CBD CORRIDOR STUDY – TERMS OF REFERENCE

Introduction

Greater Wellington Regional Council, Wellington City Council and Transit New Zealand (partnering agencies) have agreed to work together on transport planning for the central city area and connections to Wellington Airport and Hospital. Transport Planning cannot be reviewed in isolation; it is therefore proposed to work closely with Wellington City Council to understand that Council's objectives for the central city and how they can be integrated with this study. Given that the CBD is a major employment centre for the region, it is important that transport options lying outside the city be included in the analysis where these might have an impact on transport into the CBD. Finally, the study will identify the transport improvements that are needed following the opening of the Inner City Bypass. Key questions which derive from this are:

- 1. Are changes needed to improve access to the CBD from the North?
- 2. Is additional road capacity required south of Ngauranga?
- 3. Are changes needed to improve access to the airport?
- 4. Are changes needed to improve access to the hospital?
- 5. Are changes needed to improve access to the waterfront development opportunities?
- 6. How can better pedestrian access between the business district and the waterfront area be best facilitated?
- 7. Are passenger transport improvements required to increase use and ensure balance and sustainability?
- 8. Is additional road capacity required through the Terrace Tunnel?
- 9. Are changes needed to improve access around the Basin Reserve?
- 10. Is additional road capacity required through Mount Victoria?
- 11. How is any additional traffic congestion in the CBD to be managed?
- 12. What improvements might be necessary in feeder routes to the main corridor arterials?

In answering these questions, due regard will be given to determining the effects (both positive and negative) of any changes.

Purpose

The purpose of this study is to identify the present and future transport needs along the corridor and in the associated transport network and propose solutions that best meet these needs in a manner that facilitates and supports current and future land use, social, business, recreational and other strategic goals.

The proposed solutions must reasonably:

- Assist economic development
- Assist safety and personal security
- Improve access and mobility
- Protect and promote public health
- Ensure environmental sustainability

The proposed solutions are expected to include an integrated package of proposals and linked initiatives that ensure that the benefits of the proposals are sustained, and that also facilitate and promote improved long term performance, including reduction of congestion, for the corridor and adjacent transport networks and passenger transport services.

Proposed solutions will recognise the impacts that developing one part of the network will have on other parts and the relationship with social and land use effects. These solutions will take into account constraints of affordability and economic efficiency. Proposals will form an integrated improvement package that will contribute to the achievement of the objectives.

Background

For Greater Wellington, this is the forth corridor study (after Western, Hutt and Wairarapa) to be undertaken as part of the ongoing development of the Regional Land Transport Strategy (RLTS). Corridor studies examine a section of the RLTS in more detail. The Corridor Planning Process used in previous corridor plans in the region will be used in this study. For Wellington City Council, this is part of a Transport Implementation Plan that is being prepared in conjunction with city form strategies that guide the future development of the city. Wellington City is also developing an urban design strategy. This will be taken into account by this study. Work on the future demographic and economic structure and urban form of the region will also be incorporated into the project as it progresses. For Transit this work will help it determine projects and packages to be implemented as part of its contribution to the National Land Transport Programme.

Scope

This study will focus on high level objectives and consider travel in the corridor between the Ngauranga merge and Wellington Airport and the regional hospital. It includes more than one major route (e.g. Aotea Quay and the motorway). Links from the Hutt Corridor (SH2) and the Western Corridor (SH1) to facilities of regional significance are important. Improving access to local suburbs and amenities is not part of this study but where proposals have significant effects on suburban access, these will be reported on.

The implications of proposals for the corridor on other parts of the network will be identified. The study will be multi modal. This means that road, rail, bus, pedestrian and cycling strategies will be considered. There is competition for space in this corridor and therefore initiatives for one mode may have implications for other modes and activities. It has been agreed with Wellington City Council that analysis will be undertaken at a macro/strategic level, recognising the city's role and responsibilities in transportation, traffic and infrastructure management. Solutions for the corridor will be formulated in an integrated way with modelling undertaken as an input to decision making where appropriate and not as an end in itself.

A travel demand strategy will be developed separately as part of the wider review of the Regional Land Transport Strategy.

