

Dominion Road Update

Glossary

Auckland Council	(AC)
Auckland Transport	(AT)
Auckland Plan	(AP)
Benefit Cost Ratio	(BCR)
New Zealand Transport Agency	(NZTA)
Quality Transit Network	(QTN)
Regional Land Transport Programme	(RLTP)

Executive Summary

The Dominion Road preliminary options were presented to the AT Board in June 2011 at which the Board provided direction towards the development of a preferred option. Since this time the project team has given effect to the Board's resolutions by progressing the scheme to a point where a preferred option has been identified. This option is presented in this paper which seeks the Board's approval. Following Board approval of the preferred option it is proposed to communicate this to the public through open days and other channels to mitigate the uncertainty within the community.

Dominion Road forms part of Auckland's QTN network. The improvements identified to be provided by the preferred option have a strong fit with the strategic direction for transport.

The project team has socialised this scheme with various stakeholders over the past year and there is general support for the scheme. This is reflected in positive key stakeholder feedback received through the RLTP/LTP consultation process.

The cost to complete the scheme is estimated at \$96M. The draft LTP has a budget provision of \$84M and the revenue from the sale of surplus properties is estimated to yield a further \$12M.

A full benefit cost analysis has been undertaken on the scheme using methods consistent with the NZTA Economic Evaluation manual. Based on the latest cost estimate the recommended scheme has a BCR of 2.0.

Recommendations

It is recommended that the Board:

- i). Receive the report
- ii). Approves the progression to detailed design of the preferred option as described in this paper.

Strategic Context

Dominion Road forms part of Auckland's QTN network and the improvements proposed in this project have a strong fit with the strategic direction for transport as set by the AP. The Plan states that "Auckland expects significant improvements in its transport system so that it works well for business, residents and visitors, supports Auckland's development, and contributes to the health and safety of its people and character of its places."

This project responds to those aspirations through an approach that balances transportation improvements along the corridor with the needs of local businesses and residents, whilst also enhancing the character of the street.

Dominion Road carried 2.2 million passenger trips in the period March 2010-March 2011. This amounts to a contribution of just over 3% of the entire region's public transport trips. The strategic traffic model predicts a 30% increase in transport trips along Dominion Road as a result of future land use and other infrastructure improvements. The increase in trips will largely be driven from within the walk-up catchment to Dominion Road. Bus services currently carries an average of 10,000 passenger transport trips per week day and this is predicted to increase to 13,000 passenger transport trips per week day by 2041

Dominion Road already carries more people in buses than in cars during the morning peak. Traffic observations showed that the road carries up to 1,100 people in 30 buses inbound during the peak hour and up to 900 people in 800 cars inbound during the peak hour

There is no capacity in the road network to accommodate the projected growth of 700 trips in the peak hour and there is no space to widen any of the three roads (Sandringham, Dominion or Mt Eden) to accommodate an additional traffic lane. The project therefore proposes infrastructure investment that increases the capacity of this QTN corridor and enables improved bus efficiency.

The first priority area set by the AP is to manage the transport system as a single, integrated system. The AP expects planning and delivery partners to implement principles on land use and transport as stated in the plan. An issue pertinent along this corridor is the conflict between 'movement' and 'place' that occurs as the corridor traverses through three village centres.

The project has therefore given greater emphasis to place function than has traditionally occurred when there was conflict between the movement and place functions of the transport network.

Background

This project was presented to the AT Board in June 2011. At that meeting the AT Board resolved:

- that improvements to the Dominion Road corridor that support the refined existing QTN level of service be developed, and socialised with stakeholders;
- that land purchases which enable the refinement of the existing QTN be completed as soon as practicable; and
- the sale of non-strategic property be progressed.

The project team has given effect to these resolutions and have progressed the scheme to a point where a preferred option has been identified and priced. This option is presented in this paper, and will be communicated to the public through open days and other channels if approved by the Board.

Recommended Improvements

Public transport improvements: The existing bus lane will be extended through each of the three village centres (Mt Roskill, Balmoral, Eden Valley), to create a continuous dedicated bus lane along each side of Dominion Road, during morning and evening peak hours respectively. Outside peak hours, the bus lanes will be used for parking.

