



# MCA Workshop Outcomes

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Seeking **collaborative solutions** for extending Roe Highway



## Introduction

On 19 February 2010, the SMC team held a Multi Criteria Analysis (MCA) workshop on the Roe Highway Extension in collaboration with the community.

The workshop provided the community with an opportunity to suggest key criteria for the assessment of design options for the extension and to rank those criteria according to their values.



## The process

### Discussion

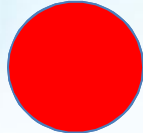
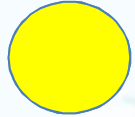

The participants were asked to identify and discuss different environmental, social and economic criteria.

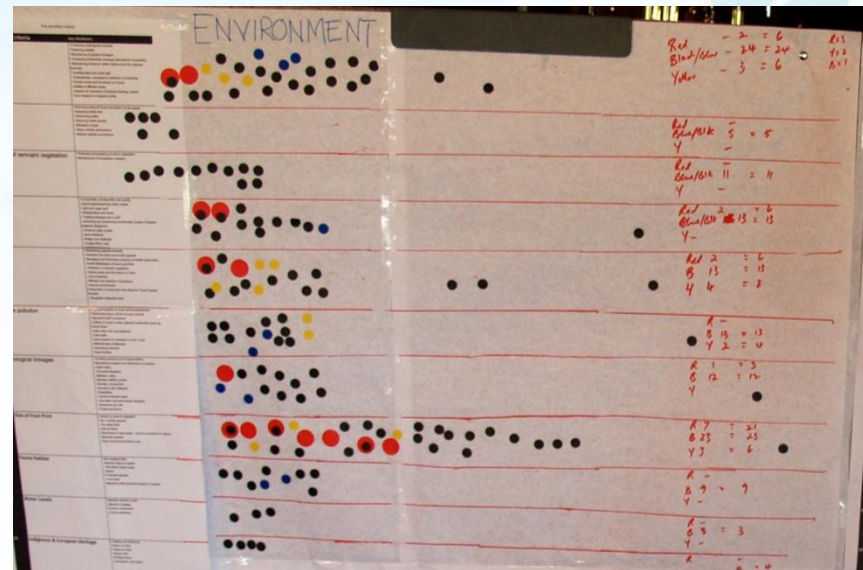
All suggested criteria were recorded and presented back to the group on voting sheets.



## Voting

Participants were invited to vote using coloured dots to determine the top five criteria:

- First Priority  = 3 points
- Second Priority  = 2 points
- Arbitrary votes  = 1 point





## The need for consolidation

The MCA Workshop identified many criteria. The results identified some criteria more than once and some were repeated across categories.

For example, access was repeated twice within the social category and noise was repeated across the environmental and social categories.



## The consolidation process

A strict process was followed to consolidate the voting:

1. Coding the criteria as Soc1, Soc2, Soc3 and so on, to allow traceability.
2. Where necessary and appropriate, combining criteria within a category (e.g. combine Soc1 and Soc2) and adding the votes together.
3. Where necessary and appropriate, combining criteria across categories (e.g. combine Soc1 and Env2) and adding the votes together. For example, while 'noise' is both a social and environmental criterion, its primary location is social.
4. Where necessary, relocate criteria to another category (e.g. Soc1 becomes a new Env criteria such as Env37) and relocate the votes to the new category. Criteria must only appear in one category for the process to be effective.
5. Where necessary and appropriate, split criteria into two or more new criteria (e.g. Soc1 becomes Soc5 and Soc6) and divide the votes evenly. If the attributes within a criteria are significantly different, they will be split into separate criteria and the votes will be evenly distributed.



## Consolidation details

The main tasks were to remove any overlap within and across categories.

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## Changes in priority made by the consolidations

The consolidations brought about one significant change to the top five in the Social category:

*Noise (Soc 10) moved up in rank from number 5 to number 2.*



## The community based priorities

The consolidation process prioritised the top five criteria for each category according to the total number of votes.

