greater WELLINGTON
REGIONAL COUNCIL
Te Pane Matua Taiao

Report	13.668
Date	14 June 2013
File	TP/03/26/19
Committee	Regional Transport
Author	Luke Troy, Manager Corporate Planning

Wellington Public Transport Spine Study – Final Report

1. Purpose

This report outlines the key findings of the Wellington Public Transport Spine Study (PT Spine Study) and the recommended next steps following the study. The AECOM *Summary Report* is provided as **Attachment 1** to this report. Copies of the *Option Evaluation Report*, other final reporting and technical appendices will be made available online and on request.

2. The decision-making process and significance

The matter requiring decision in this report has been considered by officers against the requirements of Part 6 of the Local Government Act 2002.

2.1 Significance of the decision

Officers have considered the significance of the matter and recommend that the matter be considered to have low significance in terms of the Council's significance policy and decision-making guidelines.

This decision is to agree on a process and the next steps that follow the completion of the PT Spine Study.

Officers do not consider that a formal record outlining consideration of the decision-making process is required in this instance.

3. Background

The PT Spine Study is a joint study between Greater Wellington Regional Council, Wellington City Council, and the NZ Transport Agency. Transport consultants AECOM were contracted to carry out the feasibility study on behalf of the partners. The study commenced in August 2011.

The study is a project in the Ngauranga to Airport Corridor Plan adopted by the Regional Transport Committee in 2008. The corridor plan signals the need for future investment in public transport through central Wellington and for the feasibility of a high quality, high frequency public transport spine to be investigated alongside other transport improvements, which combined will provide transport network improvements for Wellington City to assist economic growth in the city and region, amongst other outcomes. The other projects in the corridor plan include upgrades to SH1 that are now included in the NZTA's Wellington inner city Roads of National Significance (RoNS) programme. Providing public transport improvements along the spine is closely connected with, and in many aspects reliant upon, these RoNS projects. For example, the grade separation provided by the Basin Reserve Bridge project is crucial to the viability of a high quality public transport system through this part of the network.

The study initially focused on the corridor from the Wellington Railway Station to the Regional Hospital in Newtown. The study area was subsequently extended through to Kilbirnie to the south-east to optimise the benefits from the shortlisted options.

The problem the PT Spine Study seeks to address is future issues of longer and unreliable public transport journey times through the corridor, increased traffic congestion on the road network, constrained economic growth and productivity, and reduced effectiveness of current and planned investment in public transport due to uncertainty about the longer term solution.

The timeframe for implementation of the preferred option for a high quality public transport spine will be medium to long term. However, there are a number of public transport improvements planned in the shorter term, such as those planned as part of the Wellington City Bus Review, to address the current bus congestion and reliability issues.

It is important to note that the PT Spine Study is a feasibility study that seeks to examine the relative merits of options. It does not provide detailed designs for the options or a detailed business case. Once a preferred option is selected, further work will be required to develop this option to a stage that it can be funded and implemented.

One of the objectives for the study has been to identify a long term direction for public transport in central Wellington and to ensure that investment in the short-medium term is consistent with this long term direction, to avoid redundancy and maximise the overall effectiveness of investment. To this end it will be important for the review and implementation of future transport plans, programmes and specific projects to take the findings of the study into account. The study partners will continue to work together to ensure that the findings of the PT Spine study are drawn through into the detailed planning for these transport projects on SH1 and the local road network.

4. Study methodology

The scoping phase of the study involved a comprehensive international review and community engagement phase.

The study then progressed through long list and medium list evaluation stages to sieve and refine the most feasible options (by route alignment and mode) and arrive at three short list options for more detailed evaluation.

A number of partner groups were involved throughout the study to provide a combination of direction, input and testing of ideas and information as the study progressed. These included an Elected Members Group, Steering Group, Technical Working Group and Partner Coordinators Group. Wider external stakeholders were also engaged through key stages of the study, primarily through a Reference Group and Transport Operators Advisory Group.

