

1 BRT Evaluation Framework

Critical success factors

Things an option must have if it is to be considered further.

Reduction in bus-on-bus congestion
Reduction in PT journey times along the PT Spine
Increase in reliability of PT journeys along the PT Spine
Increase in PT patronage in Wellington city
Increase in PT Spine corridor carrying capacity

Multi-criteria analysis framework

The criteria with which the options will be evaluated

ILM "Strategic Response"	Project objective	Reference	Criteria	Measure	Source	
A transport network that enables Wellington city to unlock its economic potential	1	Increased economic activity	1.1	PT Spine corridor throughput	Bus patronage + private vehicle trips, along PT Spine, AM Peak	Spine Study
			1.2	Ability to drive intensification of development and economic activity	Qualitative	Working group
			1.3	Increase in the value of land use along the PT Spine	Qualitative; informed by estimated change in land values in 800m circles around the BRT stations	Council valuation database
			1.4	Increase in residential population along the PT Spine	Qualitative; informed by population growth along BRT corridors	
A network that reliably and efficiently moves people and freight	2	Improved multi-modal network efficiency	2.1	Reduction in PT journey times	PT travel times, AM Peak - Newtown and Kilbirnie to Railway Station	Spine Study
			2.2	Increased reliability of PT journeys	Variation in PT Spine travel times, AM peak	Spine Study
			2.3	Reduction in vehicle operating costs	Vehicle operating costs, based on bus kms travelled	Spine Study
			2.4	Improvement in ability to move goods and services around the city	Percent of HCV travelling in congested conditions - (AM peak)	Transport model outputs
			2.5	Operational resilience (level of interaction with other modes)	Qualitative	Working group
	3	Improved accessibility	3.1	Increase in PT Spine corridor carrying capacity	Total corridor capacity along BRT route	Spine Study
			3.2	Improved options for mode choice	Qualitative	Working group
			3.3	Reduction in bus-on-bus congestion	Reliability measures or bus average travel speeds (kph)	
	4	Increased PT patronage	3.4	Reduction in PT journey times	PT travel times, AM Peak - Newtown and Kilbirnie to Railway Station	Spine Study
			4.1	Increase in PT patronage in Wellington city	PT trips (all modes) across Wellington region - AM peak	Spine Study
4.2			Increase in PT mode share in Wellington city	PT mode share across Wellington region - AM peak	Spine Study	
A public transport system that offers users a competitive choice for travel	5	Improved PT user experience (incl potential users)	5.1	Increase in PT user satisfaction	Qualitative	Working group
			5.2	Increase in ease of use of PT	Qualitative	Working group
<i>Not specifically included in ILM</i>	6	Minimise emissions	6.1	Assessment of emissions (buses)	Qualitative; informed by journey times and bus km travelled	
			6.2	Assessment of emissions (mode shift)	Qualitative; informed by PT mode shift AM peak and bus/car emissions info	
	7	Minimise impacts on physical environment / amenity	7.1	Land take	Qualitative - assisted by technical specialists	Working group
			7.2	Construction effects	Length of construction (months) and/or number of properties along BRT routes which are affected	Working group
			7.3	Visual effects	Qualitative	Working group
			7.4	Noise effects	Qualitative - assisted by technical specialists	Working group
			7.5	Heritage effects	Qualitative	Working group
			7.6	Loss of town belt	Qualitative	Working group
			7.7	Ecological effects	Qualitative	Working group
			7.8	Safety impacts	Qualitative - assisted by technical specialists	Working group
			7.9	Impacts on residential amenity	Qualitative	Working group
			7.10	Localised urban centre commercial impacts	Qualitative	Working group
	8	Affordable / value for money	7.11	Loss of parking	Qualitative assessment, based on street layout assumptions	Working group
			7.12	Traffic and transport effects	Quantitative - with technical specialists	Working group
			8.1	Benefits	Quantitative - sum of monetised EEM benefits	Spine Study
			8.2	Capex	Total capital expenditure (land acquisition, construction, new buses)	Spine Study / QS
	9	Alignment / integration with other infrastructure & services	8.3	Opex + maintenance	Total opex (staffing, fuel, RUC, maintenance)	Spine Study / QS
			8.4	Rates impact	Projected annual average rates increase required to fund the BRT option	Working group
9.1			Alignment with strategic documents (eg GOS, RLTP, LTP, Urban Growth Plan)	Qualitative	Working group	
9.2			Alignment with specific projects (eg RONS, cycling)	Qualitative	Working group	

