

# Terms of Reference

## Wellington Public Transport Spine Study

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### 1. Study Outline

#### 1.1 Introduction

The Wellington Public Transport Spine Study is a joint study to be led by Greater Wellington in partnership with the NZ Transport Agency and Wellington City Council.

This Terms of Reference defines the scope of what is proposed to be covered by the study, as well as outlining the strategic context in which this study is to be carried out, the proposed timing and governance arrangements, and expected deliverables.

#### 1.2 Purpose

The overall **purpose** of the study is to assess the feasibility of a high quality public transport system in the Ngauranga to Airport (N2A) Corridor, as specified in the N2A Corridor Plan.

The overall study **objective** is to assess the feasibility and merits of a range of longer-term options for providing a high frequency and high quality public transport system between the Wellington Railway Station and the Wellington Regional Hospital, including any possible connections to the north and south-east, to support the urban intensification of this growth corridor.

Sub-objectives are:

1. To determine the desirable characteristics of a 'high quality public transport system' in the context of the N2A corridor.
2. To assess the merits of alternative routes through the Station – Hospital corridor and any possible connections beyond this.
3. To estimate the costs, transport benefits, inherent resilience to emergencies, compatibility and other impacts of different public transport modes along this corridor and any potential connections to the existing PT network.
4. To advise on the relative merits of alternative route and modal options for providing a high quality PT system in the corridor over the medium/longer-term, including the need for, indicative timing and phasing of the most meritorious options.
5. To provide all relevant research evidence to assist decision-making on the long-term future planning for public transport along this key growth corridor.

The study is responding to and intended to support the planned urban intensification of the Wellington City 'growth spine', which is expected to result in an additional 18,000 people or 9800 households along the corridor (approximately 40% of total growth in Wellington City) within the next 20 years. The growth spine has been planned to be developed in conjunction with a high quality public transport system, to ensure that a substantial proportion of new trips are by public transport and active modes, thereby minimising pressure on the roading network and avoiding further congestion.

The current public transport system is already operating near capacity on some sections, most notably along the 'Golden Mile' through the CBD, where the convergence of different routes is resulting in significant delays to bus services (as well as other traffic), particularly at peak periods. Improved technology (such as integrated ticketing and real-time information) and incremental improvements to infrastructure (such as bus-only lanes) are already being implemented. These are expected to provide short to medium term solutions. In the longer-term further significant improvements in public transport performance seem likely to be needed to provide appropriate levels of service that would act as an attractive alternative to car-based travel and support the continued economic growth of the city and the region.

### **1.3 Context**

The Ngauranga to Airport (N2A) Corridor Plan was adopted by the Regional Transport Committee in 2008. This multi-modal plan was developed by the NZ Transport Agency, Wellington City Council and Greater Wellington. It was the culmination of about three years of studies, technical investigations and consultation.