The bus lane operational hours will initially (upon completion of construction) require a 30 minute extension to each peak followed by future extensions as demand increases. The progression plan for extending the bus lane operational hours is shown in the table below:

Peak	Bus lane operating hours		
	Existing	2016	2041
Morning peak	7:00am - 9:00am	7:00am – 9:30am	7:00am – 10:00am
Afternoon peak	4:00pm – 6:00pm	3:30pm – 6:00pm	3:00pm – 7:00pm

Bus stop locations are generally provided at 200m to 400m intervals, equating to 15 northbound and 14 southbound stops. The recommended option seeks to reduce these to have bus stops spaced at approximately 400m intervals, and also to match inbound and outbound stop locations. The general effect is a slight reduction in stops, with the exact location of each stop to be determined during the detailed design phase. Refer to Figure 1 below for an indication on the bus stop rationalisation.

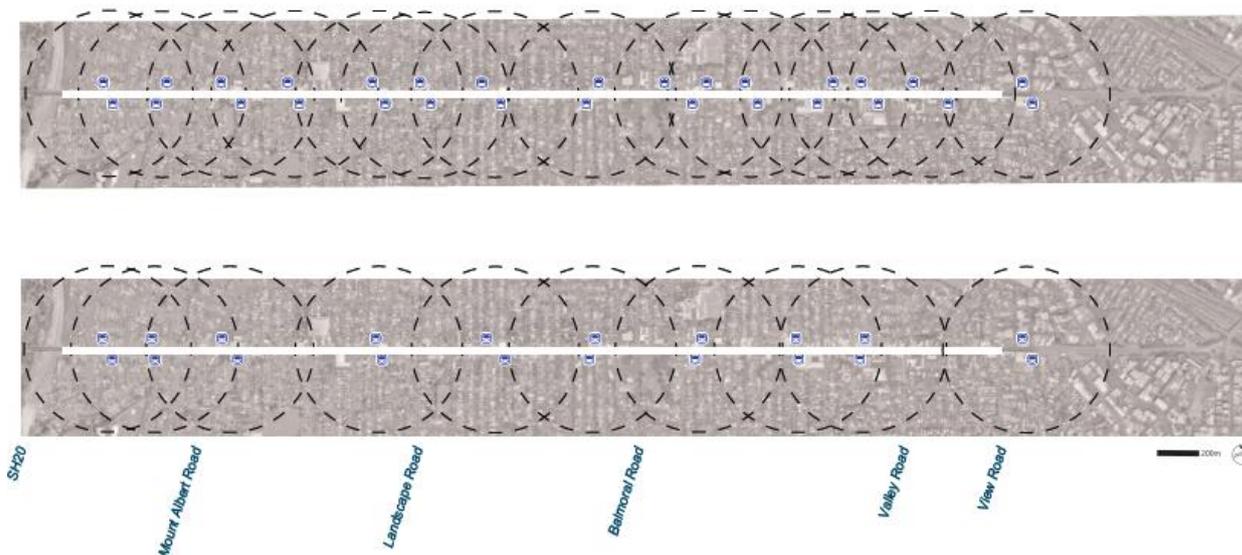


Figure 1: Rationalisation of bus stop locations

Traffic lane changes: The current design allows for one continuous general traffic lane and one continuous bus lane (and off-peak parking) along the length of Dominion Road between SH20 in the south and Ian McKinnon Drive in the north. This is expected to eliminate bottlenecks currently created by traffic merging where bus lanes start and finish. The roundabout at Denbigh Avenue will become a fully signalised intersection.

Safety improvements: Outside the village centres, the bus lanes will be widened from the current 3 metres to 4.5 metres, to provide buses with sufficient room to pass cyclists and also to provide sufficient room for cyclists to move around parked cars. Pedestrian refuges will be added at regular intervals along the length of Dominion Road.

Streetscape improvements: The areas between the village centres will be upgraded with new footpaths, lighting and planting. Overhead lines will be moved underground.

A visualisation of the mid-block section is shown in the artist's impression below.



Figure 2: Artist's impression of the current concept for mid-block sections

This visualisation illustrates the high quality footpath that is envisaged and the improvements to street lighting and landscaping that are possible due to undergrounding of overhead power lines. It also illustrates the improved opportunities for pedestrians to cross the street through the provision of refuge islands in the median and raised tables at side streets.