2 Scoring

Objective	Criteria	Score	Option 0 Do minimum			Option 1 Targeted bus priority and other modes improvement			Option 2 Peak bus lanes & priority			Option 3 Targeted bus lanes & priority			Option 4 Full bus lanes & priority			Option 5 Physically separated lanes & priority													
			1			2b			2b			3b			4b			5b													
			Score	Comment	Comment	Score	Comment	Comment	Score	Comment	Comment	Score	Comment	Comment	Score	Comment	Comment	Score	Comment	Comment											
Increased economic activity	PT Spine corridor throughput	0	1	Small increase in throughput	1	Similar to 1	2	Lower throughput than 3b and 5b, since only operating at peak	2	Closer to 2b than 2a. The Kibbirie branch more than offsets the delay.	2	No substantial difference from 5a	3	No substantial difference from 5b	3	No substantial difference from 5c	2	No substantial difference from 7a	3	No substantial difference from 7b	3	No substantial difference from 7c	2	Compared with 7b, same improvement from Newtown but less improvement from Kibbirie	3	Large increase in throughput. Best amongst the options.	3	Closer to 7b than 7a. The Kibbirie branch more than offsets the delay.			
	Ability to drive intensification of development and economic activity	0	1	Small improvement in accessibility and mobility, driving small improvements in economic activity	1	Similar to 1	2	Lower benefits than 3b and 5b, since only operating at peak	2	Closer to 2b than 2a. The Kibbirie branch more than offsets the delay.	2	No substantial difference from 5a	3	No substantial difference from 5b	3	No substantial difference from 5c	2	No substantial difference from 7a	3	No substantial difference from 7b	3	No substantial difference from 7c	2	Compared with 7b, same benefit in central areas and Newtown but less benefit around Kibbirie	3	Significant increase in accessibility and mobility, driving intensification and economic activity	3	Closer to 7b than 7a. The Kibbirie branch more than offsets the delay.			
	Increase in the value of land use along the PT Spine	0	1	Small improvement in accessibility and mobility, driving small improvements in land value	1	Similar to 1	2	Lower benefits than 3b and 5b, since only operating at peak	2	Closer to 2b than 2a. The Kibbirie branch more than offsets the delay.	2	No substantial difference from 5a	3	No substantial difference from 5b	3	No substantial difference from 5c	2	No substantial difference from 7a	3	No substantial difference from 7b	3	No substantial difference from 7c	2	Compared with 7b, same benefit in central areas and Newtown but less benefit around Kibbirie	3	Significant increase in accessibility and mobility, driving increases in land values	3	Closer to 7b than 7a. The Kibbirie branch more than offsets the delay.			
	Increase in residential population along the PT Spine	0	1	Small improvement in accessibility and mobility, driving small increases in residential population	1	Similar to 1	2	Lower benefits than 3b and 5b, since only operating at peak	2	Closer to 2b than 2a. The Kibbirie branch more than offsets the delay.	2	No substantial difference from 5a	3	No substantial difference from 5b	3	No substantial difference from 5c	2	No substantial difference from 7a	3	No substantial difference from 7b	3	No substantial difference from 7c	2	Compared with 7b, same benefit in central areas and Newtown but less benefit around Kibbirie	3	Significant increase in accessibility and mobility, driving increased residential population	3	Closer to 7b than 7a. The Kibbirie branch more than offsets the delay.			
Improved multi-modal network efficiency	Reduction in PT journey times	0	1	Small improvement in times	1	Similar to 1	2	Smaller aggregate time reduction than 3b and 5b, since only operating at peak	2	Closer to 2b than 2a. The Kibbirie branch more than offsets the delay.	2	No substantial difference from 5a	3	No substantial difference from 5b	3	No substantial difference from 5c	2	No substantial difference from 7a	3	No substantial difference from 7b	3	No substantial difference from 7c	2	Compared with 7b, same improvement from Newtown but less improvement from Kibbirie	3	Large improvement in journey times. Best amongst the options.	3	Closer to 7b than 7a. The Kibbirie branch more than offsets the delay.			
	Increased reliability of PT journeys	0	1	Small improvement	1	Similar to 1	2	Lower reliability benefit than 3b and 5b, since only operating at peak	2	Closer to 2b than 2a. The Kibbirie branch more than offsets the delay.	2	No substantial difference from 5a	3	No substantial difference from 5b	3	No substantial difference from 5c	2	No substantial difference from 7a	3	No substantial difference from 7b	3	No substantial difference from 7c	2	Compared with 7b, same improvement from Newtown but less improvement from Kibbirie	3	No material congestion	3	Closer to 7b than 7a. The Kibbirie branch more than offsets the delay.			