Ranking 6,7 & 8 are shown for completeness.

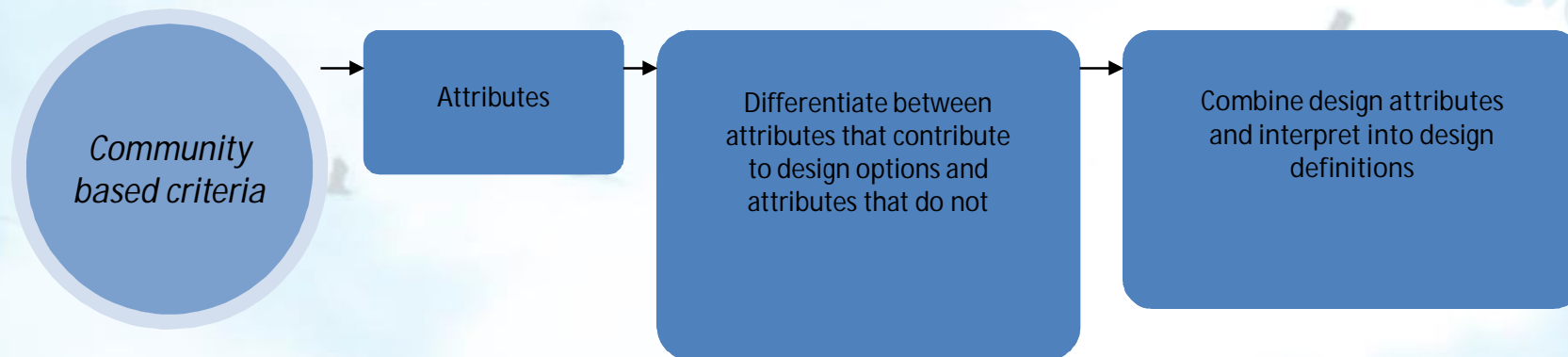
Please see the next slide for the priorities table.

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Category	Priority Criteria	Votes
Environmental	1. Impact on Wider Area	110
	2. Fauna	97
	3. Sources of Contamination	90.5
	4. Size of Footprint	85
	5. Wetlands	79
	6. Flora and Vegetation	60.5
	7. Air Quality	48
	8. Ecological Linkages	38
Social	1. Planning	157
	2. Noise	117
	3. Pedestrian Access and Connectivity.	83
	4. Visual Impacts and Aesthetics	76
	5. Traffic Flow	75
	6. Local Amenity and Quality of Life	73
	7. Vehicular Access and Connectivity	47
	8. Road Safety	44
Economic	1. Cost of Construction	170
	2. Accessibility	151
	3. Efficient Freight and Vehicle Movement	108
	4. Future Costs	100
	5. Land Value	74
	6. Traffic Congestion	73
	7. Alternative Methods of Transport	63
	8. Cost Benefit	41

# The design definitions

SMC has interpreted the top criteria from each category to establish design definitions that will assist in differentiating between design options for the Roe Highway Extension. The process is highlighted by the following diagram:





