

Living Streets Aotearoa



Submission from Living Streets Aotearoa Wellington City Public Transport Spine Study

Contact person: **Ellen Blake**
Email: **wellington@livingstreets.org.nz**
Phone: **021 1067139**
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About Living Streets

Living Streets Aotearoa is New Zealand's national walking and pedestrian organisation, providing a positive voice for people on foot and working to promote walking friendly planning and development around the country. Our vision is "More people choosing to walk more often and enjoying public places".

The objectives of Living Streets Aotearoa are:

- to promote walking as a healthy, environmentally-friendly and universal means of transport and recreation
- to promote the social and economic benefits of pedestrian-friendly communities
- to work for improved access and conditions for walkers, pedestrians and runners including walking surfaces, traffic flows, speed and safety
- to advocate for greater representation of pedestrian concerns in national, regional and urban land use and transport planning.

Wellington is the local walking action group based in this area which is working to make city and suburban centres in the region more walking-friendly.

For more information, please see: www.livingstreets.org.nz

Submission

Living Streets Aotearoa fully supports a reliable, efficient, equitable and sustainable public transport system. We appreciate the close links between public transport and pedestrians and seek to see these enhanced – most pedestrians will use public transport at some time, and most public transport trips have a walk component. The Ngauranga to Airport Transport Plan provides a good framework for this by identifying a high quality and high frequency public

transport spine between Johnsonville and the airport as a priority. We fully support this idea of a seamless system along the major growth spines and this study has gone some way to providing the information required to make sound long term decisions. However the latter part of the spine study falls short and should be rejected.

Living Streets Aotearoa is interested in an efficient modern system that lasts the test of time, we do not consider that the key decision drivers for our public transport system should revolve solely around balancing costs and benefits based on the current cost benefit model.

The problem statement in the summary document is supported, although it is far from a complete list of the problems that an improved PT spine could address. Many studies have concluded that the most important issue to address in relation to public transport in Wellington City is bus congestion along the Golden Mile. That is creating inefficiencies and serious unreliability across the whole bus network. By increasing transit time and unreliability, it is affecting patronage. Loss of patronage means more cars. More cars not only moving through pedestrian space, but also resulting in demand for more parking space – frequently at the expense of footpaths and amenities.

Coverage

The Public Transport Spine Study (PTSS) does not cover the full area of the expected growth spine by missing out Johnsonville to the CBD, Newtown to Kilbirnie, and Kilbirnie to the airport. The PTSS also seems to bypass Hataitai removing the current good service through this area. It is important to have a network design that will improve public transport in the total area before decisions are made. We support including Johnsonville in the network design.

Instead of a 'y' shape PT spine network we suggest closing the loop would be more efficient, making the link between Newtown and Kilbirnie, and extending the service to the airport.

There was very little consideration of effects of the PT spine on pedestrians, and effects of pedestrian infrastructure quality on the operation of the spine. We understand that once the PT network design is clear, integrating the network with pedestrian infrastructure will be an important step. Living Streets Aotearoa offer to contribute to that important work.

Public transport patronage

The expected growth in public transport use seems very modest and we would like to see modelling used that expects a much higher level of public transport use (as in the Regional Land Transport Plan) so that the system is future proofed and can cope with these desired higher patronage levels. The network design selected together with pedestrian design features should aim to increase patronage.

Analysis of different vehicle options

Living Streets Aotearoa supports the most efficient, future-proofed, seamless, and pedestrian friendly public transport system for Wellington. We do not have a preferred mode, but highlight some of the issues in the current analysis of modes

1 Pedestrian friendliness

Public transport relies on pedestrians as customers to a large extent, and the interaction between pedestrians and the PT mode is very important. The analysis of vehicle options needs to include not only volume, capacity, and the speed of moving from one point to another, but the ease of getting on and off the vehicle, reliability, and impact on the walkability of the environment in which it operates. This study lacks sufficient information about costs and benefits for pedestrians, or how it will aid the desired increase in walking rates. These are important for this modelling as most of the route/s travel through the highest density urban developments in Wellington including the CBD area.

The data focus only on PT and vehicle use – although the WPTM allows for some pedestrian trip legs. For instance, the report shows that PT trips to the CBD in the morning peak account for 30% of trips but doesn't mention that over 20% of the remaining trips are made on foot. Therefore over half of trips in the CBD are PT or on foot – the costs and benefits for these two modes need to be considered equitably at least, as much as vehicle costs and benefits.

LRT appears to have the most capacity, make the biggest speed savings, and have the best VC ratio so that fewer vehicles are required to carry the same number of passengers. Less vehicles along the Golden Mile would improve walkability of that route and is one of the key PT issues.

The economic assessment was limited to a very few variables of annual travel time cost and vehicle operating cost only, and the report states that many benefit sources were not explored, and therefore the results can be considered highly conservative. Yet this analysis was the basis to develop the benefit cost ratio (p41 Option evaluation notes). The current study BCR for LRT seems to be wildly different from a 1995 BCR of 2.2.