	Reduction in vehicle operating costs	0	1	Small reduction due to faster bus journeys and mode shift	1	Similar to 1	2	Lower mode shift and journey time improvements than 3b & 5b, since only operating at peak	2	Closer to 2b than 2a. The Kibbirie branch more than offsets the delay.	2	No substantial difference from 5a	3	No substantial difference from 5b	3	No substantial difference from 5c	2	No substantial difference from 7a	3	No substantial difference from 7b	3	No substantial difference from 7c	2	Lower decrease than 7b due to lack of a Kibbirie branch	3	25% decrease in bus operating costs relative to Option 0. Some decrease in car operating costs due to mode shift.	3	Closer to 7b than 7a. The Kibbirie branch more than offsets the delay.			
	Improvement in ability to move goods and services around the city	0	1	Small improvement in mobility	1	Similar to 1	2	Lower improvement than 3b and 5b, since only operating at peak	2	Closer to 2b than 2a. The Kibbirie branch more than offsets the delay.	2	No substantial difference from 5a	3	No substantial difference from 5b	3	No substantial difference from 5c	2	No substantial difference from 7a	3	No substantial difference from 7b	3	No substantial difference from 7c	2	Compared with 7b, same improvement in central areas and Newtown but less improvement around Kibbirie	3	Significant increase in accessibility and mobility	3	Closer to 7b than 7a. The Kibbirie branch more than offsets the delay.			
	Operational resilience (level of interaction with other modes)	0	0	No material difference from Option 0	0	No material difference from Option 0	0	No material difference from Option 0	0	No material difference from Option 0	0	No material difference from Option 0	0	No material difference from Option 0	0	No material difference from Option 0	0	No material difference from Option 0	0	No material difference from Option 0	0	No material difference from Option 0	0	No material difference from Option 0	0	No material difference from Option 0	0	No material difference from Option 0	0	No material difference from Option 0	0
Improved accessibility	Increase in PT Spine corridor carrying capacity	0	1	Small increase in throughput	1	Similar to 1	2	Lower capacity than 3b and 5b, since only operating at peak	2	Closer to 2b than 2a. The Kibbirie branch more than offsets the delay.	2	No substantial difference from 5a	3	No substantial difference from 5b	3	No substantial difference from 5c	2	No substantial difference from 7a	3	No substantial difference from 7b	3	No substantial difference from 7c	2	Compared with 7b, same capacity improvement from Newtown but less improvement from Kibbirie	3	Large increase in capacity. Best amongst the options.	3	Closer to 7b than 7a. The Kibbirie branch more than offsets the delay.			
	Improved options for mode choice	0	1	Small improvement in PT journey times from Newtown	1	Similar to 1	2	Smaller option improvement than 3b and 5b, since only operating at peak	2	Closer to 2b than 2a. The Kibbirie branch more than offsets the delay.	2	No substantial difference from 5a	3	No substantial difference from 5b	3	No substantial difference from 5c	2	No substantial difference from 7a	3	No substantial difference from 7b	3	No substantial difference from 7c	2	Compared with 7b, same improvement from Newtown but less improvement from Kibbirie	3	Large improvement in journey times. BPT a more feasible option for more people.	3	Closer to 7b than 7a. The Kibbirie branch more than offsets the delay.			
	Reduction in bus-on-bus congestion	0	1	Small improvement	1	Similar to 1	2	Lower congestion improvement than 3b and 5b, since only operating at peak	2	Closer to 2b than 2a. The Kibbirie branch more than offsets the delay.	2	No substantial difference from 5a	3	No substantial difference from 5b	3	No substantial difference from 5c	2	No substantial difference from 7a	3	No substantial difference from 7b	3	No substantial difference from 7c	2	Compared with 7b, same improvement from Newtown but less improvement from Kibbirie	3	No material congestion	3	Closer to 7b than 7a. The Kibbirie branch more than offsets the delay.			
	Reduction in PT journey times	0	1	Small improvement in times	1	Similar to 1	2	Smaller aggregate time reduction than 3b and 5b, since only operating at peak	2	Closer to 2b than 2a. The Kibbirie branch more than offsets the delay.	2	No substantial difference from 5a	3	No substantial difference from 5b	3	No substantial difference from 5c	2	No substantial difference from 7a	3	No substantial difference from 7b	3	No substantial difference from 7c	2	Compared with 7b, same improvement from Newtown but less improvement from Kibbirie	3	Large improvement in journey times. Best amongst the options.	3	Closer to 7b than 7a. The Kibbirie branch more than offsets the delay.			