Village centre upgrades: Each of the three village centres – Mt Roskill, Balmoral and Eden Valley – will be upgraded as part of the project. These upgrades will include new footpaths, street furniture, lighting and additional street planting, as space allows. For urban design purposes, the village centres are defined as follows:

- Eden Valley – Onslow Road to Grange Road
- Balmoral – Balmoral Road to Kensington Avenue
- Mt Roskill – Keystone Avenue to Mt Albert Road

Within the village centres, the bus and traffic lanes will each be 3 metres wide. The road cannot be widened in the village centres, as character and heritage buildings must be protected.

These narrower lanes, together with other safety measures, will also encourage motorists to reduce their speed through the village centres.

A narrow raised median is also proposed in each village centre, to assist with street crossing opportunities. Indented parking is also removed and replaced with parking in the bus lanes (outside peak hours) to enhance pedestrian amenity through the village centres.

The recommended option therefore provides the best possible pedestrian environment, whilst also maintaining the bus priority through this QTN corridor.

The layout along the entire corridor is shown in Attachment 1-Layout of the Corridor. The key elements through each village centre are described below and illustrated through artist impressions.

Mt Roskill Village Centre: An artist's impression of the proposed option through the village centre is shown in Figure 3 below.



Figure 3: Artist's impression of the current concept for Mt Roskill Village Centre (looking towards the CBD)

The kerbside lane will be turned into a peak hour bus lane. All indented parking will be removed and replaced with parking in the bus lanes (off peak times). This allows for footpaths to be widened, which in turn allows for adequate provision of street lighting and landscaping. Further consideration will be given as to how the village centre's character can be expressed through paving materials, landscaping etc. during the detailed design phase. These matters will be workshopped with the Local Boards and key stakeholders during the detailed design phase.

Balmoral Village Centre: An artist's impression of the proposed option through the village centre is shown in Figure 4 below.

The narrow cross section will be applied between Balmoral Road and Kensington Avenue. Again, the option includes the removal of all indented parking, which is replaced with parking in the bus lanes (off peak times). Lanes are already narrow and limited opportunity exists to widen the footpath, which limits the streetscape improvements in this village centre. A central median will be provided whilst still allowing frequent crossing opportunities for pedestrians.

The right turn into/out of Wiremu Street will be restricted by the central median to improve pedestrian connectivity across the street and to remove safety and capacity issues at the intersection. This was met with general support from Wiremu Street property owners.

Further consideration will be given as to how the village centre's character can be expressed through paving materials, landscaping etc. during the detailed design phase. These matters will be workshopped with the Local Boards and key stakeholders during the detailed design phase.



Figure 4: Artist's impression of the current concept for Balmoral Village Centre (looking northbound towards Wiremu Street intersection)

Eden Valley Village Centre: The narrow cross section will be applied between Onslow Road and Grange Road. The option adopts a similar approach to the other two village centres, providing continuous bus lanes through the village centre and removal of all indented parking, which is replaced with parking in the bus lanes (off peak times). The removal of indented parking/bus bays will provide opportunity to increase footpath amenity as depicted on the artist's illustration below. A central median will also be introduced as for the other village centres.

Further consideration will be given as to how the village centre's character can be expressed through paving materials, landscaping etc. during the detailed design phase. These matters will be workshopped with the Local Boards and key stakeholders during the detailed design phase.

An artist's impression of the proposed option through the village centre is shown in Figure 5 below.



Figure 5: Artist's impression of the current concept for Eden Valley Village Centre

The current scheme actively addresses the community's key concerns and has therefore been more positively received by key stakeholders (still to be presented to the wider community through an open day).

The project team are comfortable that general support for the scheme has now been obtained. This is reflected in the feedback received through the RLTP consultation process, summarised below.