Programme

The CBD Corridor Study is programmed to commence in May 2004 with the sign-off of the Terms of Reference by the partnering agencies. The timetable aims to provide a draft CBD Corridor Plan for discussion by the partnering agencies in February 2005. A more detailed programme is outlined in Appendix 1.

Consultation

Consultation will be undertaken in accordance with the requirements of the Land Transport Management Act 2003. The need to provide early and full opportunities for persons and organisations to participate in the process will be provided via:

- Wellington City's current consultation on the Draft Transport Strategy;
- Wellington City's planned consultation on CBD urban design;
- Specific contact with required organisations and stakeholders after initial problem research and definition; and
- Full public consultation once broad options have been studied. This will involve a hearing process.

Technical Group

A technical group made up of officers from Greater Wellington Regional Council, Transfund New Zealand, Transit New Zealand, Wellington, Hutt, Upper Hutt and Porirua City Councils is responsible for overseeing the technical work of the study. Their role is to ensure that the study is based on sound processes and information. The technical group will be the author of the technical reports to the respective committees. The technical group is chaired by Greater Wellington Regional Council.

Issues and Needs

Issues and needs for travel in the CBD Corridor are identified in the Regional Land Transport Strategy and are shown in Appendix 2. It should be noted that improvements have been made in a number of these areas since the RLTS was last reviewed in the late 1990's. The issues will be reviewed and updated early in the study. Appendix 2 also contains commentary about the Technical Group's current understanding of the main issues and the assumptions made about them.

Options

A large number of improvement strategies exist. These options include road, public transport (rail and bus), pedestrian and cycling, land-use, road pricing and non-pricing travel demand management initiatives.

Stage 1 outline scenarios are defined in Appendix 3. These will be analysed to identify the performance of the various project elements. Stage 2 scenarios will be defined after the results of Stage 1 are available. Stage 2 will develop and analyse integrated packages in

order to identify a optimal improvement packages that will be recommended for the public consultation phase.

Analysis

The improvement options will be analysed using both the regional transport strategy model (WTSM), and a more detailed traffic model of the inner city.

WTSM uses EMME/2, which is well suited for modelling strategic level intermodal issues. The detailed traffic model uses SATURN which is well suited to modelling saturated networks. Data will be exchanged between the respective models. EMME/2 will be used to determine the best combination of projects to include in each scenario, with SATURN then used to evaluate their effects on the Wellington City road network.

A series of agreed performance indicators will be used to assess proposed strategies. The proposed form of evaluation will be a planning balance sheet approach previously used in the development of the RLTS. The planning balance sheet uses a performance matrix where each row of the matrix gives a ranking against objectives.

Outputs

Detailed technical reports summarising the current and future needs, the options considered, the analyses, evaluations and recommendations will be produced for the Regional Land Transport Committee (GWRC), the Built and Natural Environment Committee (WCC) and the Transit New Zealand Board.

A summary report will also be produced for use in the subsequent public consultation phase of the CBD Corridor Plan's development.

Prepared by CBD Corridor Study Technical Group 11 March 2004

APPENDIX 1

Indicative Process & Timeline

Activity	Completion Date	
Introductory meeting with senior WCC officers	November 2003	
Establishment of technical group	December 2003	
Development of study Terms of Reference (alignment of	March 2004	
objectives, agreement of scope and process)		
Sign off by WCC/ TNZ/ RLTC	April / May 2004	
Technical analysis overseen by the technical group:		
 Preparation of a problem framing report to identify current issues, needs and outcomes (largely based on WCC's existing and developing information) 	June 2004	
 Preliminary consultation with key stakeholders and required organisations to ensure the identified needs are appropriate and the range of solutions to be considered are adequate 	July 2004	
 Analysis of suggested solutions using transport models and qualitative techniques 	October 2004	
Preparation of reports	November 2004	
 Further consultation with key stakeholders and required organisations to ensure that proposals are meeting the identified needs and outcomes. 	December / January 2005	
Prepare draft corridor plan (partners workshop)	February 2005	
Approval for consultation by WCC/ TNZ/ RLTC	Feb /March 2005	
Public consultation (detailed process to be developed)	April to June 2005	
Submission review	August 2005	
Hearing committee process	October 2005	
Draft corridor plan approved by RLTC	November 2005	
Circulated for final comment by financial stakeholders	February 2006	
Corridor plan adopted by RLTC	February 2006	

