
REPORT 2

**PUBLIC TRANSPORT SPINE STUDY: RESPONSE TO
REGIONAL LAND TRANSPORT COMMITTEE
RECOMMENDATIONS**

1. Purpose of Report

On 3 March 2014 the Regional Land Transport Committee (RLTC), which includes representation from Wellington City Council (WCC), received a report and recommendations from its sub-committee on the Public Transport Spine Study (PTSS). These recommendations¹ included requests to be made to, WCC, Greater Wellington Regional Council (GWRC) and the New Zealand Transport Agency (NZTA) to undertake specific actions contributing to implementing the outcomes of the Study.

This report specifically focuses on the actions requested of WCC². In addressing these matters an attempt has been made to identify where WCC will be required to make decisions that will impact on the status quo.

2. Executive Summary

The RLTC has adopted its sub-committee's position that Bus Rapid Transit (BRT), running along the "core" spine from the Railway Station to the Regional Hospital and the Railway Station via Mt Victoria Tunnel to Kilbirnie, is the optimal outcome of the PTSS.

The requests from the RLTC to WCC regarding the implementation of the outcomes of the PTSS require decisions to be made which will impact on how space within multi modal road corridors is allocated and on how physical changes to roads, user priority and streetscapes will be funded.

Fully segregated bus ways within the brownfields (and heavily urbanised) environment is neither practicable nor desirable. Nevertheless as a "guiding principle" best endeavours to achieve dedicated bus lanes will be considered where possible.

Ultimately decisions on the compromises between what is ideal and what is possible in terms of space allocation within the road corridor will have to be made by WCC.

This report advocates that WCC receives the RLTC's requests, accepts their intent and reframes them in a business context.

¹ The full schedule of resolutions is attached as Appendix A.

² These are resolutions 3.2, 3.3 and 3.4 as detailed in Appendix A.

This approach acknowledges that more work (at both conceptual and detailed levels) needs to be undertaken before final decisions on how the various aspects of the overall project can be taken.

Some aspects of implementation require significant investment and this in turn will require the reprioritisation of current work programmes. Such decisions and commitments can only be made on the basis of robust business cases.

As detailed design and costing proceeds those matters requiring ratification and funding approval by Council will be brought forward. A number of issues will require funding decisions in time for inclusion in the 2015-25 Long Term Plan (LTP) though actual implementation may fall in the outer years of that timeframe.

3. Recommendations

1. Receive the report.
2. Agreed to appoint two members to the proposed PTSS Governance Board.
3. Agree to the intent of the requests from the RLTC to WCC in relation to the implementation of the PTSS.
4. Agree to undertake the following in order to address the RLTC requests:
 - a) *Develop and agree a governance and joint project management structure³ with NZTA and GWRC to oversee the work programme for the implementation of enhanced bus priority and Bus Rapid Transit (BRT).*
 - b) As a priority undertake core spine assessments to determine:
 - (i) Physical corridor constraints; and
 - (ii) Centre versus edge runningand advise GWRC of the outcomes of those assessments.
 - c) *As a priority undertake concept planning for Kent/Cambridge Terraces and Adelaide Road to facilitate the Network Integration Plan for the Basin Reserve.*
 - d) *Note that funding is included in the 2014/15 Annual Plan to undertake preliminary design in order to achieve b) and c) above.*
 - e) *Undertake detailed assessment, options evaluation, design, costing and business plans of physical carriageway, streetscape, interchange facilities and other works necessary to deliver bus priority and BRT outcomes, particularly for the core corridors identified.*

³ See Appendix B for detail.

- f) Assess and where practicable implement options to achieve the targeted maximum 60 buses each direction per hour within the “Golden Mile” (noting that the provision of secondary routes will be problematic).*
- g) Assess options for protecting and extending the core routes and subject to approval implement any measures identified as part of this review process.*
- h) Obtain approval and funding for the various stages of bus priority and BRT implementation as identified in e), f) and g) above.*
- i) Include funding in the 2014/15 Annual Plan, the 2015 – 2025 Long Term Plan and the 2015 – 2025 Regional Land Transport Plan (local share) to undertake e), f) and g) above with staged implementation resulting from h) above.*
- j) Review and where necessary reinforce the urban growth corridor through policies and other planning instruments.*
- k) Review the supply of inner city commuter parking and evaluate the policies to ensure agreed outcomes are delivered.*
- l) Assess and report upon the BRT implications for the Mt Victoria Tunnel duplication project and how this impacts upon both the local road network and the Town Belt. (Noting that in the absence of established evidential need to the contrary the WCC preference is to minimise intrusion into the Town Belt.)*

4. Background

The PTSS is a collaborative project between WCC, GWRC and NZTA which has been managed through GWRC.

