

30 November 2016

## MEMO: LONG LIST MCA ASSESSMENT WORKSHOP

***This memo summarises the discussion and outcome from the Let's Get Wellington Moving (LGWM) long list MCA workshops 1 and 2.***

### 1 ASSESSMENT PROCESS

The purpose of this phase of the project was to assess the long list of scenarios against the agreed MCA criteria. This process is to allow the scenario assessment scores to be confirmed and ultimately shortlisted scenarios identified.

The assessment team was asked to individually score the long list scenarios against the assessment criteria. These scores were then provided to the workshop facilitator and a group workshop held to moderate these individual scores into a single team assessment.

The original methodology was to have a single workshop to undertake this moderation. However due to earthquakes in the Wellington area around the time of the proposed workshops and limited availability the assessment was undertaken over two workshops.

To ensure some continuity across both workshops several members of the assessment team attended both workshops.

At the conclusion of both workshops, the notes of the agreed moderation (this document) were circulated to all workshop members for comment.

### 2 WORKSHOPS DETAILS

As outlined above, two workshops were held as follows:

- Workshop 1 : 18<sup>th</sup> November 2016
- Workshop 2 : 28<sup>th</sup> November 2016

Both workshops followed the same agenda as outlined below:

1. Introduction and scene setting	15mins
2. Review scores	30mins
a. General patterns	
b. Areas of alignment	
c. Areas of differences	
3. Break (if required)	
4. Moderated scoring	90mins
5. Areas for further work	15mins
6. Next Steps	15mins

The moderation exercise in workshop 2 used the moderated outcome form workshop 1 as the starting point of the discussion.

## 2.1 ATTENDEES

The attendees at the workshop were:

Attendee	Organisation	Workshop 1	Workshop 2
<b>Facilitator, Commute</b>	Commute (Facilitator and reporting)	✓	✓
<b>Manager Network Projects</b>	WCC	✓	✓
<b>City Engineer</b>	WCC	✓	
<b>Programme Director</b>	LGWM Team Director	✓	✓
<b>Senior Spatial Planning Advisor</b>	WCC	✓	
<b>Planning &amp; Investment Manager</b>	NZTA	✓	
<b>Manager Transport and Waste Operations</b>	WCC	✓	
<b>Chief Advisor Transport</b>	WCC	✓	
<b>Principal Planner</b>	NZ Transport Agency		✓
<b>Manager Transport Strategy</b>	WCC		✓
<b>Senior Transport Planner</b>	GWRC		✓
<b>Team Leader Data &amp; Analysis</b>	GWRC		✓
<b>Manager, Regional Transport Planning</b>	GWRC		✓
<b>Principal Transport Planner</b>	NZ Transport Agency		✓

Workshop facilitator, programme director and project design lead attended both workshops to provide workshop 1 context and continuity.

The above assessment team provided a diverse and wider range of skills and perspectives to ensure a robust assessment.

## 3 INITIAL DISCUSSIONS

Initial discussions at the workshops highlighted a number of areas of alignment in the individual assessments. There were also some areas where the workshop attendees had different understandings of the assessment criteria and their application. This was discussed at the start of each workshop.

The overall observation was that there was strong alignment across the individual assessors for the first four criteria.

There was general alignment on the difficulty of assessing original scenarios M,N and O. These scenarios M,N,O were developed to be resilience focussed. They were however not defined in detail

and therefore difficult to assess. It was agreed that resilience was an assessment criteria and outcome of the other scenarios (to differing degrees). Therefore these scenarios were removed as they could not be defined with enough clarity to allow an assessment to be completed and resilience was being captured in the assessment criteria.

It was also agreed in these workshop discussions that additional costing information was needed before the cost criteria could be accurately assessed.

## 4 WORKSHOP OUTCOME

### 4.1 OVERALL

Overall there was strong alignment between the assessors on most criteria. Different approaches to the assessment of the implementability and adaptability criteria had been undertaken. The cost criteria required further information to allow assessors to complete this accurately.

In workshop 1, the assessment of each individual assessor was presented and patterns identified and reviewed by the group as an initial step.

Workshop 1 then examined each criterion for all scenarios and agreed scores for the group.

This assessment was undertaken at the Tier 1 assessment level, with cognisance of the Tier 2 criteria. The criteria are included below for completeness. It is noted that the project governance group when approving the criteria added the two tier 2 criteria in red. These criteria were considered in detail in workshop 2.