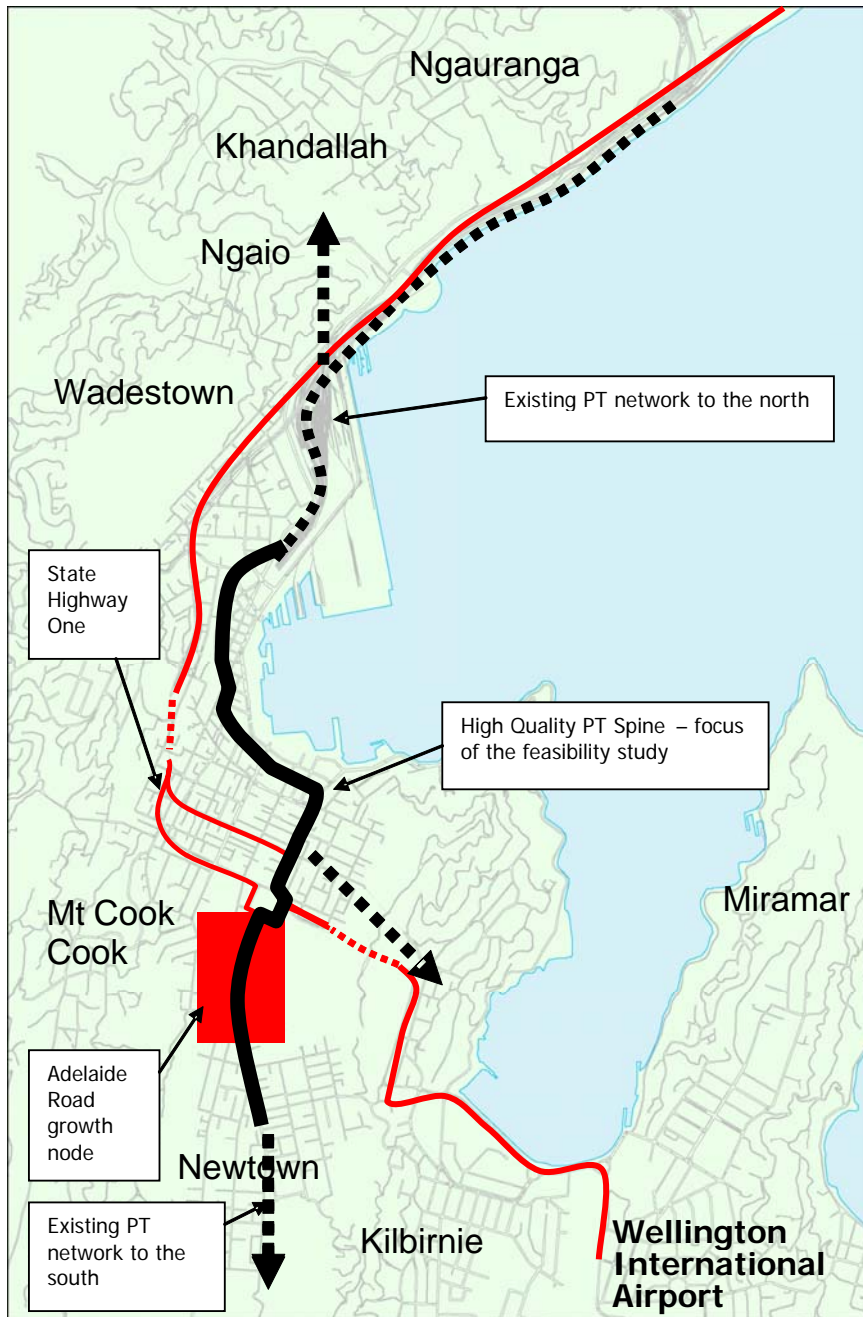
The corridor plan aims to strengthen four key transport elements in Wellington City, including a high quality and frequency public transport 'spine'. The plan sets out a package of measures over a ten year period. One of the measures identified in the N2A Corridor Plan is to: 'undertake a feasibility study for a high quality public transport system, including light rail'. The lead agency with responsibility for this project is Greater Wellington, with Wellington City Council and NZ Transport Agency as partners. This project is included in the Regional Land Transport Programme (RLTP) as a Second Priority activity, commencing in 2011/12, with an indicative cost of \$1M. The RLTP also includes a subsequent 'scheme assessment' of the proposed high quality PT system. This is scheduled for 'after 2013/14' at an indicative cost of \$6M.

### **1.4 Scope**

#### **Geographical Coverage**

The core focus of the study is the corridor between the Wellington Railway Station and the Wellington Regional Hospital in Newtown. However, the study will also need to consider any possible connections of the high quality public transport network to the north (ie to Johnsonville) and south-east (ie to Kilbirnie and Wellington Airport), and whether these would influence the overall assessment of the options. This is illustrated on the map below.

The study will not re-examine public transport systems and services outside of the N2A Corridor. The study is also not intended to review other public transport routes and services within Wellington City, but it will take account of other (non-corridor) routes operating into/through the CBD and how these may be affected by the study options or any opportunities these afford.



Within the core N2A corridor there are several potential options for the routing of any high quality public transport system: these should be examined as part of the study, but in the context of the investigations already carried out as part of the N2A Corridor Plan.

## Modal Options

While the study itself should include detailed consideration of the modal options as it is developed, it is expected that the feasibility of both bus-based and light rail public transport systems will be included. It should also consider, at least in the initial stages, any other PT modes that are practical, of proven technology, of sufficient capacity for application in the corridor.

While the study will assess impacts on other modes (ie road-based vehicles, walking, cycling), and the extent to which they can support and complement a high quality public transport network, it will not consider these modes as alternatives to enhancing the PT system.

In regard to light rail and bus-based modes, it is expected that a range of sub-options will be considered including, but not limited to:

- **Bus**
  - Infrastructure options
    - On segregated right-of-way
    - On shared roadway (in mixed traffic)
    - Unguided v guided (physical/optical guidance)
    - Priority measures (links, intersections).
  - Vehicle options:
    - Capacities (rigid v articulated)
    - Alternative power technologies (eg diesel v electric trolley v hybrids)
- **Light rail**
  - Infrastructure options:
    - On segregated right-of-way
    - On shared roadway (in mixed traffic)
    - Priority measures (links, intersections).
  - Vehicle options:
    - Rigid, articulated or coupled sets
    - Alternative power technologies (eg induction-based power)
    - Low floor or compatible with heavy rail platforms.