Key stakeholder	Extract from RLTP submission.
New Zealand Bus Limited	Extract from full submission. "... NZ Bus supports the following significant projects in the plans in particular: Dominion Rd Upgrades..."
Dominion Road Business Association	Extract from full submission. "... The Dominion Rd Business Association supports the proposed expenditure for Dominion Rd to make the corridor more efficient for public transport and a safer and more pleasant environment for both businesses and shoppers along this iconic road. We acknowledge the change in focus from the original concept that would have seen the road effectively turned into a four-lane highway with all on street parking removed and oppressive property designations to what is now a far more sensible and acceptable proposal. We look forward to continuing to advocating on behalf of our members and working with Auckland Transport and Auckland Council on finalizing the design concept for the project and ensuring that we achieve high quality and substantial improvements to the paving, street furniture and lighting, especially in the Eden Valley and Balmoral shopping areas, and minimising the impacts of construction on our business members..."
Trust Investments Management Limited	Extract from full submission. "...The Dominion Road upgrade is supported provided that a full review of the designations relating to this project is carried out as a priority..."
Puketapapa Local Board	Extract from full submission: "Support the improvements planned for Dominion Road including alternative cycle routes. The Board is seeking these specific changes to the Dominion Rd upgrade project plans: Re-route alternative Dominion Road safe cycle route to link Memorial Park path with the Mt Roskill School campus and the SH20 footbridge into Keith Hay Park as per Figure 1. Provide a link from Keith Hay Park to Waikowhai Bay through Molley Green reserve."

Although we have general agreement from key stakeholders there are still a couple of concerns raised through the engagement process that will need to be addressed as the project progresses. They are:

- Business owners are concerned about the disruption to business continuity during construction, and have requested that AT work further with them to develop construction methodology and communication plan that will minimise business disruption.
- The business community seeks reassurance that the operational hours of the bus lanes will not be extended beyond those currently foreseen (i.e. beyond 7am-10am and 3pm-7pm) and that the increases are only implemented as and when absolutely necessary

Status of Property Purchase

Land purchase is progressing along the section of road. The purchases are mostly confined to a 1–2m wide strip to allow for widening of footpaths and bus lanes in between the village centres. The acquisition programme should be completed by the end of this calendar year, giving the community certainty on property status along this corridor.

No current option requires the deviation through Eden Quarter and this has been removed.

Impact on buildings: There are a few instances where buildings will need to be partly demolished to enable widening. None of these properties are within the village centres, and none are listed heritage buildings.

Economics

The cost to complete the scheme is estimated at \$96M. The draft LTP has a budget provision of \$84M and the revenue from the sale of surplus properties is estimated to yield a further \$12M. The estimate is broken down as follows:

Estimated cost to proceed	Total Expected Estimate
Investigation and reporting	\$1.2m
Design and project documentation	\$5.6m
Construction	\$86.9m
Required property costs	\$12.3m
Less sunk cost	-\$10.2m
TOTAL	\$95.8m
Funding	
Revenue from excess property sale	\$12.0m
LTP Provision	\$84.0m
TOTAL	\$96.0m

Based on the cost estimate of \$106M the economic evaluation produced a BCR of 2.0 and FYRR = 8%.

Project Profile

The Dominion Road project profile has been assessed as HHL and has been confirmed with NZTA as being 'above the threshold' for NZTA subsidy.

However, given the latest BCR analysis the profile has the potential to increase to HHM, provided that NZTA agrees to the latest BCR analysis. This would substantially increase the likelihood of securing funding from NZTA.

Criteria	AT Priority
Strategic Fit	H
Effectiveness	H
Efficiency	L (may increase to M)

Funding

A budget allocation of \$84m is required to progress the current option through to construction. This is the available in the current LTP as follows:

Year	2013/14	2014/15	2015/16	2016/17	Total
Budget Amount (\$)	\$0	\$9M	\$20M	\$55M	\$84

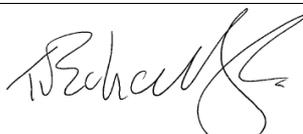
Next Steps

The following steps are proposed to advance this project:

- Communicate the preferred option to the wider public through a series of open days.
- Apply for detailed design funding from the NZTA
- Procure the detailed design of the project. The detailed design will specifically explore the following aspects through ongoing consultation with key stakeholders:
 - Type of materials, paving patterns, landscaping, street furniture
 - Exact form of the additional proposed pedestrian crossings (raised table, changing colour or signalised)
 - The possibilities to enhance each village centre's character through public art component.
 - Construction methodologies to minimise disruption during construction.
 - Value engineering to minimise cost.

Attachments

Attachment 1 – Layout of the Corridor

WRITTEN BY	Theunis van Schalkwyk Project Director – Corridor Improvements	
RECOMMENDED by	Dr. Kevin Doherty Chief Infrastructure Officer	
APPROVED FOR SUBMISSION by	Dr. David Warburton Chief Executive	