For context purposes the PTSS addresses only that part of the public transport network between the Railway Station and the southern and eastern suburbs. It is only part of the broader public transport framework which in turn is only part of the broader transport framework which of course in turn is only an enabler of community social, environmental and economic outcomes.

The potential costs of implementing the recommendations from the PTSS, as agreed by the sub-committee are significant; however the scope of the PTSS is limited. Accordingly, its implementation must be placed within the broader integrated transport network context and not overwhelm it.

For additional context GWRC has a mandated role to provide public transport services whereas WCC has mandated roles in land use planning and the equitable management of transport corridors for all users and modes. WCC is

therefore responsible for decisions around how space within transport corridors (roads in this instance) is allocated.

5. Current Position

The RLTC has adopted BRT as the optimal outcome of the PTSS. The fundamental design feature of the BRT system will be higher capacity buses with associated improved journey time reliability. The physical configuration of the BRT vehicle to achieve higher capacity means that the vehicle has to be bigger – that is higher or longer. However, the BRT option has to be accommodated within the constraints of Wellington’s existing road corridors therefore the constraints of the corridor will need to be evaluated before vehicles can be specified. For this reason the exact characteristics of the Wellington BRT system have not yet been defined.

Bus priority at intersections and dedicated bus lanes are two of the tools available to improve journey time reliability and will need to be assessed within the Wellington context. This is because the extent to which bus priority measures and dedicated bus lanes can be provided varies according to location.

Both vehicle size constraints and journey time reliability improvements will be determined by decisions that fall within the mandate of WCC. Those decisions will be informed by officer evaluation of options.

Table 1 Outcomes & Options

Desired Outcomes	Options to Deliver Outcomes
<ul style="list-style-type: none"> • <i>Retain/Grow Public Transport mode share (better services)</i> • <i>Reduce Numbers of PT vehicles in Lambton Quay</i> • <i>Environmentally sound</i> 	<ul style="list-style-type: none"> • <i>Larger capacity vehicles</i> • <i>Enhanced priority</i> • <i>Improved routes</i>

6. Bus Rapid Transit

The Institute for Transportation & Development Policy published “The BRT Standard – version 1.0” in January 2012. This standard provides an assessment tool for ranking BRT systems based on international best practice. Out of a possible 100 points a Gold standard BRT requires more than 85 points, Silver requires 70 – 84 points and Bronze requires 50 – 69 points.

An initial assessment of BRT in a Wellington context factoring in local constraints indicates a base score of less than 50 points.

This suggests that the BRT solution for Wellington will be “bespoke” and most likely consist of higher capacity vehicles with an enhanced bus priority. It may not achieve a grading based upon the BRT Standard but nevertheless could be

considered as BRT. Irrespective of how it is described it will be an improvement on existing services.

7. Response to RLTC Recommendations

The recommendations requiring a response from WCC are those in 3.2, 3.3 and 3.44.

Within the intent of the RLTC recommendations and applying a robust business case process the following represents a pathway forward:

- a. Develop and agree on a governance and joint project management structure⁵ to oversee the work programmes and specific actions identified.
- b. As a priority undertake route assessments to determine:
 - (i) Physical corridor constraints; and
 - (ii) Centre versus edge running.
- c. As a priority undertake concept planning for Kent/Cambridge Terraces and Adelaide Road to facilitate the Network Integration Plan for the Basin Reserve.
- d. Include funding in the 2014/15 Annual Plan to undertake preliminary design in order to achieve b) and c) above.
- e. Undertake detailed assessment, options evaluation, design, costing and business plans of physical carriageway, streetscape, interchange facilities and other works necessary to deliver bus priority and BRT outcomes, particularly for the core corridors identified.
- f. Assess and where practicable implement options to achieve the targeted of a maximum 60 buses each direction per hour within the “Golden Mile” (*noting that the provision of secondary routes will be problematic*).
- g. Assess options for protecting and extending the core routes and subject to approval implement any measures identified as part of this review process.
- h. Obtain approval and funding for the various stages of bus priority and BRT implementation as identified in e), f) and g) above.
- i. Include funding in the 2014/15 Annual Plan, the 2015 – 2025 Long Term Plan and the 2015 – 2025 Regional Land Transport Plan (local share) to undertake e), f) and g) above with staged implementation resulting from h) above.