## 2. Existing Strategies, Studies and Projects

### 2.1 Reference Reports and Studies

The feasibility study will take account of and build on a number of previous studies and investigations. These include background reports prepared as part of the development of the N2A Corridor Plan and the Wellington RLTS, and historical studies that have investigated various public transport options in Wellington City.

Historic reports relevant to public transport services in the corridor include:

- Transport Plan, Thorndon to Kilbirnie (De Leuw Cather) 1963
- Terrace Tunnel to Mt Victoria (R.W. Burrell) 1980
- The Wellington-Johnsonville Railway Line: A Cost-Effectiveness Study (Gabites, Porter and Partners) 1984
- Report of the Urban Rail Review Committee 1985
- Study of Public Transport Options, Johnsonville-Wellington CBD Corridor (Travers Morgan) 1993
- Light Rail Transit Feasibility Study (Works Consultancy) 1995
- Public Spaces and Public Life Study (GEHL Architects) 2004
- North Wellington Public Transport Study (SKM) 2006.

Relevant reports prepared as part of the RLTS and N2A Corridor Plan include:

- Ngauranga to Airport Corridor Plan (2008)
- Ngauranga to Airport Modelling report (2008)
- Ngauranga to Airport technical reports 1, 2 and 3 (2008)
- Central Area Bus Operational Review (2009)
- Wellington Regional Rail Plan (2009).

The feasibility study will also need to take into account existing spatial, economic development and land use plans and strategies, including:

- Wellington City Transport Strategy (2006)
- Wellington City Urban Development Strategy (2006)
- Wellington Regional Strategy (2007)
- Adelaide Road Framework (2008)
- Johnsonville Town Centre Plan (2008)
- Kilbirnie Town Centre Plan (2010)
- Wellington International Airport Masterplan 2030
- Wellington City District Plan (current version)
- Wellington 2040 (under development).

In addition, it will be relevant to refer to the recent business case developed for the Auckland CBD Rail project, and the additional research to be undertaken by the Ministry of Transport and NZTA in terms of the scope of issues that might need to be covered.

A significant number of international reports on the feasibility of light rail and bus rapid transport systems may also be relevant to the Wellington context, in terms of methodologies, assumptions and relevant case examples.

## 2.2 National and Regional Strategies

The feasibility study fits within the policy and planning framework provided by several national and regional level documents. The following sections summarise the direction provided by these documents and relevance to the feasibility study.

### **New Zealand Transport Strategy (NZTS)**

The NZTS was updated in 2008 to provide long term direction for transport out to 2040. The NZTS is not a statutory document as it does not specifically meet the requirements of a 'national land transport strategy' as set out in the amended LTMA 2003 (section 66).

The vision of the NZTS is that *"People and freight in New Zealand have access to an affordable, integrated, safe, responsive and sustainable transport system."*

The five objectives set out in the NZTS reflect the goals of the Land Transport Management Act which requires all regional land transport strategies to ensure that they contribute to:

- assisting economic development
- assisting safety and personal security
- improving access and mobility
- protecting and promoting public health
- ensuring environmental sustainability

### **Government Policy Statement**

The current GPS was issued by the Ministry of Transport in May 2009. It covers the period 2009/10 to 2018/19, providing funding targets for the first 3 years, funding ranges for the next 3 years, and forecasts for the final 4 years.

The current GPS sets out short to medium term impacts that the government wants to achieve through the NLTP. These are:

#### GPS Impacts that contribute to economic growth and productivity

- Improvements in the provision of infrastructure and services that enhance transport efficiency and lower the cost of transportation through:
  - improvements in journey time reliability
  - easing of severe congestion
  - more efficient freight supply chains
  - better use of existing transport capacity.
- Better access to markets, employment and areas that contribute to economic growth.
- A secure and resilient transport network.

### Other impacts

- Reductions in deaths and serious injuries as a result of road crashes.
- More transport choices, particularly for those with limited access to a car where appropriate.
- Reductions in adverse environmental effects from land transport.
- Contributions to positive health outcomes.

A new GPS is expected in July 2011 and the study will need to take account of any change in NZTA investment priorities that may be sought by the Government as a result.