The feasibility study has been undertaken in line with the Treasury Better Business Case guidelines[1], including the use of Investment Logic Mapping for the process of identifying the study's problem definition.

5. Short list Evaluation

The three short listed options assessed were:

Bus Priority

An enhanced bus network with greater priority at intersections and along key corridors, using existing vehicle types.

Bus Rapid Transit (BRT)

Dedicated bus lanes for new high capacity articulated or double-decker vehicles as well as other system improvements to enhance frequency and journey times.

Light Rail Transit (LRT)

Dedicated lanes and tracks for new tram vehicles, as well as interchanges to transfer from buses.

The short list evaluation included analysis of options to extend routes to the north and south, development of routes and cross sections, a planning/social/environmental assessment, transport modelling, cost estimates and economic analysis to test the feasibility of the three options.

[1] http://www.infrastructure.govt.nz/publications/betterbusinesscases/guidance

6. Key findings

The key findings from the Study are:

- There is a need for future investment in public transport through central Wellington to achieve the goal of growing public transport mode share.

- A high quality, high frequency public transport spine has an important role within the Ngauranga to Airport Corridor, alongside RoNS, as part of a balanced long-term transport network for Wellington.

- There are opportunities to improve public transport mode share from the south and south-east of Wellington, however extensions of the options to the north would have limited overall benefit.

- Bus Rapid Transit provides the highest benefits, followed by Light Rail Transit and Bus Priority.

- The most expensive option is Light Rail Transit at an estimated total cost of $940 million (in 2012 dollars). This is significantly more than the next most expensive option (Bus Rapid Transit) which has an estimated cost of $207 million. The Bus Priority option is least expensive at an estimated cost of $59 million.

- Bus Rapid Transit has the highest overall Benefit Cost Ratio (BCR), followed by Bus Priority then Light Rail Transit.

- The Bus Priority and Bus Rapid Transit options can be developed incrementally. The optimal staging and timing for the Bus Rapid Transit and Light Rail Transit options, however, is in one stage with completion around 2021-22.

- It is technically feasible to construct all of the options. For most of the route they can be accommodated within the existing road corridor. However, there are potentially significant impacts on property from Bus Rapid Transit and Light Rail Transit options through Mt.Victoria and along Ruahine Street and Wellington Road.

- Aligning other policies (such as parking and land use policies) and transport projects would be necessary to realise the full benefits of any of the options. For example, managing any increases in the future availability of commuter parking appears to be key intervention to increase public transport patronage and mode share.

Additional information about the findings of the study and analysis (including modelling, costings, economic analysis, and planning, environmental and social assessments) are provided in the *Summary of Key Findings* attached to this report and the detailed technical study reports available separately.

7. Alternative Funding Study

A parallel piece of work, being undertaken by consultant Hill Young Cooper, is the *Alternative Funding Options Study* for the Wellington Public Transport Spine.

The Alternative Funding Options Study is examining a suite of funding options to ascertain how effective these would be in generating revenue to fund or part-fund any of the shortlisted options from the PT Spine Study. The options that are being examined include:

- Targeted rates
- Development contributions
- Regional fuel tax
- Congestion pricing/road pricing
- Parking levies
- Land value capture
- Air space lease
- Increased fare box recovery

The funding requirements of the shortlisted options are substantial, particularly for Light Rail Transit. The table below shows a simple analysis of the annual repayment costs of the capital cost of the three options. This assumes either the total capital cost or a 50% share, paid back over a 25 year period at the current interest rate of 6%:

Option	Capital Cost $m	Indicative Annual Repayment	Capital Cost $m (assuming 50% NLTF or Treasury contribution)	Indicative Annual Repayment
Bus Priority	59	$5m/yr	30	$2m/yr
Bus Rapid Transit	207	$16m/yr	103	$8m/yr
Light Rail Transit	938	$74m/yr	469	$37m/yr

The current Transport (targeted) rate levied by the Greater Wellington Regional Council in 2012/13 totals $47million. This covers the council's proportion of the cost of the region's public transport network, including rail, bus and ferry.