⁴ See Appendix A for detail.

⁵ See Appendix B for detail.

- j. Review and where necessary reinforce the urban growth corridor through policies and other planning instruments.
- k. Review the supply of inner city commuter parking and evaluate the policies to ensure agreed outcomes are delivered.
- l. Assess and report upon the BRT implications for the Mt Victoria Tunnel duplication project and how this impacts upon both the local road network and the Town Belt. *(Noting that in the absence of established evidential need to the contrary the WCC preference is to minimise intrusion into the Town Belt.)*

In order to deliver upon the steps outlined above additional resources within the traffic/transport planning team will be required to support the multi disciplinary team that will be formed within WCC. Aspects of this are covered in greater detail in Appendix B and Appendix C sets out the detailed work programme.

8. Other Considerations

8.1 Financial considerations

There will be significant funding implications for WCC as this project proceeds. Initial funding for preliminary work streams has been allowed for within the 2014/15 Annual Plan. The preliminary work is largely assessment, evaluation and some design. It does not include any implementation costs.

More broadly the overall funding package for the PTSS project in its entirety still needs to be determined and agreed. For example the PTSS was 75% funded by NZTA with GWRC and WCC each contributing 12.5% to the balance.

As the project moves into the current phase which will involve detailed design and implementation the funding responsibilities need to be re-examined. It is improbable that NZTA will continue to fund this phase at the previous 75% level and so the actual level of funding support from NZTA and the contributions from WCC and GWRC will be clarified and reported at a later date.

8.2 Climate change impacts and considerations

Enhanced public transport services are essential to encourage mode shift from private motor vehicles. The reduction in congestion through less private motor vehicles on the road will reduce green house gas emissions.

8.3 Long-term plan considerations

Funding considerations associated with the implementation of the PTSS recommendations will require funding commitments within the 2015-25 LTP. The extent of these commitments is unable to be determined at this time but for some works within parts of the core spine the need for considerable investment is possible.

When detailed design and costs emerge for each separable portion of the overall project these will be reported to Council for funding and other approval considerations. Implementation is unlikely to have a significant impact in the early stages of the 2015-25 LTP.

In effect there will be an overarching project with separable components, each having their own analysis of benefit and cost.

8.4 Economic Benefits

The BRT project in its raw form has a positive benefit cost ratio (BCR) – that is the benefits exceed the costs.

Wider economic benefits (such as land value uplift) have not been fully factored into these BCR estimations. The project will help facilitate more intensive residential and commercial development along the urban growth spine and this will likely lead to uplift in property values.

The reduction in travel time, and improvements in accessibility to and from the southern and eastern suburbs and within the City, can be expected to increase the overall level of business activity within the City by adding to its attractiveness as a place to live or visit.

8.5 Other Matters

Improvements to public transport are highly desirable. The primary challenge for Council is how to prioritise the potentially significant investment in public transport against other competing investment demands.

Although at one level the PTSS can be viewed as an integrated investment package the project details are yet to be fully resolved. There will be opportunities to consider options and sequencing of separable parts of the whole and this will assist in how decisions are made and priorities determined.

9. Conclusion

The RLTC has adopted BRT as the optimal outcome of the PTSS. This report advocates that WCC receives the RLTC's requests in relation to the findings of the PTSS, accepts their intent and reframes them in a business context.

This approach acknowledges that more work (at both conceptual and detailed levels) needs to be undertaken before final decisions on how the various aspects of the overall project can be taken.

Some aspects of implementation require significant investment and this in turn will require the reprioritisation of current work programmes. Such decisions and commitments can only be made on the basis of robust business cases.

As detailed design and costing proceeds those matters requiring ratification and funding approval by Council will be brought forward. A number of issues will

require funding decisions in time for inclusion in the 2015-25 LTP though actual implementation may fall in the outer years of that timeframe.