**Table 1 : Assessment criteria**

Tier 1	Tier 2
A transport system that enhances the liveability of the central city	Improved walkability in the CBD with better access to the waterfront
	Enhanced urban environment
	Reduced impact of motorised transport in CBD
	Minimised adverse effects on natural environment
	Minimised impacts on built environment
A transport system that provides more efficient and reliable access to support growth	No increase to number of vehicles in the CBD
	Increased reliability and improved access to and from CBD
	Consistency with the Urban Growth Plan and Wellington Regional Strategy
	Improved throughput of people and goods on strategic corridors
	Increased reliability of access to and from the airport, hospital and port
A transport system that reduces reliance on private vehicle travel	Transport demand is able to be spread across the day (not just in peaks)
	Reduced PT travel time variability
	Increased PT catchment
	Improved pedestrian mode share
	Improved cycling mode share
A transport system that improves safety for all users	Increased vehicle occupancy
	Improved PT mode share
A transport system that is adaptable to disruptions and future uncertainty	Reduced deaths and serious injuries for road users
	Improved safety for pedestrians and cyclists
Implementability	Adaptability to be able to respond and recover from unplanned events
	Adaptability and flexibility to cope with future uncertainty and technologies
	Consentability
	Feasibility
	Capital cost
	Operational cost

Workshop 2 was initially presented with the moderated scores from workshop 1. Workshop 2 then examined each criterion for all scenarios and confirmed moderated scores for the group.

Where these differed from the workshop 1 outcomes the rationale is outlined in this note for transparency.

The discussion and scoring outcome from both workshops is summarised below for each of the Tier 1 criteria.

## 4.2 LIVEABILITY

The moderated scores for this criteria are shown in Figure 1.

**Figure 1 : Liveability scoring summary**

Let's Get Wellington Moving		Scenarios												
		Do Min	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	Scenario G	Scenario H	Scenario I	Scenario J	Scenario K	Scenario L
		0	A	B	C	D	E	F	G	H	I	J	K	L
<b>Summary</b>														
A transport system that enhances the liveability of the central city		0	---	++	++	---	+++	+++	+++	+++	++	+	+++	0

The importance of walking within the CBD and its impact on the liveability and vibrancy of the city was discussed as an important element of this criteria for assessors. Scenarios with hard TDM pricing were considered likely to reduce vehicles movements near the CBD and therefore offer enhanced liveability amenity in the CBD. Other infrastructure was required to support and deliver these potential liveability benefits.

Scenarios A & D were both scored as delivering very poor outcomes against this criteria. This is due to the likely increase in vehicles in and through the CBD and the impact this would have on pedestrians and other users, reducing the liveability. It was acknowledged that the grade separation of some important intersections would provide localised pedestrian benefit.

Scenarios F, G, H and K were considered to deliver significant liveability improvements. There would be increased pedestrian amenity and a reduction in vehicles in and around the CBD with the scenarios. Each scenario delivered this significant outcome differently, Scenario F combined pricing with strong active modes investment, Scenario G did not have pricing but had greater PT investment, Scenario H provided grade separation of key parts of the road network and detuned the waterfront whilst Scenario K combined pricing and a high level of pedestrian investment.

Workshop 1 initially assessed Scenario E as having moderate benefits, however workshop 2 agreed that the combination of pricing and high PT investment warranted an increase in score to a significant benefit.

Scenario B and C were considered to offer more moderate liveability benefits due to the increase in PT and pedestrian services, however not to the same extent as the higher scoring scenarios as they also include roading options.

Scenario I provided considerable additional traffic in and around the CBD, as well as considerable pedestrian and cyclist enhancements, which on balance was assessed as providing a moderate improvement to this criteria.

Scenario J provided moderate levels of PT and walking investment, but did improve local roads for pedestrians through a reduction in speed. This was assessed as providing minor liveability improvements.

Scenarios L was initially assessed as offering minor positive liveability outcomes due to the focus on local street improvements. However workshop 2 moderated that by comparison to other scenarios this provided the least investment in walking and delivered no net improvement in liveability outcomes and hence the assessment was changed to being neutral.

### 4.3 EFFICIENCY AND GROWTH

The moderated scores for this criterion are shown in Figure 2.

Figure 2 : Efficiency and growth scoring summary

Let's Get Wellington Moving		Scenarios												
		Do Min	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	Scenario G	Scenario H	Scenario I	Scenario J	Scenario K	Scenario L
		0	A	B	C	D	E	F	G	H	I	J	K	L
<b>Summary</b>	A transport system that provides more efficient and reliable access to support growth	0	++	+	+++	++	+	0	-	+	+	--	-	0

The general conversation at the workshop for this criterion was focussed on the role of transport to support and enable economic growth.