There is no analysis of ease of use of the different modes or impact on the environment. Wellingtonians are well known for liking their quiet, low pollution trolley buses. Modern BRT and LRT systems can have at-ground access which would be a great improvement on existing systems. These and other ease of use factors should be considered.

Transfers from one route or service to another is likely to be a feature of the new system. There is little information to assess how transfers would occur and this is an important consideration for a seamless system. Transfers are a very common occurrence in public transport systems overseas but some transfers are much better than others. Wellington

historically used transfers at the Railway Station and Courtenay Place successfully so it is not entirely a new concept.

We would like to see better analysis of the interaction between pedestrians and the PT network design and vehicle options.

With an attractive pedestrian network linked to the PT spine, the catchment for the spine will be far larger, and therefore the transit-oriented development and patronage benefits of the spine also higher.

2 Analysis of the different vehicle systems.

There seem to be a lot of assumptions without much justification on what is required for each vehicle option, and, that the RONS roading projects will go ahead. For instance, an extra tunnel included for light rail but not required for BRT, the RoNS go ahead despite undermining public transport viability, walkability, and encouraging growth on the city fringes, use of the Mt Victoria tunnel and not the current bus tunnel.

The assumption that urban development would be the same for each option does not appear sound either – the study itself predicts property prices will increase by up to 25% for LRT but only up to 20% for BRT. The quieter, less polluting option being more attractive to locate along.

The study shows the capacity of BRT through the Mt Victoria tunnel is overcapacity from 2021 onwards – how is this expected to work? While LRT has plenty of spare capacity to expand into. This will affect reliability and should be factored into decision making.

Other assumptions are also dubious – why does PT have to share a lane in the new Mt Victoria tunnel with cars? Why LRT power has to swap from overhead to underneath in tunnel? Why would tunnels close more frequently with LRT? Mt Victoria tunnel will need to be closed anyway to make the RoNs changes. Why do BRT /LRT need an extra Mt Victoria tunnel to work?

How did factors such as LRT providing a superior ride (e.g standing most acceptable on LRT) and a reduction in PT stops along the Golden Mile factor in the analysis and option selection? Benefits were assessed using the NZTA guidelines which only uses time savings costs, and includes a cost for disbenefit to motorists. We would like to see more equitable treatment of benefits and disbenefits for pedestrians included in the assessments.

The detailed design of the spine will affect pedestrians within the corridor:

- Rail is less likely to be a hazard to pedestrians. The tracks are a constant reminder to them of the risk of a PT vehicle arriving.

- Stops can be either a problem for pedestrians, or a positive feature in the walking environment. Currently most are a nuisance because PT facilities and passengers block the footpath.
- Electric vehicles reduce noise and emissions increasing walking amenity.
- Rail speeds tend to be more uniform, making pedestrian predictions of risk more accurate. And railed vehicles follow a very predictable route, lowering the risk to pedestrians on footpaths. This is an important issue in the CBD, which has had a number of bus-pedestrian collisions in recent years.
- Where it is feasible, stops and the corridor itself should be made positive parts of the urban environment – turned into green areas, or useful resting places, or adorned with sculptures. A key advantage of LRT in this regard is that a far wider range of corridor surface options is available, including grass and gardens. That will allow the corridor itself and the adjacent pedestrian areas and parks to be fully integrated.

The benefits of LRT were underplayed and in particular, we wish to have recognition of the benefits to pedestrian safety, the benefits of reliable level boarding, and the potential for increased accessibility for wheelchair users with LRT.

Key route considerations

We support the conclusions of the study team that the spine should be along Lambton Quay rather than the Terrace. We wish to see only one spine in the CBD.

Secondary spine routes were common to all options considered and were used because the primary spine network proposed can't be made to work effectively. With a duplicated spine legibility is lost. This is a serious issue.

Currently buses service the airport and the study does not look at BRT/LRT options to the airport. The study assumes airport buses will follow the secondary spine.

Golden Mile

Consolidation of bus stops is envisaged although no details on the exact location this would increase walk distance for passengers but this is not considered an impact despite increasing travel times for pedestrians. We note bus stops are reduced from 8 to 5 for all options. We would have more comments on this aspect in a final design and do not necessarily consider removing bus stops is a benefit.

The number of vehicles per hour is a key factor with less better but not if this reduces capacity. LRT seems to be the only mode that increases capacity along the Golden Mile significantly while reducing vehicle movements. LRT capacity of 180 people compared with 100 BRT and 60 on bus. The vehicle frequency of 12 vehicles per hour LRT (every 4 minutes)

or 20 vph BRT (every 2.5 minutes) are required to move 1600 passengers per hour at 80% load.

Journey time reliability is improved with both dedicated line options.