Increased PT patronage	Increase in PT patronage in Wellington city	0	1	Small increase in patronage	1	Similar to 1	2	Lower patronage than 3b and 5b, since only operating at peak	2	Closer to 2b than 2a. The Kibbirie branch more than offsets the delay.	2	No substantial difference from 5a	3	No substantial difference from 5b	3	No substantial difference from 5c	2	No substantial difference from 7a	3	No substantial difference from 7b	3	No substantial difference from 7c	2	Compared with 7b, same improvement from Newtown but less improvement from Kibbirie	3	Large increase in patronage. Best amongst the options.	3	Closer to 7b than 7a. The Kibbirie branch more than offsets the delay.			
	Increase in PT mode share in Wellington city	0	1	Small increase in PT mode share	1	Similar to 1	2	Lower mode share change than 3b and 5b, since only operating at peak	2	Closer to 2b than 2a. The Kibbirie branch more than offsets the delay.	2	No substantial difference from 5a	3	No substantial difference from 5b	3	No substantial difference from 5c	2	No substantial difference from 7a	3	No substantial difference from 7b	3	No substantial difference from 7c	2	Compared with 7b, same improvement from Newtown but less improvement from Kibbirie	3	Large improvement in mode share. Best amongst the options.	3	Closer to 7b than 7a. The Kibbirie branch more than offsets the delay.			
Improved PT user experience (end potential users)	Increase in PT user satisfaction	0	0	No material improvement from do minimum	1	Similar to 1	1	Some improvement in user satisfaction - more than 1, but less than 5b	1	Some improvement in user satisfaction - more than 1, but less than 5c	1	Less improvement than 5a, due to piecemeal nature of solution	1	Less improvement than 5b, due to piecemeal nature of solution	1	Less improvement than 5c, due to piecemeal nature of solution	1	No substantial difference from 7a	3	No substantial difference from 7b	3	No substantial difference from 7c	1	Lack of Kibbirie branch impacts wider network operations, making this significantly inferior to 7b	3	Significant improvement in all aspects of PT service along the PT Spine	3	Closer to 7b than 7a. The Kibbirie branch more than offsets the delay.			
	Increase in ease of use of PT	0	0	No material improvement from do minimum	1	Small improvements in stop infrastructure	1	Small improvements in stop infrastructure	1	Small improvements in stop infrastructure	1	Small improvements in stop infrastructure	1	Small improvements in stop infrastructure	1	Small improvements in stop infrastructure	1	No substantial difference from 7a	3	No substantial difference from 7b	3	No substantial difference from 7c	1	Some improvement in station facilities, and some operational user improvements. Not including Kibbirie terminal improvements makes this substantially inferior to 7b.	3	Significant improvement in station facilities, and some operational user improvements	3	Closer to 7b than 7a. The Kibbirie branch more than offsets the delay.			
Minimise emissions	Assessment of emissions (buses)	0	0	Small increase in PT journey times, but not enough to make a material difference to emissions	0	Similar to 1	1	Slightly larger improvement in journey times from 1, enough to make a small improvement in emissions	1	Slightly larger improvement in journey times from 1, enough to make a small improvement in emissions	1	No substantial difference from 5a	2	No substantial difference from 5b	2	No substantial difference from 5c	1	No substantial difference from 7a	2	No substantial difference from 7b	2	No substantial difference from 7c	1	Small improvement in emissions through large improvement in journey times. Journey time savings are more significant than mode shift changes.	2	Some reduction in emissions through large improvement in journey times. Journey time savings are more significant than mode shift changes.	2	Some reduction in emissions through large improvement in journey times. Journey time savings are more significant than mode shift changes.			
