Road for Brooklyn community through signalisation. Potential for modal shift/ reduction in traffic through improved cycling infrastructure and access to public transport.	The Grieve Parade initiatives would reduce truck volumes on these routes. Improved signalling and an upgrade of Millers Road could move truck traffic away from the Brooklyn community, improving amenity and accessibility. More efficient truck movements on Millers Road could improve accessibility for the Brooklyn community.	Improved safety and efficiency for all road users on Williamstown Road.

For more information

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