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Appendix A

Recommendations from the PTSS hearings sub committee

That the Committee:

1. **Receives** the report.
2. **Notes** the content of the report.
3. **Agrees** to the recommendations of the Wellington Public Transport Spine

Options Hearing Subcommittee as set out below:

3.1. *The Wellington Public Transport Spine Options Hearings Subcommittee recommends that the Regional Transport Committee:*

- a. *Notes that the Public Transport Spine development is an action arising out of the integrated multi-modal Ngauranga to Airport Corridor Plan and sits alongside improvements to the strategic road network and actions to encourage active modes.*
- b. *Notes that the recommended option will be incorporated into a wider network planning exercise and procurement process that will result in a new integrated public transport network for Wellington City.*
- c. *Confirms that the purpose of the Public Transport Spine is to support the efficient and effective operation of the wider public transport network by:*
 - i. *Providing a dedicated central city corridor that enables reliable and improved journey times for all public transport service;*
 - ii. *Providing an efficient, reliable and frequent connection between the central city and the southern and eastern suburbs;*
 - iii. *Growing public transport mode share.*
- d. *Notes that corridor options are constrained by the existing urban form and environment.*
- e. *Agrees that the core spine corridor within which dedicated lanes and other priority measures should be applied runs from Wellington Railway Station along the Golden Mile⁶, along Kent/Cambridge Terraces to the Basin Reserve, branching into two:*

⁶ The Golden Mile runs along Lambton Quay, Willis Street, Manners Street, and Courtenay Place

Appendix A

- i. Along Adelaide Road and Riddiford Street to the Regional Hospital, and*
 - ii. Through the duplicated SH1 Mt Victoria Tunnel and along Ruahine Street, Wellington Road and Kilbirnie Crescent to Kilbirnie town centre.*
- f. Agrees that Bus Rapid Transit is the preferred option for the Wellington public transport spine.*
- g. Agrees that a pathway should be planned to progress from Bus Priority through to Bus Rapid Transit, noting that there are opportunities to develop interim Bus Priority measures in the shorter term that are compatible with the longer term solution.*
- h. Notes that full implementation of Bus Rapid Transit will require corridor designation and protection, vehicle and service procurement and physical changes to the road corridor all of which can be sequenced in phases.*
- i. Agrees that designation and other protection mechanisms should be advanced over the entire corridor as a high priority in the short term.*
- j. Notes that further investigation will be carried out as a high priority to confirm whether a designation for additional bus lanes is required on Ruahine Street and Wellington Road.*
- k. Agrees that the initial priority for implementation should be the corridor through the Golden Mile and onto the Regional Hospital.*
- l. Agrees that an extension of the spine corridor through to the Wellington Airport should be future-proofed.*
- m. Notes that it is desirable for Bus Rapid Transit services to extend beyond the core spine to service destinations further afield, and that additional priority measures on these corridors would be advantageous.*
- n. Notes that the existing technology within the Real Time Information and SCATS systems, is able to facilitate assigned priority to public transport vehicles at signalised intersections.*
- o. Agrees that physical infrastructure along the core spine corridor should, where practical, be designed in a manner that does not prohibit the future transport development of the corridor, including for Light Rail Transit.*