	Assessment of emissions (mode shift)	0	0	Small increase in PT mode share, but not enough to make a material difference to emissions	0	Similar to 1	0	Some increase in PT mode share, but not enough to make a material difference to emissions	0	Some increase in PT mode share, but not enough to make a material difference to emissions	0	Some increase in PT mode share, but not enough to make a material difference to emissions	0	Some increase in PT mode share, but not enough to make a material difference to emissions	0	Some increase in PT mode share, but not enough to make a material difference to emissions	0	No substantial difference from 7a	1	No substantial difference from 7b	1	No substantial difference from 7c	0	Some increase in PT mode share, but not enough to make a material difference to emissions. Lack of Kibbirie branch makes this inferior to 7b.	1	Small reduction in emissions as a result of a significant increase in PT mode share.	1	Small reduction in emissions as a result of a significant increase in PT mode share.			
Minimise impacts on physical environment / amenity	Land take	0	0	No more land take, relative to that in the do minimum	0	No more land take, relative to that in the do minimum	0	No more land take, relative to that in the do minimum	0	No more land take, relative to that in the do minimum	0	No more land take, relative to that in the do minimum	0	No more land take, relative to that in the do minimum	0	No more land take, relative to that in the do minimum	0	No more land take, relative to that in the do minimum	0	No more land take, relative to that in the do minimum	0	No more land take, relative to that in the do minimum	0	No more land take, relative to that in the do minimum	0	No more land take, relative to that in the do minimum	0	No more land take, relative to that in the do minimum	0	No more land take, relative to that in the do minimum	
	Construction effects	0	0	Minimal construction period & effects	-1	No material difference from 5a	-2	No material difference from 5b	-1	No material difference from 5c	-1	No material difference from 5a	-2	No material difference from 5b	-1	No material difference from 5c	-1	Less construction than 7a, since no physical separation	-2	Less construction than 7b, since no physical separation	-1	Less construction than 7c, since no physical separation	-2	Staged construction, but no Kibbirie effects	-3	Construction takes a number of years, as it occurs in stages	-2	Some construction effects, but all undertaken at the same time			
	Visual effects	0	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	
	Noise effects	0	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	
	Heritage effects	0	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	
	Loss of town belt	0	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	
	Impacts on residential amenity	0	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	0	Minimal effects	
	Localised urban centre commercial impacts	0	0	Minimal impact	0	Minimal impact	0	Minimal impact	0	Minimal impact	0	Minimal impact	0	Minimal impact	0	Minimal impact	0	Minimal impact	0	Minimal impact	0	Minimal impact	0	Minimal impact	0	Minimal impact	0	Minimal impact	0	Minimal impact	
	Loss of parking	0	0	Minimal, if any, loss of parking	-1	Some loss of parking at peak times	-1	Some loss of parking at peak times	-1	Some loss of parking at peak times	-1	Loss of parking in some areas	-1	Loss of parking in some areas	-1	Loss of parking in some areas	-2	Some loss of parking	-2	Some loss of parking	-2	Some loss of parking	-2	Some loss of parking	-2	Some loss of parking	-2	Some loss of parking	-2	Some loss of parking	
	Traffic and transport effects	0	-1	Excludes some Basin Reserve roading improvements from Option 0, with some adverse traffic effects	0	Minimal effects on wider traffic	0	Minimal effects on wider traffic	0	Minimal effects on wider traffic	-1	Small impacts on general traffic, including reduced turning movements and reduction in general road space	-1	Small impacts on general traffic, including reduced turning movements and reduction in general road space	-1	Small impacts on general traffic, including reduced turning movements and reduction in general road space	-1	Small impacts on general traffic, including reduced turning movements and reduction in general road space	-1	Small impacts on general traffic, including reduced turning movements and reduction in general road space	-1	Small impacts on general traffic, including reduced turning movements and reduction in general road space	-1	Small impacts on general traffic, including reduced turning movements and reduction in general road space	-2	Some impacts on general traffic, including reduced turning movements and reduction in general road space	-2	Some impacts on general traffic, including reduced turning movements and reduction in general road space	-2	Some impacts on general traffic, including reduced turning movements and reduction in general road space	