### **Regional Land Transport Strategy**

The Regional Land Transport Strategy (approved in 2010) provides the strategic direction and framework for development of the region's land transport system. The vision of the RLTS is: *To deliver an integrated land transport network that supports the region's people and prosperity in a way that is economically, environmentally and socially sustainable.*

The RLTS includes objectives, outcomes, and targets, together with a number of specific strategic transport policies. The outcomes identified in the strategy include:

- Increased peak period public transport mode share
  - Increased off-peak public transport use and community connectedness
  - Improved public transport accessibility for all, including the transport disadvantaged
  - Reduced public transport journey times compared to travel by private car
  - Increased public transport reliability
- Increased mode share for pedestrians and cyclists
- Reduced greenhouse gas emissions
- Reduced severe road congestion
- Improved regional road safety
- Improved land use and transport integration
- Improved regional freight efficiency

The RLTS takes account of, and contributes to, the national policy framework and investment signals provided by the documents described in the sections above.

### **Ngauranga to Airport Corridor Plan**

A number of corridor plans are developed under the framework of the RLTS. These enable a more detailed and focused look at various corridors that make up the regional network. Corridor Plans are multi-modal documents that outline a package of improvements that will contribute to the overall RLTS outcomes, together with specific objectives for the transport corridor in question.

The Ngauranga to Airport Corridor was adopted in Oct 2008. The corridor plan aims to strengthen four key transport elements in Wellington City:

- A high quality and frequency passenger transport ‘spine’
- Highly accessible and attractive ‘activity’ or shopping streets
- A reliable and accessible ‘ring’ or bypass route for vehicles
- Interconnected and convenient local street, walking, cycling and passenger transport networks.

The corridor plan identifies a number of packages for improvements to the transport network to achieve these goals. Immediate priorities were: establishing bus priority measures as first step towards a high quality public transport corridor; a Basin Reserve upgrade to provide more reliable bus journey times, reliable travel times on the east-west ‘ring route’, and walking/cycling improvements; continuing travel demand management programmes; walking and cycling network improvements; and protecting the ability of the strategic network to provide a high quality ‘ring route’ for inter-regional connectivity, economic linkages, time critical travel, and support the public transport network.

In addition, the corridor plan identified a number of feasibility studies and scheme assessments to be undertaken. These are to ensure the direction for future development of the public transport and road networks are clearly defined and steps are taken towards implementing the long term strategic direction.

### **Contribution of the proposed study to the above documents**

The High Quality Public Transport Feasibility Study is a follow-on action identified in the multi-modal corridor study (N2A Corridor Plan). Understanding the feasibility of different options for delivering a step change in public transport services through the ‘growth spine’ corridor, is an integral component of the overall approach set out in the plan.

Achieving a step change in public transport through the corridor will be a key contribution to assist the region move towards its outcomes and targets around increased peak period public transport mode share, and reduced severe road congestion, as set out in the RLTS.

A high quality public transport system will also contribute to the impacts sought by the GPS in relation to journey time reliability, congestion, freight efficiency, access to markets and employment, and network resilience. Encouraging many more local commuter trips from the southern suburbs into the Wellington City CBD by public transport will have the flow on effect of reducing congestion and allowing more reliable travel times on the strategic east-west SH1 ‘ring route’ linking the Wellington Motorway with the Wellington Airport and eastern suburbs. In addition, quick and reliable public transport options for commuters will support the City’s economic growth making it more attractive to employers and employees. It will also make the City more resilient to future fuel price shocks. For commuter trips into the Wellington City CBD, a high quality public transport system meets the GPS goal of using existing transport capacity more efficiently, both in terms of road space and car parking requirements.



The following table sets out the contribution of the study outcomes to the NZTS objectives:

assisting economic development	assisting safety and personal security	improving access and mobility	protecting and promoting public health	ensuring environmental sustainability
Faster travel times for public transport commuters - resulting in increased productivity	Mode shift to public transport – increased use of a safer mode of transport	Improved access and mode choice along a core public transport spine	Mode shift to public transport – more walking trips associated with public transport use	Reduced fuel use and carbon emissions - reduced traffic congestion
Mode shift leading to reduced congestion – less time wasted in congested conditions for people and freight		Supports higher density development along the Adelaide Road growth spine	Supports a greater proportion of people living within walking/cycling distance of CBD employment and facilities – therefore more opportunities for active modes for trips	More resilient network in future climate change and peak oil scenarios
Mode shift leading to improved travel time reliable on SH1 'ring route' benefiting time sensitive and non-transferable vehicle trips (eg. freight, tradesmen, etc)		Better access for trips on the strategic road network through the city and to/from the Wellington International Airport	Potential to remove or reduce the number of diesel buses from core routes with heavy foot-traffic and shop frontages where air pollution has greatest impact	Reduced land use footprint for transport infrastructure – more efficient movement of people, less parking space requirements