APPENDIX 2

Current Identified Issues

The following issues for travel in the CBD Corridor are identified in the Regional Land Transport Strategy (p 60). It should be noted that improvements have been made in a number of these areas since the RLTS was last reviewed in the late 1990's. The issues will be reviewed and updated early in the study. A number of projects in the CBD corridor study area will be subject to various decisions during the study. It is expected that projects will not be delayed simply because of the study, but the state of the study might be used to inform the necessary decisions.

Wellington CBD

- Peak period and weekend road congestion
- Inadequate penetration of passenger rail services into the CBD
- Inadequate pedestrian connections from the CBD to the railway station
- Bus services caught in road congestion
- Poor pedestrian travel conditions
- Car parking management and supply
- Car parking levies (p61)

Ngauranga to Wellington CBD

The Ngauranga to CBD section of the arterial network incorporates the Wellington Urban Motorway from the Ngauranga merge to the end of the Terrace Tunnel.

The Regional Land Transport Strategy (p60) identifies the following issues for the Ngauranga to Wellington CBD link:

- Serious peak period road congestion
- High accident rates

The Impacts of Major Projects and Activity Areas

A key platform of the RLTS is the theme of network balance. The strategic transport network will not perform optimally and achieve the strategy's objectives if the network is not in balance. This means that upstream and downstream capacity and the capacity across modes should ideally be in balance. Proposals are interdependent and should not be considered in isolation.

There are a number of major projects that are due to be implemented in the near to mediumterm future that need to be considered in an integrated way. Initial thoughts are set out below.

(a) Inner City Bypass

The construction of the Inner City Bypass with improved traffic management on adjoining streets and improvements to other forms of travel means that this project has a significant place in the City's and region's transport network.

Currently Transit has resolved all consent issues and is working with GWRC and WCC to demonstrate to Transfund that the project meets the requirements of the Land Transport Management Act 2003.

The best information available to date indicates that the Inner City Bypass will be proceeding as planned; for the purposes of this study the construction of the Inner City Bypass will be taken as a given.

(b) Kapiti and Hutt Valley Rail Packages

These will increase the demands for pedestrian travel, bus movements, and bus priority from Wellington Station. Enhancements in bus travel and pedestrian travel will be required to match so that the full benefits of the public transport improvements can be realised

(c) Ngauranga-Aotea capacity improvement

Peak period congestion can be alleviated by increasing capacity between Ngauranga merge and Aotea Quay. There is potential for this proposal to deliver more peak period traffic from the north to the CBD road network and beyond. The nature of capacity increase (i.e. full time extra lanes, HOV lanes etc) and desirability of this project will be studied.

(d) Wellington Waterfront

The development of Wellington Waterfront (including Te Papa and Waitangi Park) will be a destination predominantly for pedestrians, however the needs of other modes should also be considered. Wellington Waterfront will be a sizeable trip generator and will have major impacts on the Waterfront route and also other major routes. The transport needs of the urban development envisaged for this area will be identified.

(e) Railyards Precinct (Gateway Project)

The development of the Railyards Precinct will be a destination for cars, bus, cyclists and pedestrians. The Railyards Precinct will be a sizeable trip generator and will have major impacts on the Waterfront route and also other major routes. The transport needs of the urban development envisaged for this area will be identified.

(f) Waterfront Route

There have been a number of investigations that have considered how the Waterfront route can be reconfigured to better integrate it into Wellington City's urban environment. Changes to this route will impact on Wellington Waterfront's accessibility and will impact on the performance of the region's strategic transport network. The transport needs of the urban development envisaged for this area will be identified. Work planned for the city in the area of urban design and pedestrian facilities will also be undertaken in 2004 and will be incorporated into the CBD Corridor project.