Additional road capacity on key routes was highly valued for this criterion. Pricing was assessed as having some negative impact on growth outcomes due to the demand constraining nature of this mechanism, however reliability would be enhanced.

Public transport was seen as next key contributor to this criterion, with BRT considered a step change in outcome compared to other PT options.

Scenario C was assessed as delivering the best outcome in this category as it provides additional road reliability and throughput for strategic routes as well as enhanced PT services, resulting in a significant improvement.

Scenarios A and D were considered to provide a moderate improvement for this criterion due to the lesser investment in PT and cycling areas compared to Scenario C, giving them a moderate, rather than significant benefit. This meant these two scenarios performed better than all others, except C.

Scenarios B, E, H and I were assessed to offer minor improvements, as when compared to the higher scoring Scenarios, Scenario B offered less roading investment, Scenario E included pricing and Scenario H and I included less PT investment and TDM measures.

Scenario F provides a mix of PT and active modes with pricing and these were considered to balance each other for no net improvement.

Scenario L was challenging to evaluate in detail as the reduced capacity of local roads was considered to not deliver additional reliability for commuters in particular. However, with the additional measures provided it was assessed as having no net adverse or positive impact.

Scenarios G and K included TDM and a lack of road transport investment that was assessed as a slight adverse impact.

Scenario J was assessed as the worst performing scenario for this criterion (moderate adverse impact) as the lack of additional capacity for all modes was unlikely to drive growth and efficiency.

#### 4.4 CAR DEPENDENCY

The moderated scores for this criterion are shown in Figure 3.

Figure 3 : Reduced private vehicle reliance scoring summary

Let's Get Wellington Moving		Scenarios												
		Do Min	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	Scenario G	Scenario H	Scenario I	Scenario J	Scenario K	Scenario L
		0	A	B	C	D	E	F	G	H	I	J	K	L
<b>Summary</b>	A transport system that reduces reliance on private vehicle travel	0	-	++	+	--	+++	++	++	++	+	0	++	--

It was clarified at the beginning of the discussion that in relation to the first Tier 2 criteria, the 'PT catchment' is within 30mins of CBD.

Pricing was highly valued in this criterion. Supporting infrastructure was however required to realise the potential benefit of this measure. There was a greater focus by assessors on the commuter reliance on private vehicles.

Scenario E was assessed as the best performing scenario, with the pricing element providing the impetus for reduced car dependency. Compared with other pricing scenarios, Scenario E provided the appropriate alternative infrastructure (PT etc) for those private vehicle users who shift modes. Scenarios B, F, G, H were active mode and PT focussed and correspondingly given a moderate benefit score. The main difference between these scenarios and Scenario E was Scenario B and G not having pricing, Scenario F not having the same level of PT investment and Scenario H having less PT.

Scenario K was assessed as only having a minor benefit in workshop 1, however workshop 2 increased this score to being moderate due to the pricing element and the level of investment proposed in all other modes.

Scenarios I was assessed as providing minor benefits for reduced car dependency. Scenario I had increased road capacity, but also enhanced PT services. The road infrastructure reduced the assessed benefit from moderate to minor. Scenario C provided a high BRT PT investment which was valued highly, however this was combined with additional road capacity which balanced this scenario to offering a minor benefit against this criterion.

Scenario J was considered to provide no additional infrastructure to get people out of cars in a noticeable way, therefore a BAU outcome is forecast, hence a 0 score.

Scenarios that increased the amount of road capacity for general traffic were assessed as having adverse impacts on this criterion given the likely increase in road mode share as a result. Scenario D was the worst performing Scenario against this criterion, with the additional road capacity and lack of PT investment seen as not reducing the reliance on private vehicles.

Scenario L was also assessed as having a moderate adverse impact due to its local road enhancements and lack of PT investment encouraging private vehicle users. Scenario A included additional road capacity and BRT so was assessed performing better than Scenario D, and having a minor adverse impact on private vehicle use.

#### 4.5 SAFETY

The moderated scores for this criterion are shown in Figure 4.

Figure 4 : Safety scoring summary

Let's Get Wellington Moving		Scenarios												
		Do Min	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	Scenario G	Scenario H	Scenario I	Scenario J	Scenario K	Scenario L
<b>Summary</b>		0	A	B	C	D	E	F	G	H	I	J	K	L
A transport system that improves safety for all users		0	--	++	++	--	++	++	++	++	++	++	++	++

With active modes an important aspect of this assessment, the scenarios with improved walking and cycling were assessed as being positive, particularly in and around the CBD.

Scenarios that provided additional road capacity were not assessed positively as there would be increased exposure to accidents.