### Alignment with Policies

To contribute to the direction signalled by the NZTS and GPS, land use policies and plans should be well integrated with transport policies and plans wherever possible. The N2A Corridor Plan is a strategic multi-modal plan that has been developed taking into account Wellington City Council's strategic land use and growth strategies. It signalled the need for more detailed investigation of a public transport spine through the corridor – the purpose of this proposed study. The study will include looking at how land use would be influenced by the implementation of a high quality public transport corridor, and conversely the likely impact of planned growth areas identified through Wellington City Council's District Plan and Urban Development Strategy on the demand for, and feasibility of, a high quality public transport system.

Any future 'step change' in public transport through the N2A corridor will assist in serving identified growth centres, including the Wellington CBD and central area, the proposed redevelopment and intensification along Adelaide Road in Newtown, and future growth in and around centres like Newtown, Kilbirnie and Johnsonville.

The outcome of this study will also be important to inform future reviews of Wellington City's land use planning documents and growth strategies to ensure continued integration between urban development and transport infrastructure.

## 2.3 Relationship to Current Transport Projects

This feasibility study will need to take full cognisance of the suite of strategic transport projects currently being implemented or already committed in Wellington City and the region. Careful consideration will be needed of the inter-connections of the options in this study and the operation of both the wider public transport network and the roading network.

Relevant current transport projects and studies underway in Wellington City, and the region, include:

- PT technology projects: Real-Time Information rollout; Integrated Ticketing.
- PT infrastructure projects: Bus Priority project; rail station upgrades; rail network upgrades.
- Road infrastructure projects: Ngauranga to Aotea Quay; Basin Reserve Improvements; Mt Victoria Tunnel Duplication; Airport to Mt Victoria Tunnel Improvements.
- PT vehicle projects: procurement of Matangi train fleet; Ganz-Mavag upgrade; new/upgraded trolley bus fleet.
- PT studies and reviews: Integrated Public Transport Network Framework; Wellington Public Transport Service Review; Public Transport Operating Model.

Many of these projects represent a significant investment in the existing public transport systems across the region. This includes: the passenger rail upgrade projects underway at a cost of \$550 million (purchase of 48 two-car Matangi trains, the upgrade of the rail network required for the new trains, and the Mackays to Waikanae upgrade); the upgrade of the bus fleet at a cost of around \$5 million per annum over 10 years; and the installation of real-time information at a cost of over \$6 million.

## 3. How funding is to be used

### 3.1 Technical Methodology

#### Transport Demand Modelling

Demand modelling of the study options is to be undertaken using Greater Wellington's PT model, as upgraded and integrated with the WTSM model (upgrade currently in progress). A new model will essentially be created for the purpose of this study - known as the N2APTM 2011. This model involves enhancements to the current GW strategic transport model (WTSM) based on the latest available population and household data, including forecasts up to year 2041 and incorporating various other enhancements to enable more accurate modelling of the PT options for this study.

The N2APTM 2011 model development work is being undertaken through a separate consultancy contract, but the upgraded model will be available within the specified timeframe for the main study. It is yet to be resolved whether the application of the new model for the testing of options in this study will be undertaken (i) directly by GW staff; (ii) through a separate consultancy contract managed by GW; or (iii) as part of the main consultancy contract for this study. If option (i) or (ii) is chosen, close liaison will be essential between the main study consultant and the party undertaking the modelling work.

### **Option Definition and Detail**

The range of options for modelling/evaluation and the detailed specification of them will be agreed between the consultant and the client at the appropriate phase(s) in the project. The intention will be to assess a sufficient range of mode and route options so as to be able to draw conclusions as to the relative merits of alternative modes and routes for this corridor.

Options are to be developed to a sufficient level of detail (including outline engineering drawings) such that their total capital costs and recurrent (operational) costs can be estimated to a degree of accuracy sufficient to enable high level decision-making. Capital costings will be required to cover land, infrastructure and vehicles. Operating costs are to be estimated, in conjunction with GW, based on NZ and (where appropriate) Australian experience relating to urban public transport unit costs.