	Affordable / value for money	Benefits	0	1	Smaller amount of benefit	1	Smaller amount of benefit	2	Similar amount of benefit to 5a and 7a	2	Similar amount of benefit to 5a and 7a	2	Smaller amount of benefit	2	Similar amount of benefit to 5a and 7a	2	Similar amount of benefit to 5a and 7a	2	Considerable benefits, but less than 7b	3	Substantial benefits	3	Substantial benefits	2	Considerable benefits, but less than 7b	3	Substantial benefits	3	Substantial benefits		
		Capex	0	-1	Relatively small capex investment. Below \$50m.	-2	Large capex investment. Between \$50m and \$100m.	-2	Large capex investment. Between \$50m and \$100m.	-2	Large capex investment. Between \$50m and \$100m.	-1	Relatively small capex investment. Below \$50m.	-1	Relatively small capex investment. Below \$50m.	-1	Relatively small capex investment. Below \$50m.	-2	Large capex investment. Between \$50m and \$100m.	-2	Large capex investment. Between \$50m and \$100m.	-2	Large capex investment. Between \$50m and \$100m.	-3	Substantial capex investment. Over \$100m.	-3	Substantial capex investment. Over \$100m.	-3	Substantial capex investment. Over \$100m.		
Opex + maintenance		0	0	Minimal reduction in annual opex. Below \$30m NPV.	1	Smaller reduction in annual opex. Below \$30m NPV.	1	Smaller reduction in annual opex. Below \$30m NPV.	1	Smaller reduction in annual opex. Below \$30m NPV.	1	Smaller reduction in annual opex. Below \$30m NPV.	1	Smaller reduction in annual opex. Below \$30m NPV.	1	Smaller reduction in annual opex. Below \$30m NPV.	2	Large reduction in annual opex. Above \$30m NPV.	2	Large reduction in annual opex. Above \$30m NPV.	2	Large reduction in annual opex. Above \$30m NPV.	1	Smaller reduction in annual opex. Below \$30m NPV.	2	Large reduction in annual opex. Above \$30m NPV.	2	Large reduction in annual opex. Above \$30m NPV.			
Rates impact		0	1	Smaller rates impact	2	Large rates impact	2	Large rates impact	2	Large rates impact	1	Smaller rates impact	1	Smaller rates impact	1	Smaller rates impact	2	Large rates impact	2	Large rates impact	2	Large rates impact	2	Large rates impact	2	Large rates impact	2	Large rates impact	2	Large rates impact	
Alignment / integration with other infrastructure & services	Alignment with strategic documents (eg ROS, RTP, LTP, Urban Growth Plan)	0	0	Intention to improve PT services, but not as well aligned with strategic documentation than Option 2	1	Peak-only nature of this solution makes it only slightly more aligned than Option 0	1	Peak-only nature of this solution makes it only slightly more aligned than Option 0	1	Peak-only nature of this solution makes it only slightly more aligned than Option 0	1	Piecemeal nature of this solution makes it only slightly more aligned than Option 0	1	Piecemeal nature of this solution makes it only slightly more aligned than Option 0	1	Piecemeal nature of this solution makes it only slightly more aligned than Option 0	1	Lack of physical separation makes this not as well-aligned as 7a	2	Lack of physical separation makes this not as well-aligned as 7b	2	Lack of physical separation makes this not as well-aligned as 7c	2	Lack of Kibbirie branch makes this option less aligned to strategic priorities than 7b.	3	Well aligned with strategic priorities around economic growth, improving PT patronage and overall PT services	3	Well aligned with strategic priorities around economic growth, improving PT patronage and overall PT services			
	Alignment with specific projects (eg RONS, cycling)	0	-1	Does not integrate with RONS. Provides for additional cycling infrastructure in available roadspace.	2	Aligned with RONS. Option to allow cyclists to use bus lanes.	2	Aligned with RONS. Option to allow cyclists to use bus lanes.	2	Aligned with RONS. Option to allow cyclists to use bus lanes.	2	Aligned with RONS. More roadspace available for cycle infrastructure than 5 & 7. Cyclists could be allowed to use bus lanes.	2	Aligned with RONS. More roadspace available for cycle infrastructure than 5 & 7. Cyclists could be allowed to use bus lanes.	2	Aligned with RONS. More roadspace available for cycle infrastructure than 5 & 7. Cyclists could be allowed to use bus lanes.	2	Aligned with RONS. Cyclists could be allowed to use bus lanes.	2	Aligned with RONS. Cyclists could be allowed to use bus lanes.	2	Aligned with RONS. Cyclists could be allowed to use bus lanes.	2	Aligned with RONS. Cyclists could be allowed to use bus lanes.	1	Aligned with RONS. Will require additional roadspace to provide for cycle infrastructure.	1	Aligned with RONS. Will require additional roadspace to provide for cycle infrastructure.	1	Aligned with RONS. Will require additional roadspace to provide for cycle infrastructure.	