The interim findings have concluded that:

1. No one funding option will generate sufficient revenue and a package of funding tools is likely to be required.

2. The funding options that generate the most revenue are those that are broad-based. However these may be perceived as unfair as they affect many households or businesses that derive the least benefit from the shortlisted public transport options. For instance a regional fuel tax of 5 cents per litre would generate about $13 million per year.

3. The more targeted funding options, which better reflect the area likely to benefit most, generate less revenue. For instance a car parking levy of $250 on all off-street car parks in the CBD would generate about $7 million per year. Development contributions of between $2000 and $4000 per household unit levied in the immediate PT Spine corridor may generate about $20 million over a 20 year period.

4. Some of the funding options that have been analysed lack a legislative mandate and would require a change in government policy to be implemented. This includes regional fuel tax and congestion charging.

The study commenced in May 2013 and is due to be completed in early July. It is proposed that, once completed, the final study report be released and the key findings used to inform the Committee's consideration of a preferred option (see Next Steps below).

8. Information and feedback

The PT Spine Study is a technical study which has investigated all the potential options for a high quality public transport spine through central Wellington and outlines the relative costs and benefits of the shortlisted options. It does not recommend a preferred option.

It is proposed to provide information to the public on the study findings and receive feedback on the options over the next few months.

This will include:

- Public release of the study findings and study reports.
- Information provision – through reports and information placed on Greater Wellington's 'Have Your Say' website and links to other partner websites.
- Engagement and clarification about the study findings - through tools such as an online 'Question and Answer' forum and stakeholder engagement meetings.
- Feedback on the options – through written feedback online and hardcopy; and through a representative sample survey of the regional community.

Due to the election period, there is insufficient time to make a decision on the preferred option this Triennium. Instead this decision will be made by the reconvened RTC in late 2013/early 2014. At this time it is envisaged that the RTC would adopt a preferred option, having considered the study findings and taking into account the feedback. This preferred option would be the subject of formal public consultation prior to confirming the RTC adopting a final option, to be included in an amended Ngauranga to Airport Corridor Plan.

9. Next steps

Dependant on the preferred option selected, the next steps for the PT Spine project itself may include:

- Detailed design of the preferred option. This would identify the detailed layout of the road corridor, location and design of stations/stops, and other infrastructure requirements. The early progression of this work would assist in ensuring that other transport projects in the same corridor and designed to be complementary.
- Indicative business case (under Treasury Better Business Case Framework).
- Scheme assessment. This phase would need to be completed in sufficient time to allow for the consenting phase to begin.
- Detailed business case (under Treasury Better Business Case Framework).
- Designation and consenting for any parts of the preferred option that lie outside of the existing road corridor. This phase would need to be completed in sufficient time to allow for the preferred option to be made operational in the selected timeframe.

10. Communication

Briefings on the study findings for partner councils, RTC members, media, and key stakeholders will be carried out on the 18th and 19th June prior to this meeting.

The PT Spine Study website will be updated with the key findings, study reports and FAQs.

Information provision and inviting feedback on the study outcomes will be carried out as discussed in section 8 above.

11. Recommendations

That the Committee:

1. ***Receives*** *the report.*

2. ***Notes*** *the content of the Wellington PT Spine Study Summary of Key Findings report set out in* ***Attachment 1****.*

3. ***Agrees*** *to release the results of the Wellington PT Spine Study and provide for feedback from the public.*

4. ***Notes*** *that the RTC will consider the study and feedback at the beginning of the next local government triennium, and adopt a preferred option for consideration by the community through a consultation process.*

5. ***Agrees*** *to delegate to the Chair of the Regional Transport Committee authority to release the findings of the 'Alternative Funding Study' when*

completed, so that this information may inform feedback on the Wellington PT Spine Study.

Report prepared by:	Report approved by:
Luke Troy Manager, Corporate Planning	Jane Davis General Manager, Strategy and Community Engagement

Attachment 1: Wellington Public Transport Spine Study – Summary Report