### **Option Evaluation**

Evaluation of the options is to take account of the full range of expected economic, financial, social and environmental impacts.

A socio-economic evaluation is to be undertaken based on the methodology set out in the NZTA Economic Evaluation Manual (EEM).

Evaluation of the impact on future urban development and land values along the corridor will also be required.

A business case evaluation will also be required, based on Treasury guidelines and any requirements to be specified by NZTA.

Close integration of the evaluation and modelling aspects is regarded as critical to the success of the study.

An independent peer review of the evaluation(s) will be undertaken in accordance with NZTA requirements.

### **Separate Study of Funding Options**

It should be noted that investigation of alternative funding options and opportunities to support the development of a high quality PT system along the corridor will be the subject of a separate but concurrent contract (not part of the current funding application). These investigations will include examination of a range of funding tools apart from existing public sector funding sources. These may include existing levies such as Development Contributions and potential new tools such as Tax Increment Financing. NZTA are currently undertaking research on a national basis on some of these tools, and it is hoped that it may be possible to utilise this work and apply this to the NZTA corridor as a specific case study.

Liaison will be required between the main study consultant and the consultant undertaking the NZTA research and/or the separate contract. It is yet to be resolved whether the outputs from the funding options appraisal will be reported separately and/or incorporated within the main consultancy report.

## **3.2 Process Methodology**

### **Overall Study Management**

The study will be led by Greater Wellington, in partnership with NZTA and Wellington City Council. The Regional Transport Committee (RTC) will provide oversight of the study.

The study manager will be appointed by Greater Wellington. Governance will be managed through the following groups on which all three partner organisations will be represented:

- Elected Members Group – this group will meet at least quarterly to discuss progress with the study and resolve any issues of a political nature.
- Steering Group – this group will meet at least quarterly to be updated on progress towards the key milestones, to make any key decisions on the implementation of the study and to communicate progress to the Elected Members Group.
- Working Group – this group will meet at least monthly to consider any issues arising, provide direction to the consultant, provide technical information and advice, and ensure communication of progress to the Steering Group.
- Media Spokespersons Group – this group will meet as required to ensure that all parties are aware of relevant media activity and to coordinate media communications.

A memorandum of understanding will be agreed by the study partners to provide a framework for working together and to ensure that communications on the study are approached in a coordinated and consistent manner, so as to ensure the public and stakeholders are provided with clear and accurate messages through the media wherever possible.

### **Community Consultation**

Consultation with the community will be undertaken at several stages throughout the study. Informal feedback from key stakeholder groups on the terms of reference will be sought in the study setup stage. This will be supplemented by the use of focus groups (or similar) early in the study to test our understanding of the key factors that make public transport systems of high quality.

Wider public consultation with the community is proposed once the options have been developed and assessed. This will be aimed at providing evidence-based research to enable the community to have a realistic understanding of the costs and benefits of the options available and to comment on this assessment and any additional factors that should be included. Consultation will involve a range of methods, including public notices, media releases/articles, mailouts to stakeholders, meetings/open days, and use of 'Bang the Table' which will provide a moderated online forum about key study issues. Consultation will include 'affected communities' such as people who live, work and travel around Wellington City, and the wider regional community including commuters to Wellington City. Consultation with the transport disadvantaged will be included in the above consultation stages, for example, through specific focus groups, via the Regional Disability Reference Group, and through other groups and organisations.

### 3.3 Proposed Programme

The proposed programme (subject to amendment through negotiation with the primary consultant) for the feasibility study is as follows:

#### Preliminary Stage - 2010/11

<ul style="list-style-type: none"> <li>• Develop and agree scope with partner agencies.</li> <li>• Establish governance arrangements and MoU</li> <li>• Engage a technical advisor to assist with development of the Terms of Reference, and to oversee the study.</li> <li>• Seek informal feedback from key stakeholders groups on scope</li> <li>• Develop detailed terms of reference (TOR) and prepare funding application</li> <li>• Determine consultant procurement arrangements.</li> </ul>	Nov 2010 – Jan 2011
<ul style="list-style-type: none"> <li>• Lodge application for NZTA funding and confirm local share funding</li> </ul>	Feb 2011
<ul style="list-style-type: none"> <li>• Prepare and issue first stage of RFP</li> <li>• Evaluate and shortlist initial proposals</li> </ul>	March-April 2011
<ul style="list-style-type: none"> <li>• Request refined proposals from shortlisted suppliers</li> </ul>	May-June 2011
<ul style="list-style-type: none"> <li>• Evaluate proposals and select preferred supplier, price negotiation</li> </ul>	June-July 2011