3 Aggregate Scoring

Option 0 Do minimum	Option 1 Targeted bus priority and other modes improvement	Option 2 Peak bus lanes & priority			Option 3 Targeted bus lanes & priority			Option 5 Full bus lanes & priority			Option 7 Physically separated lanes & priority		
	1	2b	2	2a	3b	3	3a	4b	4	4a	5b	5	5a
	To Newtown as soon as possible (given constraints), no Kilbirnie branch	To Newtown as soon as possible (given constraints), no Kilbirnie branch	Full route as soon as possible (given constraints)	Full route, all delivered to coincide with Basin and Mt Vic tunnel improvements	To Newtown as soon as possible (given constraints), no Kilbirnie branch	Full route as soon as possible (given constraints)	Full route, all delivered to coincide with Basin and Mt Vic tunnel improvements	To Newtown as soon as possible (given constraints), no Kilbirnie branch	Full route as soon as possible (given constraints)	Full route, all delivered to coincide with Basin and Mt Vic tunnel improvements	To Newtown as soon as possible (given constraints), no Kilbirnie branch	Full route as soon as possible (given constraints)	Full route, all delivered to coincide with Basin and Mt Vic tunnel improvements

Scores by objective

Objective	Scores ->													
1 Increased economic activity	0	1	1	2	2	2	3	3	2	3	3	2	3	3
2 Improved multi-modal network efficiency	0	0.8	0.8	1.6	1.6	1.6	2.4	2.4	1.6	2.4	2.4	1.4	2	2
3 Improved accessibility	0	1	1	2	2	2	3	3	2	3	3	2	3	3
4 Increased PT patronage	0	1	1	2	2	2	3	3	2	3	3	2	3	3
5 Improved PT user experience (incl potential users)	0	0	1	1	1	1	1	1	1	3	3	1	3	3
6 Minimise emissions	0	0	0	0.5	0.5	0.5	1	1	0.5	1.5	1.5	0.5	1.5	1.5
7 Minimise impacts on physical environment / amenity	0	-0.08	-0.17	-0.25	-0.17	-0.25	-0.42	-0.33	-0.42	-0.58	-0.50	-0.75	-0.92	-0.83
8 Affordable / value for money	0	0.25	0.5	0.75	0.75	0.5	0.75	0.75	0.75	1.25	1.25	0.5	1	1
9 Alignment / integration with other infrastructure & services	0	-0.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2	2	1.5	2	2

Unweighted aggregate scores

Unweighted score	0	0.4	0.7	1.2	1.2	1.2	1.7	1.7	1.2	2.1	2.1	1.1	2.0	2.0
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Weighted aggregate scores

Weights by objective	
1 Increased economic activity	13%
2 Improved multi-modal network efficiency	13%
3 Improved accessibility	13%
4 Increased PT patronage	13%
5 Improved PT user experience (incl potential users)	13%
6 Minimise emissions	8%
7 Minimise impacts on physical environment / amenity	8%
8 Affordable / value for money	8%
9 Alignment / integration with other infrastructure & services	8%

Weighted scores	0	0.5	0.8	1.4	1.4	1.3	1.9	1.9	1.3	2.3	2.3	1.3	2.2	2.2
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4 Summary