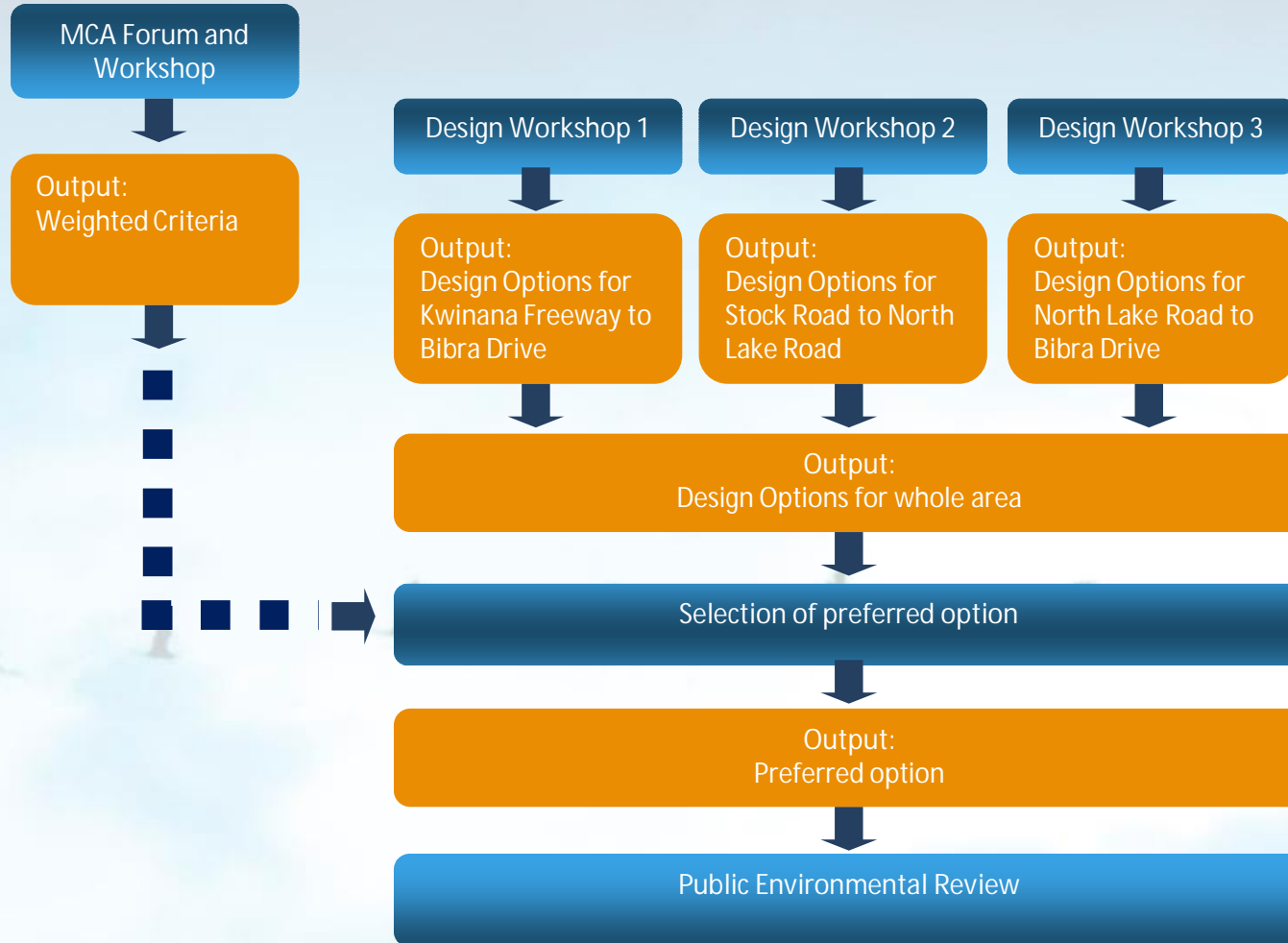
**Note:** The raw data, Top 5 consolidated MCA criteria, MCA consolidated criteria -design definitions and a report on the MCA outcomes are available for viewing here today in the display folders placed around the venue.

Alternatively, they are available for download on the SMC website: [www.southmetroconnect.com.au](http://www.southmetroconnect.com.au)

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# What happens to your input overall?



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# Design Workshops

A series of three design workshops commenced on 6 March.



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## How can you get involved in the project?

There are a number of ways for you to participate:

- Participate in design workshop (ask a member of staff for details)
- Fill out a feedback form (available at the entrance or from a member of staff)
- Contribute to our online forums: [www.southmetroforum.com.au](http://www.southmetroforum.com.au)
- Visit us at our South Metro Connect shopfront: Unit 1-4, 18 Blackly Row, Cockburn Central
- Email us [enquiries@southmetroconnect.com.au](mailto:enquiries@southmetroconnect.com.au)
- Call our hotline on 1800 132 572