#### Feasibility Stage - 2011/12

<b>Phase 1 – Project Inception and Scoping</b>	
<ul style="list-style-type: none"> <li>• Review suitability of N2APTM 2011 model for study, and confirm/ agree any enhancements required</li> <li>• Review previous work relating to WGN CBD PT corridor options and lessons learned</li> <li>• Update context (as required) in terms of land use, demographics, density, economic development (for current, forecast and proposed situations)</li> <li>• Identify drivers for change in relation to land use and economic development</li> <li>• Define ‘base case’ PT and roading network for study forecasting period (including all committed projects)</li> <li>• Define existing and projected problems and issues relating to PT</li> </ul>	June 2011 – Sept 2011

<p>services in the corridor</p> <ul style="list-style-type: none"> <li>• Test understanding of key factors for a high quality PT system using focus groups (or similar)</li> <li>• Initial determination of range of corridor options (modes, routes) for consideration, including what constitutes a 'high quality' PT system</li> <li>• Develop modelling and evaluation scope and methodology</li> <li>• Define requirements and scope for review of international experience and evidence</li> <li>• Define requirements and approach to community consultations, including any required market research</li> <li>• Prepare scoping report, for consideration/agreement by client.</li> </ul>	
<p><b>Phase 2 – International review of PT systems</b></p>	
<ul style="list-style-type: none"> <li>• Assessment of examples of high quality PT systems implemented internationally and their impacts, including effects on: <ul style="list-style-type: none"> <li>– patronage (on new services and PT system overall);</li> <li>– travel patterns, modal shifts and decongestion impacts;</li> <li>– economic development impacts and land use changes;</li> <li>– environmental, social and city liveability impacts;</li> <li>– financial impacts (capital costs and ongoing costs and revenues); and</li> <li>– how the completed schemes performed against expectations.</li> </ul> </li> <li>• Prepare international review report.</li> </ul>	<p>Sept 2011 – Dec 2011</p>
<p><b>Phase 3 – Option specification, modelling and costing</b></p>	
<p>Phase 3A</p> <ul style="list-style-type: none"> <li>• Define options in terms of mode, route, operational characteristics, interchanges and integration with wider PT network.</li> <li>• Assess engineering feasibility of options</li> <li>• Determine engineering costs of options</li> </ul>	<p>Oct 2011 – May 2012</p>
<p>Phase 3B</p> <ul style="list-style-type: none"> <li>• Specify model runs (options, forecast years, etc).</li> <li>• Undertake model runs</li> <li>• Summarise/review model results, and refine/re-run as necessary.</li> <li>• Prepare modelling report.</li> </ul>	<p>Dec 2011 – May 2012</p>
<p>Phase 3C</p>	<p>April 2012 – June 2012</p>

<ul style="list-style-type: none"> <li>• Determine operational, vehicle and facilities costs</li> </ul>	
<b>Phase 4 – Option evaluation and consultation</b>	
<ul style="list-style-type: none"> <li>• Economic evaluation (NZTA EEM requirements)</li> <li>• Financial/business case evaluation</li> <li>• Economic development and land use impacts evaluation</li> <li>• Social and environmental evaluation</li> <li>• Prepare evaluation report</li> <li>• Public consultation on costs and benefits of options</li> </ul>	Feb 2012 – Aug 2012
<b>Phase 5 – Reporting and conclusions</b>	
<ul style="list-style-type: none"> <li>• Preparation of draft study report and public consultation summary</li> <li>• Discussions between partner agencies on draft findings</li> <li>• Consideration of feedback and preparation of final study main report and summary report.</li> </ul>	Sept 2012 – Dec 2012
<b>Linked Project: Appraisal of Potential Funding Models</b> (separate contract)	
<ul style="list-style-type: none"> <li>• Assessment of potential funding models available to the region – eg Developer Contributions, Tax Increment Financing, other overseas models.</li> <li>• Prepare funding models report</li> </ul>	Jan 2012 – May 2012

### 3.4 Estimated Price

The estimated price for the study is \$1M, with the following estimated breakdown of expenditure:

<b>Task</b>	<b>Estimated cost</b>
Transport model development (additional costs to develop suitable N2APTM 2011 model for use in this project)	\$50,000
Primary Consultant: <ul style="list-style-type: none"> <li>• Project Scoping</li> <li>• International review</li> <li>• Option Specification</li> <li>• Modelling</li> <li>• Costing</li> </ul>	\$850,000

<ul style="list-style-type: none"> <li>• Evaluation</li> <li>• Land Use Impacts</li> <li>• Reporting</li> </ul>	
Technical Advice and Procurement	\$50,000
Peer Review	\$50,000

### 3.5 Procurement

Procurement will be managed in accordance with the Greater Wellington Procurement Strategy (NZTA endorsed) and the NZTA Procurement Manual.