(g) CBD Parking Policy

The CBD parking policy will be a factor affecting the split between car use, bus, train, walking and cycling. It will also have a significant impact on traffic levels using all major routes to and through the CBD. Options for future supply, pricing and distribution of CBD parking will be studied. A key linkage for this work is the city's retail strategy and proposals it contains for parking arrangements in the CBD.

(h) SH1 – Basin Reserve Improvements

Transit NZ are embarked on a major project to look at the long term needs of traffic movement through this key transport junction. In developing proposals for future access and layout, consideration will need to be given to all users and potential users of the Basin Reserve junction.

(i) Port

The future growth projections of the port in terms of the types of commodities and tonnages will be important because of the resulting demand for road and rail transport. Issues that would need to be dealt with are the future role of the port as an import/export route for commodities such as wood and wood products, motor vehicles and container traffic, as well as its role as a hub port for central New Zealand. Centreport's strategic plan will be a key input to the project in this respect.

(j) Airport

Current and forecast passenger and freight volumes through Wellington International Airport Limited will be incorporated into the analysis. Wellington is increasingly becoming more of a regional tourist destination and this must be factored into transport options for the airport and the appropriate mix between public and private transport. Freight movements to and from the airport will be affected by economic growth of the city, industrial development elsewhere in the region and likely changes in aircraft types that permit carriage of containerised freight.

(k) Hospital

The increasing importance of the hospital in the region will affect the volume of traffic moving through the city as well as requirements for parking in and around the facility. Transport options addressing the level of both private car and public transport will be examined.

(1) Rongotai Commercial Development

Development proposals for retail and business park areas around the airport are planned for implementation in the short term. This may have implications for accessibility, particularly for freight.

APPENDIX 3

Outline Strategies: Stage 1 Analysis

Strategy	Description
2001 Base	Reproducing transport/ travel situation existing in 2001.
2016 Base	The future years against which all options will be tested and will include ICB Stage II, Basin
2026 Base	Reserve interim improvements and initial bus priority schemes.
Base schemes plus best combination of following projects:	
Roading	Basin Reserve solution (selected from Meritec options)
	Ngauranga-Aotea capacity improvement
	Terrace Tunnel Tidal Flow/ duplication
	Mt Victoria Tunnel duplication
	Additional projects to be identified
	Base schemes plus best combination of following projects:
Public Transport	Golden Mile and CBD fringe bus priority schemes
	Traffic signal pre-emption for buses
	Increased bus frequency
	Additional bus routes servicing CBD and CBD fringe
	Additional express bus services to CBD
	Rail service improvements (Kapiti & Hutt Valley)
	Additional projects to be identified
Light Rapid	* *
Transit	Base schemes plus Light Rail services between Wellington Station and Courtenay Place.
Park & Ride	Base schemes plus edge of town Park & Ride/Walk sites and high frequency shuttle buses to
	CBD.
	Base schemes plus best combination of following road pricing measures:
	• Inner cordon toll
Road Pricing	Outer cordon toll
	Motorway off ramp toll
	Motorway toll
	Additional road pricing schemes to be identified
	Note that road pricing has not been adopted as a management tool within the Wellington
	Region to date. A number of policy questions are inherent in any use including the purpose,
	implementation mechanisms, fairness, effects on non-priced routes, and what road or other
Travel Demand	investments might be able to be funded by TA's under present or future Statutes. Base schemes plus effect of TDM (non-price) options, e.g. ride sharing/car pooling, high
Management	occupancy vehicle lanes
(Non-pricing)	occupancy venicle lanes
Parking	Base schemes with restrictive parking provision in CBD.
	Base schemes plus facilitation of CBD pedestrian/ cycling journeys via best combination of:
	Reduction of pedestrian/vehicle conflict
	Reduction of cyclist/ vehicle conflict
Active Modes	Pedestrian priority
(Pedestrian/	 Cyclist advance waiting areas at lights
Cycling)	Road space reallocation
	Additional pedestrian/ cycling f projects to be identified
	Note that some of these projects cannot be represented within EMME/2 and/or SATURN.
	Assessment will be qualitative.
L	1

Stage 2 senarios will be defined after the results of Stage 1 are available. Stage 2 will develop and analyse integrated packages in order to identify an optimal improvement package.