Appendix A

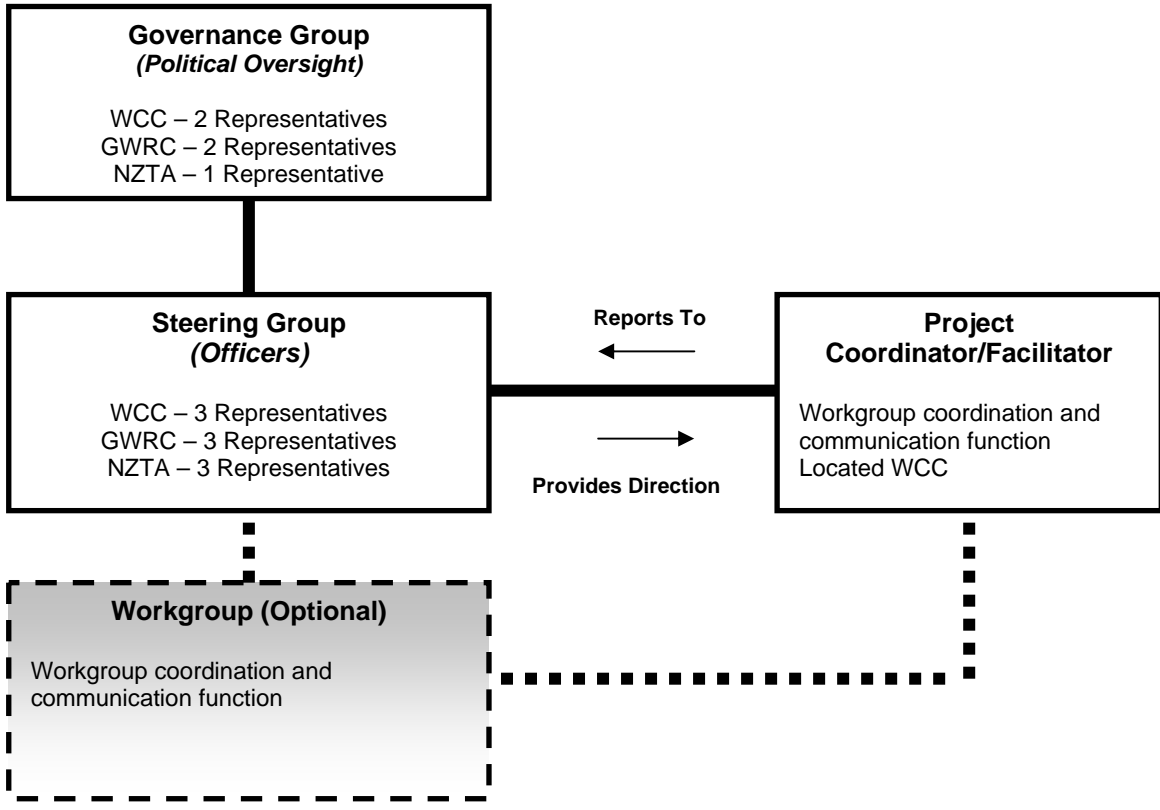
- p. Notes that the next phase of the project will need to include further investigation of outstanding issues, detailed design of the corridors, network planning and design, vehicle specification and the development of a detailed business case.*
- 3.2. *The Wellington Public Transport Spine Options Hearings Subcommittee recommends that the Regional Transport Committee request Wellington City Council, Greater Wellington Regional Council and NZ Transport Agency to:*
- a. Continue collaborative working, through an agreed governance and joint project management structure to oversee the work programmes and specific actions identified.*
 - b. Progress detailed planning and design of the Bus Rapid Transit option as a matter of urgency, to enable other related transport and urban design projects along the corridor to be progressed and to enable its implementation to be included in the Regional Land Transport Plan 2015-2021, with implementation works to be completed before the end of this period.*
 - c. Provide appropriate priority for public transport vehicles at all intersections along the core spine corridor, taking into account the needs of other modes, including pedestrians, cyclists, general traffic, freight, emergency and service vehicles.*
 - d. Progress detailed design for the core spine corridor from the Wellington Railway Station to the Regional Hospital as the high priority, including consideration of how any dedicated public transport lanes will be configured and taking into account the needs of pedestrians, cyclists, general traffic and service vehicles.*
- 3.3. *The Wellington Public Transport Spine Options Hearings Subcommittee recommends that the Regional Transport Committee request Wellington City Council and Greater Wellington Regional Council to:*
- a. Assess the suitability of the street environment and the requirements for new stop facilities for the proposed vehicle types, including any higher capacity vehicles, and to meet agreed standards for the Bus Rapid Transit system.*
 - b. Assess the need for and, where required, design and implement, new or improved interchange facilities at key locations including Wellington Railway Station, Kilbirnie town centre and Wellington Regional Hospital.*

Appendix A

- c. Undertake further investigations into the best means to achieve the target of a maximum of 60 buses per hour per direction travelling along the Golden Mile spine corridor, including through a secondary route at peak periods, enhancing the capacity of the corridors at critical locations or more short-running peak services.*
- 3.4 The Wellington Public Transport Spine Options Hearings Subcommittee recommends that the Regional Transport Committee request Wellington City Council to:*
 - a. Reinforce the policy approach of aligning residential and economic growth at key nodes and along the Growth Spine with the planned public transport investment along the core spine corridor.*
 - b. Review options to manage commuter parking provision in the central city to grow public transport mode share.*
- 3.5. The Wellington Public Transport Spine Options Hearings Subcommittee recommends that the Regional Transport Committee request Greater Wellington Regional Council to:*
 - a. Investigate and procure suitable vehicles for a future Bus Rapid Transit system in a phased programme, including consideration of higher capacity vehicles and vehicle power sources that seek to minimise carbon emissions and air pollution.*
 - b. Prioritise the implementation of integrated ticketing and investigate options for off-board ticketing through the Integrated Fares and Ticketing project.*
- 3.6. The Wellington Public Transport Spine Options Hearings Subcommittee recommends that the Regional Transport Committee request NZ Transport Agency to:*
 - a. Implement priority measures for buses as an integral component of the Basin Reserve and Mount Victoria Tunnel Duplication projects.*
- 4. Notes that the next phase of the project will need to include further investigation of outstanding issues, detailed design of the corridors, network planning and design, vehicle specification and the development of a detailed business case.*
- 5. Notes that it is intended that the implementation of the project be included as part of the Regional Land Transport Plan 2015-2021.*