The road focussed scenarios A and D were assessed as moderately adverse due to the increased number of vehicles on the road and in the CBD. The remainder of the scenarios were assessed as having positive impacts.

Scenario H was assessed in workshop 1 as having a minor safety benefit as whilst it includes considerable road options, it also has PT and active mode measures. However, workshop 2 felt that the proposed grade separations and detuning of the waterfront routes resulted in a moderate safety improvement.

All other scenarios were considered to have a moderate impact on safety, with enhanced PT, walking and cycling facilities proposed. Whilst there were differences between these scenarios, it was not considered enough to differentiate scoring. There was consideration for giving Scenario C a minor score, however on balance it was agreed that this was not warranted.

This assessment has meant that the assessment team have concluded that safety is not a significant differentiator between the scenarios (with the exception of Scenarios A and D). This reflection was made at both workshops and this was considered appropriate. The scenarios developed are generally expected to deliver a safer transport system, however there are not stand out scenarios in this regard.

#### 4.6 ADAPTABILITY

The moderated scores for this criteria are shown in Figure 5.

Figure 5 : Adaptability scoring summary

Let's Get Wellington Moving		Scenarios												
		Do Min	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	Scenario G	Scenario H	Scenario I	Scenario J	Scenario K	Scenario L
		0	A	B	C	D	E	F	G	H	I	J	K	L
<b>Summary</b>		0												
A transport system that is adaptable to disruptions and future uncertainty		0	+	++	++	+	-	--	-	+	+	-	-	0

It was generally assumed that all new infrastructure would provide as best they could for future technologies (such as smart motorways). The assessment also confirmed that the scenarios providing new infrastructure provided greater resilience than those that did not. Scenarios that provided new capacity through services such as PT were also assessed as providing greater resilience in the event of an unplanned incident. The wider the breadth of the new infrastructure/services, the greater the resilience and therefore transport system adaptability.

Pricing was generally not valued highly in this criterion as it was considered to reduce the need for additional capacity, thereby not increasing the resilience of the transport system. However, a number of assessors felt that by potentially delaying new capacity, pricing enabled the latest technology to be implemented due to this delay.

Scenario F was therefore assessed as the poorest performing scenario having a moderate adverse impact, as it includes pricing and limited additional infrastructure and services, with the proposed cycling facilities not hugely valued from a resilience perspective.

Scenario E, G, J and K were assessed as having minor adverse impact for various reasons, including Scenario E including pricing and a focus on walking infrastructure, Scenario G having a strong emphasis on walking and cycling, Scenario J being cycling focussed and Scenario K having not real additional infrastructure proposed.

Scenario L was focussed on local road improvements and operational enhancements, additional infrastructure was limited and it was assessed as being similar to the current level of adaptability.

Scenario A, D, H and I provided additional road infrastructure and therefore were assessed as providing resilience benefits and therefore an overall minor positive impact against this criterion. Scenarios B and C were given the highest score as they enhanced both strategic road and PT infrastructure, providing a breadth of resilience and adaptability.

#### 4.7 IMPLEMENTABILITY

The moderated scores for this criteria is shown in Figure 6.

Figure 6 : Implementability scoring summary

Let's Get Wellington Moving		Scenarios												
		Do Min	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	Scenario G	Scenario H	Scenario I	Scenario J	Scenario K	Scenario L
		0	A	B	C	D	E	F	G	H	I	J	K	L
<b>Implementability</b>														
Consentability	0	---	---	---	---	---	---	---	---	---	---	0	0	---
Feasibility	0	---	---	---	---	---	---	---	---	---	---	0	---	---
<b>Summary</b>														
Implementability	0	---	---	---	---	---	---	---	---	---	---	0	---	---

This tier 1 assessment was undertaken at the tier 2 level as there were only two tier 2 criteria and the workshops were mixing the two in their consideration. Each tier 2 criteria was therefore scored and an average score given for the tier 1 criteria of implementability.

#### 4.7.1 CONSENTABILITY

From a consentability perspective, the large scale scenarios with tunnels, bridges and substantive impacts on the built and natural environment were assessed as having significant to moderate consenting risk. Scenarios A, D and I were considered to have significant consenting implications due to the level of grade separation and tunnel construction for the road element of the scenarios.

Scenarios C, H and L were assessed as having a moderate (due to lesser scale) consenting risk as Scenario C included less grade separation, Scenario H did not include the tunnels or BRT and Scenario L included less road network enhancements and PT services, however did include grade separation.

Scenarios B, E and G were assessed as having minor consenting risk as Scenario B included no tunnels or grade separation, but BRT, Scenario E included no roading but BRT and Scenario G included considerable cycling investment.