Option 0 Do minimum	Option 1 Targeted bus priority and other modes improvement 1	Option 2 Peak bus lanes & priority			Option 3 Targeted bus lanes & priority			Option 5 Full bus lanes & priority			Option 7 Physically separated lanes & priority		
		2b	2	2a	3b	3	3a	4b	4	4a	5b	5	5a
	To Newtown as soon as possible (given constraints), no Kilbirnie branch	To Newtown as soon as possible (given constraints), no Kilbirnie branch	Full route as soon as possible (given constraints)	Full route, all delivered to coincide with Basin and Mt Vic tunnel improvements	To Newtown as soon as possible (given constraints), no Kilbirnie branch	Full route as soon as possible (given constraints)	Full route, all delivered to coincide with Basin and Mt Vic tunnel improvements	To Newtown as soon as possible (given constraints), no Kilbirnie branch	Full route as soon as possible (given constraints)	Full route, all delivered to coincide with Basin and Mt Vic tunnel improvements	To Newtown as soon as possible (given constraints), no Kilbirnie branch	Full route as soon as possible (given constraints)	Full route, all delivered to coincide with Basin and Mt Vic tunnel improvements

Scores by objective

Objective	Scores ->	Option 0	Option 1	Option 2	Option 3	Option 5	Option 7
Increased economic activity		0	1	1	2	2	2
Improved multi-modal network efficiency		0	0.8	0.8	1.6	1.6	1.4
Improved accessibility		0	1	1	2	2	2
Increased PT patronage		0	1	1	2	2	2
Improved PT user experience (incl potential users)		0	0	1	1	1	1
Minimise emissions		0	0	0	0.5	0.5	0.5
Minimise impacts on physical environment / amenity		0	-0.08	-0.17	-0.25	-0.17	-0.75
Affordable / value for money		0	0.25	0.5	0.75	0.75	0.5
Alignment / integration with other infrastructure & services		0	-0.5	1.5	1.5	1.5	1.5

Scores by criteria

Objective	Criteria	Scores ->	Option 0	Option 1	Option 2	Option 3	Option 5	Option 7
Increased economic activity	PT Spine corridor throughput		0	1	1	2	2	2
	Ability to drive intensification of development and economic activity		0	1	1	2	2	2
	Increase in the value of land use along the PT Spine		0	1	1	2	2	2
	Increase in residential population along the PT Spine		0	1	1	2	2	2
Improved multi-modal network efficiency	Reduction in PT journey times		0	1	1	2	2	2
	Increased reliability of PT journeys		0	1	1	2	2	2
	Reduction in vehicle operating costs		0	1	1	2	2	2
	Improvement in ability to move goods and services around the city		0	1	1	2	2	2
	Operational resilience (level of interaction with other modes)		0	0	0	0	0	-1
Improved accessibility	Increase in PT Spine corridor carrying capacity		0	1	1	2	2	2
	Improved options for mode choice		0	1	1	2	2	2
	Reduction in bus-on-bus congestion		0	1	1	2	2	2
	Reduction in PT journey times		0	1	1	2	2	2
Increased PT patronage	Increase in PT patronage in Wellington city		0	1	1	2	2	2
	Increase in PT mode share in Wellington city		0	1	1	2	2	2
Improved PT user experience (incl potential users)	Increase in PT user satisfaction		0	0	1	1	1	1
	Increase in ease of use of PT		0	0	1	1	1	1
Minimise emissions	Assessment of emissions (buses)		0	0	0	1	2	2
	Assessment of emissions (mode shift)		0	0	0	0	0	1
Minimise impacts on physical environment / amenity	Land take		0	0	0	0	0	0
	Construction effects		0	0	-1	-2	-1	-2
	Visual effects		0	0	0	0	0	-1
	Noise effects		0	0	0	0	0	0
	Heritage effects		0	0	0	0	0	0
	Loss of town belt		0	0	0	0	0	-1
	Ecological effects		0	0	0	0	0	-2
	Safety impacts		0	0	0	0	0	0
	Impacts on residential amenity		0	0	0	0	0	1
	Localised urban centre commercial impacts		0	0	0	0	0	-1
	Loss of parking		0	0	-1	-1	-1	-2
	Traffic and transport effects		0	-1	0	0	-1	-2
	Affordable / value for money	Benefits		0	1	1	2	2
Capex			0	-1	-2	-2	-2	-3
Opex + maintenance			0	0	1	1	1	2
Rates impact			0	1	2	2	2	2
Alignment / integration with other infrastructure & services	Alignment with strategic documents (eg GOS, RLTP, LTP, Urban Growth Plan)		0	0	1	1	1	2
	Alignment with specific projects (eg RONS, cycling)		0	-1	2	2	2	1