Appendix B

Potential Governance and Project Management Arrangements



1. Each workgroup is responsible to own organisation for delivery of agreed project outcomes.
2. Each workgroup has own reporting structure to relevant representatives on the Steering Committee.
3. Each workgroup primarily communicates with other workgroups through the Project Coordinator who maintains and monitors work programmes as submitted by the individual workgroups.

WCC Workgroup

Outputs as per detailed work programme Appendix B.

Transport, Traffic, Urban Design, Urban Planning Expertise

GWRC Workgroup

Vehicle Specification
Service level evaluation
Other

NZTA

Business Case Evaluation
Other

Appendix C

Detailed Work Programme – Wellington City Components

Item	Description	WCC Decision Required	Indicative Priority
Governance structure and project development	Project Governance, Steering Group, Coordination and Workgroups	Confirm Governance Structure	Urgent (To enable project to commence)
Core route assessments (Preliminary)	Apply tracking curves and height restrictions to identified “choke” points to determine physical corridor constraints. Develop a position on centre v edge running. Outcomes provided to GWRC for vehicle specification purposes		Urgent (Needed at indicative level to allow for vehicle specification inclusion in PT contracts.)
Adelaide Road, Kent/Cambridge and Basin Reserve	Revise Adelaide Rd Framework Plan and prepare detailed project design for inclusion in the LTP and Regional Land Transport Plan (RLTP)	Consideration of options and funding for inclusion in forward work programmes as part of the LTP	High (Major projects (>\$5m) to be prioritised in RLTP before end of 2014)
	Kent/Cambridge concepts and detailed design integral with Basin Reserve Mitigation	Consideration of options and funding for inclusion in forward work programmes as part of the LTP	High (Major projects (>\$5m) to be prioritised in RLTP before end of 2014)
	Basin Reserve Network Integration Plan to determine how modal priority is allocated around the reconfigured Basin.		High (To be implemented as part of Flyover project.)
Core route assessments (Detailed)	Assessment of options, detailed design and cost evaluation of streets, streetscape and traffic management leading to the implementation of bus priority and BRT measures.	Consideration of options (including integration of parking and active modes) and funding for inclusion in forward work programmes as part of the LTP	High (Major projects (>\$5m) to be prioritised in RLTP before end of 2014)
Ruahine Street/Town Belt	Assess the need and options for additional public transport lanes in Ruahine Street together with the impacts on Hataitai and Kilbirnie Crescent.	Consider the need and extent of land take required for Ruahine Street improvements	High/Medium (Needed as part of the consent development for Mt Victoria Tunnel Duplication project.)

Appendix C

Item	Description	WCC Decision Required	Indicative Priority
Golden Mile Capacity	Assessment of options to cap number of public transport movements through the Golden Mile at peak times including route variations and the identification and evaluation of secondary routes.	Consider implications of secondary routes for public transport through the Golden Mile precinct.	Medium
Extended route assessments	Assessment of options for route extensions and designations for future public transport corridors to the south (Island Bay), to the east (Airport/Mirimar) and alternative routes such as Constable Street and Evans Bay Parade. Such assessments should also consider future extensions to the west (Karori) and the north (Johnsonville).	Consideration of options and funding for inclusion in forward work programmes as part of the LTP	Medium <i>(Out years of 2015-2025 LTP)</i>
Urban Growth Corridor	Review and where necessary reinforce the urban growth corridor through policies and other planning instruments	Consider the extent to which policies are delivering desired outcomes and what changes if any are required to reinforce those outcomes.	Medium
Inner City Parking	Review the supply of inner city commuter parking and evaluate relevant policies to ensure agreed outcomes are delivered	Consider the extent to which additional controls on parking are desirable and practicable to implement.	Medium
Improved Transport Terminus Points	Identify and assess potential improvements and new public transport terminus facilities along the core spine with the Railway Station, the Regional Hospital and Kilbirnie being priority locations	Consideration of options and funding for inclusion in forward work programmes as part of the LTP	Medium/Long <i>(Out years of 2015-2025 LTP)</i>