The following procurement methods are anticipated:

Technical client advisor and peer reviewer

- Procurement by direct appointment as the technical skills required are not available in-house and there are very few suitable candidates in New Zealand or overseas that have the required public transport and modelling expertise. The value is expected to be under \$100,000.

Primary consultant

- The supplier selection method will be 'Quality' based to reflect uncertainties in the project scope and to ensure best value for money. A staged approach will be utilised to establish a shortlist of three or more suppliers from whom a proposal and separate price will be obtained. The price will be negotiated with the preferred supplier.

### 3.6 Risks and Uncertainties

The following high level risks have been identified, and appropriate mitigation strategies have been put in place:

Risk	Mitigation Strategy
Study scope is not sufficiently detailed to enable suppliers to accurately provide a fixed price	Tender is proposed to be evaluated against 'Quality' measures only, with fixed price to be negotiated with preferred supplier on a staged basis
Multiple decision-making bodies create uncertainty over study scope and direction	RTC will provide oversight of the project, including approving the terms of reference. In addition an MoU has been signed by the three study parties outlining agreed governance



	arrangements
Development of the strategic transport model (N2APTM 2011) is delayed	Procurement of the model upgrade is being managed by Greater Wellington to ensure timely delivery of the model for this study
A preferred option emerges that is unaffordable or unlikely to meet the objectives of the study	The terms of reference specify affordability and practicality as key issues to be considered in the specification of options
There is public pressure for one or more options that is not supported by the findings of the study	The terms of reference specifies that full public consultation will be carried out once the evaluation of the options has been completed. This will assist in ensuring that public debate is informed and realistic

## 4. Outcomes and Deliverables

### 4.1 Deliverables

The key deliverables expected from the study are as follows:

- Interim reports/working papers for each phase of the study, including in particular on:
  - Inception/methodology
  - Options to be studied
  - International evidence and experience
  - Option specification and costing
  - Option modelling and evaluation results.
- Main study report, initially as draft for client review.
- Summary report (suitable for wider public readership).

The main study report (and summary report) should be designed to assist decision-makers in reaching decisions on how to progress, the estimated costs involved, and the appropriate timing of any next steps. This should include an outline of the further actions required for subsequent more detailed scheme assessment (assuming the decision is to proceed further with any of the options).

### 4.2 Approval Processes

Sign off and decision-making will rest with the project partners, through the agreed governance mechanisms.

The study will be reported to the Regional Transport Committee. Relevant committees of Greater Wellington and Wellington City Council will also be kept fully informed as to progress with key study milestones.

Project governance will be managed through the following groups, at which a representative from Greater Wellington, Wellington City Council and NZTA will be present:

- Elected Members Group – this group will meet at least quarterly to discuss progress with the study and resolve any issues of a political nature.
- Steering Group – this group will meet at least quarterly to be updated on progress towards the key milestones, to make any key decisions on the implementation of the study and to communicate progress to the Elected Members Group.
- Working Group – this group will meet at least monthly to consider any issues arising, provide direction to the consultant, provide technical information and advice, and ensure communication of progress to the Steering Group.
- Media Spokespersons Group – this group will meet as required to ensure that all parties are aware of relevant media activity and to coordinate media communications.

### **4.3 Peer Review**

The peer review is intended to be undertaken by Ian Wallis (Ian Wallis Associates Ltd). This consultant has also been engaged to act as a technical advisor to assist Greater Wellington in managing the project, and as such will already be familiar with the project. Mr Wallis is an experienced public transport consultant, with over 30 years international experience in transport planning, policy and economics. He has particular expertise as a peer reviewer and in the following aspects of public transport, planning and policy:

- Network and corridor planning studies
- Market research, demand forecasting and modelling
- Project and policy evaluation and economic/financial appraisal
- Urban transport and PT policy and strategy studies
- Operational planning and costing
- PT infrastructure and on-road priority measures
- Performance assessment and monitoring
- Subsidy and funding policies
- Regulatory, procurement and contracting policies.