The study claim that routes do not create any physical barriers to movement for pedestrians along or across them except that there may be some safety issues is of concern. Adequate medians are required but they wouldn't fit on the Golden Mile currently but no solution is proposed.

We assume the configuration of services is indicative only and don't support PT all on one side of road as this would involve pedestrian crossing issues.

We support limiting other vehicles access to the PT spine.

Newtown

The report states the new service would provide 'only' a 3 minute travel time saving yet that is a significant amount of time saving.

We support the split route proposal as it will provide a better service and increase frequency of service along the Golden Mile. However the network should be taken further and the PT spine should be a loop, going through Newtown to Kilbirnie, not just having two branches at the end. This would allow for greater resilience and future proofing.

The short list cross sections show features such as kerb extensions, median islands, and parking have been removed that would create pedestrian safety issues potentially. We assume this is only for network option decision-making and will be interested to comment on the detailed plans as they arise.

Kilbirnie

We strongly support extending the spine to Kilbirnie, and even to the airport.

The report shows savings of 6 minutes by routing through the Mt Victoria tunnel but this is at the expense of stops and does nothing to improve Hataitai PT service – in fact will make it worse. We do not support use of the Mt Victoria tunnel.

There was no discussion of use of the existing bus tunnel. We would like to see options that use the bus tunnel and provide the same or better service to Hataitai.

While it is essential to have good PT service to the many schools around the Basin Reserve

It is hard to see how the PT spine can work well through this area given the traffic volumes, and the existing poor pedestrian service levels. The flyover will make those problems worse, not better. This is another reason not to use the Mt Victoria tunnel option.

Railway Station interchange

There is no detail on the railway interchange, currently it is quite a hike from train to bus which reinforces negative images of transfers.

Currently most people walk from the train to their destination and there was no information what effect any of the PT options would have on them.

We believe the study came to the wrong conclusion about the extent of effect of the current railway station location. It may not be a long distance to walk to most destinations but can be a very uncomfortable walk (due to pedestrian congestion and amount of vehicles – crossings to negotiate). Once integrated ticketing is in place, and there is no fare penalty for transferring to buses, we would expect to see more people doing so. We would like to see the walking route from the station improved and the PT interchange and transfers optimised so that people would have a true choice in mode of travel.

There are no proposals to resolve the problems facing pedestrians as they leave the Wellington railway station - from accessibility issues at the front door of the Railway Station to poor level of service at the crossings.

Northern routes

We would also like to see an improved PT service to Thorndon Quay and Kaiwharawhara. The current service levels are very low, despite the location there of many key destinations (hardware shops, Spotlight, etc). That could be most easily achieved by LRT to Johnsonville either routed through the streets or with good connections to them. We found the analysis of the North Wellington connections highly unsatisfactory and technically poor.

Parking

A 'key impact' stated in the study of options was found to be a modest loss of on-street parking. Living Streets Aotearoa supports a coordinated approach to managing all vehicle parking in the central city area to recognise the use of a key city asset, the park space, and the effect this has on efficient public transport and pedestrians. Other means to buffer pedestrians from close proximity to vehicles can be used instead of parked cars. Parking management should be implemented whether or not these PT options are pursued. Some Wellington-based research into economic benefit of each transport mode and the effect of parking provision on this should be undertaken.

Detailed design

The short list cross-sections are assumed to be indicative only for the purpose of design analysis, and so we have not commented in detail. We are however interested in the detailed plans for the network and will comment on them at the appropriate time. For instance, it does not seem an improvement to put the PT lines on one side of a road only.

We do not support a 'shared path' along Ruahine Street on the existing footpath.

Conclusion

We recommend that the Council adopt the first priority of the Ngauranga to Airport Plan immediately to establish bus priority measures as a first step towards the development of a high quality, high frequency public transport spine that will cater for travel growth, reduce vehicle congestion, improve liveability, guide and support urban intensification and provide resilience against fuel supply and price shocks. This should be implemented with parking management measures.

The report clearly identifies the large advantage to be gained from parking management and together with Bus Priority is a good short term option that can be implemented now.

The PTSS was based on a faulty network design and we therefore cannot support its conclusions. Further analysis should be undertaken of the items outlined in this submission to identify the best long term option for Wellington public transport, perhaps through a GW or independent review of the BRT/LRT options presented as a starting point. This is a vital issue for Wellington so we need to get it right, even if that takes time. A high quality network with good linkages between PT and pedestrian networks is the most important thing to be achieved.

Neither the final bus review nor the PTSS provide a suitable final network design. It is vital that an efficient, modern network design is finalised and firmly adopted as soon as possible and this should be largely unaffected by any change in PT vehicle mode. All modes should be tested against the same network design and operational standards. The arguments over bus versus tram are just a distraction until that has been done. The network design should then be reflected in district planning provisions.

We wish to be heard in support of our submission.