Scenarios F, J and K were assessed as having limited additional infrastructure and therefore no substantive consenting risks. From a consenting perspective, pricing was not seen as having any challenges.

#### 4.7.2 FEASIBILITY

Scenarios with significant infrastructure in and around the CBD (such as new tunnels) and pricing were considered to have significant implementation risks. Pricing in particular was seen as requiring new legislation and political will to be implemented, resulting in considerable feasibility challenges.

Scenarios A, D with considerable roading investment and Scenarios E, F and K with pricing were therefore considered to have a significant adverse impact for this criterion.

Scenarios C, H and I were assessed as having moderate feasibility risks due to Scenario C has tunnels and high BRT, Scenarios H and I had grade separation.

Scenarios B, G and L, were smaller in scale from an infrastructure perspective and therefore assessed as having minor feasibility risk given Scenario B had no grade separation, Scenario G only major infrastructure was BRT and Scenario L included localised grade separation.

Scenario J was assessed has having limited feasibility risk, commensurate with a score of 0.

### 4.7.3 OVERALL

Overall this resulted in scenarios A, D and I having a significant implementation risk, followed by scenarios C, E, F, H, K and L having a moderate risk with scenarios B and G having a minor risk.

## 5 COST

No cost information was available at this time, so this criterion was not scored or moderated at the workshop.

## 6 OVERALL

It is considered that a robust and comprehensive assessment of the long list scenarios has been undertaken. There has been wide involvement from the team and this has brought a diversity of perspective and expertise.

The moderation process has worked well with alignment reached at both workshops of scores for each scenario.

Combining all of the assessment undertaken is summarised in Figure 7.

Figure 7 : Workshop 1 long list assessment summary

Let's Get Wellington Moving	Scenarios												
	Do Min	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E	Scenario F	Scenario G	Scenario H	Scenario I	Scenario J	Scenario K	Scenario L
	0	A	B	C	D	E	F	G	H	I	J	K	L
<b>Summary</b>													
A transport system that enhances the liveability of the central city	0	---	++	++	---	+++	+++	+++	+++	++	+	++	0
A transport system that provides more efficient and reliable access to support growth	0	++	+	+++	++	+	0	-	+	+	--	-	0
A transport system that reduces reliance on private vehicle travel	0	-	++	+	--	+++	++	++	++	+	0	++	--
A transport system that improves safety for all users	0	--	++	++	--	++	++	++	++	++	++	++	++
A transport system that is adaptable to disruptions and future uncertainty	0	+	++	++	+	-	--	-	+	+	-	-	0
Implementability	0	---	-	--	---	--	--	-	--	---	0	--	---
Cost	0	0	0	0	0	0	0	0	0	0	0	0	0
Ranking	9	12	1	1	13	4	7	6	3	5	9	7	11
<b>Average score</b>	<b>0.0</b>	<b>-6.0</b>	<b>8.0</b>	<b>8.0</b>	<b>-7.0</b>	<b>6.0</b>	<b>3.5</b>	<b>4.0</b>	<b>7.0</b>	<b>4.5</b>	<b>0.0</b>	<b>3.5</b>	<b>-1.5</b>

Without a costing assessment, this shows the following outcomes of the long list MCA process:

1. Scenario C and B were the equal best performing scenarios against all of the criteria assessed.
2. Scenario C is the best performing scenario against the second efficiency and growth criteria.
3. Scenario H is the third ranked scenario in the assessment.
4. Scenario E performs best against the third criteria, being reducing reliance on private vehicles, due to the combination of pricing and PT enhancements

5. Scenario J is the most implementable scenario
6. Scenario L is one of the poorer performing scenarios as whilst it does not have significant impact, it also does not score highly against the majority of the assessment criteria.
7. Scenarios A and D are the lowest ranked of those assessed, however scenarios A and D also perform well against the second criteria associated with an efficient and reliable transport system that supports growth.

The changes made from workshop 1 to workshop 2 had not material change on the rankings. The individual scorings for scenarios changed but the ranking was not altered with the exception of Scenario B which moved from a second ranking after workshop 1 to a first equal after workshop 2.

## 7 NEXT STEPS

It was agreed at the workshops that the next steps will include:

1. Document the outcome of these workshops and present to the wider project team for comment and feedback
2. Gather the cost information that is to be provided from the technical team and document the findings of the two workshops.
3. A third and final workshop in this long listing process (with the assessment team) would be held where based on the agreed assessment undertaken the proposed shortlisting scenarios (or hybrids) would be agreed.
4. Document in detail the selection of shortlisted scenarios.